Volume I

Subject Statistics

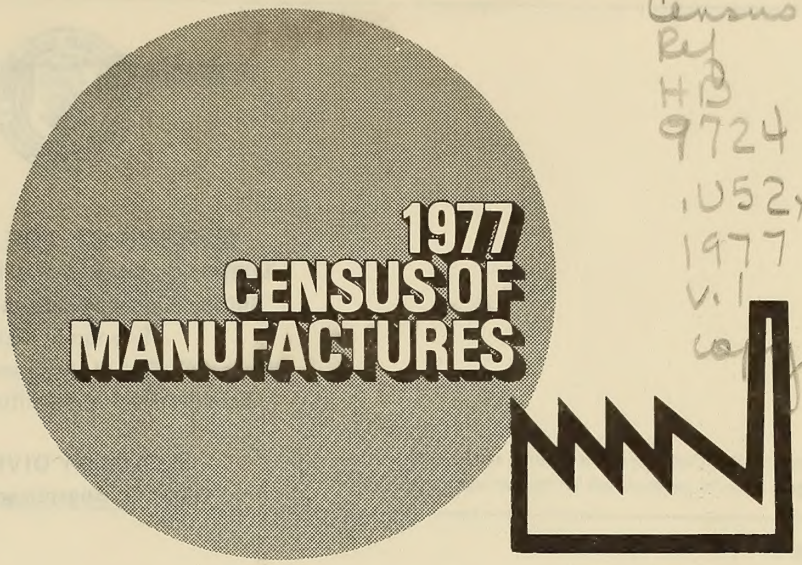
1977 CENSUS OF MANUFACTURES



U. S. Department of Commerce
BUREAU OF THE CENSUS

Issued September 1981

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Volume I

Subject Statistics

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Malcolm Baldrige, Secretary
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BUREAU OF THE CENSUS
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Acting Director

BUREAU OF THE CENSUS

Daniel B. Levine, Acting Director

Shirley Kallek, Associate Director for Economic Fields

Michael G. Farrell, Assistant Director for Economic and Agriculture Censuses

INDUSTRY DIVISION

Roger H. Bugenhagen, Chief

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Data in this volume may differ slightly from the industry and area reports previously published. These differences are due to corrections which were made for minor errors identified after the industry and area reports were issued. This volume reflects these corrections.

All errors identified in any phase of the review were carried to the computer file used to produce the final subject and special reports. Therefore, those represent the most accurate data available.

INTRODUCTION

I. GENERAL BACKGROUND

1. History of the Economic Censuses
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I. General Background

1. HISTORY OF THE ECONOMIC CENSUSES

General—The economic censuses provide a comprehensive statistical profile of a large segment of the national economy. This program includes censuses of manufactures, retail trade, wholesale trade, service industries, mineral industries, and construction industries. In 1977, these industries accounted for nearly 61 percent of the $1,894.5 billion of the gross domestic product and 70 percent of that originating in the private sector. The principal industry groups not covered were finance, insurance, and real estate; agriculture and forestry; communications; electric, gas, and sanitary services; and transportation. Limited information on transportation is collected, e.g., truck registration and distances travelled, and shipments of commodites by type of transport and distance shipped.

Uses and users of census data—The economic censuses are the primary source of facts about the structure and functioning of a major part of the economy. They are used extensively in compiling the benchmark measures of the national accounts. Census data also serve as weights or benchmarks for indexes of industrial production, productivity, and price; as well as many current surveys of industrial activity.

There is widespread use of the economic censuses, by the Government, in setting economic policy and monitoring economic programs. Manufacturers and distributors rely on census data to measure their potential geographic and industrial markets. The censuses provide the facts needed for economic forecasting; analysis of sales performance; the layout of sales territories; the allocation of advertising budgets; and the location of plants, warehouses, and stores. Trade and professional associations rely on census information to determine how their industries are changing; chambers of commerce and State and local governments depend on them to assess changes in the business structure in their areas. Business magazines and academic researchers rely on census facts as background for many of their articles.

Census reports are purchased by thousands of business and other users; census data are republished and widely circulated by trade associations, business journals, and the daily press; and census volumes are available in all the major public and college libraries.

History—The first economic type census covered the year 1809, when inquiries on manufacturing were included with the 1810 Census of Population. By modern standards, the results of this

pioneer effort would be considered unsatisfactory.[1] However, continued interest in the Nation's economic growth led to successive improvements in economic census-taking during the 19th century. By 1890, the statistical standards and procedures followed in censuses reached a full professional quality.

All of the decennial censuses from 1810 through 1940, with the exception of 1830, included questions on manufacturing. Inquiries on mining first appeared in 1840, and censuses of mineral industries were conducted decennially through 1940. Although some business-related data were collected in 1840, the first census of business was taken for the year 1929. This included retail trade, wholesale trade, and construction; beginning with 1933, selected service trades were covered. Dates of these and other economic censuses from 1809 are shown in table A.

Enterprise statistics—Through the history of the economic censuses. the unit of enumeration has been the establishment—i.e., a single physical location engaged in a specific line of business (for more discussion, see section 8). This unit is best suited for obtaining measures of direct output and input—labor, material, capital, etc. It is also best suited for providing refined industry and geographic tabulations. Statistics measuring overall income and balance sheet data are best collected at the company or enterprise level. In the early 19th century, these two business units were often identical. With the rise of large-scale operations, it became quite common for the large companies to operate separate manufacturing establishments in a number of diverse industries so that today the establishment and enterprise frequently are not the same. Enterprise measures and balance sheet data have typically been provided by the Internal Revenue Service (IRS) in its Statistics of Income and Federal Trade Commission (FTC) in its Quarterly Financial Report of Corporations.

The Bureau of the Census, as a result of the coordinated collection and tabulation of comparable data for several economic sectors in 1954, also developed an enterprise statistics

Table A. **Years Covered by U.S. Economic Censuses: 1809 to 1977**

Year covered	Manufactures	Mineral industries	Fisheries	Construction industries	Retail trade	Wholesale trade	Service industries[1]	Transportation[2]
1809	X	-	-	-	-	-	-	-
1819	X	-	-	-	-	-	-	-
1839	X	-	-	-	-	-	-	-
1840	-	X	-	-	-	-	-	-
1849	X	-	-	-	-	-	-	-
1850	-	X	-	-	-	-	-	-
1859	X	-	-	-	-	-	-	-
1860	-	X	-	-	-	-	-	-
1869	X	-	-	-	-	-	-	-
1870	-	X	-	-	-	-	-	-
1879	X	-	-	-	-	-	-	-
1880	-	X	X	-	-	-	-	-
1889	X	X	X	-	-	-	-	-
1899	X	-	-	-	-	-	-	-
1902	-	X	-	-	-	-	-	-
1904	X	-	-	-	-	-	-	-
1908	-	-	X	-	-	-	-	-
1909	X	X	-	-	-	-	-	-
1914	X	-	-	-	-	-	-	-
1919	X	X	-	-	-	-	-	-
1921	X	-	-	-	-	-	-	-
1923	X	-	-	-	-	-	-	-
1925	X	-	-	-	-	-	-	-
1927	X	-	-	-	-	-	-	-
1929	X	X	-	X	X	X	-	-
1931	X	-	-	-	-	-	-	-
1933	X	-	-	-	X	X	X	-
1935	X	X	-	X	X	X	X	-
1937	X	-	-	-	-	-	-	-
1939	X	X	-	X	X	X	X	-
1947	X	-	-	-	-	-	-	-
1848	-	-	-	-	X	X	X	-
1954	X	X	-	-	X	X	X	-
1958	X	X	-	-	X	X	X	-
1963	X	X	X	-	X	X	X	X
1967	X	X	X	X	X	X	X	X
1972	X	X	-	X	X	X	X	X
1977	X	X	-	X	X	X	X	X

- Not published. X Published.

[1]Actual coverage varied from census to census. [2]Limited information only.

[1] For an appraisal of early censuses of manufacturing, see Meyer H. Fishbein, The Censuses of Manufactures 1810-1890. National Archives Publication No. 63-22, June 1963, Government Printing Office.

program. This program relates census company-level data to data measuring the activities of individual operating units or establishments within the companies. Thus, a measurement of the integration and diversification of the American enterprise system became available. The enterprise statistics program also made it possible to link census establishment-based data on a modified basis to enterprise-based statistical systems such as the IRS's Statistics of Income for Corporations.

Legal provisions—The periodic economic censuses are required by law. Title 13 of the United States Code specifies the frequency of the censuses, the kinds of activities to be covered, the obligation to report, the penalties for failure to report, and the confidentiality of returns. It also authorizes the use of sampling techniques in conducting censuses. As amended in 1964, Title 13 requires the economic censuses to be taken at 5-year intervals, covering the years ending in "2" and "7." The next censuses will cover the year 1982 and will include the census of agriculture, which has been customarily conducted on a different time sequence from the other economic censuses. The pertinent portions of Title 13 are quoted in appendix E.

2. CHARACTERISTICS OF THE INDUSTRIAL SECTOR

General—Manufacturing is the largest sector of the economy. In 1977, manufacturing plants employed nearly 20 million persons, or 20 percent of the civilian labor force of 97.4 million. As shown in table B, gross domestic product (GDP) originating in manufacturing averages almost 24 percent of the total. Wholesale and retail trade combined was the next largest sector with 17 percent of the GDP.

Cyclical changes—The need for frequent and comprehensive statistics on manufacturing derives as much from its sensitivity to cyclical influences as from its relative size. Cyclical changes in income originating in manufacturing tend to be relatively larger than in the economy as a whole, as can be seen in the movement of national income originating in manufacturing from 1929 to 1933 to 1939 in table C.

Within manufacturing, durable goods industries accounted for about 60 percent of all manufactures during recent periods. This category tends to be more volatile than nondurable goods,

Table B. **Gross Domestic Product, by Industry, for Selected Years: 1947 to 1977**

Industry	1947	1954	1958	1963	1967	1972	1977
	Billions of dollars						
Gross national product[1]	233.1	366.8	449.7	596.7	799.6	1,185.9	1,918.0
Gross domestic product[1]	231.8	364.5	446.6	591.8	793.7	1,175.0	1,894.5
Manufacturing	66.2	106.4	123.8	167.4	222.3	292.5	462.4
Nondurable goods	32.7	45.6	54.1	69.8	88.7	119.3	185.3
Durable goods	33.5	60.8	69.7	97.6	133.6	173.2	276.6
Wholesale and retail trade	44.2	60.9	75.2	96.1	130.1	199.5	322.5
Government and government enterprises	19.3	36.9	47.1	65.9	96.3	155.4	237.2
Services	20.2	30.5	42.3	60.0	86.1	136.5	234.3
Finance, insurance, and real estate	23.2	46.5	62.4	85.3	114.2	169.8	274.0
Contract construction	9.1	17.2	21.0	27.4	37.5	59.4	86.7
Transportation	13.6	18.1	20.9	24.9	32.1	45.6	71.2
Agriculture, forestry, and fisheries	20.8	20.7	21.9	22.0	24.2	35.4	53.8
Electric, gas, and sanitary services	3.8	8.0	10.7	14.9	18.5	28.8	49.9
Communication	3.1	6.5	8.9	13.1	18.0	29.8	49.4
Mining	6.8	10.9	12.4	13.1	14.6	19.0	48.6
Rest of the world[1]	-	-	-	-	-	-	-
	Percent of gross domestic product						
Gross national product[1]	-	-	-	-	-	-	-
Gross domestic product[1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing	28.7	29.2	27.7	28.3	28.0	25.0	24.4
Nondurable goods	14.2	12.5	12.1	11.8	11.2	10.2	9.8
Durable goods	14.5	16.7	15.6	16.5	16.8	14.8	14.6
Wholesale and retail trade	19.2	16.7	16.8	16.2	16.4	17.0	17.0
Government and government enterprises	8.4	10.1	10.5	11.1	12.1	13.3	12.5
Services	8.8	8.4	9.5	10.1	10.8	11.6	12.4
Finance, insurance, and real estate	10.1	12.8	14.0	14.4	14.4	14.5	14.6
Contract construction	4.0	4.7	4.7	4.6	4.7	5.1	4.6
Transportation	5.9	5.0	4.7	4.2	4.0	3.9	3.8
Agriculture, forestry, and fisheries	9.0	5.7	4.9	3.7	3.0	3.0	2.8
Electric, gas, and sanitary services	1.7	2.2	2.4	2.5	2.3	2.5	2.6
Communication	1.3	1.8	2.0	2.2	2.3	2.5	2.6
Mining	3.0	3.0	2.8	2.2	1.8	1.6	2.6
Rest of the world[1]	-	-	-	-	-	-	-

[1]Gross national product is the market value of goods and services produced by labor and property supplied by residents of the United States. Gross domestic product is the value of goods and services attributable to labor and property located within the United States. It equals GNP less the "Rest of the world" which is the net inflow of labor and property income from abroad.

generally accounting for a smaller percentage of all manufactures during periods of contraction and a larger percentage during periods of expansion. In the early thirties, for example, as shown in table C, durable goods manufacturing fell to only about one-third of the total.[2]

Geographic distribution—In the early and middle 19th century, manufacturing activity was concentrated in the Northeast. Over the past 130 years, as shown in table D, there has been a steady decline in the proportion accounted for by the Northeastern States. Industry expanded into the north central region in the

Table C. **Total National Income and Amounts Originating in Durable and Nondurable Manufactures for Selected Years: 1929 to 1977**

Year	Gross national product[1] (bil. dol.)	Gross domestic product[1] (bil. dol.)	National income without capital consumption adjustment[1] (bil. dol.)	National income originating in manufacturing			Manufacturing as a percent of national income	Durable goods industries as a percent of total manufacturing
				Total (bil. dol.)	Nondurable goods industries (bil. dol.)	Durable goods industries (bil. dol.)		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1977	1,918.0	1,894.5	1,582.6	411.5	162.9	248.6	26	60
1976	1,718.0	1,697.5	1,413.0	366.6	149.9	216.7	26	59
1975	1,549.2	1,531.9	1,267.4	317.7	132.1	185.6	25	59
1974	1,434.2	1,414.4	1,176.8	301.4	120.6	180.8	26	60
1973	1,326.4	1,310.4	1,094.1	285.3	108.7	176.7	26	62
1972	1,185.9	1,175.0	969.9	252.3	98.3	154.0	26	61
1971	1,077.6	1,068.5	878.1	226.5	92.1	134.5	26	59
1970	992.7	985.4	814.8	215.1	87.7	127.4	26	59
1969	944.0	937.1	780.8	221.9	85.7	136.2	28	61
1968	873.4	866.7	722.7	212.7	81.6	129.4	31	59
1967	799.6	793.7	661.5	193.7	74.8	119.0	29	61
1966	756.0	750.3	627.0	189.7	72.2	117.5	30	62
1965	691.1	685.2	571.1	171.3	65.9	105.4	30	62
1964	637.7	632.3	524.2	154.2	61.3	93.2	29	60
1963	596.7	591.8	488.6	143.8	57.5	86.3	29	60
1962	565.0	560.5	463.4	136.1	55.1	81.0	29	60
1961	524.6	520.7	433.3	125.1	52.7	72.4	29	58
1960	506.5	502.9	420.8	125.1	51.9	73.2	30	59
1959	487.9	484.6	406.8	124.3	51.2	73.1	31	59
1958	449.7	446.6	373.4	107.9	45.8	62.1	29	58
1957	444.0	440.5	371.7	116.3	46.4	70.0	31	60
1956	421.7	418.5	355.7	113.2	46.3	66.9	32	59
1955	400.0	397.3	335.5	108.0	44.0	63.9	32	59
1954	366.8	364.5	307.2	94.7	39.7	55.0	31	58
1953	366.8	364.6	309.0	100.5	40.3	60.2	33	60
1952	348.0	345.7	295.5	92 6	38.3	54.3	31	59
1951	330.8	328.7	281.7	90.3	38.4	51.9	32	57
1950	286.5	284.8	244.0	76.3	33.4	42.9	31	56
1949	258.3	256.9	220.1	64.8	30.6	34.3	29	53
1948	259.5	257.9	226.7	68.8	32.9	35.9	30	52
1947	233.1	231.8	201.0	59.6	28.1	31.5	30	53
1943	192.1	191.6	171.5	58.3	19.6	38.6	34	66
1939	90.9	90.5	73.2	18.1	9.1	9.0	25	50
1935	72.5	72.1	57.6	13.4	7.3	6.1	23	46
1933	55.8	55.5	40.6	7.7	4.9	2.8	19	36
1932	58.3	57.9	43.1	7.3	5.2	2.1	17	29
1929	103.4	102.6	87.2	21.9	10.6	11.3	25	52

[1]Gross national product is the market value of goods and services produced by labor and property of residents of the United States. Gross domestic product is the value of goods and services produced within the United States. National income is gross national product less capital consumption allowances, indirect business taxes, and business transfers plus subsidies less surplus of government enterprises.

Source: Survey of Current Business.

[2]Based on national income rather than gross domestic product (GDP). Industry detail for GDP is available only from 1947; whereas, industry detail for national income is available from 1929 and encompasses the very depressed period of the 1930's.

Table D. **Employment in Manufacturing Establishments by Region: 1849 to 1977**

Year	United States	North-east	North Central	South	West
	Number of employees (thousands)				
1977	19,590	5,008	6,272	5,593	2,717
1972	19,029	5,306	6,135	5,221	2,367
1967	18,492	5,573	6,059	4,553	2,305
1963	16,235	5,190	5,239	3,780	2,025
1958	15,423	5,242	5,017	3,382	1,779
1947	14,294	5,429	5,109	2,710	1,054
1939	9,527	3,879	3,184	1,852	612
1929	10,198	4,246	3,516	1,758	675
1899	5,077	2,629	1,474	793	181
1849	957	696	110	146	4
	Percent of U.S. total				
1977	100	26	32	29	14
1972	100	28	32	27	13
1967	100	30	33	25	12
1963	100	32	32	23	13
1958	100	34	33	22	12
1947	100	38	36	19	7
1939	100	41	34	20	6
1929	100	42	35	17	7
1899	100	52	29	16	4
1849	100	73	12	15	-

Note: Detail may not add to totals because of independent rounding. 1849 data include hand and neighborhood industries, which were excluded from the censuses of manufactures beginning with 1899.

Source: Census of Manufactures.

latter part of the 19th century and, in more recent years, displayed a marked growth in the South and West.

Size distribution—Manufacturing activity tends to be characterized by relative large-scale operations. While there are many small manufacturing plants, they account for a relatively small part of the total output of goods. As shown in table E, over half of the plants covered in the 1977 Census of Manufactures were very small, employing less than 10 workers, but they accounted for less than 3 percent of total manufacturing activity as measured by value added by manufacture. (See appendix A for definition of value added).

Table E. **Number of Establishments and Value Added by Manufacture by Size of Establishment: 1977**

(Cumulative percentage)

Employment size class	Establishments	Value added by manufacture
All establishments	100.0	100.0
1 to 4 employees	40.1	1.0
1 to 9 employees	53.8	2.4
1 to 19 employees	67.6	5.2
1 to 49 employees	82.3	12.2
1 to 99 employees	89.9	20.5
1 to 249 employees	96.0	36.3
1 to 499 employees	98.3	51.0
1 to 999 employees	99.3	65.8
1 to 2,499 employees	99.8	80.1

3. CENSUS OF MANUFACTURES—BENCHMARK STATISTICS

In the farm-oriented economy of the early 19th century, the need for industrial statistics for setting government policy, except for tariffs and taxes, was slight. A few series on physical output of commodities originated either from private sources (flour, iron, steel, etc.) or as a byproduct of tax collection or other government functions (liquors, beer, tobacco products, etc.). The only sources of information on the growing manufacturing sector were the censuses of manufactures, then taken at 10-year intervals. Today, the need for industrial statistics has greatly increased so there is now a vast array of detailed information covering virtually every measurable aspect of industrial activity including employment; payrolls; hours worked; production; prices; inventories; orders; investment in structures, machinery, and equipment; and consumption of raw materials, fuels, and water. Many of these statistics are available at frequent intervals and very promptly after the close of the accounting period. Sophisticated indicators of economic change have also been developed, such as price and production indexes and the gross national product accounts that are published at monthly or quarterly intervals.

The census of manufactures, though conducted only at 5-year intervals, still plays an essential role since no other source measures the structure of the industrial sector in such a comprehensive and detailed way.

For every manufacturing plant with one employee or more, the census obtains data on its input of labor, materials, and capital; its output of products and services; its location; and the legal form of organization of the owning firm.[3]

A set of summary of general statistics are developed for each establishment (that is, total employment, payroll, number of production-worker hours and wages, cost of materials, value of shipments, inventories, capital expenditures, and value added by manufacture) and aggregated by industry, by area, by employment size of establishment, by degree of product specialization within plant, and by type of ownership. Reports are published on the detailed industrial characteristics of each State and large standard metropolitan statistical area (SMSA); and overall measures of manufacturing activity are shown at the county and individual city level provided the information can be published without compromising the confidentiality of individual company data. Since census legislation guarantees confidentiality to the firms that are required to report, it is frequently necessary to suppress some aggregates. Since a significant amount of industry detail cannot be published for the 3,140 counties and county equivalents in the United States, a special computer tape on Location of Manufacturing Plants was developed to provide a complete industry-county cross-section description of manufacturing. This tape includes the number of establishments in each of the 450 industries by county or county-equivalent area, by employment size. Comparison of this complete profile between censuses is used to study shifts in the geographic dispersion of industries and the industrial structure of local areas.

[3] Since 1967, some of this information for 120,000 small companies was not obtained directly but estimated from other government records. See the discussion of coverage of establishments in items 4 and 6.

The census of manufactures also facilitates the conduct of more frequent surveys on a sample basis. In fact, the present legislation specifying that censuses be conducted every 5 years authorizes an annual survey of manufactures (ASM) on a sample basis during the intervening years. The 5-year census provides the framework for selecting a new sample and the periodic universe levels to benchmark the sample estimates. The sample includes about one-fifth of all establishments. All large establishments are included in every sample; the smaller are selected proportionately to their size and are replaced at the end of each census. Thus, there is an annual updating of the census of manufactures in terms of broad measures of economic activity. The ASM contains the same basic measures of economic activity of the plant such as employment, payrolls, value of shipments, value added by manufacture, as does the census of manufactures, but obtains less detailed information on products, materials consumption, and equipment.[4]

The census of manufactures also is used to update other indicators of economic activity, especially the national income accounts. Census data on materials consumed and product output by industry are basic to the input-output matrix developed by the Bureau of Economic Analysis (BEA) for the manufacturing sector. The Federal Reserve Board's monthly Index of Industrial Production—a key indicator of current economic activity—relies on census industry and product data as benchmarks and weights to sum industries to higher levels of aggregation. The census and ASM also provide benchmarks for hundreds of monthly and quarterly surveys of commodity output conducted by the Bureau of the Census, other government agencies, and by manufacturers' associations.

4. INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

Structure of the SIC System—The establishments in the census of manufactures are classified according to the SIC Manual. The SIC Manual covers the entire field of economic activities, subdivided as follows:

Industrial division	Title	Major groups
A	Agriculture, forestry, and fisheries	01-09
B	Mining	10-14
C	Contract construction	15-17
D	Manufacturing	20-39
E	Transportation, communication, electric, gas, and sanitary services	40-49
F	Wholesale and retail trade	50-59
G	Finance, insurance, and real estate	60-67
H	Services	70-89
I	Public administration	91-97
J	Nonclassifiable establishments	99

Below the major group level, the SIC provides for 3-digit groups and finally for 4-digit industries. To illustrate—

Division D—Manufacturing

Major Group. . . . . Food and kindred products
Industry group 202 . . . . . Dairy products
Industry 2023. . . . . Condensed and evaporated milk

The SIC system was developed to classify establishments as distinguished from similar systems used to classify companies or enterprises. An establishment is defined as a single physical location engaged in one of the industry categories of the SIC. (See pp. 1-9 for the application of this definition to collecting data in the economic censuses.)

This SIC system is the responsibility of an intragovernmental technical committee headed by the Office of Federal Statistical Policy and Standards, formerly part of the Office of Management and Budget, but transferred to the Department of Commerce in 1977. The system is used by all Federal Government agencies engaged in the classification of establishments. Many State and local governments and business concerns also organize their own records along SIC system lines in order to facilitate comparison with federal statistics.

The first SIC Manual was issued in 1939. For the manufacturing sector, the nucleus was the set of industry classifications developed over many years for use in the census of manufactures. A revised manual was issued for the manufacturing industries in 1945 and with minor modifications, used in the 1947 and the 1954 Censuses of Manufactures. In 1957, the SIC Manual was extensively revised for manufacturing industries and the historical comparability of some data was seriously affected. The introduction and appendixes to the 1958 census volumes discuss in detail this revision and its effects on census series. Only minor revisions of the SIC Manual were made between 1958 and 1967. The next extensive revision of the SIC Manual affecting the comparability of industry data was completed in 1972. These revisions and their impact on comparability appear in appendix C of the 1972 Census of Manufactures volumes.

Structure of the Manufacturing SIC System—For manufacturing, there are 20 2-digit SIC Major Groups (20 to 39) which are subdivided in 144 3-digit SIC Groups (201 to 399) and into 452 4-digit industries (2011 to 3999). The Bureau of the Census combined some small industries in order to publish data.

Most of the 452 manufacturing industries are defined in terms of specific groups of related products. Usually the products are made of similar materials and by similar processes and many are competitive but the SIC system does not necessarily bring together products which are close substitutes

[4] Since the ASM is based on a sample, the cross-classifications by industry and by area are fewer than in the census of manufactures. At the U.S. level, statistics are published in the annual survey for practically all of the 450 industries. However, at the SMSA level, statistics are published only for 3-digit and 2-digit industry groupings. At the county level, information is published for about 10 percent of the 3,140 counties and equivalent areas. These 300 odd counties are the larger ones in terms of manufacturing activity and account for about 80 percent of total manufacturing employment. Data for cities are shown for those cities having over 20,000 manufacturing employees.

in use and competitive in markets. In determining the boundaries of industries,[5] it is essential that each industry comprise a group of establishments that are highly specialized in making products that define the industry (primary products) and that a large proportion of all the products be made in establishments classified in the industry. While similarity of product is most frequently the determining factor in defining an industry, some industries are defined in terms of the processes or equipment used regardless of the final product of the establishment. (Example: Industry 3361, Aluminium Foundries (castings).) A small number of industries are basically defined by material used as well as final product of the plant. (Example: Industry 2521, Wood Office Furniture, and Industry 2522, Metal Office Furniture.)

There are wide differences among industries in their purity—i.e., the extent to which the establishments classified in the industry:

a. Account for the total production of commodities "primary" to the industry.
b. Produce products or services "belonging" to other industries (that is, secondary products).
c. Use similar materials or processes.

These variations are frequently construed to be shortcomings. However, these limitations in the classification structure arise from the inherent complexity of our economic system and from the variation in types of production that take place in individual establishments.

While the SIC system is the basis for aggregating census data, the data collected, in turn, provide the statistical basis for periodic critical evaluation of that classification system and its revision.[6]

No general-purpose system of industrial classification can satisfy all users of census data. Some business users are interested primarily in a narrow range of products which they and their competitors produce. Others are involved in a wide range of products that move through the same marketing channel. Others seek data relating to the consumers of one or more types of materials. Some are interested only in the data for highly specialized plants; others for plants producing a "full line" of products. Those studying productivity may require data for plants using the same techniques.

The large number of SIC industries provides the analyst with the "building blocks" for making useful approximations, even if specific data cannot be developed to resolve many of these problems. A single general-purpose system of classification can only partially satisfy these diverse needs; a point is soon reached at which the adaptation of a system to serve one use better will reduce its ability (sometimes disproportionately) to serve an alternative use.

Accordingly, users of data frequently reqroup detailed SIC industries differently from the 2- and 3-digit SIC categories. The Federal Reserve Board for many years has made combinations to stress such characteristics of products as durable, nondurable, consumer, producer, finished, intermediate goods, etc. Other public and private agencies also recombine the detailed classes. The 4-digit industries are more susceptible to allocation to such categories than the 2-digit SIC groups.

Subindustries—The Bureau of the Census frequently has further classified some of the basic 4-digit SIC industries into "subindustries." Subindustries are employed where there are wide disparities in the input-output relationships (or operating ratios) of the plants in the industry because of differences in the degree of vertical integration, technology, methods of distribution, geographic location, types of materials used, etc. In about 61 manufacturing industries, subindustries were established for editing purposes and many were regarded as significant enough to be used for publication. For example, the bakery industry (SIC 2051) is subdivided into wholesale bakeries, chain-store bakeries, home-service bakeries, and retail multioutlet bakeries; and many apparel industries (major group 23) are subclassified into manufacturers, contractors, and jobbers.

To provide a further measurement of variations with 4-digit industries, the Bureau of the Census also subclassified establishments by the degree to which they produce the primary products or specific classes of primary products of the 4-digit industry into which they are classified. This is, in effect, a subindustry classification based on the degree of product specialization which is published in table 5a of Volume II, Industry Statistics.

Definition of manufacturing—Manufacturing includes a wide range of activities as defined in the SIC Manual. Manufacturing is the mechanical or chemical transformation of inorganic or organic substances into new products. The assembly of component parts of products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfer to other plants of the same company, or to the order of industrial users. Typically, manufacturers do not sell directly to the household consumer, although some (for example, baking, milk bottling, etc.) sell, chiefly at retail, to household consumers through the mail, through house-to-house routes, or through salesmen. Some service-type activities (enameling, binding, platemaking, etc.) are included in manufacturing if they are performed primarily for trade; but are considered nonmanufacturing if they are performed primarily to the order of the household consumer. On the other hand, some manufacturing industries include business firms which perform only the entrepreneurial functions

[5] Frequently, business analysts and other data users look at a group of products from more than one point of view. For example, modern high-speed computers are classified as office machines. This describes the purpose of the product. In a physical sense, however, such computers would be described as electronic devices. Similarly, paper bags, wooden boxes, glass bottles, tin cans, and steel barrels may all be classified as containers, or they may be individually grouped with other products of similar materials, such as converted paper products, wood products, glass products, etc.

[6] See Industry Classification and Sector Measures of Industrial Production by James W. McKie, Bureau of the Census Working Paper No. 20, 1965, and Historical Comparability of Census of Manufactures Industries, 1929-1958 by Harold T. Goldstein, Bureau of the Census Working Paper No. 9, 1959.

of buying the materials and designing and marketing the product, but have the actual production done on contract (for example, apparel jobbers).

SIC classifies establishments—The SIC system is an establishment classification system, and the census of manufactures is conducted on an establishment basis. That is, a company with operations at more than one location is required to submit a report for each location. On the other hand, a company engaged in distinctly different lines of activity at one location is required to submit a separate report for each activity if the plant records permit such a separation and if the activities are substantial in size.

The requirement that distinct lines of activity at the same location be separately reported was applied only where the establishment produced and shipped significant amounts of products classified in different SIC industries. In widely varying degrees, many manufacturing establishments make products that fall into different SIC industries. Generally, the amounts involved are not significant enough to warrant the filing of separate reports, even if feasible. However, there are a number of locations at which large numbers of employees are engaged in activities defined in different industries of the SIC system. Frequently, companies organize their operations and their records separately for the diverse activities and report them as separate plants. When they do not do so on their own initiative, the Bureau of the Census requests separate reports if it appears that 100 or more employees are involved in each activity. For the most part, companies have cooperated and "split out" the different activities which would otherwise significantly distort the relationship of the industry and product statistics. Not infrequently, however, the two groups of products are made on the same production lines by many of the same employees and cannot be distinguished sufficiently in company records to provide establishment-type reporting.

The SIC system also recognizes special situations where otherwise separately classifiable activities frequently occur at one location. For example, the definition of Industry 2421, Sawmills and Planing Mills, recognizes that sawmills may include logging operations. Similarly, pulpmills operated in combination with papermills are included in one report.

Establishments included in census of manufactures—For the 1947 Census of Manufactures, the censuses have included only establishments with one employee or more. Prior to 1947, different criteria were used to determine if an establishment had to report in the census. In the censuses of 1921 through 1939, establishments with less than $5,000 value of products were excluded. For 1899 to 1919, the limit was $500. The change in the minimum-size criterion to an employment basis in 1947 did not appreciably affect the overall comparability of earlier census figures, except for the number of establishments.[7]

A sample survey of manufacturing plants with no paid employees was conducted in conjunction with the 1958 census. While there were nearly 52,000 establishments in this category in that year, they accounted for only about one-quarter of 1 percent of the total value of shipments of all manufacturing industries. The proportion was higher for certain industry groups such as lumber and wood products, and printing and publishing. Tabulation of IRS data for 1977 indicates that manufacturers with no paid employees continue to be of very minor importance. They contribute less than one half of 1 percent of the total value of shipments of all manufacturing industries.

Special treatment of very small establishments—Beginning with the 1967 census, an effort was made to relieve the very small establishments from the necessity of filing a census report. Approximately 145,000 small single-unit manufacturing firms identified as having less than 10 employees benefited from this procedure. Limited data on payrolls, sales, and industry classification from the administrative records of the Social Security Administration (SSA) and the IRS were made available to the Bureau of the Census for use in the 1967, 1972, and 1977 economic censuses. (These special arrangements safeguarded the confidentiality of both tax and census records.) Data other than payrolls and sales for these small establishments were estimated from historical industry ratios. The effect on industry aggregates is slight in most industries; for manufacturing as a whole, these small "administrative records" account for only 1.7 percent of the value added. Detailed product and materials data for these small establishments were not estimated; the entire value of product shipments and cost of materials was imputed to a "not specified by kind" (n.s.k.) category. If these establishments had been included in the 1972 Census of Manufactures, they were assigned the industry classifications to which they had been coded. If they had started business later, they were coded on the basis of brief descriptions of the general activity of the establishment as reported to the SSA. Where the description is incomplete or there are relatively fine lines of demarcation between industries or between manufacturing and nonmanufacturing activity, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product information. Therefore, the Bureau of the Census conducted a special classification survey in order to clarify the industry codes of some of the establishments in the adminstrative record file. All establishments without specific 4-digit codes and those where there could be significant misclassification between manufacturing and other sectors were sent such a questionnaire. Nevertheless, the total establishment counts in most industries should be viewed as approximations rather than precise measurements. The counts for establishments with 20 employees or more are far more reliable than the total number of establishments.

Auxiliary units—Manufacturing requires a wide range of diverse support activities. These activities include movement to the manufacturing plant, storage, the operation and maintenance of plant and equipment, the design of flow of work through the production process, and necessary arrangements for shipment of output to customers. Also included are a host of subsidiary activities associated with the operation of an establishment (for example, management and policy formation, product and market orientation, engineering and quality control,

[7] This point is discussed at greater length in the Introduction to the 1947 volumes.

recordkeeping and accounting, physical security of plant and equipment, and the like).

Support and subsidiary activities may be performed by personnel located at the manufacturing establishments or at a separate location serving one or more manufacturing locations of the same company. These separate locations are referred to as administrative offices and auxiliaries, where these activities are carried on at a different physical location or are performed for more than one plant, they are excluded from the figures for operating manufacturing establishments and are included in the data shown for administrative offices and auxiliaries. (See the description of the questionnaire used for these establishments, form NC-X6, in item 7.)

Border-line activities—The following types of activities, while having some of the characteristics usually found in manufacturing, are considered as nonmanufacturing and, therefore, are excluded from the census:

a. Processing on farms when the raw materials are grown on the farm and the manufacturing activities (poultry dressing, milk and butter production, logging, etc.) are on a small scale without extensive use of paid labor. Also custom milling, egg hatching, cotton ginning, and similar activities closely associated with agriculture are excluded.
b. Mineral preparation such as the crushing, screening, and concentrating of ores. However, mining performed as a secondary activity in conjunction with manufacturing is included in the census unless a separate report for the mining activity was filed; for example, stone and clay mining at cement, lime, and clay products plants.
c. Custom work to the individual order of household consumers. Examples are custom tailoring, woodworking, lettering on monuments, setting of diamonds, and the making of orthopedic appliances.
d. Repair and other service activities, except specified services performed "for the trade." Repair shops of railroads are also excluded.
e. Production of coke "for own use" by establishments owned by public utility companies.

Census establishment-based data measures manufacturing as primary activity. In the census of manufactures, no attempt is made to measure the extent of manufacturing at locations which are not primarily manufacturing plants, such as retail establishments which sell most of their products on the premises directly to household consumers (retail bakeries,[8] ice cream stores, etc.), or manufacturing by construction contractors at the site (for example, production of paving mixtures).

Conversely, it is not unusual for manufacturing establishments to engage also in some nonmanufacturing activities such as repair work, merchandising of products without further processing, and installation work. Ordinarily, these nonmanufacturing receipts are small in relation to the manufacturing activities and, therefore, it is not difficult to determine that the establishments should be included in the manufactures area. However, if the nonmanufacturing activities account for a significant proportion of total receipts of an establishment, the classification of that establishment into the appropriate major economic sector is more difficult.

In the economic censuses, an establishment engaged in a combination of manufacturing and merchandising is assigned either to the manufacturing or the trade industries depending on which of these activities was estimated to account for the larger share of its "value added" or "income produced." This criterion, even though based on approximation, was considered preferable to treating each dollar of receipts from each type of activity equally in determing the primary industry, since manufacturing requires considerably more worker-hours, salaries and wages, and capital inputs per dollar of receipts than either wholesaling or retailing. However, in classifying establishments engaged in manufacturing and also in mining, repair work, installation, construction, or other nonmanufacturing services, dollar receipts were used as the basis of classification because these activities require substantially comparable input per dollar of receipts.

Product codes—The SIC coding system is designed to describe industries and operates in such a way that the definitions become progressively narrower with successive additions of numerical digits. There are 20 very broad 2-digit groups, 144 3-digit groups, and 452 4-digit industries. Based on the SIC Manual, the Bureau of the Census has developed a product coding system along similar lines which contains about 1,500 5-digit product classes and approximately 13,000 individual 7-digit products. (See "the classification of products and materials" below.) The 7-digit products and 5-digit product classes are considered the primary products of the industry with the same first four digits as the product code. For example, the 7-digit product code number 2023212 refers to canned evaporated milk. The first five digits of this code number, 20232, refer to the "product class" canned milk, and the first four digits, 2023, refer to the industry in which these products are made (the condensed and evaporated milk industry). The same system is applied to the coding of materials. The first four digits of a material code (for example, the code number 024111, whole milk used as a material) describe the industry that produces it; e.g., 0241, agricultural industry, dairy farms.[9]

This SIC-based system is simpler than other systems for the coding of industrial products and materials used, since there is a direct numerical relationship between commodities and industries. Complications occur in the few SIC industries defined in terms of processes or equipment used as well as products made. As an example, women's sweaters are produced in knitting mills (industry 2253) and also in cut-and-sew shops (industry 2339). To retain the industry-of-origin concept, therefore, it is necessary to assign different product code numbers to women's sweaters, depending on where they are made.

The SIC-based commodity classification is used in the Bureau of the Census' entire industrial statistics program, including

[8] Separate data for retail bakeries with baking on the premises were included in the retail census publications.

[9] See tables 6a and 7 in volume II.

monthly, quarterly, and annual surveys, and also in the census of wholesale trade. The Bureau of the Census also publishes data on imports and exports in terms of SIC-based categories as well as the traditional Schedule B and TSUSA systems.[10]

Primary and secondary products of establishments—An establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of products of any other single industry. The industry code assigned to the establishment is derived from a summation of values for 7-digit product codes to their 4-digit industry and the selection of the largest 4-digit value as the establishment's industry classification. However, as mentioned earlier, the industry classification of an establishment may be determined not only by the products it makes but also by the processes employed or materials used in making those products.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. Therefore, the general statistics (employment, payrolls, inventories, value added by manufacture, total value of shipments, capital expenditures, etc.) shown for an industry (tables 1 to 4, Volume II, Industry Statistics) encompass not only the primary activities of the establishments in that industry but also their secondary activities. On the other hand, the product statistics in tables 5a and 6a of the industry chapters measure the total output of specific products whether they are produced by establishments classified in the same industry as the product or not. For this reason, in relating the general statistics of an industry, especially the industry total value of shipments (tables 1 to 4 in Volume II, Industry Statistics), to the product statistics (table 6), the composition of the industry's output as shown in tables 5b and 5c should be considered. Table 5c is a matrix table in which the columns break down industry shipments into primary and secondary products and "miscellaneous receipts." The rows of the table show the amount that each industry produced of a given product class.

The extent to which industry and product statistics may be matched with each other is measured by the two ratios shown in table 5b which are computed from table 5c. The first of the ratios, called the primary product specialization ratio, is the proportion of product shipments (both primary and secondary) of the industry made up of primary products. The second, defined as the coverage ratio, is the proportion of primary products shipped by the establishments classified in the industry to total shipments of such products by all manufacturing establishments.

Degrees of integration—In many industries, establishments use a wide variety of processes and materials to make the products of the industry. An industry classification based on end products may include establishments which are vertically integrated and those which put only the finishing touches on an already highly-fabricated purchased item. For example, in the refrigeration industry, there are some establishments that are almost completely integrated, producing the compressor and condensing unit, electric motor, and even the castings for those intermediate products, as well as the stamping of the case and the final assembly. In other plants, the condensing unit, the motor, and the case may be purchased and merely assembled into the finished product.

In some instances, nonintegrated plants have been placed in separate industry categories from the integrated plants. In many industries, the census provides separate statistics on departmental operations or on the production of intermediate commodities made and used in the producing plant. When an industry includes plants which ship a significant proportion of their output to other plants of the same company, separate figures are usually shown on the interplant transfers.

These differences in the integration of production processes, types of operations, and types of materials used, should be taken into account when relating the general items (employment, payrolls, value added, etc.) to the product and materials data. Where integrated operations are of consequence in an industry, that fact is pointed out in the explanatory text.

Industry code resistance—The production of many establishments is so evenly divided among two or more industry-determining product groups that the industry codes could change from year to year (industry codes can be based on less than half of the total value if there are three or more groups). In the ASM, plants had always been prevented from shifting back and forth among industries due to minor shifts in product mix in the years between censuses by the application of a "resistance formula" in assigning industry classifications. In census years, such resistence was not applied.

A resistance formula of the ASM type was first used in the 1963 Census of Manufactures. In the 1977 census, the formula was applied only to establishments included in the 1976 ASM sample panel with certainty (that is, included with a probability of "1"). In general, these certainty cases were establishments of companies with at least one manufacturing plant with 250 employees or more.

The formula recognizes the conflicting need to maintain continuity in the establishment composition of an industry to measure change and the need to allow establishments to be reclassified to measure the current composition of the industry.

In the 1977 census, the industry classification of a certainty establishment was allowed to change from that assigned in 1976 under one of the following conditions:

a. The value of the 1977 primary products constituted 60 percent or more of its total value of product shipments.

b. The value of the 1977 primary products, while less than 60 percent of the total, was at least twice the value of products which had determined the 1976 industry code.

c. The value of the 1977 primary products, while not meeting either of the two above conditions, had been the largest group of products for at least two years, i.e., exceeded the value of the 1975 primary industry's products in both 1977 and 1976 by at least 20 percent.

[10] Schedule B is the U.S. export classification while TSUSA is applied to imports.

Table F. **Value Added by Manufacture for Regions, Divisions, and States: 1977**

Region, division, and State	Value added by manufacture (million dollars)	United States, total (percent)	Region, division, and State	Value added by manufacture (million dollars)	United States, total (percent)
United States[1]	585,165.6	100.0	South Region--Con.		
Northeast Region	138,746.4	23.7	South Atlantic Division--Con.		
New England Division	35,586.9	6.1			
Maine	2,343.0	.4	West Virginia	3,880.2	.7
New Hampshire	2,174.7	.4	North Carolina	18,230.6	3.1
Vermont	1,050.1	.2	South Carolina	8,186.1	1.4
Massachusetts	16,348.6	2.8	Georgia	12,548.8	2.1
Rhode Island	2,736.6	.5	Florida	9,255.1	1.6
Connecticut	10,933.9	1.9			
Middle Atlantic Division	103,159.5	17.6	East South Central Division	36,234.3	6.1
New York	44,289.8	7.6	Kentucky	9,545.7	1.6
New Jersey	22,852.8	3.9	Tennessee	12,663.4	2.2
Pennsylvania	36,016.9	6.2	Alabama	8,405.9	1.4
			Mississippi	5,619.3	1.0
North Central Region	200,889.8	34.3			
East North Central Division	160,223.4	27.4	West South Central Division	52,112.5	8.9
Ohio	43,054.7	7.4	Arkansas	4,881.6	.8
Indiana	22,717.6	3.9	Louisiana	9,418.3	1.6
Illinois	40,279.1	6.9	Oklahoma	4,662.3	.8
Michigan	37,566.0	6.4	Texas	33,150.3	5.7
Wisconsin	16,606.0	2.9			
			West Region	84,910.6	14.5
West North Central Division	40,621.3	6.9	Mountain Division	13,620.4	2.3
Minnesota	9,605.2	1.6	Montana	847.3	.1
Iowa	8,684.4	1.5	Idaho	1,430.0	.2
Missouri	13,041.9	2.2	Wyoming	380.8	.1
North Dakota	473.3	.1	Colorado	4,471.8	.8
South Dakota	611.6	.1	New Mexico	733.5	.1
Nebraska	2,867.1	.5	Arizona	3,332.9	.6
Kansas	5,337.8	.9	Utah	1,974.0	.3
			Nevada	495.2	.1
South Region	160,581.7	27.4			
South Atlantic Division	72,304.3	12.4	Pacific Division	71,245.1	12.2
Delaware	1,595.7	.3	Washington	8,955.0	1.5
Maryland	7,115.6	1.2	Oregon	6,138.0	1.0
District of Columbia	610.2	.1	California	54,862.4	9.4
Virginia	10,882.0	1.9	Alaska	504.2	.1
			Hawaii	785.5	.1

[1]Total value added differs slightly from summation of the individual States since a few establishments that could not be accurately coded to a State are included in the United States total.

5. GEOGRAPHIC CLASSIFICATION

Census divisions and regions—The 1977 Census of Manufactures measures industrial activity at the State, county, city, and standard metropolitan statistical area levels. In prior censuses, similar information was also provided for the traditional nine geographic divisions (e.g., New England, Middle Atlantic, etc.) and the four geographic regions (northeast, south, north central, and west).

The presentation of data for individual industries and industry groups at all these geographic levels has always created serious problems in protecting the confidentiality of individual company data. Consequently, it has frequently been necessary to set priorities as to what will be published (see item 21). In the past, the preference was given to publishing data for the broad geographic regions over States leading to greater suppression of industry detail at the State level. In recent years, there has been increasing interest in State information in preference to the broader regions. As a result, the 1977 Census of Manufactures gave first precedence to publishing State figures. A decision was also made to forego publication of any divisional and regional totals. This was desirable to avoid suppressing industry detail in one State that could have been published, in order to protect data for another State in the same division, that had to be suppressed to preserve the confidentiality of a respondent's figures.

Thus, some summary tables for the nine geographic divisions and four regions that were published in prior censuses do not appear in Volume III, Area Statistics, of the 1977 Census of Manufactures. (See table F for 1977 value added data for regions, divisions, and States.)

Standard metropolitan statistical areas—In addition to the data for the legally constituted geographic units (States, counties, and cities), all manufacturing totals are shown for approximately 280 SMSA's.[11] In the 1977 tables, detail for 2-, 3-, and 4-digit industries is shown for an SMSA if data for individual companies would not be disclosed, and the industry had at least 250 manufacturing employees. These are the same criteria as those used in the 1972 census. In censuses prior to 1967, detail had not been shown for SMSA's with under 40,000 total manufacturing employment, and only industry group figures were shown for SMSA's with 40,000 to 190,000 employees.

SMSA's are integrated economic and social units with a large volume of daily travel and communication between the central city (having 50,000 or more population) and outlying parts of

[11] See appendix F for a description of each SMSA.

Table G. **The 50 Largest SMSA's Ranked by Value Added by Manufacture: 1977 and 1972**

Standard metropolitan statistical area	Number of employees (thousands)	Value added by manufacture (mil. dol.)	1977 rank	1972 rank	Standard metropolitan statistical area	Number of employees (thousands)	Value added by manufacture (mil. dol.)	1977 rank	1972 rank
Chicago, Ill	884.3	27,542.1	1	1	Indianapolis, Ind	124.0	3,922.2	27	26
Los Angeles-Long Beach, Calif	825.5	24,701.8	2	2	Gary-Hammond-East Chicago, Ind	98.2	3,517.6	28	30
New York, N.Y.-N.J	796.6	19,878.3	3	3	Dayton, Ohio	106.5	3,261.0	29	29
Detroit, Mich	564.6	18,149.9	4	4	Toledo, Ohio-Mich	92.7	3,203.0	30	35
Philadelphia, Pa.-N.J	451.8	13,429.6	5	5	Denver-Boulder, Colo	106.4	3,068.5	31	36
Houston, Tex	210.1	9,844.4	6	11	Providence-Warwick-Pawtucket, R.I.-Mass	140.0	3,040.4	32	33
St. Louis, Mo-Ill	248.7	8,342.0	7	8	Portland, Ore.-Wash	99.4	2,951.6	33	40
Cleveland, Ohio	265.4	8,105.9	8	7	Columbus, Ohio	96.2	2,969.4	34	32
Newark, N.J	255.5	7,870.8	9	6	New Brunswick-Perth Amboy-Sayreville, N.J	80.5	2,945.2	35	31
Dallas-Fort Worth, Tex	269.9	7,869.1	10	13	Allentown-Bethlehem-Easton, Pa.-N.J	106.8	2,731.8	36	37
Boston, Mass	267.7	7,469.1	11	9	Beaumont-Port Arthur-Orange, Tex	38.3	2,626.3	37	(1)
San Francisco-Oakland, Calif	193.3	6,817.2	12	14	Youngstown-Warren, Ohio	79.5	2,620.2	38	38
Rochester, N.Y	144.4	6,732.4	13	10	Grand Rapids, Mich	82.6	2,582.2	39	41
Pittsburgh, Pa	239.7	6,478.4	14	12	Phoenix, Ariz	84.6	2,558.6	40	44
Milwaukee, Wis	204.1	6,408.8	15	16	Hartford, Conn	87.0	2,317.0	41	43
Minneapolis-St. Paul Minn.-Wis	216.9	6,408.0	16	15	San Diego, Calif	79.1	2,173.9	42	49
San Jose, Calif	181.4	6,205.7	17	22	Memphis, Tenn.-Ark.-Miss	64.1	2,159.7	43	45
Cincinnati, Ohio-Ky.-Ind	160.2	5,645.9	18	17	Greenville-Spartanburg, S.C	104.8	2,129.7	44	42
Anaheim-Santa Ana-Garden Grove, Calif	177.5	5,280.9	19	23	Baton Rouge, La	24.1	2,075.5	45	(1)
Baltimore, Md	165.9	5,169.5	20	18	Syracuse, N.Y	57.8	2,017.7	46	48
Buffalo, N.Y	140.3	4,735.5	21	19	Akron, Ohio	83.5	2,014.2	47	39
Louisville Ky.-Ind	106.9	4,440.7	22	20	Richmond, Va.[2]	53.4	1,992.6	48	(1)
Nassau-Suffolk, N.Y	155.9	4,370.3	23	25	Jersey City, N.J	72.2	1,983.4	49	34
Atlanta, Ga	128.7	4,222.8	24	27	Nashville-Davidson, Tenn	80.5	1,935.3	50	(1)
Seattle-Everett, Wash	131.9	4,161.0	25	28					
Kansas City, Mo.-Kans	117.8	4,119.9	26	21					

Note: The Flint, Mich., SMSA, falls within the top 50 SMSA's but is excluded from this table to avoid disclosing figures for individual companies.

[1]Not in the top 50 SMSA's. [2]New Kent County added in 1977.

the area.[1 2] Each area (except in New England) consists of one whole county or more. An area may contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force and are socially and economically integrated with the central city. These areas were defined by the Federal Committee on Standard Metropolitan Statistical Areas for general-purpose use in presenting economic and social data. In the New England States, similar integration criteria have been applied in defining SMSA's, but on a city and town basis, because towns are regarded as the significant unit in this region of the country.

The requirement that each SMSA consist of county units (except in New England) sometimes results in the inclusion in an area of a considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of smaller area segments such as minor civil divisions, but the usefulness of areas so defined would be limited by the fact that many types of economic and social data are available only on a county basis. Periodically, the SMSA's are redefined. While some changes can be made at any time, if there are serious reasons, the major restructuring of SMSA's occur after each census of population is completed. Appendix F describes the current SMSA's and the changes since 1972.

Each SMSA is designated by the name of the principal city of the area. In addition to the name of the principal city, the areas title may include one or two additional city names.

Value added by manufacture in all SMSA's accounted for 79 percent of the U.S. total in 1977. The relative importance of the 50 largest SMSA's in 1977 and their rankings in the 1972 and 1967 censuses are shown in table G.

[1 2] Each SMSA must include either (1) a city with 50,000 or more inhabitants, or (2) a city having a population of at least 25,000 which (a) with the addition of the population of contiguous places has a population density of at least 1,000 persons per square mile; (b) constitutes, for general economic and social purposes, a single community with a combined population of at least 50,000; and (c) includes a total population of at least 75,000 in the county or counties in which the city and contiguous places are located.

Standard consolidated statistical areas (SCSA's)—In many highly urbanized areas of the country, SMSA's tend to border on one another. For some purpose, it was desirable to treat them as one geographic area and the SCSA's were developed. Each SCSA includes two or more contiguous SMSA's which meet specific criteria of size, urban character, integration, and contiguity of

urbanized areas. As with the SMSA's, the SCSA's are defined by the Federal Committee on SMSA's of the Office of Management and Budget. Their number has increased from two in the 1972 census to 13 for 1977. All manufacturing totals appear in table 4 of each State chapter. Data for 2-, 3-, and 4-digit industries with 250 manufacturing employees or more are published in table 6.

Industrial counties—In addition to industry statistics for SMSA's, table 7 of each State report presents data by county for each industry group (2- and 3-digit) and industry (4-digit) that had at least 450 manufacturing employees if it would not disclose figures reported by individual companies.

Cities with 450 manufacturing employees or more—Summary totals and industry detail at the 2-, 3-, and 4-digit levels are shown for individual cities with 450 manufacturing employees or more, provided the data do not disclose information for individual companies.

II. Methods

6. PLANNING AND PREPARATION

General—The Bureau of the Census has an obligation to meet public needs for timely and reliable information while holding costs and the burden on respondents to a minimum. During the planning stages of each economic census, the advice of trade and professional associations, Federal and State government agencies, individual companies, labor unions, and research and educational organizations is sought in an effort to reach both the users of data and the respondents who supply the basic figures. Simultaneously, the problems encountered in the previous censuses are studied, and improved methods of collection, processing, and tabulation are explored.

Mailing lists—Beginning with the 1954 economic censuses, the basic mailing lists have been obtained from IRS and SSA records. These records were also sampled to develop statistics for retail and service establishments with no employees. After the 1963 censuses, feasibility studies indicated that greater use could be made of the data in the IRS-SSA records. In the 1967 censuses, over 2,000,000 firms were exempted from the filing requirement, including 120,000 small manufacturers. Instead, census-type statistics for this group were developed from IRS-SSA records. In close cooperation with IRS and SSA, specific procedures for the use of individual tax returns that assured confidential treatment of them were developed and set forth in Executive Order No. 10911, dated January 17, 1961, and Treasury Decision No. 6547 of the same date. The records used were business income tax returns (IRS forms 1040C, 1065, 1120, and 1120S) and payroll tax returns (IRS form 941). The name and address, payrolls, and gross business receipts were obtained from these reports, in addition to the SIC industrial activity code assigned by SSA. Other census statistics for these small firms were imputed using industry average ratios of the data item to payrolls and sales.[13]

This procedure was repeated in the 1972 and 1977 economic censuses. In 1972, there was a concerted effort by the Bureau of the Census to improve the industry coding of the administrative record by mailing a nature-of-business inquiry to establishments whose industry codes could have been affected by the 1972 revision to the SIC Manual. A similar effort was made in 1977 to clarify the classification of firms which SSA had not been able to code precisely.

Content of questionnaires—As in previous censuses, the content of the 1977 questionnaires was developed in consultation with a large number of organizations and individuals, representing both the manufacturers who supply the data and those who use the statistics. Those consulted included Government agencies, individual firms, labor unions, the American Statistical Association, the American Economic Association, the American Marketing Association, the National Association of Manufacturers, and all National Manufacturers' Associations covering specific industries.

Many individual manufacturers and their trade associations were consulted about the content of the sections of the report forms dealing with the output of specific products. Drafts of the proposed 1977 product sections were circulated among 800 trade associations and about 4,000 manufacturing companies, both large and small. These draft report forms included new product detail reflecting suggestions received by the Bureau of the Census after the 1972 canvass. Small items (those valued at $7.5 million or less) were not retained in the list unless they were needed to assure correct classification of other products or were of strategic importance. A restriction was placed on proposals for additional detail; it was stipulated that the 1977 value of any new product category should exceed $20 million. The manufacturers were requested to comment specifically on the availability of the data requested in their ordinary records, and the appropriateness of the product descriptions and units of measure.

The thousands of comments and suggestions received in this clearance procedure and the decisions reached were forwarded to the Office of Federal Statistical Policy and Standards, along with the product sections developed by the Bureau of the Census as a result.

A final review was made by the Office of Federal Statistical Policy and Standards with the assistance of the Advisory Council on Federal Reports. The latter organization is a group of business executives such as controllers, economists, and market research directors, representing a cross section of all industries.

[13] As discussed elsewhere in this introduction, the amount of imputation introduced by this procedure was only about 1 percent of the overall totals.

7. REPORTING FORMS

A representative selection of the reporting forms used in the census is reproduced in appendix D. The users of each of them are discussed below.

General forms—These forms were used in the economic censuses, generally, either as companywide reports or as reports for establishments whose classification was not known precisely in advance of mailing.

NC-X1, Report of Company Organization—This companywide report was used prior to mailing the 1977 census questionnaires to develop the directory of establishments operated by multiunit companies. A more detailed account of their use is given in Section 8, The Mailing Lists.

NC-X2, Listing of Additional Establishments—This form was included with the census of manufactures forms mailed to multiestablishment companies in order to obtain a list of establishments that were acquired after the NC-X1A was filed. These additional plants were classified, added to the NC-X1A directory list, and mailed the appropriate 1977 economic censuses report forms. Plants under construction but not in operation were requested to report the value of construction put in place during 1977 and the total gross book value of assets in place at the end of the year.

NC-X3, General Schedule—This questionnaire was designed to obtain information from small companies for which the industry code available in the SSA records was not precise enough to indicate which one of the standard census questionnaires should be mailed. The information provided on form NC-X3 was used to classify these companies by industry and tabulate their data in the appropriate census.[14]

NC-X6, Administrative Offices or Auxiliary Establishments—Many multiunit companies maintain separate establishments to provide centralized administrative management, or other supporting services for other establishments of the same company, but not for the general public or other companies. They were asked to complete form NC-X6 for those establishments. The form contained questions on the approximate number of employees engaged in such functions as centralized administration, research and development, warehousing, and other auxiliary activities, and on the cost of research and development work performed by these nonmanufacturing establishments. The respondent was also asked to describe the industry activity of the operating establishments serviced by the centralized office or auxiliary unit reporting on form NC-X6.

NC-K1, Company Summary Report—Each multiunit company with 250 employees or more received a form NC-K1, Company Summary Report, in addition to a specific questionnaire for each establishment. The NC-K1 requested consolidated company totals for receipts, new capital expenditures, inventories, and fixed assets, which are published as part of the Bureau of the Census' Enterprise Statistics Program described in section I.

Census of manufactures forms—The questionnaire reproduced in the appendix, form MC-36B, is typical of the approximately 200 forms used for operating manufacturing establishments. Each of these forms was designed to be used for a specific group of industries. Since it is desirable to retain comparability in the annual survey of manufactures for establishments reporting in the sample, form MA-100 was substituted as the front sheet of the census form (e.g., MC-36B) to collect the information common to all industries. Whether or not form MA-100 was used, the inquiries on the 200 forms were identical except for the detailed questions on products shipped, materials used, and miscellaneous topics such as operations performed, equipment used, and delivery of products.

Short forms—Some industries include a large number of small- to medium-sized firms that account for a significant portion of the industry's output. Usually, these firms are not so small that the limited data in the administrative record files would meet the needs of the census. To obtain sufficient data, yet hold the reporting burden down for these smaller firms, special abbreviated short forms were designed. They obtain the key input and output statistics without the detail requested on the standard forms. A sample form is included in appendix D.

Annual survey of manufactures forms—Form MA-100 is the establishment report used in the ASM since 1949 (with modifications). The establishment's 1976 data were imprinted on the report form before mailing, thus aiding the respondent in following the instructions for the census. Item 11-A, "value of products shipped and other receipts," on form MA-100, corresponds to item 18 on the census forms such as MC-36B.

In years between censuses, the ASM collects data for broad classes of products; whereas, every 5 years, in the census, item 18 calls for information or individual product shipments.

Other related forms—Form CB-50F, Census of Distributive Trades Electrical Goods, which is reproduced in appendix D, is typical of the several forms used for wholesale establishments in the census of business. Some manufacturers operate their own wholesale establishments which the Bureau of the Census classifies as "manufacturers' sales branches and sales offices." The wholesale forms differed only in the kinds of products sold as listed in item 10. Item 18 provides the information needed to classify the establishment as a sales branch or sales office.

MC-171, Department of Defense Establishments, and MC-D4, Penal Institutions—These forms were used to collect information on government-owned and government-operated manufacturing establishments. They were used for two types of establishments:

[14] The use of form NC-X3 is also discussed in item B, Mailing Lists.

a. Manufacturing facilities owned and operated by the Department of Defense.
b. Prison industries (Federal, District of Columbia, and State).

The data were prepared with the cooperation of the Department of Defense, the Department of Justice, and the District of Columbia and State prison systems. For Department of Defense installations, information was provided on employment, worker-hours, payrolls, cost, and value of work done, by industry group and by State. For prison industries, however, only product data were requested. The data are presented in a special report included in volume I and are not included in the totals for operating manufacturing establishments.

8. MAILING LISTS

General—As discussed in item 6, the list of respondents for 1977 was obtained from IRS-SSA records. Since the IRS-SSA lists consist essentially of the names and addresses of companies rather than establishments,[15] it was necessary to follow separate procedures for multiunit companies (those operating at more than one location).

The precanvass—Multiunit companies were required to file at least one establishment report[16] covering each location. In order to mail the appropriate questionnaires, it was necessary to determine the type of activity at each location operated by multiestablishment companies. The Bureau of the Census has conducted an annual update of its directory of establishments operated by large companies in which Report of Company Organization (form NC-X1)[17] is mailed each year to multiunit companies.

All of these forms consist of a report on company affiliation and a list of the domestic establishments operated by the company. The company's establishments as identified in census records are prelisted and the respondents are asked to correct this list. They are also asked to describe new establishments not prelisted and indicate their approximate size.

Large multiunit companies are segregated for special handling because of possible overlaps and duplication. Many of these companies are active in retail and wholesale trade as well as in manufacturing. The reporting instructions are reviewed in discussions with officials of the accounting departments of many of these firms to make certain that the procedure is understood and the establishments are properly described on form NC-X1.

Single-unit companies—The mailing lists for single-unit companies (those operating at only one location) were developed from an initial control file assembled from IRS and SSA records. Out-of-scope companies (those whose activities were not to be surveyed in the economic censuses) and those identified as multiunits in the multiunit directory were removed. A special survey of out-of-scope companies with more than 50 employees was conducted, in some industries, to make certain they should not be included in the census. Some names were added to the mailing list as a result. Single units with over 150 employees were mailed form NC-X1 to determine if they were multiunits.

The final step was to identify the small companies which were not to be mailed because census-type statistics were to be developed from administrative records. The remaining records constituted the mailing lists for single-unit companies.

General schedule—While these lists generally contained adequate industry information to determine the proper form for mailing, a number of the records did not have precise industry information associated with them. Form NC-X3, General Schedule, which is reproduced in appendix D was mailed to these companies. Since it was assumed that these companies were quite small, only a few key figures were requested. The completed reports were coded and included in the tabulations. If form NC-X3 indicated that the company was actually large, it was later requested to file one or more of the appropriate standard questionnaires.

9. COVERAGE AND ACCURACY

Since the list of companies obtained from IRS and SSA records was considered to be complete, no field coverage check was conducted. The precanvass and other special procedures for multiunit companies described in item 8, Mailing Lists, and item 11, Data Collection, were designed to secure complete lists of establishments; thereby simplifying the IRS-SSA company list. Control totals, in terms of employment and payrolls of multiunit companies, were also used to verify the completeness of establishment coverage.

It was possible to compare statistics tabulated from the census of manufactures with the Bureau of the Census' Current Industrial Reports Series, or with data originating with other agencies and, thus provide a further confirmation of completeness and accuracy. These figures range from employment and wage totals compiled by the Bureau of Labor Statistics to detailed commodity output figures published by the IRS, the Fish and Wildlife Service, and the Department of Agriculture. In the industry reports in volume II, differences between the census of manufactures and other statistics are explained wherever possible. Census of manufactures comparability with broad measures such as national income, new capital expenditures, and production indexes are discussed elsewhere in this introduction. The Bureau of the Census' other procedures designed to improve the accuracy of the census data are discussed above in the items on data collection and processing.

[15] The SSA records for multiunit companies identify "reporting units," which in many instances correspond to census establishments. The differences are such, however, that it was found necessary to obtain up-to-date lists of establishments as described in this section. Also, the Bureau of the Census concept of a company differs from the IRS-SSA definition, since the census company includes all establishments under common ownership or control. In the IRS-SSA records, subsidiary corporations are often treated as independent companies.

[16] If two or more distinct lines of activity were carried on at one location, separate reports were obtained under some circumstances. (For a complete discussion, see "Establishment Basis of Reporting" in section 4.)

[17] This form is reproduced in appendix D.

A discussion of the valuation of intracompany shipments by multiunit companies is included in item 15.

10. GEOGRAPHIC CODING

Accurate and complete information on the physical location of each establishment is required in order to tabulate the census data by standard metropolitan statistical areas, counties, and cities. As in previous censuses, the post office address and ZIP code of the establishment were not always accepted as defining the physical location, but respondents were required to describe the actual location in terms of street address; city, town, or village; county; and State. For establishments located in rural territory, the name or number of the nearest highway was requested and the distance from the nearest town or other urban place.

In censuses prior to 1963, clerks assigned geographic code numbers to each establishment based on the description furnished by the respondent. This process was slow and required careful verification. Beginning with 1963, a computerized system was developed which assigned an area code number and a prefix symbol to the mailing address before the questionnaires were mailed. The prefix symbol indicated whether or not the mailing address was clearly acceptable as describing the physical location. If there was any question about its acceptability, the respondent's description was later carefully reviewed after the questionnaire was received. The assignment of tentative code numbers by the computer was based on extensive reference files containing nearly a million business names and addresses.

11. DATA COLLECTION

Although the greater use of administrative records in 1977 substantially reduced the number of companies canvassed directly, there remained nearly 2 million which were required to file, including about 205,000 manufacturers. Small manufacturers, for whom the administrative records sufficed, numbered about 145,000. The assembly of several hundred different questionnaires into mailing packages correctly labeled and coded, combined with the correct instruction booklets, was an extensive operation.

Most of the 1977 questionnaires were mailed by mid-January 1978 with a due date of February 15. The collection phase was completed by late July 1978.

Companies which did not return their questionnaires by the due date had to be reminded that their returns were overdue. In all, there were five routine followups. Telephone calls were made to the large companies to help with reporting problems and to request that the forms be completed and returned.

Estimates based on data from administrative records were included in the census tabulations for the relatively small number which had not responded by the closeout date in July 1978. Thus, reported or estimated data for all companies and establishments in the original mailing list (except those determined to be inactive during 1977) were included in the final statistical results. A special effort was made to obtain actual returns from all large firms, so that the dollar volume of business represented by proxy returns was relatively very small.

12. DATA PROCESSING

General—The editing,[18] coding, and tabulation of data for the 5 million establishments represented in the 1977 economic censuses was a complicated task. Automatic data processing and other advanced techniques were used in all phases.

The questionnaires were mailed from and returned to the Bureau of the Census office at Jeffersonville, Ind., where most noncomputer (that is, clerical) processing operations were performed. The returns were screened to identify major problems that could be resolved by routine correspondence with respondents. Acceptable data were placed on a key-to-disc system, and the encoded data sent to Washington, D.C. on a high-speed transmission system. The Washington, D.C. staff handled computer operations and all operations in connection with the use of IRS and SSA records.

Preliminary screening—After they were checked in and assigned geographic codes, the questionnaires were reviewed clerically to see that they conformed to certain minimum requirements before further processing. For multiunit companies, the sum of employment and payrolls reported on its establishment questionnaires was compared with the control totals received on IRS form 941. Questionnaires received on single-unit forms were reviewed to ascertain whether they had become multiunits through merger or acquisition. Questions arising in the screening operation were resolved by writing or telephoning the respondents. Complex problems were referred to the Washington, D.C. professional staff.

Computer editing—As in the 1972 Census of Manufactures, most of the review for consistency among data items and completeness was done on the computer. Average values and tolerance limits for key operating ratios (for example, cost of materials per dollar of shipments, payroll per employee, production-worker wages per hour, etc.) played a fundamental role in the editing process. More than half of all 4-digit SIC industries had one or more data cells changed by more than 5 percent as a result of the application of these programs.

A detailed description of the step-by-step processing procedures appears in the Bureau of the Census publication, History of the 1977 Economic Census. This volume describes the procedures followed in both the centralized overall processing and in the individual censuses such as manufactures.

[18] In data processing, the term "editing" means the review of information collected on questionnaires or from other sources, with the objective of locating and correcting erroneous entries.

III. Comments on Statistical Measures and Tables

(Explanations and definitions of the various measures of activity for which statistics are compiled in the census of manufactures are presented in appendix A. In the following text, the limitations and other characteristics of some of these measures are discussed, the content of the statistical tables is described, and comparisons with other statistical series are presented.)

13. EMPLOYMENT AND PAYROLLS IN ADMINISTRATIVE OFFICES AND AUXILIARIES

In the industry statistics chapters, the data on employment and payrolls are limited to operating manufacturing establishments. In the summary tables and the area reports, the employment and payrolls of administrative offices and auxiliaries are included as well. The report filed for administrative offices and auxiliaries requested a description of the activity of the establishments that they serviced. However, the administrative offices and auxiliaries were coded only to the 2-digit industry group of the establishments they served, whereas the operating establishments were coded to a 4-digit manufacturing industry. In most of the tables with industry detail, the administrative offices and auxiliaries are shown as a separate industry group, but statistics for them by 2-digit industry appear in each volume in the general summary tables. As indicated in table H, the relative importance of administrative offices and auxiliaries has increased substantially in recent years because of a tendency to centralize functions formerly performed in manufacturing plants. Such functions include accounting (particularly where computerized), warehousing repair services, and miscellaneous others.

Table H. **Employment in Administrative Offices and Auxiliaries and in Operating Manufacturing Plants: 1977 and Earlier**

Census year	Employees in operating manufacturing establishments		Employees in administrative offices and auxiliaries		
	Thousands of employees	Percent change from previous census year	Thousands of employees	Percent change from previous census year	Percent of total employment[1]
1977	18,516	+2.7	1,074	+8.0	5.5
1972	18,032	-2.5	994	+19.8	5.2
1967	18,492	+14.0	830	+14.3	4.3
1963	16,235	+5.3	726	+20.6	4.3
1958	15,423	-1.4	602	[1]+32.9	3.8
1954	15,645	(NA)	453	(NA)	2.8

(NA) Not available.

[1]The apparent increase from 1954 to 1958 is believed to be somewhat overstated, because coverage of administrative offices and auxiliaries was more complete in the 1958 census.

Source: Census of Manufactures.

14. MATERIALS CONSUMED

Every establishment was requested to report the total cost of materials. In addition, quantity and cost information was collected for approximately a thousand specific materials. About 350 of these were "complete coverage" materials; i.e., every industry that consumed appreciable quantities of the material was canvassed so that the data would aggregate to at least 90 percent of manufacturing consumption. For the remaining materials, information on consumption was obtained only in those industries in which the materials were important inputs. Detailed consumption information was collected in item 17, the standard material inquiry; in item 18, the product inquiry (for items that were produced and consumed in the same plant); and in a few instances in a special inquiry. The resulting statistics are presented mainly in tables 6a and 7a of the industry statistics chapters.

Because American industry uses an enormous variety of materials, the choice of materials for which "complete coverage" consumption data (90 percent or higher) were obtained had to be strictly limited. The selection of a particular material for such coverage was based on the following criteria:

a. The importance as measured by the total value of U.S. consumption of the material.
b. The percentage of total consumption accounted for by manufacturing establishments.
c. The availability of consumption information from manufacturers' records.
d. Other factors such as the strategic importance of the material or the availability of historical data on the use of the material.

The "limited-coverage" materials were chosen, not only because they constituted important inputs for particular industries, but frequently because they provided information necessary to classify plants by SIC industry. In using the detailed data on materials consumed which appear in table 7 in the industry statistics chapters, of the following limitations should be noted:

a. Materials were reported for the establishment as a whole and no attempt was made to ascertain how much of the material was used in each of various products. Thus, the industry totals appearing in table 7 include consumption in secondary products as well as primary products

of the industry. The extent of secondary production in each industry is measured by its specialization coverage ratio shown in table 5b of the industry chapters.

b. Special attention should be paid to the codes ending in "000" and captioned "materials, parts, containers, and supplies, n.s.k." The amounts appearing on these lines are totals imputed for (1) establishments whose statistics were developed from administrative records, and (2) totals for establishments which returned report forms but failed to report their consumption in specific terms. Thus, for most industries, the data for a specific material are understated. A judgment on the statistical significance of the understatement may be made from the ratio of the value shown for the "n.s.k." (code 000) to the total of materials, components, parts, containers, and supplies for the industry.

c. Establishments consuming less than a specified amount of material were not requested to report consumption of the material separately. For the majority of individual materials, the minimum amount was $10,000. The use of this cutoff is not believed to have had a significant effect on the totals, although in 1972 a lower cutoff of $5,000 was used.

d. A total of "n.e.c." material code 970099 was collected on most forms and is published for each industry. This is the total cost of materials for an industry for which no material items were prelisted on the form. A sample survey, MA-131, 1977 Supplemental Survey of Materials Consumed, was conducted to provide material consumption estimates for the cost of materials reported in material code 970099 for selected industries. Results of this survey are shown in the subject report Selected Materials Consumed.

15. VALUE OF SHIPMENTS

Value of shipments of multiunit companies—Except for a few industries, the respondents were instructed to report net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Multiunit companies were instructed to report for each establishment as if it were a separate economic unit and, in particular, to report interplant transfers at their full economic value. Full economic value is defined as not only the cost of production but also a reasonable proportion of company overhead and profits. Generally, there is no advertising or other selling cost assigned by companies to interplant transfers, so it would be expected that the value per unit of such transfers would be less than that for commercial sales. To assure consistency in the valuation as the interplant transfer moved though the company, the plant receiving the transferred goods was instructed to include them in its cost of materials at the same value as at the shipping point, plus the cost of freight and other handling charges.

If the goods were transferred to sales branches, or sold through separate sales offices, the "f.o.b. plant" instruction implies that the value is somewhat lower than the final invoice value, because the cost of selling (mainly the cost of operating the sales branch or office) is excluded.

However, there is reason to believe that these instructions were not followed uniformly by all companies. In a record-keeping practice study of 54 multiunit companies conducted a few years ago, it was found that about half of them had reported interplant transfers of semifinished products at commercial or market prices, which tend to be somewhat higher than the "cost plus overhead and profit" requested in the census instructions. Where finished products were transferred to separate selling organizations, half of the companies interviewed valued the products leaving the manufacturing plant at their final or invoice price, or somewhat higher than the requested "f.o.b. plant" transfer value. It appears from this study and other observations that the value of shipments of products reported by multiunit companies tends to be overstated. If it was known that a substantial amount of a product tended to be transferred to establishments of the same company, separate quantity and value figures were requested on the amount transferred and the amount sold outside the company. Data on these shipments, the unit value of which tends to be different from the unit value for shipments outside the company, are presented separately in table 6a in the industry chapters of volume II.

Individual products—In the 1977 census program, information was collected on the output of approximately 13,000 individual product items.[19] A "product" as used in the census of manufactures is the finest level of detail for which output information was requested. It is not necessarily synonymous with the term "product" as used in the marketing sense. In some cases, it may be much more detailed and, in other cases, it is more aggregative. For example, there is a long list of pharmaceutical preparations but a single item for all canned meats. If detailed production figures were available from other government sources or reliable private surveys, it was not considered necessary to request extensive detail in the census.

Some 6,000 of the product items were listed separately on the 1977 census report forms. Data for the remaining 7,000 products were obtained monthly, quarterly, or annually in commodity surveys of the current industrial reports program of the Bureau of the Census. Totals for the year 1977 for these items compiled in the commodity surveys are shown in table 6a, "products shipped," in the industry chapters of volume II. On the 1977 census forms, only an overall control total or "tieline" was obtained. In table 6a, both the tieline total and the total of the detail obtained in the current industrial reports are shown to indicate how closely the two surveys were reconciled.

Typically, both quantity and value of shipments were collected. However, physical quantity measures are not meaningful for some product lines, and for these, only value of shipments was collected. If a product was used to a large degree in the fabrication of other products within the same establishment in which it was produced, total quantities produced and often the quantities consumed were collected. Information on production, as well as shipments, was also collected for products for which there are significant differences between the two

[19] See 1977 Census of Manufactures MC77-R-1, Numerical List of Manufactured Products.

because of wide fluctuations in finished goods inventories. Alternate measures of output of products, such as value of work done for products with long production cycles, were used as appropriate and feasible.

Classes of products—The individual products were aggregated into classes of products which were, in turn, grouped into the primary products of each industry. In the code structure, a 7-digit number is assigned to the individual product, a 5-digit code to the class of product, and a 4-digit code to the total primary products in an industry. (See section 4 for application of coding structure to the assignment of SIC codes for establishments).

The 13,000 product items in the 1977 census (including products from the current industrial reports program) were grouped into approximately 1,500 separate product classes. General similarity was the basis for the product class combinations within each 4-digit industry, i.e., kind or use of products, the manufacturing processes, type of markets, or materials used. The economic significance of the class was also taken into account; residual products of an industry were grouped when the dollar value of the products did not warrant separate classes.

Since preserving confidentiality of the data of respondent companies is a determinant of the amount of detail that can be published, the larger number of respondents included in the product-class shipments totals permits many more cross tabulations than do the 7-digit products. In the industry chapters of volume II, product classes by State appear in table 6b and by industry of the establishment producing them in table 5c. The latter table clearly shows the primary and secondary product mix of an industry, as well as the interrelationship between the 4-digit industry value of shipments and the 4-digit product group value of shipments.

It is possible to classify individual establishments not only by 4-digit industry, but also by the largest class of products they produce within that industry. Table 5a provides finer industry-type general statistics for establishments classified according to the degree to which they specialize in producing a specific class of products.

The class-of-product concept was incorporated by the Bureau of the Census into the 1947 Census of Manufactures after it developed the technique in the compilation of World War II production statistics. Product classes were used to collect product information in the first ASM conducted in 1949. The product classes tend to be redefined more frequently than the SIC on which they are based in order to keep abreast of the growth and decline of products.

Effect of use of administrative records on product data—As noted elsewhere in this Introduction, 140,000 small manufacturers were not mailed report forms and most of their detail was imputed based on limited information in IRS and SSA administrative records. All of the value of products of these small establishments were coded only to the 4-digit products of the industry in which they were classified. These product shipment are uniquely identified in table 6a. Also uniquely identified are product shipments of reporting companies which were described too generally to code below the 4-digit level. Frequently, these were residuals in the company's records which the company felt it could not further break down. Table I, summarized by 2-digit group, reflects the importance of these "n.s.k." product shipments. Except in a few industries, they tend to be moderate in size—except in lumber, furniture, and printing (SIC 24, 25, and 27). The "n.s.k." of the respondents tends to be larger than that of the administrative records.

One factor tends to reduce the value of products, n.s.k., attributed to administrative record companies that affects table I, particularly. In some 4-digit industries, there is only one product category (an example is Industry 3273, Ready-Mixed Concrete). Administrative-record estimates for these products were treated as specific information and not tabulated as "n.s.k." headings.

In using the data for the specific 7-digit products shown in table 6a, the importance of the "n.s.k." has to be considered. The shipments of individual products tend to be understated somewhat in proportion to the size of the "n.s.k." Census-to-census comparison of 7-digit products should be made with caution if there has been a significant increase or decrease in the importance of the n.s.k.

16. DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

The aggregates of the cost of materials and value of shipments figures for industry groups, and for all manufacturing industries, include large amounts of duplication since the products of some industries are used as materials by others. With some important exceptions, such as SIC 3312, Blast Furnaces and Steel Mills, this duplication is not significant within individual 4-digit industries. However, it is significant at the 2- and 3-digit industry levels because these group totals often include industries which are successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the total value of shipments of SIC major group 20 and the addition of pulpmills to papermills in group 26. Economists have estimated that the value of manufactured products exclusive of such duplication—the value of finished manufactures—tends to approximate two-thirds of the total value of shipments reported in the census of manufactures.

Because the amount of duplication of the cost of materials in the value of products figures cannot be measured with any degree of precision, caution is urged with the use of the value of shipments totals at the 2- and 3-digit industry group levels.

Even where there is no significant amount of duplication within an industry group, value of shipments figures are not the best measures of the relative economic importance of individual manufacturing industries or geographic areas. There are wide variations in the ratio of materials, labor, and other processing costs to value of shipments; both among industries and within the same industry. The manufacturing process contributes only a small amount to the sales value of some products; but a large amount to the final value of others. Value added by manufacture is a better measure of the net contribution of an industry to the Nation's overall output.

Table I. **Value of Products, Not Specified by Kind: 1977 and 1972**

Product group code	Total value of product shipments (mil. dol.)		Products not specified by kind											
			Total (mil. dol.)		Large companies (mil. dol.)		Small companies (mil. dol.)		Percent attributed to--					
									Total		Large companies		Small companies	
	1977	1972	1977	1972	1977	1972	1977	1972	1977	1972	1977	1972	1977	1972
Total	1,287,117.8	739,426.8	65,064.9	35,968.3	43,057.2	25,132.6	22,007.7	10,835.7	5.1	4.9	3.3	3.4	1.7	1.5
20	177,357.2	106,779.6	10,836.6	5,700.5	7,446.0	4,302.6	3,390.6	1,397.9	6.1	5.3	4.2	4.0	1.9	1.3
21	8,524.9	5,540.2	54.3	40.8	38.2	32.3	16.1	8.5	.6	.7	.4	.6	.2	.1
22	39,439.5	30,884.3	1,243.0	833.3	871.9	672.3	371.1	161.0	3.1	2.7	2.2	2.2	.9	.5
23	38,876.5	29,247.5	4,207.2	2,435.6	3,213.0	1,728.9	994.2	706.7	10.8	8.3	8.3	5.9	2.5	2.4
24	38,110.0	22,919.6	5,312.9	2,999.3	3,470.8	1,405.0	1,842.1	1,594.3	13.9	13.1	9.1	6.1	4.8	7.0
25	16,162.9	10,843.2	1,763.4	1,155.5	1,195.3	848.5	568.1	307.0	10.9	10.6	7.4	7.8	3.5	2.8
26	50,350.3	27,227.4	1,883.4	791.2	1,341.3	677.6	542.1	113.6	3.7	2.9	2.7	2.5	1.1	.4
27	46,692.4	29,347.5	6,091.9	3,433.1	4,167.9	1,891.6	1,924.0	1,541.5	13.0	11.7	8.9	6.4	4.1	5.3
28	109,724.4	53,038.9	3,453.6	1,567.3	2,122.4	1,140.7	1,331.2	426.6	3.1	3.0	1.9	2.2	1.2	.8
29	93,945.7	27,349.6	776.6	330.0	674.8	255.6	101.8	74.4	.8	1.2	.7	.9	.1	.3
30	38,237.2	19,963.5	3,297.5	1,360.3	2,508.3	1,048.3	789.2	312.0	8.6	6.8	6.5	5.2	2.1	1.6
31	7,122.3	5,472.0	594.7	335.0	488.2	242.4	106.5	92.6	8.3	6.1	6.8	4.4	1.5	1.7
32	33,780.9	21,139.7	1,756.8	1,042.1	1,164.2	678.7	592.6	363.4	5.2	4.9	3.4	3.2	1.7	1.7
33	99,044.8	71,058.4	1,469.7	1,225.0	822.7	1,069.8	647.0	155.2	1.5	1.7	.8	1.5	.7	.2
34	85,593.8	51,167.1	6,059.9	3,677.9	3,976.7	2,847.1	2,083.2	830.8	7.1	7.2	4.6	5.6	2.4	1.6
35	115,329.9	60,212.7	7,624.6	4,085.9	4,557.9	2,699.2	3,066.7	1,386.7	6.6	6.8	4.0	4.5	2.7	2.3
36	83,014.3	49,958.8	2,988.2	1,464.2	1,650.0	1,148.2	1,338.2	316.0	3.6	2.9	2.0	2.3	1.6	.6
37	161,607.6	91,522.0	1,999.9	1,413.5	1,084.9	1,126.8	915.0	286.7	1.2	1.5	.7	1.2	.6	.3
38	26,949.1	14,484.8	1,277.4	556.1	662.6	413.8	614.8	142.3	4.7	3.9	2.5	2.9	2.3	1.0
39	17,254.1	11,270.0	2,373.3	1,521.7	1,600.1	903.2	773.2	618.5	13.8	13.5	9.3	8.0	4.5	5.5

Note: These values are product shipments, irrespective of the industry in which the products were made and exclusive of miscellaneous receipts, and, therefore, differ from the industry group totals shown in the general summary tables. However, products primary to more than one product group are classified based on the industry in which they were made. Data for some product groups may differ slightly from the data collected in order to avoid disclosing operations of individual companies which have previously been withheld from the tables 6a of the 1977 and 1972 Censuses of Manufactures Industry Series.

17. VALUE ADDED BY MANUFACTURE

General—The first step in the calculation of value added is the conversion of the value of shipments (including resales and miscellaneous receipts) to value of production by adding the ending inventory of finished foods and work in process inventories and subtracting the beginning inventory. The cost of materials (including materials, supplies, fuel, electric energy, cost of resales, and cost of contract work) is then subtracted from this value of production to obtain value added.[20]

Value added avoids the duplication in the value of shipments figure which results from the inclusion of the shipments of establishments producing materials and components, along with the shipments of establishments producing finished products. It does not exclude the cost of services purchased from other business firms, as does the concept of value added, used in the national income accounts.[21] Nevertheless, it is considered to be the best value measure available in census data for comparing the relative economic importance of manufacturing among industries and geographic areas.

Gross national product, national income, and value added—The national income accounts provide two measures of national output or value added originating in manufacturing: (1) gross national product (GNP), or, more precisely, gross domestic product (GDP),[22] and (2) national income without capital consumption adjustment. These two measures are statistically different and neither is completely comparable to census value added.

GDP originating in manufacturing is the net value of the output of goods and services produced in the U.S. at market prices before deductions for depreciation charges and capital consumption allowances. It differs, in part, from the census value added since it includes indirect business taxes (e.g., sales, excise, and property). Excise and sales taxes are excluded from the f.o.b. census value of shipments and, thus, from census value added. Property taxes are part of the cost of doing business included in census value added, since only the cost of materials is deducted from f.o.b. shipments. A greater difference between GDP and census value added rests in the exclusion of purchased business services from GDP, but not from census value added. Both GDP and census value added include the basic factor costs of production—labor costs, property costs including depreciation, and profits. Depreciation in the two series is calculated differently, however. The census collects depreciation as carried on the books of the establishment. Thus, it tends to be the depreciation

[20] For a few industries (for example, ship building) where value of work done is substituted for value of shipments, no adjustment is made for change in inventories. In a few other industries where value of production is collected, the inventory adjustment is made only on the basis of change in work-in-process inventories.

[21] Collection of data on the cost of purchased business services at the plant level presents many problems. Advertising by multiunit companies, for example, is frequently charged at the company level and the cost either not allocated to plants or, if allocated, are only included as part of a broader company overhead category. National income data, on the other hand, are compiled, in part, from company rather than plant data, such as the IRS Statistics of Income in which advertising is presented as a separate cost item based on company reports.

[22] Gross national product is the market value of goods and services producted by labor and property supplied by *Residents* of the United States. Gross domestic product is the goods and services attributable to labor and property *located within* the United States.

charged against the original purchase price of the plant or equipment on a tax return basis. In calculating GDP, these tax return allowances are adjusted to account for the economic service lives, straight-line depreciation, and replacement cost.

In compiling the national accounts, it is necessary to rely on two different sources of data: (1) establishment-based data similar to the census for labor income, and (2) company-based data for profit and other company level income and cost charges. In estimating the GDP for manufacturing, the property-type incomes, interest, depreciation, and profit have been reestimated to an establishment basis by the Bureau of Economic Analysis (BEA). Thus, conceptually, both the GDP and value added tend to be on a comparable establishment-industry basis.

In the national accounts, 2-digit detailed statistics within manufacturing are compiled only on a national income basis, without the capital consumption adjustment. National income differs from GDP by the exclusion of indirect business taxes and capital consumption allowances, but before the capital consumption adjustment. Unlike GDP, it remains a mixture of establishment-based data and company-based data for profits and company-type costs. This results in the inclusion in national income of the net value added created by nonmanufacturing establishments of companies primarily engaged in manufacturing, but the exclusion of value added created by manufacturing plants of primarily nonmanufacturing companies. It is thought that this tends to raise the national income attributed to manufacturing. This effect can be seen in the petroleum and coal products industry group where nonmanufacturing activities are so significant that national income exceeds value added (see tables J and K).

Table K provides a year by year comparison of GDP and national income to value added. GDP tends to be 10 to 20 percent lower. In recent years, there are some erratic variations in these relationships. In part, this is thought to be the result of the different treatment of the change in inventory that is used in the two series. The census inventory figures are book value inventories and, thus, a mixture of last-in-first-out (LIFO) and first-in-first-out (FIFO) and other historic accounting methods. In the national income accounts, these inventories are converted to current prices comparable to the prices used to value the GDP, and, thus, the change in inventories is on a current-priced value consistent with sales. Significant differences occur in the change in book value and currently-priced inventories in years of rapidly changing prices. The magnitude of these differences can be partially judged by the size of the inventory valuation adjustment used by BEA (see table L).

Reconciliation of GDP and value added—In recent years, the census and the annual survey of manufactures have been obtaining data on some of the residual costs included in census value added. As a result, it is possible to reconcile in more detail the differences between GDP and value added in manufacturing. In table M, the census value added, at $585.2 billion, exceeded GDP at $462.4 billion. When indirect business taxes (other than property taxes) are deducted from GDP, it drops to $444.0 billion, or $141.2 billion less than census value added. The labor components of the two series are reasonably close, although not identical. Census depreciation, on a book value basis, however,

Table J. **Comparison of National Income Originating and Value Added by Major Industry Group: 1977 and 1972**

(Billion dollars)

SIC code	Industry group description	National income originating[1]		Value added by manufacturing		Column A divided by column C	Column B divided by column D
		1977	1972	1977	1972		
		(A)	(B)	(C)	(D)	(E)	(F)
	Manufacturing	411.5	252.3	585.2	354.0	.70	.71
	Nondurable goods	162.9	98.3	246.9	149.5	.66	.66
20	Food and kindred products	33.1	20.5	56.1	35.6	.59	.58
21	Tobacco manufactures	2.8	1.7	4.3	2.6	.65	.65
22	Textile mill products	12.3	8.4	16.1	11.7	.76	.72
23	Apparel and other fabricated textile products	13.7	9.8	19.7	13.5	.70	.73
26	Paper and allied products	15.5	9.5	22.2	13.1	.70	.73
27	Printing, publishing, and allied industries	21.0	13.5	32.0	20.2	.66	.67
28	Chemicals and allied products	30.8	18.2	56.7	32.4	.54	.56
29	Petroleum refining and related industries	18.7	6.7	16.4	5.8	1.14	1.16
30	Rubber and miscellaneous plastics products	12.2	7.7	19.7	11.7	.62	.66
31	Leather and leather products	2.8	2.2	3.7	2.9	.76	.76
	Durable goods	248.6	154.0	338.3	204.6	.73	.75
24	Lumber and wood products, except furniture	13.2	8.3	16.2	10.3	.81	.81
25	Furniture and fixtures	6.1	4.4	8.9	6.1	.69	.72
32	Stone, clay, and glass products	13.0	8.7	19.1	12.6	.68	.69
33	Primary metal industries	28.6	17.9	37.6	23.3	.76	.77
34	Fabricated metal products	31.7	19.4	45.5	26.9	.70	.72
35	Machinery, except electrical	47.9	27.7	67.2	37.6	.71	.74
36	Electrical machinery	36.4	22.6	50.4	30.6	.72	.74
19[2]	Motor vehicles and equipment	33.7	20.1	64.3	39.8	.82	.83
37	Other transportation equipment	18.9	13.1				
38	Instruments	11.9	7.2	18.7	10.6	.63	.68
39	Miscellaneous manufacturing industries	7.1	4.6	10.3	6.8	.69	.68

[1]Source: Survey of Current Business, July 1970; July 1979.
[2]This major group was recoded to major groups 34, 36, 37, and 38 in the 1972 SIC revision.

Table K. **Comparison of Gross Domestic Product, National Income Originating in Manufacturing, and Value Added by Manufacture : 1977 and Earlier Years**

(Billion dollars)

Gross domestic product	Gross domestic product originating in manufacturing[1] [2]	National income originating in manufacturing[1] [2]	Value added by manufacture	Column A divided by column C	Column B divided by column C
	(A)	(B)	(C)	(D)	(E)
1977	462.4	411.5	585.2	.79	.70
1976	410.4	366.6	511.5	.80	.72
1975	358.2	317.7	442.5	.81	.72
1974	340.7	301.4	452.5	.75	.67
1973	326.1	285.3	405.6	.80	.70
1972	292.5	252.3	354.0	.83	.71
1971	265.6	226.5	314.1	.85	.72
1970	252.2	215.1	300.2	.84	.72
1969	256.7	221.9	304.4	.84	.73
1968	242.8	211.0	285.1	.85	.74
1967	222.3	193.7	262.0	.85	.74
1966	216.6	189.7	250.9	.86	.76
1965	197.7	171.3	226.9	.87	.76
1964	179.4	154.5	206.2	.87	.75
1963	167.4	143.8	192.1	.87	.75
1962	157.9	136.0	179.1	.88	.76
1961	144.4	125.0	164.3	.88	.76
1960	143.8	125.1	164.0	.88	.76
1959	141.3	124.3	161.5	.87	.77
1958	123.8	107.9	141.5	.87	.76
1957	131.4	116.3	147.8	.89	.79
1956	126.8	113.2	144.9	.88	.78
1954	106.4	94.7	117.0	.91	.81
1947	66.2	59.6	[3]74.3	.89	.80
1939	(NA)	18.1	[3]24.5	(X)	.74
1929	(NA)	21.9	[3]30.6	(X)	.72

(NA) Not available. (X) Not applicable.

[1]Source: Revised estimates of gross domestic product by major industries, Survey of Current Business, July 1978, p. 28; National Income and Product Accounts.

[2]In comparing gross domestic product and national income originating in manufacturing with value added, the role of change in inventories must be recognized. Census value added is value of shipments less the cost of materials adjusted for the change in book value inventories (finished goods and work in process in most industries.) Gross domestic product and national income originating in manufacture include the change in business inventories as part of gross private domestic investment. In the National Income Accounts, the book value change in inventories is adjusted for change in prices to convert it to prices similar to those used to measure the value of output. This adjustment is referred to as the inventory valuation adjustment. In periods of significant inflation, such as 1974, this adjustment can be substantial and create a slower year-to-year growth in gross domestic product originating than in value added in manufacturing, so there is a drop in gross domestic product and national income originating as a percent of value added in manufacturing. In periods of stable prices, the movements of the two inventory series usually are similar.

[3]Value added for 1947 and earlier years is unadjusted.

Table L. **Change in Manufacturing Inventories: 1977**

(Billion dollars)

Item	Value
Change in book value inventories (census)	$13.4
Inventory valuation adjustment	-8.4
Change in inventories (gross national product)	5.0

Note: In calculating gross national product, the Bureau of Economic Analysis uses the change in total inventories. In compiling value added, the Bureau of the Census typically uses finished goods and work in process inventories only. In 1977, these inventories were $9.3 billion compared with total inventories of $13.4 billion.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

is less than the GDP capital consumption allowance, adjusted for economic service lives, straight-line depreciation, and replacement cost. Census book-value depreciation was $26.7 billion, the adjusted GNP capital consumption allowance, $40.0 billion. After measurable labor costs and depreciation were deducted, unexplained census value was $231.4 billion compared with an explained GNP of $81.4 billion. Census has not been able to measure all the remaining components of value added, especially those parts which are company-type charges and profits. In 1977, information was collected on rentals and cost of communication services, and maintenance and repair purchased from other companies, a total of $22.4 billion, leaving the unexplained portion of value added at $209.0 billion. If the GDP estimates of $9.9 billion for property taxes and $71.4 billion for profits and interest payments are applied to this, there is a final unexplained portion of value added amounting to $127.7 billion.

This residual is attributable to company overhead other than central office payroll, e.g., company-level depreciation, business taxes, and purchased services (advertising, legal, accounting, and other professional services, patents, royalties, etc., not readily measurable separately at the plants).

18. CAPITAL EXPENDITURES AND GROSS ASSETS

Capital expenditures—The manufacturers were instructed to report expenditures of the type chargeable to fixed assets

Table M. COMPARATIVE STATISTICS ON CENSUS VALUE ADDED AND GROSS DOMESTIC PRODUCT: 1977

(Billion dollars)

Item	Census value added	GDP
Total	—	462.4
Less: Indirect tax (except property) business and not subsidies[1]	—	18.4
Equals	[1] 585.2	444.0
Less: Compensation of employees total	327.1	322.6
Census payrolls of operating plants	242.0	—
Census payroll supplements of operating plants	49.9	—
Census payrolls of central offices and auxiliaries	[2] 22.0	—
Census payrolls of sales branches offices	[2] 13.2	—
Equals	258.1	121.4
Less. Additional cost measured by census of manufactures	49.1	40.0
a. Included in GDP: Capital consump. allowance[3]	26.7	40.0
b. Excluded from GDP	22.4	—
Purchased communication service	3.6	—
Purchased maintenance and repairs	11.9	—
Rental payments, building and equipment	6.9	—
Equals: Residual costs included in census value added	209.0	81.4
Less: Costs or incomes assumed to be equal to those measured in GDP	93.6	81.3
Property tax	9.9	9.9
Interest and profit type income	71.4	71.4
Difference between census book value depreciation and GDP depreciation[3]	12.3	—
Equals: Remaining costs in value added (company overhead, other than payrolls included above: e.g., company-level depreciations, business taxes, and services purchased by company or directly by plants (advertising, legal, accounting, and other professional services; communications, patent fees, royalties, travel costs, etc.)	115.4	(.1)

[1] Census measures value of shipments exclusive of sales and excise taxes. Property taxes are a cost included in value added.

[2] There is strong evidence that most companies include the payroll of administrative offices and auxiliaries and all sales offices in setting the f.o.b. value of shipments from their manufacturing plants. Those costs are, thus, included in value added. Many companies also indicate that they include the cost of sales branches, although this may not be universally true (see "value of shipments" in text).

accounts, for which depreciation reserves are normally maintained. Actual capital outlays during the year were requested, not the final value of equipment put in place or structures completed during the year.

The Bureau of the Census estimates of capital expenditures tend to be lower than those published by BEA in its quarterly survey of expenditures for plant and equipment. In addition to normal sampling variation, a major source of difference rests in the scope of the two series. Census data relate only to manufacturing establishments.

The BEA series relating to manufacturing includes all establishments of manufacturing companies, nonmanufacturing as well as manufacturing, but excludes manufacturing establishments of companies that they have classified as chiefly nonmanufacturing. This difference in the two series is particularly important in the petroleum industry where company expenditures for developing new wells and new distribution facilities are ordinarily much larger than their capital expenditures at refineries. The BEA and Census data for recent years are shown in tables N and O.

Table N. Expenditures for New Plant and Equipment—BEA Series and Census: 1977 and Earlier Years

(Billion dollars)

Year	BEA-series[1]	Census (census of manufactures and ASM)[2]	Column B divided by column A
	(A)	(B)	(C)
1977	69.2	47.5	.69
1976	59.9	40.5	.68
1975	54.9	37.3	.68
1974	53.2	35.7	.67
1973	42.4	27.0	.64
1972	35.4	24.1	.69
1971	33.6	20.9	.62
1970	37.0	22.2	.60
1969	36.3	22.3	.61
1968	32.3	20.6	.64
1967	32.3	21.5	.67
1966	31.4	20.2	.64
1965	25.4	16.6	.65
1964	21.2	13.3	.63
1963	17.3	11.4	.66
1962	16.0	10.0	.63
1961	15.5	9.8	.63
1960	16.4	10.0	.61
1959	13.8	9.3	.67
1958	13.0	9.6	.74
1954	12.0	8.2	.68
1947	8.7	[2] 6.0	.69

[1] Source, U.S. Department of Commerce, Survey of Current Business, October 1980.

[2] Excludes data for establishments under construction but not yet in operation.

[3] Capital consumption allowances in GDP and depreciation as collected in the census are not completely comparable. Depreciation reported in the census is that carried on the books of the establishment and is charged against the original purchase cost of the assets. In the GNP accounts, a "capital consumption adjustment" is made to place the depreciation more on a replacement cost basis. Specifically, it is "the tax-return-based capital consumption allowances, less capital consumption allowances, that are based on estimates of economic service lives, straight-line depreciation, and replacement cost."

Source: Department of Commerce, Bureau of Economic Analysis, and Bureau of the Census.

Table 0. **Expenditures for New Plant and Equipment—BEA Series and Census of Manufactures, by Industry Group: 1977**

(Billion dollars)

Industry groups	BEA series[1]		Census of manufactures		Census as percent of BEA	
	1977	1972	1977	1972	1977	1972
All manufacturing.....	69.2	35.4	47.5	24.1	.69	.68
Durable goods.....	34.0	18.1	24.4	12.7	.72	.70
Primary metals.....	5.4	2.4	4.5	2.1	.83	.88
Fabricated metal.....	2.5	1.4	2.6	1.3	1.04	.93
Electric machinery.....	4.7	2.8	2.9	1.4	.62	.50
Machinery, except electric..	6.6	3.2	4.4	1.9	.67	.59
Transportation equipment....	9.1	4.4	4.7	2.7	.52	.61
Stone, clay, and glass.....	2.2	1.3	1.9	1.2	.86	.92
Other durables.....	3.5	2.6	3.4	2.1	.97	.81
Nondurable goods.....	35.2	17.3	23.2	11.4	.66	.66
Food and beverages.....	5.1	3.3	4.2	2.4	.82	.73
Textiles.....	1.3	1.1	1.2	1.1	.92	1.00
Paper.....	3.6	1.5	3.3	1.3	.92	.87
Chemicals.....	8.1	3.4	8.2	2.7	1.01	.79
Petroleum.....	12.7	4.8	2.3	1.2	.18	.25
Rubber.....	1.7	1.0	1.6	1.1	.94	1.10
Other nondurables.....	2.7	2.2	2.4	1.6	.89	.73

[1]Source: U.S. Department of Commerce, Survey of Current Business, October 1980.

Gross value of fixed assets—In addition to reporting capital expenditures during the year, the manufacturers were requested to report the original cost value of fixed assets (structures and machinery and equipment) in place at the end of the year, along with depreciation and retirements during the year. This series, however, is based on reports filed in the ASM sample. It is conceptually comparable with the capital expenditures data. As the census capital expenditures series differs from the BEA series, so the census gross assets series will differ from similar series based on company level reports, i.e., those appearing in the IRS Statistics of Income and the FTC Quarterly Financial Report of Corporations. Since the census assets series is also based on sample estimates from the ASM, it is subject to a sampling error. (See appendix A for more complete definitions of terms.)

19. INVENTORIES

The value of end-of-year inventories held by each manufacturing establishment was obtained for each year. Separate information was requested for—

a. Finished goods,
b. Work-in-process, and
c. Materials, supplies, fuel, and other inventories.

A measure of the changes in inventories from the beginning to the end of each year is essential to the conversion of value of shipments during the year to value of production, and, therefore, to the calculation of value added. The ratios of inventories to shipments at different times are also used in analysis of trends and business-cycle movements. For the best use of all of these measures, the inventories should be valued in the same prices as the shipments. Census inventory statistics have some limitations in these uses.

The inventories, as collected currently and in the past, have been the inventories as carried in the books of each respondent. In aggregating those inventories and calculating inventory changes, census procedures make no adjustments for the different methods of inventory valuation used by the respondents. Change in inventories and the relationship of inventories to shipments can vary significantly depending on whether last-in first-out (LIFO) or some historical method such as first-in first-out (FIFO) is used. These differences can become very significant in periods of rapid- and large-price changes. In recent years, the Bureau of the Census has been obtaining information on the preparation of inventories valued by the different accounting methods, both in its monthly surveys and the annual survey of manufactures. Some results have been published in the monthly Manufacturers' Shipments, Inventories, and Orders survey but none for the ASM. Considerable difficulty has been encountered in obtaining results of publication quality because of the complexity of the accounting at the establishment level and corporate level in large companies. Unofficial results have been made available to BEA to assist them in their adjustment of book value inventories to current and constant prices for use in the national income accounts. Some of the anomalies in the census value added and the national income originating in manufactures are due to the different treatment of inventory change in the two series.

In using inventory data by stage of fabrication for all industries at the industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and all manufacturing which are merely aggregates of figures reported by establishments in specified industries.

For a few industries in the food group, there are special problems in the handling of inventories by stage of fabrication. These are industries in which the products are aged. Included among such types of products are stemmed and dried tobacco, cheese, and whiskey. It is not clear whether such products should be treated as finished-goods inventories or as work in process while in storage. In all these industries, substantial finished goods inventroies have been reported. These data have been summarized in the inventory tables in a consistent manner for all of the years included in this report.

20. PLANT SPECIALIZATION

As discussed in item 4 above, the primary products of a plant are those which determine its industry classification; all other products are referred to as secondary products. The value of a plant's primary products in comparison to its total production is referred to as its degree of specialization. For each plant, two measures of specialization were computed:

a. A 4-digit primary product-specialization ratio, which is the sum of the values of all the plant's primary products divided by the sum of all its primary and secondary products.

b. A 5-digit primary product-class specialization ratio, which is the sum of the largest 5-digit product-class value divided by the sum of its primary and secondary products (the miscellaneous receipts of the establishment were not included in these calculations). For example, assume that an establishment reported the following:

Total value of shipments and other receipts	$1,000
Miscellaneous receipts (resales, etc.)	15
Total value of products shipped	985
32731, Concrete pipe products	100
32722, Precast concrete products	785
32730, Ready-mixed concrete	100

This plant would be coded into Industry 3272, Concrete Products, with a primary product specialization ratio of 90 percent ($885 ÷ 985); it would be subclassified into the 5-digit Class 32722, Precast Concrete, with a primary product class specialization ratio of 80 percent ($785 ÷ 985).

21. CONFIDENTIALITY

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In suppressing figures to avoid disclosing information of individual companies, individual States are given precedence over geographic regions and divisions. This is an innovation for 1977, since in prior censuses the larger geographic areas were given precedence. As a result of this change in philosophy, it has become more difficult to produce industry detail for the larger geographic areas and data for the these areas are no longer published. States are given precedence over standard metropolitan statistical areas; standard metropolitan statistical areas over counties; and counties over cities.

In tables showing industry detail, major industry group (2-digit) totals take precedence over industry group (3-digit) totals which, in turn, take precedence over individual (4-digit) industries. Similarly, in product tables, 4-digit product groupings take precedence over 5-digit product classes and the latter over individual 7-digit products.

Such order of precedence was used because:

a. It was considered preferable to show State data for an industry, even at the cost of withholding data for a region. In recent years, there seemed to be more need for and use of data for individual States than for the larger regions—especially since many regional development programs encompassed clusters of States different from the standard regions and divisions.
b. By giving preference to industry-group statistics over individual industries within each State, the extent to which individual States can be compared within the SIC industry classification framework is greatly increased.

22. MICROFICHE AND COMPUTER TAPES

Data in many tables in the census volumes are available on microfiche and on computer tape.

One major data series, the Location of Manufacturing Plants, will be available only on computer tape. This series presents the number of establishments by employment size class by 4-digit SIC industry codes for States, counties, and places of 2,500 inhabitants or more. These data are available for both State and county by industry and State and place by industry.

Microfiche reports and computer tapes are sold by Customer Services (Microfiche/Tapes), Data User Services Division, Bureau of the Census, Washington, D.C. 20233.

23. SPECIAL TABULATIONS

Special tabulations of data collected in the 1977 Census of Manufactures may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Industry Division, Bureau of the Census, Washington, D.C. 20233.

24. ABBREVIATIONS

The following abbreviations and symbols occur frequently in text, tables, and footnotes:

—	Zero
(X)	Not applicable
(NA)	Not available
(D)	Withheld to avoid disclosing operations of individual companies
n.e.c	Not elsewhere classified
n.s.k.	Not specified by kind
(S)	Suppressed
(Z)	Less than one half of unit of measure shown
lin.	Linear
equiv.	Equivalent
hp	Horsepower
kWh	Kilowatt-hours
SIC	Standard Industrial Classification
IRS	Internal Revenue Service
SSA	Social Security Administration
ASM	Annual Survey of Manufactures
CIR	Current Industrial Reports
BEA	Bureau of Economic Analysis
SEC	Securities and Exchange Commission
GNP	Gross National Product

Other abbreviations, such as lb, gal, yd, doz, and bbl, are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 pounds; where the figures are expressed in tons of 2,240 pounds, the unit of measure is specified as "long tons" or "gross tons."

General Summary—Historical Statistics

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Table 1. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries: 1977 and Earlier Years**

Year	All establishments		All employees[1]		Production workers			Value added by manufacture[3] (million dollars)	Value of industry shipments (million dollars)	New capital expenditures[4] (million dollars)	Index of industrial[5] production (1977=100)
	Total (number)	With 20 employees or more (number)	Number[2] (1,000)	Payroll (million dollars)	Number[2] (1,000)	Hours (million)	Wages (million dollars)				
1977	359,928	118,699	19,590.1	264,013.1	13,691.0	26,686.7	157,163.7	585,165.6	1,358,526.4	47,459.0	100.0
1976[6]	(NA)	(NA)	18,753.0	233,388.7	13,052.0	25,354.2	137,565.4	511,471.1	1,185,695.3	40,669.9	94.5
1975[6]	(NA)	(NA)	18,302.2	209,519.0	12,568.9	24,069.6	121,429.0	442,485.2	1,039,377.4	37,262.1	84.8
1974[6]	(NA)	(NA)	19,844.4	208,312.0	13,927.1	27,251.0	124,977.1	452,497.0	1,017,873.4	35,546.1	94.4
1973[6]	(NA)	(NA)	19,844.8	193,324.5	14,232.8	28,096.9	118,332.6	405,583.6	875,443.2	26,972.9	94.7
1972	320,710	114,195	19,028.7	174,205.5	13,527.9	26,699.2	105,501.8	353,994.0	756,534.3	24,077.7	86.7
1971[6]	(NA)	(NA)	18,363.1	156,202.8	12,874.9	25,265.9	93,231.7	314,138.4	670,970.5	20,940.7	78.9
1970[6]	(NA)	(NA)	19,217.2	153,078.5	13,528.0	26,669.3	91,609.0	300,227.6	634,322.1	22,164.2	77.6
1969[6]	(NA)	(NA)	20,035.5	152,765.6	14,357.8	28,599.8	93,459.6	304,440.7	642,635.8	22,291.2	81.0
1968[6]	(NA)	(NA)	19,527.6	141,822.7	14,041.2	28,156.8	87,480.4	285,058.9	603,220.1	20,613.1	77.6
1967	311,140	110,256	19,323.2	132,208.4	13,955.3	27,837.6	81,393.6	261,983.8	557,397.8	21,503.0	72.9
1966[6]	(NA)	(NA)	19,024.5	125,350.0	13,826.5	28,102.5	78,256.4	250,880.1	538,736.9	20,235.8	72.1
1965[6]	(NA)	(NA)	18,010.2	113,972.2	13,076.0	26,567.8	71,361.5	226,939.9	492,005.7	16,615.0	64.9
1964[6]	(NA)	(NA)	17,268.5	106,403.3	12,403.3	25,245.5	65,838.9	206,193.6	447,985.1	13,294.3	59.1
1963	311,931	102,296	16,958.4	99,898.8	12,232.0	24,509.4	62,093.6	192,082.9	420,528.1	11,370.0	55.3
1962[6]	(NA)	(NA)	16,765.6	94,291.2	12,126.5	24,269.5	59,134.1	179,071.1	399,308.9	10,436.2	52.2
1961[6]	(NA)	(NA)	16,331.2	88,127.8	11,778.5	23,289.4	54,764.6	164,281.1	369,994.3	9,779.8	47.8
1960[6]	(NA)	(NA)	16,762.7	88,087.1	12,209.5	24,174.4	55,555.5	163,998.5	(NA)	10,097.8	47.7
1959[6]	(NA)	(NA)	16,662.2	85,642.0	12,272.6	24,443.6	54,714.1	161,535.8	(NA)	9,140.0	46.8
1958[7]	303,303	95,310	16,025.2	78,348.9	11,681.1	22,679.2	49,605.2	141,540.6	326,722.8	9,543.5	41.6
1957[6]	(NA)	(NA)	17,104.7	79,354.0	12,828.9	25,208.0	52,569.0	147,838.4	(NA)	12,144.0	44.6
1956[6]	(NA)	(NA)	17,178.3	77,059.0	13,131.3	26,088.5	52,040.8	144,909.3	(NA)	11,233.2	44.1
1955[6]	(NA)	(NA)	16,818.5	72,126.0	12,954.4	25,898.3	49,217.9	135,022.5	(NA)	8,233.1	42.5
1954[7]	(NA)	(NA)	16,125.6	65,977.0	12,372.0	24,334.1	44,590.5	117,032.3	(NA)	8,200.7	37.6
1953[6]	(NA)	(NA)	17,093.0	68,590.4	13,500.9	27,065.6	48,979.1	121,659.1	(NA)	8,047.9	40.3
1952[6]	(NA)	(NA)	16,061.0	61,140.6	12,706.0	25,617.6	43,763.6	109,162.1	(NA)	7,883.4	36.9
1951[6]	(NA)	(NA)	15,638.0	56,283.8	12,508.9	25,263.8	40,654.8	102,085.8	(NA)	7,781.7	35.4
1950[6]	(NA)	(NA)	14,769.9	47,892.9	11,778.8	23,716.5	34,600.0	89,749.8	(NA)	5,041.3	32.8
1949[6]	(NA)	(NA)	13,880.1	42,752.0	11,016.3	21,769.7	30,254.0	75,366.5	(NA)	5,066.9	28.2
1947	240,807	(NA)	14,294.0	39,695.6	11,917.9	24,316.5	30,244.0	74,290.5	(NA)	5,998.1	28.7
1939[8]	173,802	(NA)	[9]9,527.3	[9]12,706.1	7,808.2	(NA)	8,997.5	24,487.3	(NA)	(NA)	15.7
1937	166,794	(NA)	9,786.4	12,829.7	8,569.2	(NA)	10,112.9	25,173.5	(NA)	(NA)	(NA)
1935[7]	167,916	(NA)	8,262.3	9,564.8	7,203.8	(NA)	7,311.3	18,552.6	(NA)	(NA)	(NA)
1933	139,325	(NA)	6,557.9	[10]6,237.8	5,787.6	(NA)	4,940.1	14,007.5	(NA)	(NA)	10.2
1931	171,450	(NA)	(NA)	(NA)	6,163.1	(NA)	6,688.5	18,600.5	(NA)	(NA)	(NA)
1929	206,663	(NA)	9,659.7	14,284.3	8,369.7	(NA)	10,884.9	30,591.4	(NA)	(NA)	(NA)
1927	187,629	(NA)	9,072.1	13,123.1	7,848.1	(NA)	10,099.5	26,325.4	(NA)	(NA)	16.6
1925	183,877	(NA)	9,142.4	12,957.7	7,871.4	(NA)	9,979.6	25,667.6	(NA)	(NA)	(NA)
1923	192,096	(NA)	9,474.7	12,996.5	8,194.2	(NA)	10,148.6	24,569.5	(NA)	(NA)	(NA)
1921	192,059	(NA)	7,557.4	9,870.2	6,475.5	(NA)	7,451.3	17,252.8	(NA)	(NA)	(NA)
1919	270,231	(NA)	9,836.8	12,426.9	8,464.9	(NA)	9,664.0	23,841.6	(NA)	(NA)	(NA)
1914	268,436	(NA)	7,514.2	5,016.0	6,602.3	(NA)	3,782.3	9,385.6	(NA)	(NA)	(NA)
1909	264,810	(NA)	7,021.1	4,105.5	6,261.7	(NA)	3,205.2	8,160.1	(NA)	(NA)	(NA)
1904	213,444	(NA)	5,674.9	2,990.9	5,181.7	(NA)	2,440.9	6,019.2	(NA)	(NA)	(NA)
1899	204,754	(NA)	4,850.0	2,258.7	4,501.9	(NA)	1,892.6	4,647.0	(NA)	(NA)	(NA)
1899[11]	509,490	(NA)	5,478.3	2,595.6	5,097.6	(NA)	2,206.5	5,474.9	(NA)	(NA)	(NA)
1889	353,864	(NA)	4,586.5	2,209.1	4,129.4	(NA)	1,820.9	4,120.3	(NA)	(NA)	(NA)
1879	253,852	(NA)	(NA)	(NA)	2,732.6	(NA)	948.0	1,972.8	(NA)	(NA)	(NA)
1869	252,148	(NA)	(NA)	(NA)	2,054.0	(NA)	620.5	1,395.1	(NA)	(NA)	(NA)
1859	140,433	(NA)	(NA)	(NA)	1,311.2	(NA)	378.9	854.3	(NA)	(NA)	(NA)
1849	123,025	(NA)	(NA)	(NA)	957.1	(NA)	236.8	464.0	(NA)	(NA)	(NA)

(NA) Not available.

[1]The figures for 1939 to 1977 include data for employees at manufacturing establishments who were engaged in distribution and in construction work. The extent to which data for such employees were included in the figures for earlier years is not known. In addition to the employment and payroll for operating manufacturing establishments, manufacturing companies reported separately for administrative offices or auxiliary units (e.g., research laboratories, storage warehouses, power plants, garages, repair shops, etc.) that service the manufacturing establishment(s) of a company. These data are included in the total employment, payroll, and establishment figures for the years 1949 to 1977.

[2]The method of compiling these figures varied, as follows: All employees: For 1955 to 1977, figures represent the average of the number of production workers for the payroll period ended nearest the 12th of March, May, August, and November, plus all other employees for the payroll period ended nearest the 12th of March; for 1949 to 1954, they represent an average of all employees for the payroll period ended nearest the 12th of March, May, August, and November; for 1947, an average of 12 monthly figures for all employees; and for 1939 and prior years, the average number of production workers based on 12 monthly figures, plus the number of nonproduction workers for one payroll period (usually in October). Production workers: For 1949 to 1977, figures are based on employment for the payroll period ended nearest the 12th of March, May, August, and November; and for 1947 and prior years, they represent the average of 12 monthly figures.

[3]For the period 1954 to 1977, value added by manufacture represents adjusted value added, and for earlier years, unadjusted value added. Unadjusted value added is obtained by substracting the cost of materials, supplies and containers, fuel, purchased electric energy, and contract work from the value of shipments for products manufactured plus receipts for services rendered. Adjusted value added also takes into account (a) value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly), plus (b) the net change in finished goods for work-in-process inventories between the beginning and end of the year. For 1849 to 1933, cost of contract work was not subtracted from value of shipments in calculating value added by manufacture.

[4]The figures for 1951 to 1977 include expenditures for plants under construction and not yet in operation. This information was not collected prior to 1951.

Footnotes are continued on next page.

[5]Source: Board of Governors, Federal Reserve System.

[6]These figures represent estimates derived from a representative sample of manufacturing establishments canvassed in the annual survey of manufactures. These estimates, therefore, may differ from the results that would have been obtained from a complete canvass of all manufacturing establishments. The standard errors associated with these estimates are published in the annual survey of manufactures volumes for this period.

[7]The 1958 and subsequent years figures include establishments classified in Industry 3273, Ready-Mixed Concrete, and establishments classified in Industry 3599, Machinery, Except Electrical, N.E.C., that were engaged exclusively or almost exclusively in machine shop repair work. The data for such establishments are excluded from the figures for the period 1939 to 1957, but are included for 1929 and earlier years. The 1954 to 1966 figures include data for establishments engaged in the processing and distribution of fluid milk, Industry 202, Dairy Products. These establishments were not included in the figures for earlier census years. In addition, beginning with 1954, the figures include data for Industry 2411, Logging Camps and Logging Contractors, which were not included within the scope of the 1947 census. There were also a number of changes in the definition of manufacturing industries during earlier census years that affect the comparability of the historical series. Among the more important of these were the following: Figures for 1935 and later years exclude data for railroad repair shops and manufactured gas, which were included in 1899 to 1933 figures; the minimum size of establishment included for 1947 to 1966 was one employee; for 1921 to 1939, manufacturing establishments reporting value of shipments of $5,000 or more were within scope; whereas, for 1919 and earlier years, the cutoff was $500. (These changes in procedure have not appreciably affected the comparability of the historical data except for the figures on number of establishments.)

[8]The figures for 1939, but not for earlier years, have been revised on the basis of retabulation of the returns to exclude data for establishments classified as manufacturing in 1939 and prior years but classified as nonmanufacturing beginning with 1947. Value added by manufacture for 1939, prior to revision and on a basis comparable with 1937 and previous year, was $24.7 billion.

[9]The 1939 figures for all employees were revised on the basis of estimates rather than by retabulation of the 1939 reports. The estimates were made in the following manner: For the number of employees, by multiplying the retabulated figure for number of production workers by the ratio of all employees to production workers computed from the unrevised 1939 statistics; for salaries and wages, by multiplying the retabulated wage figure by the ratio for salaries and wages also derived from the unrevised 1939 statistics.

[10]Not including data for salaried officers of corporations and their salaries and, therefore, not strictly comparable with figures for other years.

[11]These figures for 1899 and earlier years represent hand and neighborhood manufacturing operations.

Table 2. **Operating Ratios for All Manufacturing Establishments Including Administrative Offices and Auxiliaries: 1977 and Earlier Years**

Year	Payroll per employee (dollars)	Assets per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Assets as percent of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
1977	13,477	22,406	70	1,949	5.89	58	77	32	29,871	45	21.93
1976	12,445	21,423	70	1,943	5.43	57	77	34	27,274	46	20.17
1975	11,448	20,075	69	1,915	5.04	57	78	35	24,177	47	18.38
1974	10,497	17,131	70	1,957	4.59	57	78	33	22,802	46	16.60
1973	9,716	15,889	72	1,974	4.21	55	77	36	20,383	48	14.44
1972	9,155	15,799	71	1,974	3.95	54	77	40	18,603	49	13.26
1971	8,506	15,107	70	1,962	3.69	53	76	41	17,107	50	12.43
1970	7,966	13,910	70	1,971	3.43	53	78	42	15,623	51	11.26
1969	7,625	12,440	72	1,992	3.27	53	77	39	15,195	50	10.64
1968	7,263	11,869	72	2,005	3.11	53	77	38	14,598	50	10.12
1967	6,842	11,286	72	1,995	2.92	54	77	39	13,558	50	9.41
1966	6,589	(NA)	73	2,033	2.78	55	78	(NA)	13,188	50	8.93
1965	6,328	(NA)	73	2,032	2.69	55	78	(NA)	12,601	50	8.54
1964	6,162	9,726	72	2,035	2.61	54	78	37	11,940	52	8.17
1963	5,890	9,294	72	2,004	2.53	55	78	37	11,325	52	7.84
1962	5,624	8,890	72	2,001	2.44	55	79	37	10,681	53	7.38
1961	5,396	(NA)	72	1,977	2.35	56	80	(NA)	10,059	54	7.05
1960	5,255	(NA)	73	1,980	2.30	(NA)	(NA)	(NA)	9,784	54	6.78
1959	5,140	(NA)	74	1,992	2.24	(NA)	(NA)	(NA)	9,695	53	6.61
1958	4,889	(NA)	73	1,942	2.19	(NA)	(NA)	(NA)	8,832	55	6.24
1957	4,639	6,460	75	1,963	2.09	(NA)	(NA)	(NA)	8,643	54	5.86
1956	4,486	(NA)	76	1,987	1.99	(NA)	(NA)	(NA)	8,436	53	5.55
1955	4,288	(NA)	77	1,999	1.90	(NA)	(NA)	(NA)	8,028	53	5.21
1954	4,091	(NA)	77	1,967	1.83	(NA)	(NA)	(NA)	7,258	56	4.81
1953	4,013	(NA)	79	2,005	1.81	(NA)	(NA)	(NA)	7,117	56	4.49
1952	3,807	(NA)	79	2,016	1.71	(NA)	(NA)	(NA)	6,797	56	4.26
1951	3,586	(NA)	80	2,020	1.61	(NA)	(NA)	(NA)	6,539	55	4.04
1950	3,243	(NA)	80	2,013	1.46	(NA)	(NA)	(NA)	6,077	53	3.78
1949	3,080	(NA)	79	1,976	1.39	(NA)	(NA)	(NA)	5,430	57	3.46
1947	2,777	(NA)	83	2,040	1.24	(NA)	(NA)	(NA)	5,197	53	3.06
1939	1,334	(NA)	82	(NA)	(NA)	(NA)	(NA)	(NA)	2,570	52	(NA)
1937	1,311	(NA)	88	(NA)	(NA)	(NA)	(NA)	(NA)	2,572	51	(NA)
1935	1,158	(NA)	87	(NA)	(NA)	(NA)	(NA)	(NA)	2,245	52	(NA)
1933	951	(NA)	88	(NA)	(NA)	(NA)	(NA)	(NA)	2,136	45	(NA)
1931	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1929	1,479	(NA)	87	(NA)	(NA)	(NA)	(NA)	(NA)	3,167	47	(NA)
1927	1,447	(NA)	87	(NA)	(NA)	(NA)	(NA)	(NA)	2,902	50	(NA)
1925	1,417	(NA)	86	(NA)	(NA)	(NA)	(NA)	(NA)	2,808	50	(NA)
1923	1,372	(NA)	86	(NA)	(NA)	(NA)	(NA)	(NA)	2,593	53	(NA)
1921	1,306	(NA)	86	(NA)	(NA)	(NA)	(NA)	(NA)	2,283	57	(NA)
1919	1,263	(NA)	86	(NA)	(NA)	(NA)	(NA)	(NA)	2,424	52	(NA)
1914	668	(NA)	88	(NA)	(NA)	(NA)	(NA)	(NA)	1,249	53	(NA)
1909	585	(NA)	89	(NA)	(NA)	(NA)	(NA)	(NA)	1,162	50	(NA)
1904	527	(NA)	91	(NA)	(NA)	(NA)	(NA)	(NA)	1,061	50	(NA)
1899	466	(NA)	93	(NA)	(NA)	(NA)	(NA)	(NA)	958	49	(NA)
1899	474	(NA)	93	(NA)	(NA)	(NA)	(NA)	(NA)	999	47	(NA)
1889	482	(NA)	90	(NA)	(NA)	(NA)	(NA)	(NA)	894	54	(NA)
1879	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1869	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1859	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1849	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: For qualifications to data, see footnotes on table 1.

(NA) Not available.

Table 3. **Employment Statistics for Operating Manufacturing Establishments and Administrative Offices and Auxiliaries by Major Industry Group: 1977 and Prior Census Years**

1977 code	Major industry group and year	All establishments		Operating manufacturing establishments		Administrative offices and auxiliaries	
		Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)
	All industries....1977..	19,590.1	264,013.1	18,515.9	242,031.9	1,074.2	21,981.2
	1972..	19,028.7	174,205.5	18,034.4	160,433.2	994.3	13,772.3
	1967..	19,322.9	132,208.5	18,492.3	123,480.6	830.9	8,727.9
	1963..	16,958.4	99,898.8	16,231.9	93,283.3	726.5	6,615.5
20	Food and kindred products....1977..	1,622.1	20,472.7	1,520.0	18,543.6	102.1	1,929.1
	1972..	1,663.0	14,098.0	1,569.3	12,920.2	93.7	1,177.8
	1967..	1,725.9	10,841.5	1,649.6	10,076.8	76.3	764.7
	1963..	1,714.6	9,233.9	1,643.1	8,637.2	71.5	596.8
21	Tobacco manufactures....1977..	68.6	897.6	60.6	750.7	8.0	146.9
	1972..	74.3	595.7	66.3	502.1	8.0	93.6
	1967..	83.1	451.2	75.1	376.8	8.0	74.4
	1963..	83.8	381.3	77.3	330.5	6.5	50.8
22	Textile mill products....1977..	908.9	8,434.4	875.7	7,881.4	33.2	553.0
	1972..	983.8	6,413.0	952.6	6,051.0	31.2	362.0
	1967..	954.0	4,610.6	929.0	4,390.9	25.0	219.7
	1963..	883.1	3,538.0	863.2	3,385.0	19.9	152.9
23	Apparel and other textile products....1977..	1,361.8	10,062.2	1,334.3	9,658.6	27.5	403.6
	1972..	1,394.0	7,478.1	1,368.3	7,212.0	25.7	266.1
	1967..	1,372.9	5,722.2	1,356.7	5,582.2	16.2	140.0
	1963..	1,290.5	4,508.8	1,279.5	4,423.0	11.0	85.8
24	Lumber and wood products....1977..	706.9	7,694.9	692.4	7,424.7	14.5	270.2
	1972..	703.4	5,131.3	691.0	4,985.6	12.4	145.7
	1967..	561.7	2,872.6	554.0	2,798.9	7.7	73.7
	1963..	568.7	2,385.4	563.1	2,338.7	5.6	46.7
25	Furniture and fixtures....1977..	472.8	4,588.6	463.8	4,448.5	9.0	140.1
	1972..	468.5	3,286.3	462.0	3,205.4	6.5	80.9
	1967..	430.0	2,305.1	425.3	2,258.3	4.7	46.8
	1963..	381.2	1,767.1	376.5	1,726.7	4.7	40.4
26	Paper and allied products....1977..	666.3	9,845.3	628.7	8,942.9	37.6	902.4
	1972..	667.8	6,465.5	633.4	5,992.1	34.4	473.4
	1967..	670.7	4,786.7	638.9	4,436.2	31.8	350.5
	1963..	613.8	3,746.4	588.0	3,508.2	25.8	238.2
27	Printing and publishing....1977..	1,131.1	14,645.9	1,092.2	14,024.5	38.9	621.4
	1972..	1,085.5	10,162.1	1,056.5	9,831.2	29.0	330.9
	1967..	1,052.1	7,323.5	1,031.0	7,151.5	21.1	172.0
	1963..	925.1	5,611.5	913.2	5,514.8	11.8	96.7
28	Chemicals and allied products....1977..	1,061.6	17,630.7	880.2	13,831.8	181.4	3,798.9
	1972..	995.0	10,908.2	836.5	8,730.5	158.5	2,177.7
	1967..	982.7	7,932.1	841.4	6,443.0	141.3	1,489.1
	1963..	853.1	6,013.6	737.4	4,969.8	115.7	1,043.8
29	Petroleum and coal products....1977..	212.1	4,258.2	146.8	2,696.2	65.3	1,562.0
	1972..	209.5	2,633.7	139.5	1,637.5	70.0	996.2
	1967..	210.7	1,960.5	141.6	1,216.1	69.1	744.4
	1963..	219.9	1,762.9	153.5	1,133.8	66.4	629.1
30	Rubber and miscellaneous plastics products...1977..	746.5	8,994.3	721.3	8,536.0	25.2	458.3
	1972..	635.1	5,381.9	617.7	5,165.2	17.4	216.7
	1967..	531.0	3,421.8	516.7	3,286.5	14.3	135.3
	1963..	426.7	2,470.8	415.0	2,364.0	11.8	106.7
31	Leather and leather products....1977..	253.3	1,992.0	242.5	1,859.7	10.8	132.3
	1972..	285.5	1,706.2	273.4	1,589.3	12.1	116.9
	1967..	336.6	1,518.2	328.7	1,458.8	7.9	59.4
	1963..	335.0	1,278.0	327.5	1,227.8	7.6	50.2
32	Stone, clay, and glass products....1977..	654.8	8,740.3	613.7	7,943.1	41.1	797.2
	1972..	660.7	6,035.1	623.2	5,546.9	37.5	488.2
	1967..	620.6	4,133.8	589.9	3,825.5	30.7	308.3
	1963..	602.8	3,462.5	573.9	3,212.5	28.9	250.0
33	Primary metal products....1977..	1,160.4	19,783.5	1,113.6	18,752.5	46.8	1,031.0
	1972..	1,185.3	12,784.8	1,142.8	12,166.5	42.5	618.3
	1967..	1,329.1	10,395.7	1,281.0	9,850.9	48.1	544.8
	1963..	1,167.0	8,149.0	1,126.5	7,734.1	40.4	414.8
34	Fabricated metal products....1977..	1,607.4	22,045.4	1,557.3	21,058.9	50.1	986.5
	1972..	1,533.6	14,346.0	1,493.3	13,802.6	40.3	525.4
	1967..	1,375.1	9,670.0	1,341.8	9,319.5	33.3	350.5
	1963..	1,110.6	6,644.0	1,082.1	6,387.5	28.5	256.5

See footnotes at end of table.

Table 3. **Employment Statistics for Operating Manufacturing Establishments and Administrative Offices and Auxiliaries by Major Industry Group: 1977 and Prior Census Years**—Con.

1977 code	Major industry group and year	All establishments		Operating manufacturing establishments		Administrative offices and auxiliaries	
		Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)
35	Machinery, except electrical.....1977..	2,176.4	32,442.3	2,083.3	30,557.5	93.1	1,884.8
	1972..	1,930.0	20,047.9	1,827.7	18,523.3	102.3	1,524.6
	1967..	1,929.4	14,930.2	1,864.5	14,226.3	64.9	703.9
	1963..	1,520.6	10,146.6	1,459.4	9,571.0	61.2	575.6
36	Electric and electronic equipment.....1977..	1,863.1	25,385.1	1,723.1	22,544.2	140.0	2,840.9
	1972..	1,800.1	17,189.4	1,661.3	15,189.0	138.8	2,000.4
	1967..	1,980.6	14,106.5	1,874.9	12,968.0	105.7	1,138.5
	1963..	1,612.2	10,207.1	1,511.8	9,284.3	100.4	922.5
37	Transportation equipment.....1977..	1,873.7	33,291.4	1,768.2	30,650.5	105.5	2,640.9
	1972..	1,815.2	21,526.6	1,719.0	19,880.0	96.2	1,646.6
	1967..	1,935.5	16,342.4	1,834.1	15,173.7	101.4	1,168.7
	1963..	1,689.7	12,735.6	1,601.2	11,858.2	88.6	877.4
38	Instruments and related products.....1977..	591.9	8,212.0	559.1	7,520.4	32.8	691.6
	1972..	480.8	4,677.9	453.2	4,286.2	27.6	391.7
	1967..	409.6	2,980.8	394.3	2,821.6	15.3	159.2
	1963..	316.4	2,010.4	305.5	1,912.5	11.0	98.0
39, 19	Miscellaneous manufacturing industries and ordnance and accessories.....1977[1].	451.9	4,596.5	440.7	4,406.4	11.2	190.1
	1972[1].	456.0	3,316.3	445.6	3,179.8	10.4	136.5
	1967..	831.6	5,903.5	823.5	5,819.4	8.1	84.1
	1963..	645.8	3,851.3	639.3	3,794.5	9.2	82.3

[1]Excludes ordnance and accessories. In the 1972 SIC revision, major group 19 was eliminated as a separate major industry group and its industries were reclassified to major groups 34, 36, 37, and 38.

Table 4. **Statistics for Operating Manufacturing Establishments by Major Industry Group: 1963 to 1977**

1977 code	Major industry group and year	Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
	All operating manufacturing establishments:											
	1977 Census	350,757	113,843	18,515.9	242,031.9	13,691.0	26,686.6	157,163.6	585,165.6	782,417.7	1,358,526.4	47,459.0
	1976 ASM	(NA)	(NA)	17,682.7	212,997.8	13,052.0	25,354.2	137,565.4	511,471.1	681,194.1	1,185,695.3	40,669.4
	1975 ASM	(NA)	(NA)	17,173.8	190,504.1	12,569.1	24,069.4	121,429.2	442,485.1	597,327.2	1,039,377.4	37,262.0
	1974 ASM	(NA)	(NA)	18,712.8	190,574.3	13,970.9	27,239.3	124,983.2	452,477.6	581,710.8	1,017,846.9	35,698.7
	1973 ASM	(NA)	(NA)	18,869.7	178,316.5	14,232.8	28,096.9	118,332.6	405,583.6	478,169.6	875,433.2	26,972.7
	1972 Census	312,671	109,950	18,034.4	160,433.2	13,527.9	26,699.2	105,501.8	353,994.0	407,402.1	756,534.3	24,077.7
	1971 ASM	(NA)	(NA)	17,426.3	144,246.3	12,874.9	25,265.9	93,231.7	314,138.4	356,016.9	670,970.5	20,940.7
	1970 ASM	(NA)	(NA)	18,289.5	141,886.4	13,528.0	26,669.3	91,609.0	300,227.6	336,551.6	634,322.1	22,164.3
	1969 ASM	(NA)	(NA)	19,155.6	142,645.1	14,357.8	28,599.8	93,459.6	304,440.7	341,724.5	642,635.8	22,291.4
	1968 ASM	(NA)	(NA)	18,681.0	132,568.4	14,041.2	28,156.8	87,480.4	285,058.9	320,698.0	603,220.1	20,613.1
	1967 Census	305,680	107,138	18,492.0	123,480.6	13,955.3	27,837.6	81,393.6	261,983.8	298,513.7	557,397.8	21,503.0
	1966 ASM	(NA)	(NA)	18,200.3	117,157.4	13,826.5	28,102.5	78,256.4	250,880.1	293,633.8	538,736.9	20,235.8
	1965 ASM	(NA)	(NA)	17,250.5	106,643.2	13,076.0	26,567.8	71,361.5	226,939.9	268,385.8	492,005.7	16,615.0
	1964 ASM	(NA)	(NA)	16,485.7	98,685.3	12,403.3	25,245.5	65,838.9	206,193.6	244,080.5	447,985.1	13,294.3
	1963 Census	306,617	99,352	16,231.9	93,283.3	12,232.0	24,509.4	62,093.6	192,082.9	(NA)	420,528.1	11,370.0
20	Food and kindred products:											
	1977 Census	26,656	11,038	1,520.0	18,543.6	1,072.0	2,112.4	11,730.7	56,062.2	136,963.7	192,911.6	4,214.9
	1976 ASM	(NA)	(NA)	1,525.2	15,855.7	1,054.8	2,067.1	9,836.8	48,094.7	123,788.0	172,157.6	3,433.5
	1975 ASM	(NA)	(NA)	1,527.3	15,891.2	1,056.8	2,071.4	9,861.2	48,142.0	123,953.5	172,510.4	3,399.4
	1974 ASM	(NA)	(NA)	1,553.0	14,787.9	1,074.8	2,125.8	9,196.3	44,947.5	118,330.6	162,104.2	3,006.1
	1973 ASM	(NA)	(NA)	1,559.9	13,670.3	1,080.5	2,157.8	8,470.5	39,692.7	97,433.6	135,582.5	2,413.8
	1972 Census	28,184	12,326	1,569.4	12,921.8	1,085.4	2,166.9	8,007.4	35,616.6	79,800.0	115,060.3	2,355.1
	1971 ASM	(NA)	(NA)	1,574.1	12,179.9	1,072.7	2,145.4	7,437.5	34,109.8	69,777.5	103,630.9	2,245.0
	1970 ASM	(NA)	(NA)	1,619.0	11,698.1	1,104.7	2,216.2	7,095.5	32,289.0	66,455.8	98,533.0	2,143.8
	1969 ASM	(NA)	(NA)	1,652.5	11,135.3	1,131.7	2,265.0	6,782.1	29,997.0	63,608.4	93,379.9	1,916.6
	1968 ASM	(NA)	(NA)	1,632.4	10,496.6	1,114.3	2,233.5	6,389.8	28,201.7	59,307.0	87,327.4	1,739.7
	1967 Census	32,518	13,514	1,649.6	10,076.8	1,121.7	2,259.4	6,062.6	26,620.9	57,540.6	83,975.2	1,730.1
	1966 ASM	(NA)	(NA)	1,642.7	9,542.1	1,098.0	2,239.5	5,675.9	24,895.9	55,071.5	79,750.9	1,692.0
	1965 ASM	(NA)	(NA)	1,641.2	9,161.7	1,095.2	2,233.4	5,445.5	23,537.5	50,805.5	74,248.4	1,475.5
	1964 ASM	(NA)	(NA)	1,646.2	9,027.8	1,095.4	2,269.7	5,367.0	25,053.2	48,675.0	71,597.5	1,412.9
	1963 Census	37,521	14,113	1,643.1	8,637.2	1,098.1	2,228.0	5,159.4	21,825.5	46,784.4	68,466.5	1,249.2
21	Tobacco manufactures:											
	1977 Census	228	123	60.6	750.7	50.4	92.6	570.7	4,334.1	4,729.8	9,050.6	181.5
	1976 ASM	(NA)	(NA)	66.2	654.6	56.3	104.2	513.0	3,721.6	4,342.3	8,059.9	144.9
	1975 ASM	(NA)	(NA)	66.2	654.6	56.3	104.2	513.0	3,722.0	4,395.8	8,113.4	148.4
	1974 ASM	(NA)	(NA)	67.4	604.4	58.0	106.6	476.6	3,179.1	3,966.0	7,139.9	185.4
	1973 ASM	(NA)	(NA)	68.5	557.3	59.2	110.5	440.2	2,900.1	3,446.6	6,340.7	180.4
	1972 Census	272	154	66.3	502.1	57.4	106.8	400.9	2,637.2	3,281.1	5,920.2	133.2
	1971 ASM	(NA)	(NA)	67.1	470.5	58.5	109.2	376.3	2,559.9	2,973.0	5,527.9	94.4
	1970 ASM	(NA)	(NA)	71.4	447.8	62.7	118.5	361.5	2,489.4	2,859.2	5,349.9	55.9
	1969 ASM	(NA)	(NA)	72.2	411.3	63.2	117.3	328.5	2,221.0	2,766.4	4,992.2	60.6
	1968 ASM	(NA)	(NA)	73.9	396.1	65.2	120.6	323.0	2,140.7	2,800.0	4,937.2	50.4
	1967 Census	329	195	75.1	376.9	66.1	125.5	303.6	2,032.0	2,871.4	4,903.6	53.0
	1966 ASM	(NA)	(NA)	72.4	356.2	64.1	122.3	289.4	1,872.0	2,908.8	4,772.7	58.2
	1965 ASM	(NA)	(NA)	74.6	349.4	66.2	124.9	284.9	1,765.7	2,883.5	4,648.3	59.2
	1964 ASM	(NA)	(NA)	78.8	352.9	70.2	138.3	290.7	1,772.1	2,883.0	4,651.7	58.8
	1963 Census	394	231	77.3	330.5	68.6	132.0	271.5	1,680.6	2,836.5	4,520.0	53.8
22	Textile mill products:											
	1977 Census	7,202	4,131	875.4	7,881.4	764.6	1,523.1	6,202.8	16,104.5	24,753.2	40,550.5	1,223.5
	1976 ASM	(NA)	(NA)	835.0	6,396.9	724.6	1,381.5	4,913.7	12,044.3	18,801.4	31,063.6	996.7
	1975 ASM	(NA)	(NA)	838.4	6,418.2	727.7	1,386.8	4,931.6	12,109.9	18,917.0	31,273.7	1,002.0
	1974 ASM	(NA)	(NA)	932.6	6,683.7	813.0	1,588.8	5,194.5	13,199.0	20,051.6	32,892.2	1,169.9
	1973 ASM	(NA)	(NA)	980.2	6,604.9	862.6	1,750.5	5,237.1	13,016.8	18,011.0	31,072.7	1,092.0
	1972 Census	7,203	4,505	952.7	6,051.9	836.2	1,726.0	4,807.2	11,718.0	16,505.1	28,071.5	1,127.5
	1971 ASM	(NA)	(NA)	906.8	5,330.1	794.4	1,605.2	4,212.1	9,995.2	14,023.5	24,029.8	872.8
	1970 ASM	(NA)	(NA)	924.5	5,082.0	812.9	1,628.6	4,035.6	9,333.8	13,261.2	22,610.6	811.1
	1969 ASM	(NA)	(NA)	968.4	5,159.1	859.2	1,747.6	4,129.0	9,604.7	13,415.9	22,977.7	849.2
	1968 ASM	(NA)	(NA)	959.1	4,849.6	854.4	1,758.1	3,944.7	9,184.4	13,067.0	21,969.2	690.6
	1967 Census	7,080	4,453	929.0	4,390.9	828.2	1,689.7	3,556.5	8,153.2	11,741.4	19,815.2	733.1
	1966 ASM	(NA)	(NA)	927.3	4,243.5	828.0	1,728.2	3,445.9	8,028.4	11,723.7	19,599.9	887.3
	1965 ASM	(NA)	(NA)	893.6	3,911.5	797.9	1,670.8	3,189.2	7,469.4	10,973.6	18,292.5	618.1
	1964 ASM	(NA)	(NA)	875.5	3,646.6	781.7	1,626.4	2,962.9	6,671.8	10,370.9	16,999.0	503.5
	1963 Census	7,104	4,368	863.2	3,385.0	775.3	1,568.1	2,768.4	6,123.0	9,658.7	15,740.5	382.4
23	Apparel and other textile products:											
	1977 Census	26,505	11,932	1,334.3	9,658.6	1,156.6	2,037.6	7,252.8	19,671.3	20,865.5	40,245.1	456.7
	1976 ASM	(NA)	(NA)	1,214.3	7,699.8	1,058.8	1,890.6	5,776.5	14,749.0	16,338.8	31,430.2	380.7
	1975 ASM	(NA)	(NA)	1,212.5	7,688.7	1,056.7	1,885.0	5,762.2	13,381.2	15,959.7	31,083.9	416.2
	1974 ASM	(NA)	(NA)	1,317.3	7,642.1	1,147.2	2,040.5	5,752.6	14,925.8	15,774.2	30,551.0	390.5
	1973 ASM	(NA)	(NA)	1,400.2	7,706.6	1,227.7	2,191.4	5,841.2	14,618.2	15,721.7	30,083.8	387.3
	1972 Census	24,438	12,226	1,368.3	7,212.0	1,198.3	2,161.1	5,461.1	13,487.5	14,532.0	27,809.2	363.5
	1971 ASM	(NA)	(NA)	1,318.8	6,499.8	1,148.9	2,054.4	4,942.7	12,448.4	12,672.4	25,024.5	336.2
	1970 ASM	(NA)	(NA)	1,341.4	6,267.4	1,171.2	2,119.4	4,806.5	11,597.5	11,948.1	23,501.8	299.6
	1969 ASM	(NA)	(NA)	1,381.1	6,402.2	1,209.5	2,202.5	4,944.0	11,571.1	12,692.7	24,283.2	310.8
	1968 ASM	(NA)	(NA)	1,356.0	6,012.3	1,194.0	2,176.8	4,680.6	10,880.9	12,002.5	22,648.9	267.2
	1967 Census	26,393	12,705	1,356.7	5,582.2	1,200.4	2,178.6	4,340.6	10,064.4	11,322.0	21,326.9	208.3
	1966 ASM	(NA)	(NA)	1,359.8	5,207.1	1,202.2	2,213.1	4,037.8	9,180.5	10,943.1	19,971.0	205.8
	1965 ASM	(NA)	(NA)	1,335.2	4,955.2	1,182.7	2,179.3	3,877.5	8,683.6	10,475.8	18,953.2	167.9
	1964 ASM	(NA)	(NA)	1,302.8	4,684.4	1,147.3	2,016.8	3,639.6	8,163.2	9,819.4	17,901.1	122.8
	1963 Census	28,457	13,011	1,279.5	4,423.0	1,132.9	2,052.6	3,482.3	7,861.0	9,327.3	17,096.9	128.6

See footnotes at end of table.

Table 4. **Statistics for Operating Manufacturing Establishments by Major Industry Group: 1963 to 1977**—Con.

1977 code	Major industry group and year	Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
24	Lumber and wood products:											
	1977 Census	37,302	7,056	692.4	7,424.7	594.8	1,147.6	5,795.0	16,222.8	23,918.7	39,919.4	1,562.6
	1976 ASM	(NA)	(NA)	588.1	5,231.3	505.9	945.9	4,050.1	10,355.6	14,623.5	25,094,5	1,264.0
	1975 ASM	(NA)	(NA)	591.7	5,268.6	509.0	951.1	4,079.1	10,455.8	14,652.7	25,193.7	1,281.6
	1974 ASM	(NA)	(NA)	674.8	5,490.1	582.5	1,120.7	4,293.5	11,561.2	15,600.5	26,852.6	1,357.2
	1973 ASM	(NA)	(NA)	722.4	5,470.5	628.4	1,213.8	4,311.1	12,357.2	15,843.8	27,980.6	953.3
	1972 Census	33,948	6,867	691.0	4,983.4	601.1	1,167.5	3,932.9	10,309.4	13,592.8	23,816.0	930.9
	1971 ASM	(NA)	(NA)	530.1	3,461.8	465.2	909.3	2,781.9	6,760.9	8,173.4	14,930.8	716.3
	1970 ASM	(NA)	(NA)	541.8	3,240.5	474.5	925.1	2,591.4	5,869.0	7,214.6	13,044.3	534.9
	1969 ASM	(NA)	(NA)	566.2	3,245.9	502.0	986.0	2,629.8	6,330.6	7,760.6	14,003.9	589.7
	1968 ASM	(NA)	(NA)	551.6	3,019.2	491.1	972.8	2,471.1	5,915.5	7,024.4	12,870.1	483.7
	1967 Census	36,795	5,803	554.0	2,789.9	495.7	977.0	2,290.6	4,973.4	6,231.6	11,205.2	426.0
	1966 ASM	(NA)	(NA)	571.8	2,692.5	506.3	1,015.4	2,214.1	4,791.2	5,995.6	10,720.4	485.2
	1965 ASM	(NA)	(NA)	571.8	2,585.7	506.6	1,009.0	2,123.5	4,473.6	5,765.3	10,298.0	482.1
	1964 ASM	(NA)	(NA)	559.2	2,435.7	490.4	985.3	2,047.8	4,364.9	5,567.5	9,881.8	362.0
	1963 Census	36,150	5,765	563.1	2,338.7	497.4	978.7	1,943.3	4,020.6	5,187.0	9,200.0	394.7
25	Furniture and fixtures:											
	1977 Census	10,235	3,588	463.8	4,448.3	383.6	736.4	3,191.8	8,921.7	8,187.4	16,978.0	388.7
	1976 ASM	(NA)	(NA)	395.8	3,310.1	324.9	605.3	2,339.4	6,290.1	5,950.6	12,372.8	251.6
	1975 ASM	(NA)	(NA)	397.8	3,322.6	326.6	611.0	2,349.3	6,310.6	5,984.8	12,420.7	255.0
	1974 ASM	(NA)	(NA)	459.3	3,569.7	380.6	732.1	2,577.3	6,983.4	6,360.4	13,197.3	350.9
	1973 ASM	(NA)	(NA)	478.7	3,532.2	404.3	790.5	2,561.0	6,735.5	5,981.1	12,609.5	343.8
	1972 Census	9,232	3,646	461.6	3,202.1	383.8	755.6	2,321.3	6,089.5	5,327.8	11,308.6	306.2
	1971 ASM	(NA)	(NA)	435.5	2,820.9	360.1	710.5	2,034.0	5,226.9	4,559.4	9,753.5	196.2
	1970 ASM	(NA)	(NA)	436.9	2,691.2	361.4	715.0	1,937.6	4,875.9	4,216.5	9,074.8	231.0
	1969 ASM	(NA)	(NA)	455.5	2,693.0	381.3	761.2	1,968.0	5,030.6	4,278.3	9,215.6	189.5
	1968 ASM	(NA)	(NA)	433.4	2,452.7	364.3	733.3	1,792.8	4,561.6	3,945.2	8,457.7	177.7
	1967 Census	10,008	3,449	425.3	2,258.3	357.5	715.7	1,653.7	4,169.5	3,619.6	7,749.8	198.0
	1966 ASM	(NA)	(NA)	428.6	2,188.1	360.7	735.0	1,621.2	3,989.9	3,609.1	7,537.0	185.6
	1965 ASM	(NA)	(NA)	407.1	2,013.4	341.7	698.8	1,486.6	3,612.4	3,290.2	6,879.7	151.1
	1964 ASM	(NA)	(NA)	388.2	1,844.5	323.8	663.0	1,374.6	3,226.9	3,110.3	6,309.4	108.2
	1963 Census	10,478	3,313	376.5	1,726.7	314.8	639.7	1,290.0	3,068.3	2,836.2	5,884.1	110.2
26	Paper and allied products:											
	1977 Census	6,545	3,999	628.7	8,942.9	486.3	985.9	6,323.1	22,170.9	30,148.2	52,085.7	3,295.0
	1976 ASM	(NA)	(NA)	588.6	6,990.4	453.7	900.6	4,872.7	17,943.7	23,792.0	41,711.5	2,718.0
	1975 ASM	(NA)	(NA)	589.5	6,984.5	454.4	902.5	4,873.4	17,926.8	23,818.6	41,743.1	2,718.3
	1974 ASM	(NA)	(NA)	645.9	6,955.0	507.4	1,032.2	4,995.0	18,957.2	23,161.9	41,665.3	2,208.3
	1973 ASM	(NA)	(NA)	645.4	6,481.9	509.0	1,056.1	4,695.4	15,166.0	17,654.2	32,752.4	1,529.6
	1972 Census	6,038	3,956	633.4	5,992.1	498.8	1,040.5	4,320.2	13,064.1	15,240.5	28,261.9	1,335.3
	1971 ASM	(NA)	(NA)	631.9	5,536.8	494.7	1,024.7	3,950.6	11,682.1	13,840.0	25,458.1	1,197.4
	1970 ASM	(NA)	(NA)	659.0	5,374.1	519.9	1,075.8	3,849.9	11,590.3	13,288.7	24,800.5	1,397.4
	1969 ASM	(NA)	(NA)	669.9	5,200.0	530.9	1,128.0	3,757.3	11,426.4	13,091.3	24,426.5	1,420.7
	1968 ASM	(NA)	(NA)	642.5	4,749.5	510.2	1,086.2	3,436.0	10,465.5	11,902.6	22,307.8	1,238.3
	1967 Census	5,890	3,813	638.9	4,436.2	507.7	1,071.2	3,205.5	9,756.3	11,292.2	20,969.9	1,585.3
	1966 ASM	(NA)	(NA)	633.9	4,235.9	503.2	1,075.6	3,070.8	9,417.2	11,112.8	20,413.7	1,421.9
	1965 ASM	(NA)	(NA)	609.6	3,895.6	484.5	1,029.3	2,829.0	8,464.1	10,170.0	18,578.5	1,185.6
	1964 ASM	(NA)	(NA)	592.9	3,685.6	470.8	1,007.3	2,678.3	7,805.7	9,460.2	17,194.5	901.9
	1963 Census	5,713	3,552	588.0	3,508.2	467.8	988.6	2,551.1	7,395.7	9,001.4	16,357.1	708.5
27	Printing and publishing:											
	1977 Census	49,767	9,132	1,092.2	14,024.5	625.8	1,152.8	7,322.1	31,979.5	17,794.7	49,716.2	1,597.8
	1976 ASM	(NA)	(NA)	1,070.2	11,655.2	626.2	1,138.1	6,219.9	24,641.0	13,538.5	38,125.1	1,174.6
	1975 ASM	(NA)	(NA)	1,072.8	11,675.3	629.8	1,144.6	6,252.8	24,503.1	13,562.5	38,135.3	1,184.4
	1974 ASM	(NA)	(NA)	1,075.7	11,139.3	639.1	1,189.2	6,131.0	23,610.3	12,526.7	35,822.4	1,140.9
	1973 ASM	(NA)	(NA)	1,083.5	10,523.3	649.2	1,203.2	5,830.1	21,871.2	11,071.7	32,854.7	1,089.5
	1972 Census	42,102	8,618	1,056.1	9,826.9	637.4	1,180.7	5,459.3	20,197.1	10,043.3	30,132.4	1,047.2
	1971 ASM	(NA)	(NA)	1,049.1	8,975.9	626.3	1,192.0	5,010.1	18,086.4	8,861.4	26,887.3	941.9
	1970 ASM	(NA)	(NA)	1,077.2	8,682.2	652.9	1,265.1	4,903.3	17,232.4	8,557.1	25,756.5	872.8
	1969 ASM	(NA)	(NA)	1,090.7	8,337.7	666.5	1,261.6	4,701.8	16,793.4	8,540.9	25,332.7	853.3
	1968 ASM	(NA)	(NA)	1,040.0	7,627.0	635.9	1,204.1	4,279.7	15,328.7	7,907.1	23,190.4	756.7
	1967 Census	37,989	8,035	1,031.0	7,151.5	631.6	1,196.1	4,011.3	14,355.1	7,518.5	21,738.4	788.1
	1966 ASM	(NA)	(NA)	1,017.6	6,751.0	619.1	1,208.7	3,831.5	13,264.5	7,114.9	20,201.7	708.5
	1965 ASM	(NA)	(NA)	982.4	6,269.2	597.3	1,156.3	3,574.9	12,098.8	6,599.6	18,620.3	542.7
	1964 ASM	(NA)	(NA)	935.0	5,847.6	569.7	1,123.6	3,349.5	11,192.1	6,185.5	17,337.1	464.5
	1963 Census	38,090	7,215	913.2	5,514.8	559.8	1,083.2	3,191.0	10,476.4	5,777.3	16,165.7	463.9
28	Chemicals and allied products:											
	1977 Census	12,173	4,602	880.2	13,839.3	543.8	1,089.9	7,446.2	56,720.6	62,293.8	118,153.6	8,198.9
	1976 ASM	(NA)	(NA)	842.0	11,227.0	509.8	1,000.8	5,857.7	44,976.3	45,150.6	89,721.2	6,353.1
	1975 ASM	(NA)	(NA)	848.1	11,303.8	511.2	1,003.4	5,870.5	45,116.0	45,141.8	89,847.8	6,382.4
	1974 ASM	(NA)	(NA)	865.5	10,547.3	542.0	1,084.7	5,697.0	44,488.1	41,467.3	83,801.0	4,957.2
	1973 ASM	(NA)	(NA)	852.4	9,440.3	535.1	1,075.3	5,149.3	36,239.4	28,595.7	65,008.0	3,186.2
	1972 Census	11,425	4,431	836.5	8,730.5	525.0	1,053.7	4,753.9	32,413.9	25,085.5	57,349.6	2,728.4
	1971 ASM	(NA)	(NA)	848.9	8,259.9	528.6	1,060.5	4,451.2	29,431.5	22,489.8	51,873.1	2,937.7
	1970 ASM	(NA)	(NA)	881.0	8,003.8	555.7	1,120.6	4,327.0	27,929.6	21,781.8	49,355.2	3,110.7
	1969 ASM	(NA)	(NA)	882.6	7,602.5	565.6	1,150.9	4,181.1	27,318.9	21,281.1	48,269.8	2,843.4
	1968 ASM	(NA)	(NA)	856.3	6,938.5	550.8	1,116.0	3,845.4	25,810.4	19,984.0	45,622.4	2,788.7
	1967 Census	11,799	4,348	841.4	6,443.0	541.4	1,086.1	3,555.2	23,550.1	18,821.2	42,148.3	2,936.1
	1966 ASM	(NA)	(NA)	822.4	6,129.3	528.5	1,077.4	3,400.2	22,655.6	18,516.8	40,780.4	2,898.6
	1965 ASM	(NA)	(NA)	780.3	5,594.4	502.4	1,022.5	3,104.8	20,955.6	16,804.5	37,478.8	2,482.0
	1964 ASM	(NA)	(NA)	749.2	5,244.3	479.9	986.0	2,927.5	19,165.8	15,218.4	34,268.1	1,862.2
	1963 Census	11,996	3,985	737.4	4,969.8	474.1	963.4	2,779.9	17,586.1	14,255.1	31,772.7	1,545.7

See footnotes at end of table.

Table 4. **Statistics for Operating Manufacturing Establishments by Major Industry Group: 1963 to 1977**—Con.

1977 code	Major industry group and year	Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
29	Petroleum and coal products:											
	1977 Census	2,206	773	146.8	2,696.2	101.1	207.9	1,765.4	16,377.6	81,655.4	97,452.7	2,261.3
	1976 ASM	(NA)	(NA)	141.1	2,147.4	97.9	197.4	1,357.3	10,499.5	59,198.4	69,484.6	2,417.8
	1975 ASM	(NA)	(NA)	141.1	2,143.6	98.0	197.6	1,355.8	10,090.2	59,099.4	68,969.2	2,328.4
	1974 ASM	(NA)	(NA)	145.6	1,919.9	101.4	207.9	1,240.9	9,951.1	50,140.5	58,875.8	1,845.1
	1973 ASM	(NA)	(NA)	136.5	1,716.0	95.8	193.6	1,110.4	7,740.2	27,421.1	34,899.0	1,107.0
	1972 Census	2,016	720	139.5	1,637.5	97.9	200.5	1,064.0	5,793.1	22,762.5	28,694.7	1,154.2
	1971 ASM	(NA)	(NA)	141.3	1,564.1	97.1	197.6	993.5	5,616.8	21,460.7	26,935.2	1,304.0
	1970 ASM	(NA)	(NA)	143.8	1,487.2	99.6	204.9	941.6	5,477.9	19,493.5	24,882.9	1,217.6
	1969 ASM	(NA)	(NA)	141.9	1,368.7	98.1	196.7	857.1	5,703.3	18,720.5	24,392.9	1,071.6
	1968 ASM	(NA)	(NA)	141.0	1,284.3	98.4	201.3	825.1	5,567.1	17,664.3	23,190.0	1,064.9
	1967 Census	1,880	704	141.7	1,216.2	99.2	202.1	786.3	5,425.9	16,748.4	22,043.4	999.3
	1966 ASM	(NA)	(NA)	139.8	1,128.0	99.1	198.0	741.7	4,753.8	15,652.5	20,419.7	668.7
	1965 ASM	(NA)	(NA)	142.4	1,107.4	101.6	203.7	732.6	4,131.3	14,973.6	19,111.4	603.5
	1964 ASM	(NA)	(NA)	148.4	1,127.1	105.4	213.6	743.2	3,780.4	14,570.2	18,357.5	412.6
	1963 Census	1,839	689	153.5	1,133.9	109.4	216.7	745.1	3,713.2	14,291.5	17,994.7	413.7
30	Rubber and miscellaneous plastics products:											
	1977 Census	11,943	5,294	721.3	8,536.0	563.7	1,110.6	5,841.6	19,740.0	20,217.8	39,552.8	1,645.3
	1976 ASM	(NA)	(NA)	585.0	5,922.6	451.0	873.1	3,984.6	13,599.3	13,610.2	27,191.2	1,139.9
	1975 ASM	(NA)	(NA)	587.4	5,944.9	453.0	877.8	4,002.1	13,674.2	13,688.0	27,316.5	1,152.5
	1974 ASM	(NA)	(NA)	661.3	6,203.1	522.6	1,024.9	4,303.3	14,826.2	13,628.2	27,902.2	1,457.0
	1973 ASM	(NA)	(NA)	672.0	5,812.3	532.0	1,041.7	4,080.1	13,439.6	11,058.3	24,383.6	1,305.0
	1972 Census	9,237	4,188	617.7	5,165.2	486.8	968.3	3,605.0	11,653.3	9,466.1	20,923.7	1,059.6
	1971 ASM	(NA)	(NA)	543.5	4,285.7	422.2	844.4	2,968.4	9,521.2	7,541.6	17,043.7	723.8
	1970 ASM	(NA)	(NA)	545.8	3,998.6	426.9	849.2	2,759.1	8,502.7	7,038.3	15,471.4	828.4
	1969 ASM	(NA)	(NA)	567.4	4,026.0	450.8	915.5	2,846.4	8,431.1	7,324.6	15,637.4	856.6
	1968 ASM	(NA)	(NA)	541.9	3,705.4	430.1	875.4	2,624.1	7,730.4	6,799.1	14,377.4	760.0
	1967 Census	6,456	3,122	516.7	3,286.5	410.1	815.5	2,312.5	6,799.5	5,974.4	12,758.6	677.2
	1966 ASM	(NA)	(NA)	491.8	3,072.0	390.6	799.9	2,174.3	6,277.1	5,825.5	11,976.0	599.9
	1965 ASM	(NA)	(NA)	465.2	2,813.9	368.8	747.1	1,985.3	5,681.4	5,276.5	10,863.2	516.0
	1964 ASM	(NA)	(NA)	430.1	2,546.9	340.7	695.9	1,798.5	4,990.9	4,789.3	9,723.2	399.4
	1963 Census	5,728	2,449	415.0	2,364.0	328.8	658.5	1,672.4	4,654.0	4,480.1	9,116.2	343.5
31	Leather and leather products:											
	1977 Census	3,075	1,486	242.5	1,859.7	211.5	381.9	1,408.1	3,718.8	3,932.6	7,607.4	96.2
	1976 ASM	(NA)	(NA)	239.7	1,651.4	208.9	377.5	1,249.9	3,187.2	3,111.2	6,323.0	77.5
	1975 ASM	(NA)	(NA)	240.0	1,652.4	209.3	377.9	1,251.5	3,187.2	3,117.1	6,333.4	78.4
	1974 ASM	(NA)	(NA)	255.8	1,604.1	223.1	401.8	1,228.8	3,120.2	3,099.2	6,176.5	76.1
	1973 ASM	(NA)	(NA)	267.6	1,595.4	234.7	434.4	1,230.2	2,962.0	3,075.9	6,022.5	80.9
	1972 Census	3,201	1,657	273.4	1,589.3	240.4	449.1	1,230.8	2,917.2	2,895.4	5,769.5	74.5
	1971 ASM	(NA)	(NA)	273.8	1,500.6	240.4	441.8	1,155.0	2,760.8	2,437.4	5,218.4	69.2
	1970 ASM	(NA)	(NA)	295.8	1,526.0	261.0	479.6	1,183.7	2,819.7	2,468.6	5,288.4	62.8
	1969 ASM	(NA)	(NA)	326.7	1,592.9	290.7	537.9	1,252.3	2,898.0	2,594.1	5,463.9	64.2
	1968 ASM	(NA)	(NA)	334.1	1,582.1	298.2	561.4	1,252.7	2,911.9	2,604.1	5,485.5	78.8
	1967 Census	3,685	1,967	328.7	1,458.8	293.3	549.2	1,147.0	2,626.5	2,540.9	5,169.0	62.1
	1966 ASM	(NA)	(NA)	341.1	1,426.0	303.1	574.4	1,125.3	2,480.8	2,590.3	5,032.6	61.5
	1965 ASM	(NA)	(NA)	335.7	1,348.3	299.2	562.7	1,065.3	2,322.0	2,342.0	4,640.5	46.5
	1964 ASM	(NA)	(NA)	326.7	1,285.9	291.9	553.4	1,022.1	2,264.7	2,173.3	4,414.4	37.7
	1963 Census	4,047	2,073	327.5	1,227.8	292.3	543.1	982.1	2,078.6	2,127.8	4,209.6	34.6
32	Stone, clay, and glass products:											
	1977 Census	17,744	5,201	613.7	7,943.1	484.4	960.7	5,766.6	19,129.6	16,444.8	35,476.6	1,881.4
	1976 ASM	(NA)	(NA)	588.8	6,389.7	461.2	901.7	4,596.2	14,848.7	12,301.0	27,073.9	1,581.2
	1975 ASM	(NA)	(NA)	591.6	6,402.6	464.0	905.9	4,601.1	15,337.6	12,339.2	27,595.1	1,601.6
	1974 ASM	(NA)	(NA)	637.0	6,414.2	507.9	1,012.5	4,719.8	14,566.0	12,041.2	26,260.1	1,583.6
	1973 ASM	(NA)	(NA)	643.8	6,079.4	510.8	1,027.7	4,456.7	13,801.0	10,179.8	23,861.7	1,391.4
	1972 Census	16,015	5,301	623.2	5,546.9	492.6	998.1	4,037.3	12,586.5	9,062.6	21,537.5	1,195.5
	1971 ASM	(NA)	(NA)	582.6	4,801.6	462.4	927.8	3,503.4	10,757.8	7,816.6	18,534.7	927.8
	1970 ASM	(NA)	(NA)	591.3	4,530.5	470.2	950.6	3,320.7	9,785.8	7,048.6	16,761.1	919.8
	1969 ASM	(NA)	(NA)	608.3	4,440.4	484.0	987.4	3,257.0	9,851.1	7,054.1	16,815.8	907.9
	1968 ASM	(NA)	(NA)	590.1	4,064.6	468.9	950.7	2,973.4	9,211.7	6,609.3	15,783.3	734.0
	1967 Census	15,580	4,911	589.9	3,825.5	469.3	948.4	2,784.1	8,333.4	6,146.0	14,449.4	820.9
	1966 ASM	(NA)	(NA)	616.0	3,837.5	488.0	998.9	2,811.7	8,494.6	6,262.5	14,629.4	939.5
	1965 ASM	(NA)	(NA)	604.6	3,602.1	479.9	981.1	2,640.2	7,995.9	5,989.3	13,938.7	773.2
	1964 ASM	(NA)	(NA)	580.8	3,369.0	458.5	949.2	2,446.9	7,492.7	5,541.1	12,950.2	627.2
	1963 Census	15,838	4,655	573.9	3,212.5	455.8	928.9	2,350.2	7,044.0	5,287.8	12,289.1	607.6
33	Primary metal products:											
	1977 Census	7,375	3,980	1,113.6	18,745.0	885.3	1,744.0	14,065.2	37,568.2	66,171.3	103,179.4	4,496.8
	1976 ASM	(NA)	(NA)	1,088.9	14,993.7	856.0	1,637.5	11,029.8	30,366.8	51,949.8	80,817.0	4,164.5
	1975 ASM	(NA)	(NA)	1,090.5	15,015.0	856.3	1,638.5	11,047.1	30,554.4	52,155.2	81,315.3	4,187.4
	1974 ASM	(NA)	(NA)	1,247.8	15,900.2	1,001.0	1,995.0	12,102.4	37,297.3	58,720.5	95,618.0	3,751.8
	1973 ASM	(NA)	(NA)	1,221.7	14,147.9	995.5	2,027.7	10,873.1	28,614.1	44,007.1	72,727.2	2,334.2
	1972 Census	6,792	3,901	1,142.8	12,166.5	922.7	1,849.9	9,202.4	23,258.1	35,708.9	58,429.7	2,160.6
	1971 ASM	(NA)	(NA)	1,169.3	11,204.6	931.4	1,831.8	8,300.6	21,119.8	31,867.5	53,067.3	2,197.5
	1970 ASM	(NA)	(NA)	1,261.2	11,251.9	1,013.5	2,009.0	8,410.2	21,444.6	32,629.8	53,510.7	2,736.7
	1969 ASM	(NA)	(NA)	1,310.5	11,447.4	1,064.3	2,171.5	8,687.7	22,729.0	32,956.6	55,257.9	2,815.9
	1968 ASM	(NA)	(NA)	1,274.7	10,479.2	1,033.4	2,090.4	7,922.2	20,973.7	29,346.3	50,317.0	3,102.3
	1967 Census	6,837	4,082	1,281.0	9,850.9	1,041.5	2,088.7	7,457.3	19,978.2	27,219.9	46,730.9	3,134.1
	1966 ASM	(NA)	(NA)	1,296.2	9,911.0	1,065.5	2,191.3	7,648.6	20,898.8	29,130.0	49,528.4	2,765.1
	1965 ASM	(NA)	(NA)	1,250.3	9,237.6	1,025.6	2,105.4	7,176.4	18,924.4	26,509.6	45,302.8	2,257.0
	1964 ASM	(NA)	(NA)	1,180.5	8,487.9	973.4	1,994.4	6,577.6	16,692.4	23,526.9	40,032.4	1,886.0
	1963 Census	6,513	3,583	1,126.5	7,734.1	922.2	1,839.0	5,933.6	15,261.1	20,474.2	35,621.5	1,446.3

See footnotes at end of table.

Table 4. **Statistics for Operating Manufacturing Establishments by Major Industry Group: 1963 to 1977**—Con.

1977 code	Major industry group and year	Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
34	Fabricated metal products:											
	1977 Census	33,712	12,739	1,555.7	21,035.9	1,191.6	2,373.8	14,428.8	45,511.5	45,384.8	90,023.5	2,606.1
	1976 ASM	(NA)	(NA)	1,416.9	16,334.3	1,070.2	2,085.4	11,029.5	34,203.0	34,465.7	68,738.7	2,074.2
	1975 ASM	(NA)	(NA)	1,419.9	16,359.0	1,072.7	2,091.2	11,048.4	34,095.8	34,527.8	68,823.6	2,077.7
	1974 ASM	(NA)	(NA)	1,574.7	16,570.0	1,207.7	2,415.0	11,469.2	35,221.0	33,858.1	67,569.9	1,981.2
	1973 ASM	(NA)	(NA)	1,566.7	15,374.0	1,212.5	2,439.9	10,742.3	30,573.4	28,520.7	58,556.3	1,734.7
	1972 Census	29,525	11,676	1,493.3	13,820.6	1,148.0	2,302.7	9,544.4	26,945.8	25,197.5	51,739.3	1,323.2
	1971 ASM	(NA)	(NA)	1,279.2	11,022.1	980.9	1,971.4	7,577.5	21,966.3	20,051.9	42,026.4	1,042.5
	1970 ASM	(NA)	(NA)	1,333.5	10,780.0	1,025.2	2,080.3	7,430.1	20,887.8	19,074.9	39,620.9	1,139.7
	1969 ASM	(NA)	(NA)	1,399.1	10,773.1	1,097.1	2,227.5	7,550.7	20,739.5	19,045.3	39,597.1	1,286.7
	1968 ASM	(NA)	(NA)	1,357.8	10,038.1	1,067.7	2,192.6	7,061.7	19,504.5	17,957.0	37,340.5	1,041.2
	1967 Census	27,418	10,741	1,341.8	9,319.5	1,056.9	2,160.9	6,541.6	18,042.6	16,704.9	34,577.8	1,118.4
	1966 ASM	(NA)	(NA)	1,252.3	8,244.9	984.1	2,038.2	5,762.4	15,791.9	15,306.2	30,904.6	952.5
	1965 ASM	(NA)	(NA)	1,173.3	7,413.6	914.5	1,901.4	5,181.5	14,171.3	13,687.3	27,536.1	805.7
	1964 ASM	(NA)	(NA)	1,115.9	6,852.9	869.5	1,794.8	4,802.7	12,692.9	12,375.5	24,895.6	726.8
	1963 Census	27,075	9,210	1,082.1	6,387.5	843.8	1,721.0	4,483.7	11,791.1	11,397.9	23,065.2	570.1
35	Machinery, except electrical:											
	1977 Census	48,200	12,446	2,083.3	30,557.5	1,413.8	2,803.0	18,298.4	67,222.5	56,531.6	122,187.7	4,402.4
	1976 ASM	(NA)	(NA)	1,966.6	24,555.1	1,340.7	2,644.6	14,778.3	51,044.4	44,581.0	95,752.5	3,354.7
	1975 ASM	(NA)	(NA)	1,979.2	24,702.0	1,349.8	2,661.1	14,853.8	51,471.0	44,821.2	96,400.3	3,369.4
	1974 ASM	(NA)	(NA)	2,126.1	24,713.4	1,496.7	3,024.8	15,431.1	52,494.9	43,548.6	92,487.2	3,312.2
	1973 ASM	(NA)	(NA)	1,993.8	21,598.0	1,400.2	2,842.7	13,493.7	44,559.0	35,566.1	78,092.7	2,344.0
	1972 Census	40,792	10,599	1,827.7	18,523.3	1,266.9	2,538.3	11,358.6	37,562.9	29,204.1	65,820.7	1,906.3
	1971 ASM	(NA)	(NA)	1,743.5	16,235.0	1,187.2	2,334.8	9,740.0	30,680.9	24,536.7	55,559.9	1,696.0
	1970 ASM	(NA)	(NA)	1,890.6	16,637.8	1,306.4	2,624.2	10,222.4	31,814.3	24,875.0	56,080.6	1,854.9
	1969 ASM	(NA)	(NA)	1,943.7	16,441.7	1,377.2	2,829.7	10,401.8	32,009.2	24,705.9	55,767.7	1,866.3
	1968 ASM	(NA)	(NA)	1,848.8	14,754.9	1,320.4	2,700.8	9,427.8	28,777.8	22,071.3	50,605.5	1,743.1
	1967 Census	37,892	10,629	1,864.5	14,226.3	1,349.0	2,785.0	9,236.1	27,836.4	21,231.6	48,477.2	1,868.1
	1966 ASM	(NA)	(NA)	1,803.7	13,469.8	1,309.9	2,795.8	8,843.0	27,034.9	20,769.7	46,621.9	1,658.3
	1965 ASM	(NA)	(NA)	1,652.8	11,741.8	1,195.9	2,515.1	7,659.6	22,762.0	17,306.4	39,241.1	1,228.4
	1964 ASM	(NA)	(NA)	1,538.6	10,606.9	1,108.7	2,327.3	6,982.3	20,302.4	15,304.5	35,060.1	939.4
	1963 Census	33,703	8,426	1,459.4	9,571.0	1,045.1	2,151.1	6,209.3	17,310.6	13,254.2	30,363.1	783.1
36	Electric and electronic equipment:											
	1977 Census	14,973	6,338	1,723.1	22,544.2	1,191.4	2,309.2	12,951.6	50,365.7	39,369.5	88,433.1	2,866.5
	1976 ASM	(NA)	(NA)	1,523.6	17,401.2	1,019.9	1,949.6	9,631.9	34,845.0	28,677.8	64,213.9	1,876.8
	1975 ASM	(NA)	(NA)	1,520.9	17,392.0	1,017.8	1,946.5	9,627.8	34,804.4	28,689.6	64,197.9	1,865.8
	1974 ASM	(NA)	(NA)	1,775.5	18,092.8	1,242.3	2,389.1	10,508.7	36,901.5	30,106.0	65,804.1	2,426.3
	1973 ASM	(NA)	(NA)	1,797.0	17,150.7	1,277.5	2,504.9	10,190.3	34,984.2	27,166.5	60,864.8	1,996.1
	1972 Census	12,274	5,736	1,662.2	15,200.1	1,160.8	2,275.0	8,822.6	30,583.6	23,315.6	53,433.0	1,418.8
	1971 ASM	(NA)	(NA)	1,659.0	14,436.7	1,119.4	2,182.7	8,040.0	27,874.2	20,923.0	49,168.1	1,398.6
	1970 ASM	(NA)	(NA)	1,831.6	14,827.2	1,237.4	2,417.4	8,320.6	27,773.5	21,003.7	48,420.8	1,519.7
	1969 ASM	(NA)	(NA)	1,917.8	14,829.7	1,324.0	2,618.5	8,445.7	28,210.9	21,115.9	48,913.7	1,640.7
	1968 ASM	(NA)	(NA)	1,882.7	13,807.8	1,304.1	2,596.5	7,986.0	26,425.0	20,321.6	46,470.4	1,477.6
	1967 Census	10,706	5,572	1,874.9	12,968.0	1,323.4	2,611.3	7,607.0	24,487.3	19,437.3	43,361.0	1,537.2
	1966 ASM	(NA)	(NA)	1,811.0	11,988.1	1,318.5	2,641.9	7,259.3	23,481.7	18,472.6	40,842.6	1,388.3
	1965 ASM	(NA)	(NA)	1,604.8	10,449.5	1,138.6	2,313.1	6,231.6	20,161.7	15,430.7	35,127.3	1,045.9
	1964 ASM	(NA)	(NA)	1,483.8	9,407.3	1,029.9	2,070.2	5,568.9	17,765.4	13,234.0	30,784.7	761.3
	1963 Census	9,948	4,722	1,511.8	9,284.3	1,049.4	2,090.5	5,405.8	17,010.7	12,942.6	29,840.2	701.9
37	Transportation equipment:											
	1977 Census	10,176	3,653	1,768.2	30,673.5	1,284.4	2,612.7	20,314.3	64,291.1	103,489.6	166,954.0	4,670.9
	1976 ASM	(NA)	(NA)	1,604.6	22,772.0	1,137.0	2,216.8	14,405.4	45,337.3	68,677.6	113,500.6	2,762.1
	1975 ASM	(NA)	(NA)	1,604.4	22,770.3	1,137.9	2,217.3	14,418.8	45,155.2	68,591.1	113,218.3	2,794.3
	1974 ASM	(NA)	(NA)	1,738.0	22,609.2	1,249.6	2,469.9	14,554.1	44,973.3	64,875.4	108,245.2	3,176.1
	1973 ASM	(NA)	(NA)	1,835.7	22,571.9	1,340.6	2,732.4	14,833.8	45,684.9	65,555.6	110,710.7	2,530.1
	1972 Census	8,802	3,618	1,719.0	19,880.0	1,246.2	2,527.4	12,848.6	39,799.4	55,767.8	94,704.9	2,660.2
	1971 ASM	(NA)	(NA)	1,620.8	16,697.8	1,186.0	2,370.8	11,047.9	34,845.0	51,251.9	86,920.4	1,258.2
	1970 ASM	(NA)	(NA)	1,688.6	16,072.6	1,200.8	2,393.3	10,230.0	29,990.2	42,293.2	72,589.5	1,611.6
	1969 ASM	(NA)	(NA)	1,919.7	17,650.7	1,398.1	2,823.0	11,454.6	34,053.2	48,012.3	81,786.0	1,942.6
	1968 ASM	(NA)	(NA)	1,887.6	16,811.2	1,376.5	2,893.3	11,135.4	32,866.2	46,997.1	79,494.3	1,599.0
	1967 Census	7,483	3,354	1,834.1	15,173.7	1,336.5	2,745.6	9,918.2	28,173.9	40,419.9	68,512.3	1,822.4
	1966 ASM	(NA)	(NA)	1,829.7	14,852.4	1,354.5	2,843.8	9,857.8	28,277.1	41,936.1	69,422.7	1,879.8
	1965 ASM	(NA)	(NA)	1,683.8	13,273.3	1,240.7	2,639.8	8,813.2	26,330.9	39,901.2	65,842.7	1,506.1
	1964 ASM	(NA)	(NA)	1,563.2	11,887.2	1,119.8	2,367.7	7,771.5	22,733.9	33,189.7	55,688.9	1,176.6
	1963 Census	7,180	2,852	1,551.2	11,406.0	1,108.2	2,355.7	7,388.9	21,854.0	31,790.0	53,581.0	981.0
38	Instruments and related products:											
	1977 Census	7,481	2,538	559.1	7,520.4	347.2	677.9	3,743.2	18,762.0	10,503.9	28,897.8	938.9
	1976 ASM	(NA)	(NA)	499.8	5,828.7	308.8	587.6	2,818.1	14,157.6	7,721.7	22,058.7	794.3
	1975 ASM	(NA)	(NA)	502.0	5,854.2	310.4	590.8	2,835.4	14,116.2	7,754.9	22,071.8	756.7
	1974 ASM	(NA)	(NA)	524.1	5,560.3	338.3	653.0	2,851.3	13,627.4	7,698.1	20,864.8	808.0
	1973 ASM	(NA)	(NA)	485.4	4,800.5	316.0	613.9	2,490.0	12,224.3	5,977.3	17,793.7	635.6
	1972 Census	5,987	2,070	454.1	4,296.5	291.9	569.6	2,237.1	10,583.7	5,071.2	15,565.7	480.4
	1971 ASM	(NA)	(NA)	381.7	3,345.7	244.9	465.1	1,732.9	8,385.9	3,956.8	12,275.8	392.7
	1970 ASM	(NA)	(NA)	404.6	3,357.5	261.5	502.1	1,746.3	7,905.4	3,943.6	11,782.5	435.5
	1969 ASM	(NA)	(NA)	413.1	3,271.8	271.0	535.2	1,757.2	7,676.0	4,119.9	11,686.3	388.3
	1968 ASM	(NA)	(NA)	400.0	3,001.5	265.5	524.7	1,625.0	7,174.1	3,780.7	10,886.9	397.2
	1967 Census	4,453	1,614	394.3	2,821.6	265.9	530.2	1,569.0	6,418.4	3,591.8	9,907.2	392.2
	1966 ASM	(NA)	(NA)	362.0	2,509.3	248.8	494.1	1,426.0	5,833.3	3,210.9	8,832.7	307.0
	1965 ASM	(NA)	(NA)	328.7	2,227.9	225.9	451.5	1,275.0	5,002.2	2,742.3	7,621.2	232.2
	1964 ASM	(NA)	(NA)	308.0	2,013.6	209.1	420.5	1,148.5	4,314.3	2,378.1	6,603.2	192.1
	1963 Census	3,949	1,343	305.5	1,912.5	208.4	416.6	1,100.7	3,992.1	2,171.1	6,117.8	191.9

See footnotes at end of table.

Table 4. **Statistics for Operating Manufacturing Establishments by Major Industry Group: 1963 to 1977**—Con.

1977 code	Major industry group and year	Establishments		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
39	Miscellaneous manufacturing industry and ordnance and accessories:											
	1977 Census[1]	17,259	3,794	440.7	4,406.4	338.7	626.7	2,745.3	10,291.0	9,061.4	19,150.7	473.6
	1976 ASM[1]	(NA)	(NA)	393.4	3,487.0	302.5	564.8	2,168.4	7,580.0	6,707.1	14,486.9	301.9
	1975 ASM[1]	(NA)	(NA)	394.9	3,499.7	303.2	566.8	2,173.5	7,695.9	6,742.5	14,647.2	348.6
	1974 ASM[1]	(NA)	(NA)	435.0	3,477.1	336.9	636.5	2,253.7	7,666.5	6,625.0	14,043.7	362.3
	1973 ASM[1]	(NA)	(NA)	447.1	3,351.0	351.8	660.3	2,187.5	7,166.3	5,969.2	13,046.1	341.2
	1972 Census[1]	15,188	3,755	446.1	3,184.5	350.2	661.5	2,086.7	6,777.0	5,558.8	12,185.9	317.1
	1971 ASM	(NA)	(NA)	411.3	2,739.9	319.1	604.4	1,773.2	5,707.3	4,470.2	10,122.0	262.5
	1970 ASM	(NA)	(NA)	429.3	2,684.9	337.0	643.3	1,752.3	5,433.1	4,348.3	9,743.4	253.2
	1969 ASM	(NA)	(NA)	448.5	2,664.8	362.5	689.7	1,796.4	5,296.3	4,426.0	9,665.4	240.0
	1968 ASM	(NA)	(NA)	430.7	2,461.3	348.8	669.2	1,666.7	4,950.9	4,074.7	8,945.0	209.0
	1967 Census	14,072	3,845	423.1	2,291.0	344.4	662.0	1,552.5	4,599.4	3,773.4	8,310.7	213.5
	1966 ASM	(NA)	(NA)	418.2	2,150.3	340.2	666.3	1,463.3	4,338.3	3,778.8	7,971.4	181.3
	1965 ASM	(NA)	(NA)	416.0	2,042.2	339.6	661.1	1,393.3	4,092.3	3,510.7	7,541.4	165.9
	1964 ASM	(NA)	(NA)	393.7	1,924.0	315.0	631.4	1,313.7	3,762.6	3,151.5	6,889.0	137.4
	1963 Census	14,723	3,618	390.9	1,812.1	315.0	613.2	1,253.5	3,562.4	2,965.0	6,494.8	131.0

(NA) Not available.

[1]Excludes ordnance and accessories. In the 1972 SIC revision, major group 19 was eliminated as a separate major industry group and its industries were reclassified to major groups 34, 36, 37, and 38.

Table 5. **Employment Statistics for Operating Manufacturing Establishments and Administrative Offices and Auxiliaries by State: 1977 and Prior Census Years**

State and year	All establishments		Operating manufacturing establishments		Administrative offices and auxiliaries	
	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)
United States.....1977..	19,590.1	264,013.1	18,515.9	242,031.9	1,074.2	21,981.2
1972..	19,028.7	174,205.5	18,034.4	160,433.2	994.3	13,772.3
1967..	19,323.2	132,208.5	18,492.3	123,480.6	830.9	8,727.9
1963..	16,958.4	78,348.9	16,231.9	93,283.3	726.5	6,615.5
Alabama.....1977..	341.0	3,773.2	335.5	3,684.3	5.4	88.9
1972..	322.6	2,396.8	318.7	2,346.7	3.9	50.1
1967..	288.8	1,602.8	286.4	1,581.4	2.4	21.4
1963..	243.8	1,162.4	240.2	1,128.3	3.6	34.1
Alaska.....1977..	11.4	166.0	(D)	(D)	(D)	(D)
1972..	7.6	77.3	(D)	(D)	(D)	(D)
1967..	7.6	55.6	7.6	55.2	(Z)	.4
1963..	5.8	39.7	5.8	39.6	(Z)	.2
Arizona.....1977..	110.9	1,462.9	105.8	1,374.5	5.0	88.4
1972..	93.9	855.1	92.2	830.5	1.7	24.6
1967..	76.8	543.2	75.7	533.1	1.1	10.1
1963..	56.9	347.5	56.4	342.7	.6	4.8
Arkansas.....1977..	197.1	1,932.4	193.6	1,881.4	3.5	51.0
1972..	180.9	1,151.7	178.5	1,126.6	2.4	25.1
1967..	143.6	665.6	142.2	653.6	1.4	12.0
1963..	113.6	439.6	112.8	433.4	.9	6.1
California.....1977..	1,751.5	24,671.5	1,682.9	23,248.3	68.6	1,423.2
1972..	1,545.1	15,477.8	1,479.6	14,618.3	65.5	859.5
1967..	1,583.5	12,514.5	1,537.6	12,024.4	45.9	490.2
1963..	1,397.6	9,612.2	1,350.7	9,137.2	46.9	439.0
Colorado.....1977..	152.5	2,124.8	143.7	1,958.7	8.8	166.1
1972..	132.6	1,297.8	125.2	1,206.0	7.4	91.8
1967..	104.0	730.5	101.0	702.8	3.0	27.7
1963..	93.7	596.0	91.2	573.8	2.6	22.2
Connecticut.....1977..	412.1	5,852.3	377.5	5,086.2	34.6	766.1
1972..	399.3	3,860.0	380.4	3,580.3	18.9	279.7
1967..	477.7	3,494.3	461.7	3,327.4	16.0	166.9
1963..	419.4	2,583.8	403.9	2,456.4	15.6	127.3
Delaware.....1977..	66.5	1,140.6	42.2	589.9	24.3	550.7
1972..	69.1	745.5	(D)	(D)	(D)	(D)
1967..	70.7	588.4	50.6	338.7	20.1	249.7
1963..	58.3	429.6	41.2	244.5	17.1	185.1
District of Columbia.....1977..	18.6	297.6	17.4	268.1	1.1	29.5
1972..	19.4	239.6	(D)	(D)	(D)	(D)
1967..	23.1	178.7	22.4	168.3	.7	10.4
1963..	22.1	147.6	21.3	138.8	.9	8.9
Florida.....1977..	358.0	4,133.1	350.0	4,003.3	8.0	129.8
1972..	342.9	2,750.3	336.7	2,672.8	6.2	77.5
1967..	285.1	1,754.7	281.1	1,720.5	4.0	34.2
1963..	215.4	1,102.3	212.0	1,073.2	3.4	29.0
Georgia.....1977..	484.7	5,124.5	470.3	4,856.5	14.4	268.0
1972..	467.2	3,329.9	453.3	3,162.1	13.9	167.8
1967..	423.1	2,231.2	415.0	2,159.8	8.1	71.4
1963..	354.0	1,505.6	349.7	1,473.2	4.3	32.4
Hawaii.....1977..	25.0	276.8	23.6	253.9	1.4	22.9
1972..	24.8	191.1	(D)	(D)	(D)	(D)
1967..	25.4	139.6	24.4	129.9	1.0	9.7
1963..	25.1	109.0	24.3	101.9	.9	7.1
Idaho.....1977..	51.6	625.2	49.6	582.7	1.9	42.5
1972..	43.0	339.9	41.4	318.4	1.6	21.5
1967..	37.1	219.9	36.0	208.8	1.1	11.1
1963..	30.5	162.6	30.1	159.2	.4	3.4
Illinois.....1977..	1,286.2	18,740.8	1,190.1	16,737.2	96.1	2,003.6
1972..	1,306.0	12,799.5	1,224.6	11,693.1	81.4	1,106.4
1967..	1,397.3	10,013.9	1,331.5	9,319.6	65.8	694.3
1963..	1,211.2	7,560.6	1,151.4	7,023.2	59.8	537.4
Indiana.....1977..	705.9	10,438.9	688.5	10,135.3	17.4	303.6
1972..	703.9	6,881.5	689.7	6,709.0	14.2	172.5
1967..	710.2	5,023.2	701.3	4,933.2	8.9	90.0
1963..	609.8	3,794.3	599.8	3,708.5	10.0	85.8
Iowa.....1977..	240.3	3,382.5	235.5	3,291.7	4.8	90.8
1972..	215.5	2,038.8	213.1	2,002.6	2.4	36.2
1967..	210.1	1,434.6	208.8	1,420.3	1.3	14.3
1963..	178.2	1,046.7	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 5. **Employment Statistics for Operating Manufacturing Establishments and Administrative Offices and Auxiliaries by State: 1977 and Prior Census Years** – Con.

State and year	All establishments		Operating manufacturing establishments		Administrative offices and auxiliaries	
	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)
Kansas....1977..	168.1	2,114.8	164.4	2,058.3	3.7	56.5
1972..	137.0	1,181.4	134.0	1,145.5	3.0	35.6
1967..	143.8	964.8	142.0	949.3	1.8	15.5
1963..	114.3	684.4	112.8	674.0	1.5	10.5
Kentucky....1977..	277.5	3,452.2	266.1	3,252.6	11.3	199.6
1972..	258.7	2,160.0	250.3	2,060.3	8.4	99.7
1967..	224.6	1,351.9	217.6	1,285.4	7.0	66.5
1963..	180.5	959.0	175.7	920.0	4.8	39.0
Louisiana....1977..	194.8	2,682.7	192.0	2,635.0	2.8	47.7
1972..	179.4	1,601.4	176.6	1,571.2	2.8	30.2
1967..	164.5	1,084.4	162.7	1,068.8	1.8	15.6
1963..	139.5	769.4	138.8	763.7	.8	5.8
Maine....1977..	102.8	1,077.6	101.8	1,063.9	.9	13.7
1972..	99.5	696.2	(D)	(D)	(D)	(D)
1967..	110.8	577.2	110.2	572.1	.6	5.1
1963..	99.9	438.6	99.2	433.8	.7	4.8
Maryland....1977..	243.2	3,419.5	228.5	3,163.9	14.7	255.6
1972..	255.6	2,386.3	245.5	2,260.3	10.1	126.0
1967..	287.6	1,956.0	281.2	1,891.3	6.4	64.7
1963..	263.7	1,549.8	258.6	1,501.1	5.1	48.7
Massachusetts....1977..	613.4	7,818.8	579.7	7,168.5	33.7	650.3
1972..	618.9	5,486.0	585.4	5,031.3	33.5	454.7
1967..	713.6	4,646.3	685.4	4,372.8	28.2	273.5
1963..	674.0	3,712.4	646.9	3,476.5	27.2	235.9
Michigan....1977..	1,115.9	20,054.0	1,011.1	17,434.0	104.8	2,620.0
1972..	1,076.2	12,745.1	981.5	11,125.8	94.7	1,619.3
1967..	1,134.1	9,357.2	1,039.7	8,290.9	94.4	1,066.3
1963..	961.1	6,950.7	879.0	6,147.5	82.1	803.2
Minnesota....1977..	331.7	4,693.0	301.9	3,988.0	30.1	705.0
1972..	302.2	2,889.0	274.9	2,538.4	27.3	350.6
1967..	299.8	2,106.5	275.9	1,881.3	23.9	225.2
1963..	245.9	1,478.6	230.6	1,356.0	15.3	122.6
Mississippi....1977..	219.4	2,061.5	216.8	2,032.6	2.6	28.9
1972..	200.4	1,302.4	198.3	1,283.7	2.1	18.7
1967..	160.4	764.0	159.3	756.0	1.1	8.0
1963..	128.5	486.2	127.8	480.9	.7	5.3
Missouri....1977..	433.0	5,703.9	404.1	5,214.2	28.9	489.7
1972..	434.3	3,897.3	407.9	3,563.4	26.4	333.9
1967..	452.2	3,048.9	430.8	2,831.4	21.4	217.5
1963..	391.4	2,235.2	371.9	2,080.8	19.5	154.4
Montana....1977..	23.8	317.0	23.5	314.2	.3	2.8
1972..	21.4	184.6	21.3	183.3	.1	1.3
1967..	20.4	129.5	(D)	(D)	(D)	(D)
1963..	20.2	109.3	(D)	(D)	(D)	(D)
Nebraska....1977..	87.7	1,075.4	85.0	1,032.2	2.7	43.2
1972..	84.9	704.2	83.3	685.1	1.6	19.1
1967..	77.0	475.9	75.9	465.6	1.1	10.3
1963..	64.9	348.0	63.8	339.7	1.1	8.3
Nevada....1977..	15.0	191.6	14.5	184.9	.5	6.7
1972..	10.0	91.7	9.6	87.6	.4	4.1
1967..	7.0	49.6	7.0	49.1	(Z)	0.5
1963..	6.8	42.2	(D)	(D)	(D)	(D)
New Hampshire....1977..	95.3	1,029.0	94.2	1,008.1	1.1	20.9
1972..	89.7	663.2	89.0	654.3	.8	8.9
1967..	94.9	512.6	94.6	509.9	.3	2.7
1963..	84.1	378.9	83.4	373.8	.7	5.1
New Jersey....1977..	778.3	10,924.2	691.3	9,175.6	86.9	1,748.6
1972..	836.1	8,107.2	756.1	6,961.4	80.0	1,145.8
1967..	881.3	6,325.4	817.9	5,673.1	63.4	652.3
1963..	829.2	5,121.3	778.0	4,665.8	51.2	455.5
New Mexico....1977..	29.0	296.9	28.7	292.0	.3	4.9
1972..	23.6	157.2	23.2	152.5	.4	4.7
1967..	16.9	98.6	16.6	95.2	.3	3.4
1963..	15.3	82.1	15.2	79.7	.2	2.3
New York....1977..	1,509.9	20,876.1	1,383.7	18,088.8	126.1	2,787.3
1972..	1,679.3	16,218.5	1,512.2	13,750.7	167.1	2,467.8
1967..	1,929.2	13,851.5	1,771.2	12,055.6	158.0	1,795.9
1963..	1,853.2	11,289.7	1,708.7	9,878.2	144.3	1,411.5

See footnotes at end of table.

Table 5. **Employment Statistics for Operating Manufacturing Establishments and Administrative Offices and Auxiliaries by State: 1977 and Prior Census Years**—Con.

State and year	All establishments		Operating manufacturing establishments		Administrative offices and auxiliaries	
	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)	Employees (1,000)	Payroll (million dollars)
North Carolina....1977..	765.3	7,518.5	739.4	7,042.5	25.9	476.0
1972..	743.7	4,929.1	722.5	4,677.7	21.2	251.4
1967..	643.8	3,066.1	628.9	2,924.7	14.9	141.4
1963..	530.6	2,092.1	519.1	2,002.9	11.6	89.1
North Dakota....1977..	13.8	162.3	(D)	(D)	(D)	(D)
1972..	10.2	78.6	(D)	(D)	(D)	(D)
1967..	7.5	41.6	(D)	(D)	(D)	(D)
1963..	6.5	31.5	(D)	(D)	(D)	(D)
Ohio....1977..	1,331.2	20,356.0	1,249.5	18,753.7	81.7	1,602.3
1972..	1,346.3	13,810.0	1,263.8	12,720.1	82.5	1,089.9
1967..	1,397.0	10,523.1	1,334.9	9,898.5	62.1	624.6
1963..	1,239.5	8,125.4	1,186.1	7,656.6	53.4	466.8
Oklahoma....1977..	164.4	2,050.9	150.1	1,786.3	14.2	264.6
1972..	142.7	1,187.9	128.9	1,020.7	13.8	167.2
1967..	117.7	764.2	105.0	648.0	12.7	116.2
1963..	97.7	551.7	87.3	465.1	10.4	86.6
Oregon....1977..	202.4	2,760.0	197.0	2,657.4	5.4	102.6
1972..	178.6	1,627.3	173.7	1,565.2	4.9	62.1
1967..	163.1	1,082.5	160.4	1,059.3	2.7	23.2
1963..	145.2	819.6	143.1	803.0	2.0	16.6
Pennsylvania....1977..	1,329.2	18,042.7	1,241.9	16,308.8	87.3	1,733.9
1972..	1,417.5	12,794.1	1,330.4	11,627.2	87.1	1,166.9
1967..	1,549.5	10,349.7	1,468.9	9,506.0	80.6	843.7
1963..	1,392.9	8,008.6	1,324.7	7,372.7	68.2	636.0
Rhode Island....1977..	125.0	1,326.5	123.6	1,296.8	1.4	29.7
1972..	118.1	888.2	116.5	865.6	1.6	22.6
1967..	122.3	700.4	121.0	687.4	1.3	13.0
1963..	113.9	533.4	112.6	523.2	1.3	10.2
South Carolina....1977..	374.2	3,804.9	365.2	3,663.9	9.0	141.0
1972..	345.1	2,344.5	337.9	2,265.4	7.2	79.1
1967..	304.3	1,502.2	298.2	1,452.4	6.1	49.8
1963..	261.6	1,049.3	258.5	1,030.8	3.2	18.5
South Dakota....1977..	22.5	251.4	(D)	(D)	(D)	(D)
1972..	17.4	134.5	(D)	(D)	(D)	(D)
1967..	15.5	92.5	(D)	(D)	(D)	(D)
1963..	13.2	70.0	13.1	69.4	.1	.5
Tennessee....1977..	489.8	5,218.7	481.1	5,098.9	8.8	119.8
1972..	467.4	3,351.7	459.8	3,276.0	7.6	74.8
1967..	418.0	2,190.0	412.8	2,145.8	5.2	44.2
1963..	334.9	1,505.2	330.8	1,479.2	4.1	26.0
Texas....1977..	886.4	11,653.1	841.5	10,735.9	44.9	917.2
1972..	735.6	6,340.0	707.7	5,945.2	27.9	394.8
1967..	657.5	4,340.4	636.8	4,130.8	20.7	209.6
1963..	513.8	2,890.5	499.4	2,765.4	14.4	125.1
Utah....1977..	70.2	867.2	68.1	834.8	2.1	32.4
1972..	56.6	486.2	53.7	452.9	2.9	33.3
1967..	47.0	314.9	46.4	310.2	.6	4.7
1963..	53.5	328.2	52.6	320.2	.9	8.1
Vermont....1977..	41.5	498.0	41.3	494.8	.2	3.2
1972..	36.9	311.4	(D)	(D)	(D)	(D)
1967..	42.5	259.1	42.2	256.9	.3	2.2
1963..	33.7	167.9	33.5	166.1	.3	1.8
Virginia....1977..	395.2	4,442.4	383.5	4,244.9	11.7	197.5
1972..	375.4	2,826.0	365.8	2,720.3	9.6	105.7
1967..	339.8	1,905.1	331.6	1,828.1	8.2	77.0
1963..	302.1	1,432.0	295.3	1,377.1	6.8	54.9
Washington....1977..	265.0	4,054.3	256.2	3,871.0	8.8	183.4
1972..	226.0	2,308.4	219.3	2,223.7	6.7	84.7
1967..	270.7	2,119.0	266.6	2,075.8	4.1	43.2
1963..	224.4	1,479.1	221.3	1,454.0	3.1	25.1
West Virginia....1977..	117.0	1,620.5	114.3	1,568.4	2.7	52.1
1972..	120.8	1,097.6	116.8	1,042.6	4.0	55.0
1967..	124.0	831.6	120.8	801.0	3.2	30.6
1963..	117.0	700.1	112.8	659.4	4.3	40.6
Wisconsin....1977..	535.0	7,317.8	511.8	6,897.9	23.1	419.9
1972..	500.5	4,722.3	484.3	4,517.7	16.2	204.6
1967..	512.2	3,577.8	494.9	3,413.1	17.3	164.7
1963..	461.8	2,781.1	448.2	2,664.8	13.6	116.3
Wyoming....1977..	8.5	110.9	8.2	104.4	.4	6.5
1972..	7.0	56.9	6.7	53.9	.3	3.0
1967..	5.9	37.1	(D)	(D)	(D)	(D)
1963..	6.8	38.0	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing information for individual companies. (Z) Less than half of the unit of measurement shown (under 50 thousand dollars; under 50 employees).

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**

Year[1]	All establishments[2]		All employees[2]		Production wokers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
United States:											
1977 Census	359,928	118,699	19,590.1	264,013.1	13,691.0	26,686.7	157,163.7	585,165.6	782,417.7	1,358,526.4	47,459.0
1976 ASM	(NA)	(NA)	18,753.0	233,388.7	13,052.0	25,354.2	137,565.4	511,471.1	681,194.1	1,185,695.3	40,545.2
1975 ASM	(NA)	(NA)	18,302.2	209,519.0	12,568.9	24,069.6	121,429.0	442,485.2	597,327.0	1,039,377.4	37,262.1
1974 ASM	(NA)	(NA)	19,844.8	208,367.3	13,970.9	27,239.3	124,983.2	452,477.6	581,710.8	1,017,846.8	35,698.7
1973 ASM	(NA)	(NA)	19,897.9	193,324.5	14,232.8	28,096.9	118,332.6	405,583.6	478,169.6	875,443.2	26,972.9
1972 Census	320,710	114,195	19,028.7	174,205.5	13,527.9	26,699.2	105,501.8	353,994.0	407,418.7	756,534.3	24,077.7
1971 ASM	(NA)	(NA)	18,363.1	156,202.8	12,874.9	25,265.9	93,231.3	314,138.4	356,016.9	670,970.5	20,940.7
1970 ASM	(NA)	(NA)	19,217.2	153,078.5	13,528.0	26,669.3	91,609.0	300,227.6	336,551.6	634,322.1	22,164.3
1969 ASM	(NA)	(NA)	20,035.5	152,765.6	14,357.8	28,599.8	93,459.6	304,440.7	341,724.5	642,635.8	22,291.2
1968 ASM	(NA)	(NA)	19,527.6	141,822.7	14,041.2	28,156.8	87,480.4	285,058.9	320,698.0	603,220.1	20,613.1
1967 Census	311,140	110,256	19,322.9	132,208.4	13,955.3	27,837.6	81,393.6	261,983.8	298,513.7	557,397.8	21,503.0
1966 ASM	(NA)	(NA)	19,024.0	125,350.0	13,826.5	28,102.5	78,256.4	250,880.1	293,633.8	538,736.9	20,235.8
1965 ASM	(NA)	(NA)	18,010.2	113,972.2	13,076.0	26,567.8	71,361.5	226,939.9	268,385.8	492,005.7	16,615.0
1964 ASM	(NA)	(NA)	17,268.5	106,048.1	12,403.3	25,245.5	65,838.9	206,193.6	244,080.5	447,985.1	13,294.3
1963 Census	311,931	102,291	16,958.4	99,898.8	12,232.1	24,510.3	62,090.8	192,082.9	(NA)	(NA)	11,380.0
Alabama:											
1977 Census	5,863	1,855	341.0	3,773.2	273.0	525.2	2,697.6	8,405.9	12,814.7	21,010.1	1,318.9
1976 ASM	(NA)	(NA)	330.3	3,351.1	265.7	511.7	2,388.2	7,716.1	10,510.7	17,988.1	1,151.9
1975 ASM	(NA)	(NA)	312.7	2,908.3	252.3	473.4	2,072.4	6,709.8	9,270.8	15,886.7	1,054.4
1974 ASM	(NA)	(NA)	337.8	2,892.4	276.6	533.0	2,104.7	6,858.5	9,059.3	15,698.2	910.9
1973 ASM	(NA)	(NA)	334.8	2,614.0	272.3	536.1	1,905.3	5,841.2	7,210.2	13,020.4	480.8
1972 Census	4,984	1,630	322.6	2,396.8	262.2	519.3	1,730.8	5,064.8	6,254.4	11,239.5	355.1
1971 ASM	(NA)	(NA)	299.0	2,040.1	243.1	479.8	1,485.6	4,530.9	5,041.2	9,560.9	355.5
1970 ASM	(NA)	(NA)	304.7	1,961.0	248.5	487.9	1,419.2	4,339.6	4,657.9	8,947.4	417.2
1969 ASM	(NA)	(NA)	309.8	1,939.5	252.5	504.8	1,419.7	4,315.1	4,703.2	8,963.2	382.8
1968 ASM	(NA)	(NA)	297.9	1,778.5	242.0	481.1	1,286.8	3,981.7	4,277.3	8,299.4	347.1
1967 Census	4,951	1,446	288.8	1,602.8	235.3	466.6	1,166.6	3,525.5	3,956.4	7,442.9	378.9
1966 ASM	(NA)	(NA)	294.4	1,564.6	238.8	478.4	1,126.0	3,451.1	3,821.7	7,197.2	423.7
1965 ASM	(NA)	(NA)	272.9	1,419.2	222.6	448.2	1,024.2	2,954.2	3,463.4	6,393.6	371.9
1964 ASM	(NA)	(NA)	252.6	1,265.9	206.3	414.4	913.3	2,617.0	3,068.6	5,614.1	282.2
1963 Census	4,079	1,257	243.8	1,162.4	197.6	391.0	842.3	2,325.2	(NA)	(NA)	147.4
Alaska:											
1977 Census	429	128	11.4	166.0	9.3	16.9	122.7	504.2	767.2	1,250.3	178.1
1976 ASM	(NA)	(NA)	7.9	120.6	6.2	11.5	90.1	503.6	495.4	991.8	170.6
1975 ASM	(NA)	(NA)	8.0	113.4	6.3	12.2	84.2	449.2	389.5	827.7	121.6
1974 ASM	(NA)	(NA)	8.0	102.0	6.9	12.4	77.6	370.1	328.3	672.9	49.8
1973 ASM	(NA)	(NA)	8.4	90.0	6.8	12.7	69.1	245.3	252.9	487.3	42.7
1972 Census	342	91	7.5	75.1	6.1	11.6	56.5	170.4	191.8	366.1	21.8
1971 ASM	(NA)	(NA)	7.7	80.1	6.0	11.6	59.0	197.7	237.6	429.5	18.5
1970 ASM	(NA)	(NA)	7.9	78.0	6.3	11.8	59.9	174.9	210.8	382.9	23.4
1969 ASM	(NA)	(NA)	6.3	54.8	5.1	9.7	40.6	133.8	177.8	314.6	15.3
1968 ASM	(NA)	(NA)	6.5	51.1	5.4	10.0	38.2	113.7	172.5	309.8	14.3
1967 ASM	323	95	7.6	55.6	6.3	11.7	42.7	130.4	147.8	278.2	14.7
1966 ASM	(NA)	(NA)	7.1	51.8	5.9	11.6	42.2	131.1	155.3	284.8	12.2
1965 ASM	(NA)	(NA)	6.3	45.3	5.2	10.5	36.4	112.2	130.9	242.3	12.6
1964 ASM	(NA)	(NA)	5.3	39.2	4.3	8.4	29.8	87.9	115.8	203.9	6.1
1963 Census	303	73	5.8	39.7	4.7	9.2	30.5	85.0	(NA)	(NA)	14.5
Arizona:											
1977 Census	2,892	677	110.9	1,462.9	69.8	135.0	780.7	3,332.9	3,773.4	7,022.4	213.7
1976 ASM	(NA)	(NA)	99.0	1,237.1	62.5	120.1	651.7	2,882.4	3,368.2	6,232.9	183.2
1975 ASM	(NA)	(NA)	95.4	1,099.0	59.7	112.4	567.3	2,600.7	2,914.3	5,517.0	292.9
1974 ASM	(NA)	(NA)	108.9	1,146.3	70.7	134.0	604.7	2,787.4	3,113.2	5,742.3	247.1
1973 ASM	(NA)	(NA)	104.4	1,003.2	68.4	133.0	550.5	2,397.5	2,648.6	4,939.7	219.4
1972 Census	2,037	597	93.9	855.1	62.3	121.1	481.5	1,879.6	2,233.7	4,041.2	198.4
1971 ASM	(NA)	(NA)	82.6	721.1	52.4	102.3	387.3	1,384.6	1,775.7	3,180.7	142.2
1970 ASM	(NA)	(NA)	88.8	713.7	54.7	110.1	374.0	1,436.8	1,797.8	3,175.3	116.5
1969 ASM	(NA)	(NA)	91.2	696.1	59.2	117.5	375.6	1,275.1	1,663.4	2,922.6	118.4
1968 ASM	(NA)	(NA)	82.0	601.1	54.6	109.6	330.1	1,129.7	1,267.8	2,419.0	107.2
1967 Census	1,630	424	76.8	543.2	50.8	101.8	308.6	995.3	1,003.9	2,003.7	109.9
1966 ASM	(NA)	(NA)	71.0	498.0	47.4	97.7	287.0	926.5	1,077.5	1,960.4	78.5
1965 ASM	(NA)	(NA)	61.1	407.1	40.7	83.8	234.3	717.9	980.7	1,686.5	52.0
1964 ASM	(NA)	(NA)	59.8	374.8	39.9	81.3	221.5	654.3	876.6	1,518.8	39.2
1963 Census	1,518	339	56.9	347.5	38.6	77.5	210.5	627.1	(NA)	(NA)	49.5

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Arkansas:											
1977 Census	3,595	1,101	197.1	1,932.4	160.6	310.4	1,400.7	4,881.6	7,554.1	12,276.1	470.1
1976 ASM	(NA)	(NA)	188.3	1,649.5	152.8	295.3	1,201.2	4,278.0	6,392.3	10,604.8	472.7
1975 ASM	(NA)	(NA)	175.9	1,425.9	141.7	266.9	1,015.0	3,708.5	5,706.3	9,416.9	342.7
1974 ASM	(NA)	(NA)	193.5	1,444.1	159.8	306.7	1,060.2	3,641.0	5,527.7	9,071.3	353.6
1973 ASM	(NA)	(NA)	195.9	1,317.1	163.7	319.3	982.0	3,153.4	4,684.5	7,835.7	231.5
1972 Census	2,897	1,053	180.9	1,151.7	150.1	298.4	853.4	2,799.8	3,754.8	6,504.2	190.0
1971 ASM	(NA)	(NA)	165.1	979.9	134.9	268.7	714.9	2,420.0	3,261.7	5,625.9	171.7
1970 ASM	(NA)	(NA)	160.5	893.1	132.8	264.2	656.9	2,147.7	2,942.7	5,054.9	210.8
1969 ASM	(NA)	(NA)	161.1	837.0	135.1	266.0	625.1	2,025.9	2,823.1	4,777.8	180.9
1968 ASM	(NA)	(NA)	148.2	745.2	124.0	245.7	557.9	1,800.6	2,564.0	4,327.4	145.2
1967 Census	2,911	927	143.6	665.6	120.7	239.6	497.3	1,557.7	2,354.2	3,877.1	172.6
1966 ASM	(NA)	(NA)	136.0	591.6	114.9	234.7	451.2	1,409.8	2,181.2	3,553.8	121.7
1965 ASM	(NA)	(NA)	128.9	533.3	109.4	221.3	405.0	1,221.4	1,938.5	3,150.3	103.9
1964 ASM	(NA)	(NA)	119.3	481.7	100.2	205.1	367.9	1,088.6	1,716.3	2,777.5	73.6
1963 Census	2,859	840	113.6	439.6	95.6	191.8	331.7	960.9	(NA)	(NA)	73.4
California:											
1977 Census	45,289	12,883	1,751.5	24,671.5	1,142.6	2,224.2	13,150.5	54,862.4	66,881.2	120,895.8	3,385.4
1976 ASM	(NA)	(NA)	1,600.1	21,214.7	1,041.3	2,021.8	11,202.3	46,297.4	56,155.6	102,041.0	2,867.1
1975 ASM	(NA)	(NA)	1,540.5	19,303.2	993.4	1,920.3	10,189.9	40,082.4	49,328.1	89,415.1	2,572.8
1974 ASM	(NA)	(NA)	1,657.2	18,872.8	1,088.8	2,115.1	10,109.1	40,599.3	46,998.5	86,449.7	2,583.6
1973 ASM	(NA)	(NA)	1,641.2	17,118.9	1,098.0	2,134.2	9,413.9	36,759.0	38,699.7	73,880.5	1,917.2
1972 Census	35,699	11,149	1,545.1	15,483.1	1,020.0	1,974.9	8,430.4	31,175.2	32,603.2	62,902.6	1,649.0
1971 ASM	(NA)	(NA)	1,447.3	13,799.1	937.2	1,843.5	7,382.3	27,568.2	27,541.7	54,440.3	1,416.9
1970 ASM	(NA)	(NA)	1,553.1	14,056.8	1,003.9	1,981.3	7,556.3	26,358.3	26,435.4	52,357.2	1,567.4
1969 ASM	(NA)	(NA)	1,631.8	14,151.1	1,075.2	2,119.6	7,701.1	27,016.9	27,242.9	53,937.0	1,720.9
1968 ASM	(NA)	(NA)	1,610.3	13,378.9	1,061.6	2,112.9	7,377.8	25,348.3	26,162.1	51,134.6	1,536.3
1967 Census	31,962	10,012	1,583.5	12,514.5	1,044.9	2,089.7	6,877.8	23,393.6	24,156.7	47,106.1	1,529.2
1966 ASM	(NA)	(NA)	1,501.8	11,381.4	984.0	1,981.9	6,266.6	21,331.1	23,030.7	43,705.5	1,471.2
1965 ASM	(NA)	(NA)	1,400.6	10,301.3	911.8	1,838.2	5,582.6	18,950.3	20,949.6	39,495.4	1,181.5
1964 ASM	(NA)	(NA)	1,383.7	9,904.7	879.7	1,770.2	5,234.5	18,016.9	19,667.8	37,514.0	1,032.4
1963 Census	32,201	9,079	1,397.6	9,612.2	897.5	1,791.4	5,195.2	17,185.0	(NA)	(NA)	985.1
Colorado:											
1977 Census	3,948	961	152.5	2,124.8	97.7	190.1	1,141.3	4,471.8	5,594.2	10,018.0	443.1
1976 ASM	(NA)	(NA)	142.9	1,870.8	92.2	180.4	1,015.5	3,989.8	5,638.5	9,535.5	385.2
1975 ASM	(NA)	(NA)	138.3	1,667.5	88.4	171.4	902.1	3,426.5	5,030.2	8,388.2	365.0
1974 ASM	(NA)	(NA)	140.3	1,541.4	93.9	185.2	887.3	3,310.8	4,646.4	7,885.2	358.0
1973 ASM	(NA)	(NA)	135.4	1,362.2	90.5	176.7	793.6	2,732.7	3,789.8	6,473.3	310.6
1972 Census	2,841	834	132.6	1,297.8	89.0	176.7	769.7	2,504.3	3,319.7	5,792.9	228.8
1971 ASM	(NA)	(NA)	116.9	1,071.6	78.4	155.4	646.0	2,088.5	2,590.9	4,699.1	238.3
1970 ASM	(NA)	(NA)	117.1	979.0	79.6	157.7	596.1	1,947.0	2,269.7	4,172.3	222.9
1969 ASM	(NA)	(NA)	110.6	883.9	75.2	152.5	544.1	1,880.4	2,032.1	3,888.1	155.1
1968 ASM	(NA)	(NA)	102.5	789.2	70.5	144.7	490.1	1,627.7	1,923.4	3,533.7	137.6
1967 Census	2,461	664	104.0	730.5	71.2	143.4	444.8	1,509.2	1,733.0	3,226.6	99.6
1966 ASM	(NA)	(NA)	104.1	707.8	73.4	147.4	442.3	1,457.9	1,666.0	3,091.1	130.5
1965 ASM	(NA)	(NA)	96.2	624.1	67.0	134.0	391.5	1,210.5	1,460.6	2,607.6	84.6
1964 ASM	(NA)	(NA)	90.3	591.0	61.9	124.7	364.1	1,152.7	1,355.2	2,503.1	63.7
1963 Census	2,453	593	93.7	596.0	64.0	128.5	369.1	1,193.8	(NA)	(NA)	68.0
Connecticut:											
1977 Census	6,485	2,366	412.1	5,852.3	255.3	509.0	2,901.8	10,933.9	9,084.4	19,842.2	566.0
1976 ASM	(NA)	(NA)	405.4	5,315.0	249.2	492.3	2,635.7	10,095.8	8,313.7	18,397.4	479.9
1975 ASM	(NA)	(NA)	399.3	4,885.1	242.4	471.7	2,374.6	8,732.5	7,337.4	16,047.5	582.6
1974 ASM	(NA)	(NA)	430.8	4,846.0	272.2	552.8	2,498.9	8,934.1	7,431.9	15,897.9	479.1
1973 ASM	(NA)	(NA)	418.7	4,316.1	270.0	546.4	2,294.8	7,893.4	6,000.4	13,826.5	354.7
1972 Census	5,836	2,231	399.3	3,860.0	258.2	520.9	2,068.7	6,828.3	5,384.6	12,121.0	331.6
1971 ASM	(NA)	(NA)	407.0	3,613.0	261.0	520.7	1,948.5	6,049.3	5,233.2	11,358.0	324.7
1970 ASM	(NA)	(NA)	452.6	3,788.6	298.3	599.5	2,109.2	6,595.7	5,491.8	12,099.1	343.2
1969 ASM	(NA)	(NA)	475.1	3,843.7	318.5	655.9	2,198.2	7,172.2	5,829.0	12,792.3	379.4
1968 ASM	(NA)	(NA)	469.9	3,587.1	318.4	657.2	2,077.8	6,567.1	5,580.4	12,107.5	401.3
1967 Census	5,829	2,231	477.7	3,494.3	329.9	684.6	2,066.0	6,389.8	5,284.1	11,619.7	445.7
1966 ASM	(NA)	(NA)	468.9	3,340.7	327.8	694.2	2,012.2	6,185.0	4,970.6	10,845.2	403.6
1965 ASM	(NA)	(NA)	440.4	2,951.0	306.4	639.8	1,768.6	5,308.6	4,300.3	9,481.2	269.9
1964 ASM	(NA)	(NA)	420.8	2,715.9	291.0	604.7	1,622.1	4,754.4	3,834.2	8,521.0	222.2
1963 Census	5,607	2,050	419.4	2,583.8	294.0	601.7	1,569.1	4,495.9	(NA)	(NA)	214.8

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Delaware:											
1977 Census	619	231	66.5	1,140.6	32.3	63.0	409.9	1,595.7	3,635.3	5,208.7	148.2
1976 ASM	(NA)	(NA)	66.0	1,063.6	32.2	62.1	383.3	1,580.7	3,491.5	5,042.7	159.7
1975 ASM	(NA)	(NA)	62.6	934.2	30.7	57.7	324.1	1,247.3	2,681.0	3,967.3	169.7
1974 ASM	(NA)	(NA)	66.7	909.2	35.0	68.8	341.2	1,362.3	2,855.4	4,128.9	146.9
1973 ASM	(NA)	(NA)	70.8	829.6	38.5	74.7	331.6	1,447.8	2,322.2	3,766.7	114.1
1972 Census	567	243	69.1	754.5	37.7	73.9	304.4	1,291.9	2,108.8	3,387.9	91.5
1971 ASM	(NA)	(NA)	69.6	734.8	34.5	71.5	282.2	1,281.0	1,951.8	3,222.0	78.2
1970 ASM	(NA)	(NA)	70.8	702.1	35.6	69.5	244.9	1,071.3	1,564.0	2,631.2	67.5
1969 ASM	(NA)	(NA)	76.4	700.5	41.5	81.1	264.9	1,151.6	1,685.3	2,829.3	76.5
1968 ASM	(NA)	(NA)	74.5	676.1	39.9	79.3	253.6	1,202.9	1,600.6	2,794.1	94.7
1967 Census	528	253	70.7	588.4	38.8	75.8	228.1	958.4	1,520.8	2,484.3	115.9
1966 ASM	(NA)	(NA)	68.4	574.4	35.6	72.3	212.2	955.5	1,529.2	2,467.0	90.8
1965 ASM	(NA)	(NA)	66.0	538.3	34.6	72.2	206.8	877.1	1,539.6	2,416.6	70.3
1964 ASM	(NA)	(NA)	62.5	484.2	32.6	65.7	177.8	772.1	1,176.1	1,933.7	72.7
1963 Census	569	243	58.3	429.6	30.4	61.5	159.0	658.2	(NA)	(NA)	88.8
District of Columbia:											
1977 Census	555	130	18.6	297.6	7.5	13.3	102.3	610.2	377.7	984.4	18.1
1976 ASM	(NA)	(NA)	17.9	227.8	(S)	(S)	(S)	553.2	371.4	932.0	20.0
1975 ASM	(NA)	(NA)	19.5	279.4	(S)	(S)	(S)	509.0	386.2	888.3	14.9
1974 ASM	(NA)	(NA)	20.5	280.4	(S)	(S)	(S)	486.2	383.2	870.2	18.1
1973 ASM	(NA)	(NA)	20.0	237.1	10.2	17.8	107.2	407.2	288.3	697.0	23.0
1972 Census	564	135	19.4	220.0	9.4	16.5	96.7	389.0	250.7	630.9	18.9
1971 ASM	(NA)	(NA)	20.4	200.8	9.9	17.6	93.1	350.3	244.4	592.4	25.7
1970 ASM	(NA)	(NA)	21.3	202.1	10.5	19.4	91.7	361.2	262.6	618.8	16.9
1969 ASM	(NA)	(NA)	21.5	189.1	10.3	18.9	80.4	331.6	247.6	580.1	11.3
1968 ASM	(NA)	(NA)	21.1	173.8	10.6	19.8	76.8	316.2	241.9	554.9	16.3
1967 Census	593	155	23.1	178.7	11.7	21.7	77.4	332.8	258.8	589.7	17.0
1966 ASM	(NA)	(NA)	24.0	176.9	12.2	22.6	79.0	302.9	267.2	567.2	10.9
1965 ASM	(NA)	(NA)	24.0	169.0	12.3	22.5	74.8	291.5	241.3	530.8	12.9
1964 ASM	(NA)	(NA)	24.0	169.8	10.8	20.8	67.7	273.5	225.2	497.0	10.2
1963 Census	617	167	22.1	147.6	11.3	21.3	64.7	256.8	(NA)	(NA)	13.0
Florida:											
1977 Census	12,399	2,915	358.0	4,133.1	249.6	485.2	2,335.5	9,255.1	11,898.4	20,980.6	737.3
1976 ASM	(NA)	(NA)	331.4	3,516.4	225.9	432.9	1,959.9	8,280.0	9,941.0	18,091.3	867.0
1975 ASM	(NA)	(NA)	324.7	3,215.4	218.0	413.3	1,769.7	7,437.2	8,892.2	16,335.8	819.2
1974 ASM	(NA)	(NA)	361.1	3,276.4	245.0	475.5	1,845.4	7,425.2	8,595.4	15,758.4	736.0
1973 ASM	(NA)	(NA)	362.1	3,049.5	252.9	503.0	1,749.9	6,496.9	7,329.6	13,725.6	519.9
1972 Census	10,275	2,893	342.9	2,750.3	242.0	481.5	1,580.8	5,786.8	6,276.8	11,957.7	463.0
1971 ASM	(NA)	(NA)	308.5	2,282.2	211.6	422.0	1,296.4	4,821.8	5,172.1	10,004.7	417.0
1970 ASM	(NA)	(NA)	310.0	2,192.2	210.1	426.3	1,211.8	4,560.1	4,938.0	9,522.8	377.8
1969 ASM	(NA)	(NA)	313.5	2,129.1	217.0	436.8	1,184.6	4,398.5	4,630.6	8,927.9	312.9
1968 ASM	(NA)	(NA)	294.8	1,911.3	203.5	413.5	1,068.7	4,046.4	4,152.5	8,153.7	283.1
1967 Census	7,950	2,186	285.1	1,754.7	197.3	399.8	990.0	3,682.7	3,704.1	7,322.9	300.7
1966 ASM	(NA)	(NA)	349.3	1,444.0	171.7	353.2	810.7	2,938.4	3,263.6	6,154.7	306.8
1965 ASM	(NA)	(NA)	232.4	1,268.0	159.4	328.1	716.4	2,688.5	2,957.6	5,607.1	297.7
1964 ASM	(NA)	(NA)	221.6	1,160.3	150.8	310.4	650.3	2,486.7	2,844.9	5,301.1	166.8
1963 Census	7,377	1,806	215.4	1,102.3	148.4	301.3	626.2	2,352.0	(NA)	(NA)	190.6
Georgia:											
1977 Census	8,623	2,906	484.7	5,124.5	376.2	740.6	3,404.4	12,548.8	20,365.4	32,856.4	1,143.4
1976 ASM	(NA)	(NA)	468.9	4,506.1	362.4	708.3	2,950.1	11,092.6	17,561.9	28,391.4	852.9
1975 ASM	(NA)	(NA)	434.7	3,905.5	332.6	632.9	2,451.3	8,790.0	14,393.2	23,250.8	687.0
1974 ASM	(NA)	(NA)	480.5	3,908.3	371.6	719.2	2,545.8	9,475.6	14,472.0	23,584.3	912.2
1973 ASM	(NA)	(NA)	483.9	3,635.2	381.6	760.9	2,464.4	8,618.6	12,685.4	21,092.4	669.6
1972 Census	7,627	2,663	467.5	3,336.0	368.6	737.5	2,242.8	7,385.8	11,022.2	18,374.2	688.9
1971 ASM	(NA)	(NA)	433.7	2,865.5	340.3	674.8	1,920.3	6,533.2	9,372.4	16,395.9	508.4
1970 ASM	(NA)	(NA)	441.9	2,724.3	344.7	683.4	1,811.5	5,482.7	8,331.1	14,263.3	453.3
1969 ASM	(NA)	(NA)	453.8	2,718.9	362.5	729.8	1,846.3	5,413.4	8,276.7	13,613.7	514.0
1968 ASM	(NA)	(NA)	429.0	2,438.4	344.6	700.4	1,475.3	5,102.6	7,623.9	12,654.1	414.2
1967 Census	6,976	2,268	423.1	2,231.2	339.3	684.6	1,522.2	4,683.6	7,054.6	11,713.0	423.3
1966 ASM	(NA)	(NA)	415.3	2,048.1	337.8	694.4	1,428.3	4,568.7	6,995.3	11,482.3	369.9
1965 ASM	(NA)	(NA)	393.5	1,833.8	322.4	661.5	1,301.3	4,053.8	6,370.6	10,350.3	308.9
1964 ASM	(NA)	(NA)	366.0	1,647.8	297.3	607.2	1,166.3	3,563.2	5,549.2	9,063.5	237.5
1963 Census	6,249	2,056	354.0	1,505.6	290.0	582.4	1,073.0	3,254.0	(NA)	(NA)	202.2

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Hawaii:											
1977 Census	949	231	25.0	276.8	17.4	31.3	160.5	785.5	1,176.1	1,974.0	44.4
1976 ASM	(NA)	(NA)	24.2	266.4	17.1	30.8	153.9	700.3	1,156.8	1,854.8	55.6
1975 ASM	(NA)	(NA)	23.7	236.7	16.9	30.6	133.0	685.4	1,116.2	1,800.3	51.5
1974 ASM	(NA)	(NA)	22.5	210.4	15.8	28.8	116.6	913.8	952.9	1,848.2	50.2
1973 ASM	(NA)	(NA)	24.3	195.5	17.5	31.9	117.9	496.1	592.9	1,086.4	36.6
1972 Census	773	238	24.8	191.1	17.7	33.1	113.7	410.0	548.3	955.6	46.7
1971 ASM	(NA)	(NA)	24.4	176.6	17.5	34.3	105.7	435.0	465.9	899.9	28.0
1970 ASM	(NA)	(NA)	24.8	168.7	18.1	35.3	102.8	408.6	451.1	856.9	40.5
1969 ASM	(NA)	(NA)	23.9	145.3	17.9	33.2	90.8	351.0	408.3	758.1	19.8
1968 ASM	(NA)	(NA)	23.2	134.0	17.4	32.2	83.3	353.9	381.9	737.1	15.6
1967 Census	697	215	25.4	139.6	19.0	35.9	86.9	326.2	399.6	723.4	26.0
1966 ASM	(NA)	(NA)	24.8	123.8	18.7	34.3	78.2	310.8	371.5	680.9	24.1
1965 ASM	(NA)	(NA)	25.4	118.1	18.7	34.0	73.5	292.1	365.9	655.5	17.2
1964 ASM	(NA)	(NA)	25.0	113.7	18.3	33.1	69.4	268.8	372.0	638.4	17.7
1963 Census	672	203	25.1	109.0	18.7	33.2	67.5	261.1	(NA)	(NA)	15.4
Idaho:											
1977 Census	1,495	379	51.6	625.2	39.8	76.5	431.9	1,430.0	2,233.6	3,657.7	158.7
1976 ASM	(NA)	(NA)	52.5	613.6	38.9	75.1	396.3	1,525.0	1,972.3	3,448.1	159.9
1975 ASM	(NA)	(NA)	47.3	498.2	36.4	68.2	337.6	1,345.4	1,792.8	3,048.5	143.0
1974 ASM	(NA)	(NA)	47.9	447.5	36.8	70.1	300.2	1,223.2	1,688.6	2,903.2	132.6
1973 ASM	(NA)	(NA)	45.1	384.7	34.9	66.3	268.0	976.0	1,378.2	2,345.2	75.2
1972 Census	1,190	350	43.0	339.9	34.3	66.0	244.6	820.8	1,257.4	2,069.0	74.9
1971 ASM	(NA)	(NA)	43.7	316.4	33.3	64.1	208.8	669.0	1,001.6	1,661.6	54.2
1970 ASM	(NA)	(NA)	45.3	299.4	34.7	65.6	198.7	649.7	930.9	1,573.6	53.2
1969 ASM	(NA)	(NA)	39.2	263.8	31.4	61.3	184.2	577.2	865.5	1,431.9	51.9
1968 ASM	(NA)	(NA)	37.3	241.1	29.5	58.8	170.0	552.3	777.4	1,337.1	42.6
1967 Census	1,131	303	37.1	219.9	29.0	56.9	157.0	503.4	713.4	1,224.5	57.7
1966 ASM	(NA)	(NA)	35.3	204.5	27.8	54.9	144.1	494.2	684.8	1,158.5	57.6
1965 ASM	(NA)	(NA)	33.1	186.1	26.3	51.3	131.8	443.8	630.0	1,062.5	81.3
1964 ASM	(NA)	(NA)	32.9	177.9	26.2	51.5	129.1	406.4	566.4	973.4	45.4
1963 Census	1,103	254	30.5	162.8	24.1	48.5	116.6	366.4	(NA)	(NA)	28.4
Illinois:											
1977 Census	19,517	7,441	1,286.2	18,740.8	857.8	1,676.7	10,756.5	40,279.1	53,342.1	93,081.3	2,661.5
1976 ASM	(NA)	(NA)	1,249.9	16,831.3	825.4	1,595.2	9,557.1	36,084.5	46,771.5	82,351.3	2,335.2
1975 ASM	(NA)	(NA)	1,247.8	15,534.3	816.9	1,574.9	8,790.2	32,089.3	42,888.9	75,011.1	2,228.5
1974 ASM	(NA)	(NA)	1,386.8	15,746.2	936.8	1,843.7	9,301.0	32,799.8	43,295.8	74,702.9	2,154.5
1973 ASM	(NA)	(NA)	1,372.5	14,383.1	945.4	1,876.1	8,657.4	29,356.7	33,805.2	62,581.6	1,698.8
1972 Census	18,617	7,345	1,306.1	12,801.1	901.0	1,780.3	7,614.9	25,848.9	28,146.3	53,553.1	1,564.1
1971 ASM	(NA)	(NA)	1,282.2	11,701.6	871.2	1,708.9	6,875.9	22,789.8	25,109.0	47,939.6	1,476.3
1970 ASM	(NA)	(NA)	1,356.9	11,552.2	929.0	1,844.0	6,835.5	22,379.0	24,525.8	46,705.1	1,515.4
1969 ASM	(NA)	(NA)	1,408.0	11,224.9	989.7	1,976.7	6,920.9	22,642.0	23,718.4	46,040.4	1,492.5
1968 ASM	(NA)	(NA)	1,387.9	10,542.1	977.0	1,955.4	6,468.7	21,196.4	22,454.0	43,615.1	1,494.2
1967 Census	18,536	7,477	1,397.3	10,013.9	995.1	1,978.8	6,180.0	20,016.5	21,559.6	41,333.7	1,493.4
1966 ASM	(NA)	(NA)	1,404.8	9,733.6	1,012.9	2,054.8	6,156.5	19,885.2	21,987.3	41,323.8	1,468.7
1965 ASM	(NA)	(NA)	1,319.6	8,803.9	940.9	1,386.8	5,531.0	17,743.8	19,527.7	31,005.1	1,148.0
1964 ASM	(NA)	(NA)	1,250.4	8,141.1	885.3	1,806.0	5,052.8	16,012.0	17,586.5	33,401.2	914.4
1963 Census	18,593	6,974	1,211.2	7,560.6	855.9	1,717.0	1,915.4	14,641.5	(NA)	(NA)	775.6
Indiana:											
1977 Census	8,061	3,229	705.9	10,438.9	521.9	1,024.8	7,046.5	22,717.6	29,829.1	52,172.2	2,078.0
1976 ASM	(NA)	(NA)	677.0	9,589.0	498.3	969.0	6,107.7	19,982.8	25,661.3	45,180.9	1,475.1
1975 ASM	(NA)	(NA)	653.5	7,978.4	470.2	892.5	5,159.1	16,358.8	22,001.1	38,250.2	1,505.8
1974 ASM	(NA)	(NA)	733.0	8,310.6	541.3	1,061.0	5,572.4	18,005.7	21,849.7	39,423.9	1,402.4
1973 ASM	(NA)	(NA)	749.8	7,850.0	561.8	1,119.0	5,362.1	16,368.5	18,092.7	34,175.5	1,107.2
1972 Census	7,354	30,491	703.9	6,881.5	526.1	1,041.7	4,640.8	14,111.6	15,327.1	29,167.7	907.3
1971 ASM	(NA)	(NA)	665.1	6,003.1	491.0	957.4	3,957.9	12,073.9	13,281.1	25,346.0	847.1
1970 ASM	(NA)	(NA)	696.7	5,819.3	516.7	1,013.0	3,844.9	11,469.1	12,612.3	24,048.2	1,016.2
1969 ASM	(NA)	(NA)	743.8	5,916.6	564.5	1,122.7	4,024.9	11,857.4	13,463.5	25,057.1	1,168.4
1968 ASM	(NA)	(NA)	715.2	5,423.3	542.4	1,085.4	3,699.9	11,250.2	12,122.7	23,348.0	997.5
1967 Census	(NA)	(NA)	710.2	5,023.2	543.6	1,078.1	3,453.5	10,308.0	11,706.0	21,856.0	1,004.4
1966 ASM	6,720	2,917	706.7	4,897.6	544.2	1,114.9	3,421.2	10,116.7	11,813.2	21,647.5	1,075.8
1965 ASM	(NA)	(NA)	666.6	4,449.9	511.4	1,047.0	3,118.6	9,316.7	10,731.6	19,921.5	1,050.1
1964 ASM	(NA)	(NA)	625.1	4,044.5	473.2	969.3	2,792.4	8,250.8	9,475.5	17,605.8	908.3
1963 Census	6,860	2,547	609.8	3,794.3	463.1	937.2	2,622.1	7,726.9	(NA)	(NA)	555.2

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Iowa:											
1977 Census	3,783	1,245	240.3	3,382.5	170.6	331.7	2,191.3	8,684.4	14,943.6	23,514.9	677.8
1976 ASM	(NA)	(NA)	231.1	2,994.8	164.0	312.8	1,910.3	7,798.6	13,126.6	20,772.3	709.5
1975 ASM	(NA)	(NA)	225.1	2,717.9	159.0	305.9	1,746.4	6,977.2	12,096.1	19,011.6	689.2
1974 ASM	(NA)	(NA)	237.7	2,634.9	175.3	344.3	1,776.9	6,774.7	11,826.5	18,260.1	512.7
1973 ASM	(NA)	(NA)	232.3	2,376.5	169.0	334.8	1,559.7	5,646.9	10,678.2	16,156.9	326.7
1972 Census	3,387	1,170	215.5	2,038.8	157.0	311.2	1,355.0	4,757.7	7,945.0	12,599.8	329.4
1971 ASM	(NA)	(NA)	200.8	1,729.3	143.2	279.8	1,122.3	3,941.1	6,317.0	10,229.3	262.6
1970 ASM	(NA)	(NA)	213.4	1,706.8	151.6	298.5	1,097.2	3,797.0	6,310.5	10,069.0	281.5
1969 ASM	(NA)	(NA)	218.8	1,669.3	158.9	313.3	1,086.9	3,729.9	6,079.3	9,759.5	267.4
1968 ASM	(NA)	(NA)	214.5	1,544.7	155.9	312.2	1,021.5	3,553.6	5,593.0	9,093.0	224.7
1967 Census	3,388	1,092	210.1	1,434.6	154.0	310.0	946.1	3,250.9	5,498.1	8,681.0	230.7
1966 ASM	(NA)	(NA)	205.6	1,375.1	150.1	308.6	911.4	3,030.6	5,296.3	8,231.8	221.8
1965 ASM	(NA)	(NA)	192.3	1,222.8	138.8	280.4	798.8	2,637.9	4,614.6	7,215.1	184.2
1964 ASM	(NA)	(NA)	182.2	1,131.4	130.4	267.1	739.7	2,484.4	4,267.7	6,705.2	172.2
1963 Census	3,496	982	178.2	1,046.7	126.9	256.4	687.0	2,287.0	(NA)	(NA)	127.0
Kansas:											
1977 Census	3,270	1,037	168.1	2,114.8	121.6	241.5	1,370.8	5,337.8	10,783.0	15,987.3	345.4
1976 ASM	(NA)	(NA)	167.5	1,950.0	121.2	239.8	1,257.6	4,859.2	9,843.5	14,657.5	328.3
1975 ASM	(NA)	(NA)	167.8	1,753.4	120.3	231.5	1,115.1	4,400.5	8,687.5	13,006.6	321.3
1974 ASM	(NA)	(NA)	165.4	1,159.0	122.2	240.8	1,041.8	3,882.6	7,796.3	11,460.4	305.4
1973 ASM	(NA)	(NA)	152.6	1,361.7	112.7	222.2	899.4	3,384.8	6,321.0	9,609.7	267.2
1972 Census	2,839	957	137.0	1,181.1	101.3	202.5	782.8	2,915.4	5,237.8	8,062.5	199.2
1971 ASM	(NA)	(NA)	123.8	1,019.3	89.6	175.5	669.2	2,560.6	3,992.5	6,507.0	132.5
1970 ASM	(NA)	(NA)	130.4	988.8	92.5	185.2	646.2	2,294.5	3,419.6	5,738.2	138.7
1969 ASM	(NA)	(NA)	143.6	1,031.2	104.9	208.9	684.4	2,456.4	3,680.0	6,092.0	122.4
1968 ASM	(NA)	(NA)	144.7	1,009.3	105.9	218.5	583.7	2,332.5	3,448.0	5,785.5	133.7
1967 Census	2,551	812	143.8	964.8	106.5	218.1	655.4	2,112.4	3,281.9	5,372.3	155.9
1966 ASM	(NA)	(NA)	135.5	880.8	102.6	215.2	610.1	1,955.6	3,159.6	5,102.8	113.4
1965 ASM	(NA)	(NA)	120.6	755.9	89.2	187.6	517.7	1,699.8	2,921.8	4,627.8	94.6
1964 ASM	(NA)	(NA)	120.0	746.5	88.4	187.5	513.2	1,570.2	2,651.3	4,202.7	101.4
1963 Census	2,475	696	114.3	684.4	84.6	176.9	463.2	1,461.6	(NA)	(NA)	106.3
Kentucky:											
1977 Census	3,548	1,318	277.5	3,452.2	209.0	399.5	2,302.5	9,545.7	13,565.7	22,874.7	715.9
1976 ASM	(NA)	(NA)	277.0	3,058.1	209.9	397.3	2,039.4	8,645.3	11,753.6	20,268.5	521.6
1975 ASM	(NA)	(NA)	264.8	2,713.7	200.1	375.6	1,789.7	7,426.0	10,254.8	17,647.4	484.5
1974 ASM	(NA)	(NA)	293.2	2,765.3	224.8	430.7	1,885.1	7,629.5	9,849.5	17,207.8	549.7
1973 ASM	(NA)	(NA)	277.2	2,457.3	216.6	422.9	1,707.2	6,470.9	7,947.5	14,332.1	504.4
1972 Census	3,167	1,259	258.7	2,160.0	200.4	392.9	1,479.8	5,682.1	6,794.6	12,360.0	380.0
1971 ASM	(NA)	(NA)	242.8	1,854.9	187.1	358.0	1,247.4	5,168.2	5,600.9	10,732.2	284.0
1970 ASM	(NA)	(NA)	244.8	1,733.9	190.1	367.0	1,177.6	4,491.6	5,174.6	9,595.6	308.6
1969 ASM	(NA)	(NA)	244.0	1,633.9	191.1	370.1	1,115.3	4,438.7	4,873.2	9,252.8	335.5
1968 ASM	(NA)	(NA)	232.1	1,481.3	182.7	358.8	1,024.1	4,060.7	4,598.9	8,609.8	370.0
1967 Census	2,994	1,135	224.6	1,351.9	175.6	344.5	926.7	3,636.0	4,180.5	7,796.0	338.3
1966 ASM	(NA)	(NA)	217.9	1,265.6	171.7	346.9	879.1	3,466.2	4,168.6	7,545.5	289.7
1965 ASM	(NA)	(NA)	203.0	1,152.4	158.5	320.2	795.2	3,143.3	3,768.3	6,852.0	224.0
1964 ASM	(NA)	(NA)	189.4	1,049.5	147.7	297.9	725.9	2,787.0	3,411.0	6,175.6	163.1
1963 Census	2,946	1,025	180.5	959.0	140.5	280.4	657.4	2,548.5	(NA)	(NA)	223.6
Louisiana:											
1977 Census	4,276	1,236	194.8	2,682.7	145.2	292.0	1,798.9	9,418.3	20,266.6	29,493.3	2,072.8
1976 ASM	(NA)	(NA)	189.8	2,395.2	140.1	287.8	1,576.0	8,423.4	16,884.5	25,225.2	1,560.8
1975 ASM	(NA)	(NA)	183.3	2,088.5	136.5	276.9	1,381.6	7,408.5	14,646.3	22,160.4	1,164.1
1974 ASM	(NA)	(NA)	180.6	1,869.2	136.4	278.4	1,256.8	6,924.7	13,075.4	19,576.0	948.2
1973 ASM	(NA)	(NA)	183.8	1,705.9	138.4	280.3	1,152.2	4,844.8	8,174.8	12,968.2	704.3
1972 Census	3,651	1,133	179.4	1,601.4	134.3	274.6	1,072.1	4,273.4	7,014.1	11,265.0	568.2
1971 ASM	(NA)	(NA)	161.0	1,347.0	119.4	246.6	898.4	3,504.5	5,840.5	9,334.2	536.5
1970 ASM	(NA)	(NA)	167.9	1,287.7	124.4	258.1	865.3	3,364.7	5,507.9	8,838.2	470.6
1969 ASM	(NA)	(NA)	173.3	1,265.5	129.0	264.1	839.7	3,250.3	5,342.8	8,587.3	561.1
1968 ASM	(NA)	(NA)	169.6	1,189.7	124.9	262.2	793.5	3,045.3	4,998.2	8,037.3	607.6
1967 Census	3,639	1,016	164.5	1,084.4	120.8	250.6	712.2	2,790.3	4,536.5	7,275.2	741.4
1966 ASM	(NA)	(NA)	151.6	939.3	112.3	232.3	618.6	2,530.6	4,017.6	6,509.1	487.5
1965 ASM	(NA)	(NA)	147.6	873.3	109.3	226.7	573.8	2,250.7	3,706.8	5,954.3	344.3
1964 ASM	(NA)	(NA)	145.8	857.7	105.0	219.5	534.6	2,147.2	3,480.2	5,645.1	230.2
1963 Census	3,222	954	139.5	769.4	104.7	215.4	526.2	1,915.6	(NA)	(NA)	210.8

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Maine:											
1977 Census	2,157	595	102.8	1,077.6	84.2	163.6	781.0	2,343.0	2,845.1	5,144.6	222.9
1976 ASM	(NA)	(NA)	99.0	930.1	81.0	153.7	676.4	2,041.4	2,402.2	4,422.8	507.4
1975 ASM	(NA)	(NA)	93.5	818.2	76.5	146.3	590.9	1,736.7	2,080.2	3,816.3	314.4
1974 ASM	(NA)	(NA)	103.1	814.2	84.8	163.7	600.3	1,768.4	2,108.2	3,839.0	173.2
1973 ASM	(NA)	(NA)	90.5	731.3	82.9	159.9	534.4	1,566.6	1,691.2	3,257.2	111.9
1972 Census	2,075	590	100.0	699.4	82.6	162.2	512.9	1,383.4	1,503.9	2,879.4	138.9
1971 ASM	(NA)	(NA)	95.4	615.6	78.5	151.6	448.7	1,208.3	1,303.3	2,495.2	120.8
1970 ASM	(NA)	(NA)	103.8	630.6	86.4	168.1	471.8	1,230.9	1,215.5	2,443.8	140.2
1969 ASM	(NA)	(NA)	110.9	655.2	92.2	183.7	486.1	1,225.9	1,257.2	2,493.1	103.6
1968 ASM	(NA)	(NA)	112.3	624.5	94.7	187.2	472.0	1,134.3	1,222.9	2,343.4	114.2
1967 Census	2,385	615	110.8	577.2	93.6	186.6	437.3	1,069.5	1,164.9	2,215.5	98.8
1966 ASM	(NA)	(NA)	107.5	533.4	90.6	184.5	405.7	980.3	1,088.6	2,052.7	133.7
1965 ASM	(NA)	(NA)	104.1	491.9	87.6	178.8	374.3	895.1	987.6	1,866.2	113.5
1964 ASM	(NA)	(NA)	101.3	459.4	85.6	173.2	350.6	822.9	911.9	1,720.3	70.7
1963 Census	2,535	594	99.9	438.6	84.1	170.1	335.1	785.7	(NA)	(NA)	62.5
Maryland:											
1977 Census	3,937	1,351	243.2	3,419.5	162.9	311.6	1,976.0	7,115.6	8,908.4	15,930.4	513.8
1976 ASM	(NA)	(NA)	242.8	3,162.2	164.4	316.6	1,810.2	6,681.6	8,162.1	14,762.2	421.0
1975 ASM	(NA)	(NA)	244.0	2,896.4	162.6	307.1	1,618.0	5,618.2	7,492.1	13,189.6	460.5
1974 ASM	(NA)	(NA)	259.3	2,854.5	175.3	337.9	1,652.4	5,946.6	7,694.0	13,446.1	438.6
1973 ASM	(NA)	(NA)	263.4	2,629.5	184.0	358.3	1,593.9	5,257.1	6,316.0	11,498.8	317.1
1972 Census	3,579	1,437	255.6	2,386.3	175.7	345.7	1,427.8	4,706.9	5,309.6	9,963.3	310.3
1971 ASM	(NA)	(NA)	254.4	2,183.7	176.0	346.9	1,311.2	4,279.4	4,812.2	9,113.4	311.5
1970 ASM	(NA)	(NA)	272.4	2,175.6	191.2	377.2	1,329.7	4,067.9	4,769.1	8,826.4	384.4
1969 ASM	(NA)	(NA)	289.4	2,228.2	205.3	406.1	1,381.6	4,188.9	4,960.7	9,121.1	310.9
1968 ASM	(NA)	(NA)	284.7	2,067.7	203.1	399.7	1,286.9	4,084.4	4,704.8	8,765.2	247.4
1967 Census	3,401	1,963	287.6	1,956.0	205.4	405.6	1,208.5	3,781.3	4,303.1	8,066.3	251.6
1966 ASM	(NA)	(NA)	288.6	1,878.3	207.2	418.1	1,159.4	3,587.9	4,320.6	7,819.6	270.6
1965 ASM	(NA)	(NA)	270.7	1,703.2	195.6	394.8	1,060.2	3,381.0	4,060.5	7,414.2	224.5
1964 ASM	(NA)	(NA)	263.0	1,610.8	186.4	377.3	982.0	3,152.5	3,698.2	6,819.2	156.6
1963 Census	3,519	1,399	263.7	1,549.8	188.9	375.9	960.5	3,017.2	(NA)	(NA)	176.3
Massachusetts:											
1977 Census	11,133	4,054	613.4	7,818.8	407.9	791.9	4,199.2	16,348.6	14,075.4	30,144.2	952.8
1976 ASM	(NA)	(NA)	590.9	6,942.9	387.5	743.8	3,660.8	14,420.6	12,608.7	26,918.4	781.6
1975 ASM	(NA)	(NA)	585.6	6,478.9	378.8	724.4	3,373.0	12,443.9	11,279.5	23,923.5	620.4
1974 ASM	(NA)	(NA)	638.6	6,477.4	429.2	831.9	3,569.2	12,836.1	11,464.5	23,807.2	764.5
1973 ASM	(NA)	(NA)	639.0	6,027.8	435.7	845.5	3,366.2	11,717.6	9,960.0	21,337.1	669.0
1972 Census	10,770	4,971	618.9	5,486.0	416.0	812.1	3,027.0	10,677.5	8,616.7	19,133.9	537.5
1971 ASM	(NA)	(NA)	616.5	5,109.3	407.8	784.0	2,755.1	9,494.6	7,572.3	17,110.0	454.3
1970 ASM	(NA)	(NA)	672.8	5,214.5	454.2	879.5	2,880.7	9,628.2	7,608.9	17,177.6	618.1
1969 ASM	(NA)	(NA)	709.7	5,170.8	492.9	970.4	2,956.0	9,572.4	7,882.6	17,364.1	497.3
1968 ASM	(NA)	(NA)	703.2	4,861.7	492.4	971.3	2,833.4	9,035.0	7,366.6	16,367.7	440.8
1967 Census	10,963	4,471	713.6	4,646.3	507.9	999.0	2,755.3	8,715.0	7,294.4	15,925.5	493.7
1966 ASM	(NA)	(NA)	705.2	4,415.2	503.9	1,004.9	2,620.1	8,378.2	7,305.0	15,488.3	489.8
1965 ASM	(NA)	(NA)	673.7	3,999.3	485.9	967.6	2,419.6	7,449.8	6,755.3	14,067.2	342.8
1964 ASM	(NA)	(NA)	667.6	3,808.2	478.5	952.4	2,281.1	6,821.2	6,146.2	12,870.2	308.0
1963 Census	11,311	4,351	674.0	3,712.4	480.7	948.3	2,234.6	6,403.8	(NA)	(NA)	273.0
Michigan:											
1977 Census	15,627	5,380	1,115.9	20,054.0	789.4	1,626.3	12,720.6	37,566.0	56,775.9	93,757.1	3,739.2
1976 ASM	(NA)	(NA)	1,049.9	17,322.2	740.8	1,503.2	10,792.9	32,389.8	48,688.2	80,326.7	2,636.1
1975 ASM	(NA)	(NA)	972.3	14,100.4	668.9	1,308.4	8,512.1	25,084.0	39,282.4	64,535.1	2,263.3
1974 ASM	(NA)	(NA)	1,097.6	14,307.5	763.0	1,532.6	9,101.2	26,333.2	37,942.7	63,560.5	2,850.7
1973 ASM	(NA)	(NA)	1,151.6	14,768.3	827.1	1,736.4	9,545.3	27,170.4	36,681.9	63,410.9	1,997.9
1972 Census	14,461	5,019	1,076.2	12,745.1	768.1	1,582.6	8,094.7	23,375.7	30,821.3	54,039.3	2,071.4
1971 ASM	(NA)	(NA)	1,034.4	11,128.6	728.6	1,463.5	6,965.4	20,270.6	26,787.3	47,206.9	1,202.3
1970 ASM	(NA)	(NA)	1,043.6	10,232.5	726.0	1,468.1	6,332.4	17,959.4	22,339.2	40,202.4	1,300.7
1969 ASM	(NA)	(NA)	1,169.0	11,041.6	846.9	1,743.1	7,154.9	20,253.0	25,804.9	45,963.8	1,371.6
1968 ASM	(NA)	(NA)	1,139.6	10,350.4	830.5	1,744.3	6,777.4	19,266.4	24,798.6	43,982.8	1,203.3
1967 Census	14,340	5,157	1,134.1	9,357.2	816.7	1,669.2	6,008.0	17,241.6	22,011.1	39,133.2	1,360.2
1966 ASM	(NA)	(NA)	1,145.8	9,221.3	836.0	1,775.7	6,066.7	17,629.2	23,277.4	40,557.9	1,489.2
1965 ASM	(NA)	(NA)	1,092.8	8,586.1	797.9	1,721.7	5,698.9	16,885.6	22,273.0	38,911.4	1,452.9
1964 ASM	(NA)	(NA)	1,013.3	7,604.9	728.9	1,564.6	4,948.8	14,358.6	19,081.1	33,200.3	1,030.6
1963 Census	14,220	4,537	961.1	6,950.7	690.8	1,473.9	4,521.0	13,090.3	(NA)	(NA)	761.8

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Minnesota:											
1977 Census	6,637	2,126	331.7	4,693.0	211.1	403.8	2,413.1	9,605.2	13,598.6	23,021.2	576.4
1976 ASM	(NA)	(NA)	305.5	3,892.8	197.9	380.9	2,127.5	8,473.0	12,147.3	20,439.5	494.9
1975 ASM	(NA)	(NA)	320.9	3,781.0	196.6	371.6	1,941.4	7,386.9	11,094.6	18,646.4	487.6
1974 ASM	(NA)	(NA)	334.7	3,579.9	216.7	415.7	1,963.9	7,640.2	10,869.4	18,221.7	488.7
1973 ASM	(NA)	(NA)	323.5	3.203.0	208.0	400.7	1,749.0	6,704.1	8,796.4	15,279.0	330.5
1972 Census	5,698	1,930	302.2	2,889.0	196.1	382.8	1,555.1	5,523.8	7,443.4	12,901.3	305.5
1971 ASM	(NA)	(NA)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1970 ASM	(NA)	(NA)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1969 ASM	(NA)	(NA)	323.3	2,544.2	209.1	421.3	1,397.9	4,942.7	6,451.1	11,336.8	306.2
1968 ASM	(NA)	(NA)	306.9	2,286.2	204.5	411.3	1,290.5	4,581.8	5,802.2	10,335.9	258.6
1967 Census	5,409	1,778	299.8	2,106.5	198.8	398.7	1,177.6	4,080.2	5,449.1	9,443.2	231.3
1966 ASM	(NA)	(NA)	281.2	1,893.1	190.6	385.7	1,098.6	3,823.6	5,004.3	8,702.4	210.5
1965 ASM	(NA)	(NA)	258.6	1,672.0	173.0	351.2	970.5	3,394.4	4,442.2	7,721.3	160.1
1964 ASM	(NA)	(NA)	252.0	1,599.6	166.2	338.3	904.3	3,043.9	4,221.1	7,248.1	167.3
1963 Census	5,500	1,587	245.9	1,478.6	165.6	331.6	865.4	2,806.1	(NA)	(NA)	159.1
Mississippi:											
1977 Census	3,289	1,147	219.4	2,061.5	177.9	348.1	1,477.3	5,619.3	7,279.4	12,765.8	470.8
1976 ASM	(NA)	(NA)	209.5	1,817.0	170.0	331.3	1,306.5	4,393.1	6,579.4	10,867.6	336.9
1975 ASM	(NA)	(NA)	193.4	1,560.5	156.5	296.8	1,116.8	3,660.6	5,788.2	9,471.8	259.3
1974 ASM	(NA)	(NA)	209.2	1,508.0	169.3	323.2	1,073.1	3,785.9	5,370.0	9,036.8	319.7
1973 ASM	(NA)	(NA)	209.2	1,413.9	172.2	340.5	1,022.5	3,477.4	4,463.9	7,845.7	239.0
1972 Census	2,727	1,066	200.4	1,302.4	166.9	332.0	958.6	2,824.7	3,766.3	6,540.8	235.9
1971 ASM	(NA)	(NA)	181.7	1,070.2	150.2	296.4	787.8	2,237.2	3,053.9	5,272.2	189.0
1970 ASM	(NA)	(NA)	178.8	990.5	147.6	290.7	718.5	2,102.9	2,766.0	4,836.5	274.7
1969 ASM	(NA)	(NA)	174.9	929.1	144.1	285.1	679.4	1,912.0	2,556.9	4,465.0	185.4
1968 ASM	(NA)	(NA)	169.2	866.4	140.2	282.0	639.0	1,846.9	2,343.8	4,180.1	143.7
1967 Census	2,761	925	160.4	764.0	133.8	269.7	560.9	1,635.3	2,111.8	3,719.3	276.2
1966 ASM	(NA)	(NA)	157.8	684.8	133.6	271.3	513.3	1,488.5	1,999.2	3,447.8	187.6
1965 ASM	(NA)	(NA)	147.1	601.8	124.5	249.8	455.5	1,206.1	1,826.9	3,015.0	117.5
1964 ASM	(NA)	(NA)	133.5	533.7	111.6	225.8	400.4	1,111.6	1,621.0	2,718.9	103.7
1963 Census	2,384	848	128.5	486.2	108.5	214.5	367.9	1,017.0	(NA)	(NA)	131.2
Missouri:											
1977 Census	7,354	2,430	433.3	5,709.1	299.1	572.4	3,408.5	13,087.0	20,098.8	33,162.5	780.9
1976 ASM	(NA)	(NA)	424.4	5,059.8	290.0	553.7	2,961.3	11,121.0	16,529.4	27,468.8	597.5
1975 ASM	(NA)	(NA)	406.6	4,497.5	272.9	510.6	2,558.0	9,416.2	14,294.1	23,454.9	608.9
1974 ASM	(NA)	(NA)	449.2	4,603.5	309.8	592.1	2,682.3	9,911.1	13,909.7	23,390.5	547.2
1973 ASM	(NA)	(NA)	452.1	4,283.6	313.4	610.6	2,562.7	9,121.3	12,554.5	21,481.1	435.6
1972 Census	6,732	2,470	434.3	3,897.3	299.8	583.8	2,305.4	8,169.0	10,805.9	18,773.8	395.9
1971 ASM	(NA)	(NA)	436.5	3,673.2	296.0	569.5	2,135.0	7,525.1	9,699.9	17,198.4	363.3
1970 ASM	(NA)	(NA)	449.3	3,557.8	306.3	600.4	2,077.4	6,828.5	9,158.2	15,995.8	379.4
1969 ASM	(NA)	(NA)	466.3	3,458.6	322.3	631.0	2,052.8	6,766.1	9,515.1	16,237.7	299.3
1968 ASM	(NA)	(NA)	460.5	3,302.6	324.5	642.8	2,002.3	6,635.0	9,356.8	15,925.1	309.5
1967 Census	6,545	2,457	452.2	3,048.9	320.9	631.3	1,851.7	5,895.0	8,229.0	14,085.4	346.8
1966 ASM	(NA)	(NA)	450.9	2,922.9	317.4	639.2	1,774.5	5,807.7	8,221.2	13,939.8	317.4
1965 ASM	(NA)	(NA)	426.4	2,627.7	301.0	597.3	1,585.0	5,136.7	7,726.0	12,822.0	278.4
1964 ASM	(NA)	(NA)	401.6	2,387.0	283.0	565.4	1,450.8	4,706.4	6,830.1	11,475.6	227.5
1963 Census	6,540	2,325	391.4	2,235.2	276.2	547.8	1,361.7	4,296.0	(NA)	(NA)	211.1
Montana:											
1977 Census	1,169	202	23.5	311.8	18.4	35.9	236.0	802.2	1,872.3	2,669.9	97.8
1976 ASM	(NA)	(NA)	21.7	269.8	16.9	34.0	202.7	771.1	1,778.9	2,524.9	85.6
1975 ASM	(NA)	(NA)	20.5	226.7	15.7	29.6	166.3	531.6	1,646.3	2,202.0	76.3
1974 ASM	(NA)	(NA)	20.9	206.8	16.1	29.7	148.3	610.6	1,688.8	2,217.4	99.8
1973 ASM	(NA)	(NA)	21.6	195.1	17.2	33.5	145.8	515.2	1,316.6	1,793.7	66.3
1972 Census	943	206	21.4	184.6	17.1	33.6	137.7	462.5	1,129.6	1,596.7	75.8
1971 ASM	(NA)	(NA)	19.9	158.5	15.4	30.9	118.8	330.4	882.2	1,232.0	50.4
1970 ASM	(NA)	(NA)	20.1	151.6	15.8	31.6	114.3	357.1	896.0	1,217.3	42.3
1969 ASM	(NA)	(NA)	22.1	155.5	17.8	35.3	118.7	359.1	889.2	1,256.3	26.3
1968 ASM	(NA)	(NA)	21.2	143.0	16.9	34.3	108.7	353.7	741.5	1,083.1	35.9
1967 Census	923	191	20.4	129.5	16.1	32.1	96.4	311.6	660.2	967.3	68.9
1966 ASM	(NA)	(NA)	21.9	132.3	17.2	33.3	98.3	304.2	797.4	1,093.5	31.3
1965 ASM	(NA)	(NA)	20.9	122.8	16.6	32.9	91.9	280.3	721.3	997.9	31.2
1964 ASM	(NA)	(NA)	20.4	115.9	16.3	33.0	88.6	273.8	658.0	935.1	41.9
1963 Census	976	188	20.2	109.3	16.0	31.7	82.8	236.2	(NA)	(NA)	38.6

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Nebraska:											
1977 Census	1,965	626	87.7	1,075.4	62.8	124.0	680.9	2,867.1	5,864.0	8,713.4	175.1
1976 ASM	(NA)	(NA)	87.8	986.6	63.1	125.0	634.5	2,692.1	6,133.9	8,773.3	167.5
1975 ASM	(NA)	(NA)	87.3	890.8	62.5	122.7	579.1	2,384.5	6,007.9	8,393.4	160.8
1974 ASM	(NA)	(NA)	90.4	835.1	66.6	132.7	555.9	2,253.0	5,754.0	7,949.3	143.3
1973 ASM	(NA)	(NA)	88.6	769.1	66.3	133.0	516.5	1,989.8	5,024.0	6,954.9	108.5
1972 Census	1,723	598	84.9	704.2	63.2	127.6	469.2	1,733.4	4,220.5	5,898.4	102.3
1971 ASM	(NA)	(NA)	80.2	618.0	58.7	119.2	411.2	1,594.1	3,234.6	4,826.6	86.5
1970 ASM	(NA)	(NA)	81.3	581.2	60.0	119.8	385.8	1,497.0	2,946.7	4,419.4	83.0
1969 ASM	(NA)	(NA)	84.0	576.2	64.3	129.4	398.1	1,415.6	3,047.3	4,440.5	94.8
1968 ASM	(NA)	(NA)	79.6	513.4	59.9	119.4	348.0	1,252.6	2,642.8	3,856.7	68.2
1967 Census	1,675	525	77.0	475.9	58.4	119.2	325.0	1,150.0	2,402.7	3,531.7	71.4
1966 ASM	(NA)	(NA)	71.4	419.4	53.1	110.5	283.6	992.9	2,170.4	3,131.4	75.5
1965 ASM	(NA)	(NA)	65.9	376.4	47.9	100.5	248.5	870.3	1,874.5	2,742.6	57.3
1964 ASM	(NA)	(NA)	65.4	365.3	47.1	98.1	243.5	870.5	1,747.6	2,607.9	50.2
1963 Census	1,611	474	64.9	348.0	47.0	96.7	228.5	746.6	(NA)	(NA)	46.1
Nevada:											
1977 Census	729	147	15.0	191.6	10.0	19.3	113.4	495.2	461.0	942.0	46.4
1976 ASM	(NA)	(NA)	13.6	144.4	7.7	14.4	86.9	354.2	371.1	724.8	53.0
1975 ASM	(NA)	(NA)	11.3	127.2	7.8	14.1	78.1	313.0	331.6	638.4	28.5
1974 ASM	(NA)	(NA)	11.6	115.3	8.1	15.3	72.6	309.0	343.0	640.2	24.3
1973 ASM	(NA)	(NA)	11.0	98.9	7.8	14.8	63.1	223.9	292.5	519.9	12.7
1972 Census	447	104	10.0	91.7	6.9	13.5	57.2	207.7	222.1	423.4	23.5
1971 ASM	(NA)	(NA)	7.5	64.6	5.3	10.5	40.3	145.9	163.3	307.4	21.7
1970 ASM	(NA)	(NA)	8.3	68.2	6.0	11.7	43.1	158.8	168.6	323.5	13.0
1969 ASM	(NA)	(NA)	7.9	62.2	5.8	11.1	39.6	161.8	159.6	322.5	16.5
1968 ASM	(NA)	(NA)	6.9	51.2	4.9	9.3	32.0	143.7	134.5	276.0	14.2
1967 Census	330	74	7.0	49.6	4.8	9.3	31.2	133.8	117.2	250.0	15.4
1966 ASM	(NA)	(NA)	6.4	44.8	4.4	8.8	28.1	114.2	131.1	245.6	6.3
1965 ASM	(NA)	(NA)	6.9	44.2	4.9	9.8	28.8	108.1	125.0	230.7	17.2
1964 ASM	(NA)	(NA)	6.5	42.4	4.6	9.5	27.9	113.8	120.2	234.5	8.2
1963 Census	283	73	6.8	42.2	4.8	9.5	28.4	106.3	(NA)	(NA)	8.7
New Hampshire:											
1977 Census	1,825	623	95.3	1,029.0	72.0	138.0	645.3	2,174.7	1,893.7	4,032.3	162.0
1976 ASM	(NA)	(NA)	87.8	883.2	65.7	124.6	540.4	1,832.4	1,683.9	3,495.4	137.6
1975 ASM	(NA)	(NA)	83.4	795.3	62.3	118.2	483.5	1,587.1	1,428.7	3,046.3	97.2
1974 ASM	(NA)	(NA)	91.3	783.6	69.3	130.9	500.5	1,578.3	1,494.5	3,053.4	104.0
1973 ASM	(NA)	(NA)	93.4	735.8	70.1	134.4	452.6	1,462.3	1,228.6	2,642.6	102.0
1972 Census	1,434	566	89.7	663.2	67.7	131.4	414.0	1,278.6	1,034.2	2,288.7	99.1
1971 ASM	(NA)	(NA)	81.9	576.4	60.0	117.4	356.2	1,088.7	926.3	2,021.2	79.7
1970 ASM	(NA)	(NA)	89.9	586.8	67.2	133.9	368.0	1,062.1	928.6	1,965.5	73.2
1969 ASM	(NA)	(NA)	94.4	567.7	75.9	149.8	394.4	1,006.8	921.9	1,929.8	102.4
1968 ASM	(NA)	(NA)	95.6	550.2	76.5	153.4	384.8	1,007.1	899.6	1,891.0	54.0
1967 Census	1,481	566	94.9	512.6	76.6	151.0	364.3	931.9	802.8	1,716.8	75.6
1966 ASM	(NA)	(NA)	96.3	483.7	78.0	156.5	345.3	866.1	766.9	1,636.3	72.5
1965 ASM	(NA)	(NA)	90.8	435.6	74.1	148.9	314.1	782.9	716.4	1,485.1	39.8
1964 ASM	(NA)	(NA)	85.0	398.2	69.3	138.3	284.6	688.2	672.0	1,352.5	40.5
1963 Census	1,509	546	84.1	378.9	68.6	135.1	271.8	636.1	(NA)	(NA)	30.3
New Jersey:											
1977 Census	15,696	5,775	778.3	10,924.2	489.6	955.8	5,561.7	22,852.8	28,633.9	51,279.4	1,376.3
1976 ASM	(NA)	(NA)	735.7	9,703.8	458.4	906.5	4,851.1	20,287.5	25,438.3	45,711.3	1,216.3
1975 ASM	(NA)	(NA)	747.1	9,115.4	463.4	899.4	4,557.2	17,740.8	22,759.5	40,716.8	1,200.2
1974 ASM	(NA)	(NA)	818.6	9,038.2	531.4	1,043.1	4,806.9	18,394.1	22,622.5	40,346.0	1,203.2
1973 ASM	(NA)	(NA)	852.0	8,603.7	559.6	1,089.1	4,662.1	17,754.4	18,410.2	35,924.9	955.3
1972 Census	13,790	5,918	836.1	8,107.2	546.6	1,070.9	4,353.7	16,408.9	16,149.8	32,409.1	940.1
1971 ASM	(NA)	(NA)	796.5	7,258.2	517.4	1,023.5	3,880.9	14,393.8	14,540.0	28,953.4	798.4
1970 ASM	(NA)	(NA)	858.8	7,217.2	563.6	1,116.5	3,877.6	14,413.8	14,204.7	28,503.2	902.3
1969 ASM	(NA)	(NA)	890.0	7,091.8	596.7	1,183.9	3,938.4	14,364.1	14,574.5	28,835.9	933.2
1968 ASM	(NA)	(NA)	874.3	6,433.4	591.1	1,173.6	3,743.4	13,503.4	13,696.0	27,163.9	764.5
1967 Census	14,740	5,903	881.3	6,325.4	603.7	1,203.7	3,617.8	12,738.2	13,151.2	25,761.7	824.3
1966 ASM	(NA)	(NA)	876.5	6,046.7	604.5	1,218.8	3,506.0	12,246.3	12,961.5	24,941.2	776.4
1965 ASM	(NA)	(NA)	845.2	5,601.9	585.9	1,180.5	3,292.4	11,267.9	12,076.6	23,156.2	617.6
1964 ASM	(NA)	(NA)	820.8	5,274.7	562.2	1,135.2	3,087.9	10,216.6	11,041.5	21,225.6	502.2
1963 Census	15,208	5,528	829.2	5,121.3	573.8	1,145.4	3,021.0	9,957.3	(NA)	(NA)	525.0

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
New Mexico:											
1977 Census	1,323	258	29.0	296.9	20.9	39.5	183.8	733.5	1,289.4	2,009.2	75.0
1976 ASM	(NA)	(NA)	30.2	273.0	23.1	42.1	175.3	635.2	902.8	1,534.0	119.5
1975 ASM	(NA)	(NA)	27.1	237.1	20.0	37.7	146.8	511.2	818.4	1,303.1	177.9
1974 ASM	(NA)	(NA)	28.0	220.2	20.0	37.5	136.4	491.9	80.1	1,272.9	144.2
1973 ASM	(NA)	(NA)	25.6	182.5	18.6	35.1	110.6	416.1	659.2	1,060.5	59.0
1972 Census	926	277	23.6	157.2	17.2	32.9	96.0	358.0	567.2	910.4	30.8
1971 ASM	(NA)	(NA)	22.7	141.7	17.0	32.8	88.8	272.9	496.6	765.5	43.9
1970 ASM	(NA)	(NA)	21.6	124.7	15.9	30.3	78.6	227.3	488.0	712.8	12.2
1969 ASM	(NA)	(NA)	18.4	110.0	13.4	27.2	69.7	207.2	462.2	666.9	19.2
1968 ASM	(NA)	(NA)	16.4	100.1	11.7	24.1	60.7	194.3	386.3	579.1	12.0
1967 Census	749	169	16.9	98.6	11.3	22.3	55.6	204.5	284.3	486.3	10.6
1966 ASM	(NA)	(NA)	15.8	89.3	10.6	21.1	50.5	148.1	354.0	499.1	11.5
1965 ASM	(NA)	(NA)	16.1	87.6	10.6	21.1	48.8	134.5	318.1	463.5	12.7
1964 ASM	(NA)	(NA)	15.9	83.5	10.3	20.9	47.5	150.2	284.6	406.7	10.0
1963 Census	742	169	15.3	82.1	10.2	20.7	47.2	149.6	(NA)	(NA)	10.4
New York:											
1977 Census	36,578	11,425	1,509.9	20,876.1	958.1	1,827.5	10,418.8	44,289.8	42,441.9	86,216.4	2,530.2
1976 ASM	(NA)	(NA)	1,455.3	18,786.8	906.9	1,740.5	9,243.1	38,849.3	37,694.7	76,087.1	2,303.7
1975 ASM	(NA)	(NA)	1,481.0	17,939.9	902.7	1,723.5	8,550.3	34,796.1	34,637.5	69,551.3	2,172.1
1974 ASM	(NA)	(NA)	1,621.3	18,143.4	1,022.9	1,970.8	8,863.2	35,271.4	35,020.4	69,271.2	2,198.2
1973 ASM	(NA)	(NA)	1,711.5	17,387.2	1,105.2	2,125.8	8,829.0	33,610.1	31,524.9	64,648.9	1,643.7
1972 Census	41,684	14,353	1,679.3	16,222.0	1,076.2	2,068.2	8,174.3	30,403.5	28,341.1	58,558.6	1,506.0
1971 ASM	(NA)	(NA)	1,701.9	15,263.4	1,076.1	2,066.3	7,648.0	28,862.2	25,961.4	54,936.6	1,431.7
1970 ASM	(NA)	(NA)	1,828.2	15,262.5	1,173.6	2,266.3	7,751.8	28,463.2	25,333.8	53,526.6	1,519.0
1969 ASM	(NA)	(NA)	1,939.7	15,321.0	1,270.0	2,476.3	8,017.8	28,384.0	26,637.0	54,891.0	1,594.0
1968 ASM	(NA)	(NA)	1,910.8	14,423.8	1,263.5	2,473.6	7,663.4	26,931.4	25,177.2	51,960.4	1,342.6
1967 Census	42,911	14,730	1,929.3	13,851.5	1,284.5	2,509.8	7,334.7	25,246.7	24,458.6	49,418.7	1,310.3
1966 ASM	(NA)	(NA)	1,933.5	13,097.9	1,291.6	2,549.9	6,979.8	24,588.3	24,246.0	48,231.5	1,186.2
1965 ASM	(NA)	(NA)	1,885.9	12,288.2	1,265.3	2,497.4	6,632.0	22,694.2	22,478.8	44,848.1	1,098.4
1964 ASM	(NA)	(NA)	1,860.6	11,861.1	1,238.1	2,453.5	6,381.1	20,839.7	21,055.1	41,809.9	939.8
1963 Census	47,041	15,022	1,853.0	11,289.7	1,247.8	2,431.4	6,163.5	19,539.5	(NA)	(NA)	783.4
North Carolina:											
1977 Census	9,954	4,005	765.3	7,518.5	611.3	1,186.5	5,086.3	18,230.6	23,009.8	40,912.2	1,345.3
1976 ASM	(NA)	(NA)	738.9	6,655.2	591.8	1,141.9	4,504.7	15,822.1	20,186.9	35,818.9	1,294.6
1975 ASM	(NA)	(NA)	710.8	5,847.2	563.7	1,053.7	3,866.6	13,507.0	17,752.5	31,432.8	1,236.7
1974 ASM	(NA)	(NA)	780.8	6,021.7	625.6	1,203.2	4,033.2	13,900.9	17,748.5	31,191.1	1,199.1
1973 ASM	(NA)	(NA)	781.0	5,458.6	634.9	1,249.3	3,812.6	12,592.6	14,958.3	27,440.6	1,053.6
1972 Census	8,632	3,794	743.7	4,929.1	604.0	1,211.0	3,427.3	11,014.5	13,296.7	24,123.9	986.8
1971 ASM	(NA)	(NA)	699.0	4,267.3	566.3	1,118.8	2,949.5	9,824.2	11,104.2	20,880.5	810.4
1970 ASM	(NA)	(NA)	699.9	3,998.6	571.3	1,124.4	2,789.5	9,053.4	10,559.3	19,515.0	714.0
1969 ASM	(NA)	(NA)	691.0	3,751.8	568.9	1,133.2	2,670.4	8,186.1	10,047.5	18,155.4	756.2
1968 ASM	(NA)	(NA)	669.1	3,424.1	555.6	1,112.0	2,474.2	7,575.0	9,407.7	16,880.6	637.6
1967 Census	8,266	3,379	643.3	3,066.1	537.8	1,070.2	2,210.1	6,606.5	8,592.8	15,129.6	664.6
1966 ASM	(NA)	(NA)	611.9	2,806.1	511.2	1,047.7	2,022.2	6,133.0	8,200.4	14,146.6	732.5
1965 ASM	(NA)	(NA)	576.2	2,503.3	480.6	981.9	1,818.6	5,528.4	7,401.3	12,819.3	511.6
1964 ASM	(NA)	(NA)	546.9	2,278.6	454.6	921.3	1,640.1	4,950.4	6,798.0	11,707.2	352.5
1963 Census	7,784	2,946	530.6	2,092.1	444.4	890.2	1,527.5	4,566.5	(NA)	(NA)	314.4
North Dakota:											
1977 Census	571	145	13.8	162.3	9.2	17.7	97.2	473.3	842.7	1,312.9	53.0
1976 ASM	(NA)	(NA)	14.2	139.4	8.8	16.4	78.7	387.0	864.1	1,236.2	54.9
1975 ASM	(NA)	(NA)	14.1	119.6	9.2	16.8	74.3	323.7	809.3	1,128.3	23.2
1974 ASM	(NA)	(NA)	12.3	106.0	8.4	16.8	68.7	325.9	669.7	982.1	27.8
1973 ASM	(NA)	(NA)	11.9	96.2	9.0	18.2	62.5	330.1	428.1	773.2	23.8
1972 Census	482	117	10.2	78.6	7.1	14.4	47.7	200.7	379.3	593.9	13.3
1971 ASM	(NA)	(NA)	10.1	70.3	6.9	14.5	42.9	189.0	349.8	536.1	11.3
1970 ASM	(NA)	(NA)	10.3	73.5	7.3	14.8	46.1	188.8	310.3	494.3	10.1
1969 ASM	(NA)	(NA)	8.3	50.4	5.6	11.4	32.9	144.5	268.1	408.4	13.6
1968 ASM	(NA)	(NA)	7.9	46.0	5.5	10.0	28.7	143.9	266.5	409.3	6.1
1967 Census	456	92	7.5	41.6	5.2	10.7	26.1	112.8	255.5	365.4	6.3
1966 ASM	(NA)	(NA)	6.7	37.2	4.5	9.3	21.0	100.9	221.2	318.8	7.1
1965 ASM	(NA)	(NA)	6.5	34.0	4.5	9.2	21.0	97.3	204.5	294.2	11.2
1964 ASM	(NA)	(NA)	6.5	31.7	4.5	9.0	19.8	71.6	195.8	267.1	17.0
1963 Census	459	78	6.5	31.5	4.5	9.1	19.8	72.4	(NA)	(NA)	8.1

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Ohio:											
1977 Census	17,354	6,728	1,331.2	20,356.0	924.4	1,838.5	12,907.5	43,054.7	52,736.3	95,234.7	2,790.7
1976 ASM	(NA)	(NA)	1,283.0	17,855.4	888.7	1,752.7	11,235.4	37,724.5	46,482.0	83,715.9	2,140.5
1975 ASM	(NA)	12,697	1,269.7	15,967.9	864.4	1,674.7	9,821.3	32,292.2	40,994.6	73,488.3	2,160.5
1974 ASM	(NA)	12,697	1,428.2	16,575.8	1,001.6	1,981.8	10,538.1	35,088.7	40,770.2	74,484.5	2,523.6
1973 ASM	(NA)	12,697	1,418.5	15,509.5	1,010.1	2,047.1	10,056.2	31,174.3	33,497.1	64,021.5	1,939.3
1972 Census	16,390	6,487	1,346.3	13,810.0	940.0	1,887.8	8,717.0	27,171.0	28,285.6	55,025.4	1,695.4
1971 ASM	(NA)	(NA)	1,331.5	12,512.9	922.3	1,819.3	7,796.1	23,991.7	25,920.7	50,142.4	1,310.2
1970 ASM	(NA)	(NA)	1,407.0	12,289.1	982.9	1,951.0	7,723.3	23,141.0	24,220.8	47,149.8	1,705.7
1969 ASM	(NA)	(NA)	1,468.9	12,419.4	1,048.1	2,142.2	8,019.8	24,192.6	25,275.0	49,054.5	1,975.1
1968 ASM	(NA)	(NA)	1,430.8	11,455.7	1,018.7	2,076.7	7,371.6	22,151.1	23,748.7	45,747.5	1,756.9
1967 Census	15,428	6,487	1,397.0	10,523.6	998.1	2,014.5	6,745.4	20,435.4	21,589.5	41,845.3	1,694.1
1966 ASM	(NA)	(NA)	1,411.1	10,376.1	1,016.5	2,116.7	6,807.8	20,132.1	22,034.1	41,644.9	1,585.8
1965 ASM	(NA)	(NA)	1,333.8	570.8	57.5	116.7	349.8	1,110.2	985.1	38,280.0	76.9
1964 ASM	(NA)	(NA)	1,260.1	8,579.1	902.2	1,857.0	5,582.9	16,477.0	18,350.5	34,594.8	1,085.0
1963 Census	15,484	5,800	1,239.8	8,125.4	885.1	1,799.1	5,257.2	1,550.6	(NA)	(NA)	847.8
Oklahoma:											
1977 Census	3,818	1,067	164.4	2,050.9	110.4	214.3	1,164.3	4,662.3	8,048.4	12,564.5	485.8
1976 ASM	(NA)	(NA)	150.1	1,743.0	100.1	194.8	953.1	3,607.7	6,486.0	10,126.0	410.6
1975 ASM	(NA)	(NA)	151.0	1,583.6	97.9	187.6	852.2	3,445.5	5,496.4	8,889.5	358.3
1974 ASM	(NA)	(NA)	153.5	1,427.7	104.6	201.3	821.5	3,108.2	5,005.6	7,945.2	339.2
1973 ASM	(NA)	(NA)	156.5	1,374.6	104.0	200.1	754.4	2,597.3	3,837.7	6,336.1	253.5
1972 Census	3,042	897	142.7	1,187.9	95.7	186.1	659.0	2,270.1	3,132.0	5,348.1	223.8
1971 ASM	(NA)	(NA)	132.2	1,024.0	88.2	173.5	567.4	1,834.4	2,719.0	4,553.7	158.4
1970 ASM	(NA)	(NA)	131.0	974.4	89.1	176.9	552.5	1,766.3	2,561.8	4,293.0	146.1
1969 ASM	(NA)	(NA)	129.2	912.0	87.3	171.2	513.8	1,595.4	2,314.2	3,872.0	130.9
1968 ASM	(NA)	(NA)	123.5	835.4	82.6	163.8	466.4	1,477.6	2,158.6	3,599.9	84.1
1967 Census	2,611	745	117.7	764.2	78.7	157.8	423.0	1,346.2	1,962.7	3,292.3	80.9
1966 ASM	(NA)	(NA)	110.1	677.9	73.8	151.7	381.4	1,241.9	1,844.9	3,049.3	70.6
1965 ASM	(NA)	(NA)	102.5	607.3	68.9	140.6	340.9	1,101.1	1,682.6	2,771.4	66.7
1964 ASM	(NA)	(NA)	99.1	579.5	65.6	134.1	312.5	1,032.4	1,570.0	2,598.1	62.0
1963 Census	2,575	648	97.7	551.7	64.2	130.1	295.0	978.8	(NA)	(NA)	63.6
Oregon:											
1977 Census	5,716	1,580	202.4	2,760.0	155.1	291.6	1,901.7	6,138.0	8,317.0	14,370.0	574.5
1976 ASM	(NA)	(NA)	187.8	2,371.4	145.2	272.5	1,674.7	5,392.2	6,925.1	12,299.2	378.2
1975 ASM	(NA)	(NA)	180.8	2,037.7	137.7	252.7	1,423.5	4,437.4	5,903.6	10,310.8	439.3
1974 ASM	(NA)	(NA)	191.7	1,965.8	150.9	282.4	1,395.3	4,498.3	5,557.8	9,899.7	412.7
1973 ASM	(NA)	(NA)	192.1	1,863.2	149.8	298.4	1,320.9	4,284.0	4,820.9	9,067.0	332.6
1972 Census	4,670	1,461	178.6	1,627.3	141.5	271.3	1,170.0	3,489.9	4,104.3	7,571.2	267.3
1971 ASM	(NA)	(NA)	169.4	1,406.8	131.9	252.8	1,011.7	2,806.6	3,390.0	6,183.0	232.3
1970 ASM	(NA)	(NA)	169.2	1,292.6	131.8	249.5	929.8	2,508.2	3,041.0	5,521.6	226.1
1969 ASM	(NA)	(NA)	173.5	1,260.3	139.3	266.6	923.5	2,612.8	3,181.4	5,730.1	255.6
1968 ASM	(NA)	(NA)	167.2	1,170.2	135.2	263.1	868.0	2,452.9	2,910.4	5,322.2	198.4
1967 Census	4,437	1,275	163.1	1,082.5	131.2	254.8	798.2	2,060.5	2,552.2	4,612.2	234.2
1966 ASM	(NA)	(NA)	160.9	1,029.9	128.7	252.0	767.8	1,992.3	2,450.1	4,404.4	284.1
1965 ASM	(NA)	(NA)	153.6	944.9	123.7	242.2	712.2	1,817.3	2,344.9	4,134.6	230.5
1964 ASM	(NA)	(NA)	148.5	893.9	120.2	237.3	672.6	1,698.9	2,213.3	3,892.7	141.5
1963 Census	4,881	1,225	145.2	819.6	117.6	226.4	617.1	1,574.8	(NA)	(NA)	132.0
Pennsylvania:											
1977 Census	18,735	7,704	1,329.2	18,042.7	934.1	1,781.6	10,948.8	36,016.9	44,393.0	79,844.8	2,297.4
1976 ASM	(NA)	(NA)	1,310.2	16,491.7	915.7	1,749.6	9,873.8	32,221.6	40,002.7	71,918.5	2,000.5
1975 ASM	(NA)	(NA)	1,330.9	15,248.5	914.7	1,742.6	9,080.9	29,432.2	36,733.7	65,847.0	1,995.6
1974 ASM	(NA)	(NA)	1,477.7	15,564.3	1,052.3	2,033.6	9,701.5	31,497.9	37,222.9	67,552.9	2,045.0
1973 ASM	(NA)	(NA)	1,465.2	14,164.1	1,058.8	2,049.4	8,864.7	26,818.3	29,254.2	55,585.6	1,569.2
1972 Census	18,398	8,070	1,417.5	12,794.1	1,015.0	1,953.9	7,885.7	23,518.5	25,160.6	48,344.8	1,479.3
1971 ASM	(NA)	(NA)	1,426.4	11,824.6	1,013.9	1,941.5	7,191.4	21,964.0	22,739.8	44,703.6	1,487.9
1970 ASM	(NA)	(NA)	1,514.0	11,824.3	1,084.6	2,098.5	7,266.9	21,448.2	22,342.8	43,525.6	1,572.8
1969 ASM	(NA)	(NA)	1,573.0	11,771.1	1,138.2	2,232.3	7,319.2	22,136.5	22,189.9	43,525.6	1,547.3
1968 ASM	(NA)	(NA)	1,553.8	10,965.8	1,130.6	2,216.6	6,860.8	20,318.3	20,810.5	40,998.9	1,592.0
1967 Census	18,771	8,369	1,549.5	10,349.7	1,136.2	2,211.3	6,488.7	19,276.8	19,574.0	38,590.5	1,633.4
1966 ASM	(NA)	(NA)	1,552.4	10,050.8	1,153.1	2,288.0	6,443.0	18,752.3	19,849.9	38,163.7	1,423.5
1965 ASM	(NA)	(NA)	1,491.5	9,228.5	1,108.8	2,191.4	5,944.9	17,115.9	18,258.1	35,076.6	1,074.9
1964 ASM	(NA)	(NA)	1,433.7	8,599.9	1,057.6	2,089.5	5,495.5	15,406.2	16,834.8	31,994.9	829.9
1963 Census	19,459	7,981	1,392.9	8,008.6	1,028.0	2,002.1	5,110.7	14,043.6	(NA)	(NA)	777.7

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Rhode Island:											
1977 Census	3,107	945	125.0	1,326.5	94.7	177.5	825.2	2,736.6	2,673.5	5,364.6	145.6
1976 ASM	(NA)	(NA)	115.1	1,150.0	88.9	166.0	719.8	2,294.8	2,279.3	4,532.7	143.4
1975 ASM	(NA)	(NA)	107.3	999.7	81.5	152.7	615.9	1,977.3	1,889.1	3,924.0	119.5
1974 ASM	(NA)	(NA)	121.0	1,043.3	94.2	177.0	661.2	2,182.9	1,998.4	4,081.1	119.5
1973 ASM	(NA)	(NA)	122.2	976.8	94.7	180.2	620.2	1,924.2	1,731.2	3,629.4	88.7
1972 Census	2,756	904	118.1	888.2	91.4	174.2	565.9	1,764.4	1,479.3	3,218.6	100.5
1971 ASM	(NA)	(NA)	110.6	757.8	84.5	162.5	486.9	1,468.9	1,248.4	2,715.0	80.0
1970 ASM	(NA)	(NA)	118.7	770.9	90.9	176.4	499.0	1,402.4	1,267.1	2,680.3	72.7
1969 ASM	(NA)	(NA)	125.1	762.5	99.3	191.2	503.4	1,472.6	1,299.9	2,775.2	80.9
1968 ASM	(NA)	(NA)	124.9	746.0	98.2	193.6	488.1	1,443.6	1,288.4	2,717.0	91.5
1967 Census	2,703	922	122.3	700.4	96.6	188.5	466.9	1,350.9	1,228.1	2,560.5	74.8
1966 ASM	(NA)	(NA)	127.1	682.9	100.4	200.5	464.6	1,354.9	1,254.1	2,580.7	75.0
1965 ASM	(NA)	(NA)	121.5	612.2	95.9	191.2	417.0	1,207.4	1,105.0	2,271.0	54.2
1964 ASM	(NA)	(NA)	113.7	557.7	89.3	177.8	376.5	1,006.8	988.2	2,002.7	47.2
1963 Census	2,710	868	113.9	533.4	90.0	177.2	365.3	958.6	(NA)	(NA)	43.1
South Carolina:											
1977 Census	4,229	1,560	374.2	3,804.9	299.8	594.0	2,640.3	8,186.1	10,855.2	18,882.4	788.6
1976 ASM	(NA)	(NA)	371.3	3,406.2	299.2	591.6	2,382.5	7,163.9	9,601.3	16,601.1	868.0
1975 ASM	(NA)	(NA)	340.0	2,835.8	270.7	513.7	1,930.7	5,933.9	7,788.2	13,715.0	807.0
1974 ASM	(NA)	(NA)	368.1	2,850.7	295.6	581.5	1,993.2	6,374.0	7,992.1	14,037.1	848.6
1973 ASM	(NA)	(NA)	365.6	2,627.4	299.2	606.2	1,884.8	5,853.1	6,682.8	12,472.1	595.9
1972 Census	3,719	1,441	345.1	2,344.5	282.7	581.6	1,679.4	4,965.6	5,795.3	10,721.1	506.8
1971 ASM	(NA)	(NA)	324.4	2,026.6	264.5	535.5	1,448.7	4,234.5	4,801.3	9,011.3	499.3
1970 ASM	(NA)	(NA)	323.8	1,924.0	262.6	534.9	1,366.9	3,767.7	4,288.2	8,029.4	370.5
1969 ASM	(NA)	(NA)	338.1	1,891.5	278.0	570.5	1,377.4	3,672.1	4,236.6	7,847.3	358.9
1968 ASM	(NA)	(NA)	319.7	1,698.0	265.7	553.5	1,255.6	3,394.0	3,852.9	7,150.9	401.0
1967 Census	3,465	1,251	304.3	1,502.2	253.8	523.0	1,106.6	3,030.3	3,448.5	6,440.7	416.6
1966 ASM	(NA)	(NA)	297.7	1,408.7	248.8	529.4	1,053.8	2,979.6	3,474.9	6,385.8	400.2
1965 ASM	(NA)	(NA)	283.7	1,277.8	237.0	504.2	960.3	2,777.6	3,103.8	5,804.5	282.9
1964 ASM	(NA)	(NA)	270.0	1,150.4	227.9	477.6	869.8	2,387.1	2,859.7	5,232.9	228.0
1963 Census	3,057	1,076	261.6	1,049.3	221.9	455.3	797.2	2,111.1	(NA)	(NA)	179.8
South Dakota:											
1977 Census	740	195	22.5	251.4	16.7	32.0	169.1	611.6	1,184.7	1,793.7	36.7
1976 ASM	(NA)	(NA)	21.8	216.5	16.3	31.9	149.8	493.9	1,126.7	1,608.5	48.8
1975 ASM	(NA)	(NA)	21.6	189.4	16.0	29.0	129.0	421.1	1,077.8	1,494.4	36.5
1974 ASM	(NA)	(NA)	20.9	177.2	15.6	29.7	119.5	385.3	1,010.0	1,389.0	30.7
1973 ASM	(NA)	(NA)	20.0	159.2	14.9	28.4	106.4	419.8	873.3	1,274.9	32.3
1972 Census	606	171	17.4	134.5	12.9	25.1	89.4	284.5	658.2	936.6	20.1
1971 ASM	(NA)	(NA)	16.1	118.8	11.3	22.5	78.4	226.2	516.8	741.3	13.5
1970 ASM	(NA)	(NA)	17.2	120.7	12.1	23.8	80.1	230.2	550.3	780.0	12.3
1969 ASM	(NA)	(NA)	16.6	107.2	12.2	23.9	72.1	213.5	540.6	751.9	6.6
1968 ASM	(NA)	(NA)	16.6	101.5	12.3	24.1	69.2	193.9	523.3	714.6	10.7
1967 Census	604	137	15.5	92.5	11.4	22.4	61.7	171.3	494.5	663.3	8.2
1966 ASM	(NA)	(NA)	14.1	81.0	10.3	21.4	55.5	166.3	493.0	653.1	7.7
1965 ASM	(NA)	(NA)	14.1	76.2	10.4	21.1	52.2	154.2	436.0	586.5	10.9
1964 ASM	(NA)	(NA)	13.7	73.6	10.2	21.2	50.2	140.8	431.0	571.3	9.8
1963 Census	586	115	13.2	70.0	9.6	19.9	48.0	140.0	(NA)	(NA)	7.3
Tennessee:											
1977 Census	6,487	2,477	489.8	5,218.7	375.7	720.3	3,481.2	12,663.4	16,318.9	28,752.0	961.1
1976 ASM	(NA)	(NA)	478.7	4,686.3	359.8	694.4	3,039.9	10,723.6	14,336.2	24,755.5	781.3
1975 ASM	(NA)	(NA)	452.1	4,126.6	338.0	646.0	2,653.9	9,289.2	12,432.6	21,768.2	826.1
1974 ASM	(NA)	(NA)	489.5	4,071.8	381.7	739.0	2,759.5	9,563.8	12,476.0	21,608.1	935.4
1973 ASM	(NA)	(NA)	493.3	3,756.3	389.3	761.1	2,581.6	8,772.5	10,335.4	18,918.7	673.5
1972 Census	5,647	2,291	467.4	3,351.7	367.0	725.3	2,295.1	7,662.0	8,635.7	16,129.3	540.0
1971 ASM	(NA)	(NA)	444.2	2,955.3	346.9	679.8	2,006.5	6,728.9	7,409.8	14,078.7	529.7
1970 ASM	(NA)	(NA)	447.9	2,785.5	348.2	682.4	1,886.2	6,297.0	6,858.5	12,982.6	507.7
1969 ASM	(NA)	(NA)	456.3	2,693.4	360.5	706.9	1,857.6	5,982.1	6,740.4	12,599.4	523.8
1968 ASM	(NA)	(NA)	434.1	2,445.4	345.1	682.4	1,696.4	5,542.0	6,328.9	11,771.7	481.3
1967 Census	5,040	2,022	418.0	2,190.0	333.6	654.7	1,512.2	4,921.1	5,848.0	10,700.1	412.4
1966 ASM	(NA)	(NA)	401.1	2,038.6	320.8	643.5	1,408.9	4,627.8	5,519.2	9,975.9	510.7
1965 ASM	(NA)	(NA)	373.4	1,809.2	299.2	599.1	1,257.5	4,139.4	4,841.5	8,878.0	389.7
1964 ASM	(NA)	(NA)	344.9	1,621.9	273.9	550.2	1,122.3	5,577.2	4,322.9	7,871.9	300.2
1963 Census	4,787	1,809	334.3	1,505.2	267.0	530.2	1,040.7	3,577.2	(NA)	(NA)	244.9

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Texas:											
1977 Census	18,107	5,644	886.4	11,653.1	600.7	1,190.1	6,626.4	33,080.9	60,395.8	92,735.7	5,194.7
1976 ASM	(NA)	(NA)	824.6	9,852.0	560.3	1,113.6	5,661.1	27,600.0	49,990.5	77,120.1	4,768.1
1975 ASM	(NA)	(NA)	776.7	8,656.1	529.9	1,055.6	4,960.3	24,786.1	41,427.0	65,458.0	3,804.6
1974 ASM	(NA)	(NA)	803.9	8,084.8	562.7	1,123.9	4,741.1	23,398.9	36,849.0	58,948.6	3,035.9
1973 ASM	(NA)	(NA)	786.6	7,065.7	560.2	1,108.7	4,277.4	17,688.0	25,544.9	42,982.3	1,534.0
1972 Census	14,422	4,790	736.1	6,344.6	516.6	1,030.5	3,763.3	15,228.0	21,355.5	36,647.9	1,345.7
1971 ASM	(NA)	(NA)	694.0	5,689.8	480.3	955.5	3,300.5	13,793.9	19,289.8	33,034.2	1,506.3
1970 ASM	(NA)	(NA)	722.5	5,584.4	503.4	1,011.3	3,286.5	13,094.8	18,433.0	31,291.1	1,619.1
1969 ASM	(NA)	(NA)	728.3	5,327.3	515.0	1,051.7	3,222.8	12,922.9	18,520.0	31,308.1	1,490.3
1968 ASM	(NA)	(NA)	688.8	4,875.4	486.0	1,003.8	2,948.5	11,974.5	17,515.9	29,376.0	1,490.2
1967 Census	12,722	4,039	657.5	4,340.4	466.4	958.5	2,617.0	10,922.4	15,785.0	26,498.1	1,408.8
1966 ASM	(NA)	(NA)	607.6	3,773.5	430.9	899.9	2,313.4	9,725.4	14,276.6	23,824.1	1,215.8
1965 ASM	(NA)	(NA)	566.9	3,365.1	400.7	832.6	2,065.2	8,700.2	12,790.6	21,330.1	1,006.2
1964 ASM	(NA)	(NA)	535.9	3,130.5	375.9	782.5	1,894.6	7,864.8	11,603.9	19,350.9	745.6
1963 Census	11,581	3,478	513.8	2,890.5	361.4	741.4	1,744.0	7,119.5	(NA)	(NA)	567.3
Utah:											
1977 Census	1,748	494	70.2	867.2	48.8	92.3	522.3	1,974.0	3,172.9	5,092.8	393.6
1976 ASM	(NA)	(NA)	71.2	779.4	47.9	89.3	463.5	1,708.7	2,964.9	4,640.6	141.9
1975 ASM	(NA)	(NA)	65.1	668.9	45.6	85.2	404.4	1,378.8	2,768.7	4,131.2	131.6
1974 ASM	(NA)	(NA)	66.0	614.9	46.8	88.0	377.5	1,482.7	2,651.2	4,053.8	144.8
1973 ASM	(NA)	(NA)	61.7	538.6	43.0	81.3	325.1	1,238.0	1,892.1	3,124.8	70.8
1972 Census	1,358	430	56.6	486.2	38.8	73.7	286.9	1,068.7	1,584.9	2,632.0	67.9
1971 ASM	(NA)	(NA)	49.5	391.4	33.5	63.3	223.0	864.2	1,388.1	2,257.9	71.9
1970 ASM	(NA)	(NA)	51.1	376.3	34.8	66.5	216.7	989.9	1,465.9	2,428.7	58.3
1969 ASM	(NA)	(NA)	50.0	353.5	34.8	67.9	212.5	1,054.6	1,071.0	2,122.6	50.7
1968 ASM	(NA)	(NA)	47.8	331.3	32.8	63.9	195.1	826.6	990.5	1,819.0	39.0
1967 Census	1,124	353	47.0	314.9	31.7	62.3	182.7	777.9	911.2	1,672.8	59.2
1966 ASM	(NA)	(NA)	47.2	311.2	31.7	63.5	184.4	699.4	1,038.0	1,736.6	53.1
1965 ASM	(NA)	(NA)	47.7	305.1	31.1	61.7	176.4	693.2	995.8	1,691.7	25.1
1964 ASM	(NA)	(NA)	51.5	318.1	33.2	66.5	182.1	668.0	960.0	1,610.8	23.0
1963 Census	1,110	336	53.5	328.2	33.4	67.0	182.0	710.6	(NA)	(NA)	29.6
Vermont:											
1977 Census	1,030	298	41.5	498.0	28.7	55.9	270.1	1,050.1	1,175.9	2,189.3	93.0
1976 ASM	(NA)	(NA)	41.1	449.8	28.9	55.0	247.6	952.3	1,090.7	2,056.2	95.6
1975 ASM	(NA)	(NA)	40.3	409.4	27.8	52.8	224.7	776.2	909.7	1,680.3	76.6
1974 ASM	(NA)	(NA)	39.7	382.8	28.2	55.1	223.5	792.3	815.1	1,581.3	69.3
1973 ASM	(NA)	(NA)	37.8	342.7	26.6	53.1	196.1	687.8	680.0	1,359.6	42.5
1972 Census	860	274	36.9	311.4	26.1	52.2	176.3	576.0	639.2	1,229.2	36.8
1971 ASM	(NA)	(NA)	37.4	296.2	25.6	51.9	161.3	562.1	540.4	1,101.9	49.7
1970 ASM	(NA)	(NA)	41.5	309.8	28.3	58.0	167.9	556.4	524.9	1,047.4	67.1
1969 ASM	(NA)	(NA)	42.6	301.0	30.0	61.5	173.4	555.5	515.2	1,043.4	51.2
1968 ASM	(NA)	(NA)	41.8	272.1	29.9	62.2	162.6	531.0	502.8	1,045.3	39.7
1967 Census	925	281	42.5	259.1	31.3	64.6	162.4	515.0	622.0	1,126.9	35.1
1966 ASM	925	281	42.3	246.4	31.9	66.8	159.5	514.2	640.8	1,129.7	34.1
1965 ASM	(NA)	(NA)	38.8	207.6	29.9	61.1	138.1	410.4	549.0	898.9	36.1
1964 ASM	(NA)	(NA)	33.7	176.5	25.8	53.4	119.4	337.2	374.6	710.7	20.7
1963 Census	977	267	33.7	167.9	25.7	52.4	113.4	309.3	(NA)	(NA)	15.7
Virginia:											
1977 Census	5,519	1,879	395.2	4,442.4	302.0	581.8	2,916.8	10,882.0	13,233.5	23,988.6	953.0
1976 ASM	(NA)	(NA)	377.3	3,851.0	288.9	560.7	2,547.7	9,367.7	11,255.3	20,470.5	907.4
1975 ASM	(NA)	(NA)	362.9	3,444.2	276.3	522.4	2,240.4	7,544.9	9,994.0	17,700.5	672.0
1974 ASM	(NA)	(NA)	381.6	3,292.7	296.4	578.9	2,234.7	7,869.5	9,451.0	16,719.3	784.5
1973 ASM	(NA)	(NA)	386.4	3,097.1	300.9	593.7	2,085.2	6,874.8	7,878.6	14,699.7	615.1
1972 Census	4,837	1,768	375.4	2,826.0	293.2	582.9	1,902.1	6,177.5	6,716.7	12,823.5	585.8
1971 ASM	(NA)	(NA)	350.6	2,448.1	269.5	528.3	1,610.1	5,172.8	5,737.5	10,949.6	435.3
1970 ASM	(NA)	(NA)	354.1	2,343.0	273.0	536.1	1,548.5	4,921.5	5,450.7	10,338.4	394.4
1969 ASM	(NA)	(NA)	360.4	2,290.8	281.2	563.6	1,547.5	4,816.2	5,263.2	10,024.4	388.9
1968 ASM	(NA)	(NA)	355.2	2,145.9	279.9	565.7	1,470.9	4,627.1	4,955.4	9,503.2	336.8
1967 Census	4,938	1,620	339.8	1,905.1	268.2	535.0	1,296.1	4,067.7	4,543.0	8,605.8	347.0
1966 ASM	(NA)	(NA)	335.6	1,808.5	264.1	541.7	1,224.4	3,938.4	4,498.8	8,310.0	374.8
1965 ASM	(NA)	(NA)	317.7	1,659.8	249.8	515.1	1,134.8	3,573.6	4,149.0	7,660.0	328.1
1964 ASM	(NA)	(NA)	308.9	1,554.4	241.9	498.0	1,065.9	3,305.7	3,776.1	7,043.0	275.3
1963 Census	4,543	1,573	302.1	1,432.0	239.6	480.2	992.1	3,046.3	(NA)	(NA)	231.8

See footnotes at end of table.

Table 6. **Statistics for All Manufacturing Establishments Including Administrative Offices and Auxiliaries by State: 1963 to 1977**—Con.

Year[1]	All establishments[2]		All employees[2]		Production workers			Value added by manufacture (million dollars)	Cost of materials[3] (million dollars)	Value of shipments[3] (million dollars)	New capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)				
Washington:											
1977 Census	6,723	1,712	265.0	4,054.3	180.7	338.2	2,385.0	8,955.0	12,921.4	21,746.9	850.0
1976 ASM	(NA)	(NA)	244.1	3,594.4	163.3	307.3	2,086.8	7,296.9	11,351.8	18,842.8	662.2
1975 ASM	(NA)	(NA)	239.2	3,168.1	160.6	295.6	1,794.3	7,032.9	10,050.2	16,932.5	808.0
1974 ASM	(NA)	(NA)	254.4	2,962.0	171.6	320.1	1,713.4	6,870.9	9,397.4	16,068.2	560.0
1973 ASM	(NA)	(NA)	244.8	2,625.9	171.9	320.0	1,584.2	5,733.7	7,537.4	13,524.2	446.3
1972 Census	5,345	1,463	226.0	2,308.4	159.8	303.3	1,410.9	4,721.4	5,930.1	10,815.7	353.7
1971 ASM	(NA)	(NA)	220.7	2,061.8	148.2	276.5	1,205.6	4,117.0	5,560.8	10,731.1	364.5
1970 ASM	(NA)	(NA)	237.5	2,205.6	157.6	298.0	1,272.6	4,094.7	5,839.2	10,276.4	311.0
1969 ASM	(NA)	(NA)	272.8	2,445.2	177.7	339.7	1,330.8	5,132.8	5,504.5	10,618.2	306.1
1968 ASM	(NA)	(NA)	282.7	2,333.7	182.6	351.0	1,282.1	4,808.3	5,296.3	10,100.7	374.6
1967 Census	5,014	1,375	270.7	2,119.0	177.7	344.6	1,179.8	3,764.2	4,777.5	8,503.0	464.7
1966 ASM	(NA)	(NA)	251.6	1,931.8	171.4	332.4	1,109.6	3,289.2	4,309.3	7,696.1	418.2
1965 ASM	(NA)	(NA)	223.3	1,611.2	156.9	307.0	975.2	3,048.8	3,774.7	6,964.8	243.3
1964 ASM	(NA)	(NA)	231.0	1,584.9	156.5	309.0	945.0	3,175.7	3,348.1	6,773.9	177.4
1963 Census	5,250	1,233	224.4	1,479.1	152.2	297.3	881.4	2,884.9	(NA)	(NA)	143.4
West Virginia:											
1977 Census	1,857	583	117.0	1,620.5	89.2	170.9	1,124.3	3,880.2	4,881.5	8,705.9	402.3
1976 ASM	(NA)	(NA)	120.0	1,520.8	89.0	168.6	1,023.9	3,557.7	4,478.2	7,937.6	288.8
1975 ASM	(NA)	(NA)	117.4	1,346.3	86.3	164.2	886.9	3,044.7	3,862.8	6,743.7	363.9
1974 ASM	(NA)	(NA)	126.9	1,337.6	96.6	186.9	915.8	3,320.1	3,680.9	6,893.4	299.6
1973 ASM	(NA)	(NA)	128.3	1,240.8	97.6	191.2	844.7	2,883.9	2,696.6	5,609.1	230.7
1972 Census	1,733	606	120.8	1,097.6	92.7	181.8	765.4	2,646.7	2,389.3	5,021.9	216.0
1971 ASM	(NA)	(NA)	118.3	1,017.7	89.4	175.1	701.4	2,387.7	2,188.6	4,561.5	241.3
1970 ASM	(NA)	(NA)	122.4	989.3	92.2	183.0	674.7	2,317.5	2,164.3	4,470.8	251.9
1969 ASM	(NA)	(NA)	128.1	953.1	98.4	194.7	668.4	2,288.9	2,080.8	4,331.8	198.0
1968 ASM	(NA)	(NA)	123.3	878.2	95.4	190.3	621.2	2,220.4	2,031.7	4,264.3	210.6
1967 Census	1,844	563	124.0	831.6	96.7	189.9	587.3	2,169.5	1,899.8	4,046.5	269.0
1966 ASM	(NA)	(NA)	124.6	806.5	97.4	194.8	574.3	2,146.9	1,855.3	3,982.9	249.3
1965 ASM	(NA)	(NA)	120.9	759.5	94.2	188.1	540.9	2,060.3	1,699.7	3,732.0	198.6
1964 ASM	(NA)	(NA)	119.2	737.0	90.7	182.6	516.6	1,875.6	1,606.9	3,483.9	180.3
1963 Census	1,832	528	117.0	700.1	90.2	179.8	491.3	1,886.4	(NA)	(NA)	173.0
Wisconsin:											
1977 Census	8,678	3,163	535.0	7,317.8	381.0	745.4	4,697.1	16,606.0	22,362.9	38,725.3	1,184.4
1976 ASM	(NA)	(NA)	519.9	6,611.4	370.8	717.4	4,232.6	14,905.5	20,670.1	35,427.3	913.1
1975 ASM	(NA)	(NA)	516.5	6,068.7	365.9	701.4	3,829.1	12,926.1	18,107.9	31,045.7	880.4
1974 ASM	(NA)	(NA)	552.2	5,973.5	401.0	783.1	3,874.8	12,544.2	17,563.4	29,599.3	892.9
1973 ASM	(NA)	(NA)	532.8	5,376.1	390.6	783.8	3,559.2	10,825.2	14,623.5	25,161.6	706.4
1972 Census	7,845	2,861	500.5	4,722.3	360.5	720.5	3,062.7	9,443.3	11,970.1	21,245.5	535.3
1971 ASM	(NA)	(NA)	479.8	4,227.1	342.2	670.2	2,681.7	8,476.4	10,343.0	18,830.0	406.4
1970 ASM	(NA)	(NA)	500.6	4,125.0	359.8	710.6	2,628.1	7,874.1	9,615.7	17,425.5	468.1
1969 ASM	(NA)	(NA)	523.9	4,101.0	385.7	771.4	2,687.7	8,106.6	9,684.7	17,760.8	473.2
1968 ASM	(NA)	(NA)	514.0	3,811.1	375.5	754.6	2,481.5	7,514.7	9,013.7	16,549.3	461.9
1967 Census	7,838	2,727	512.2	3,577.8	374.5	754.8	2,332.8	7,014.1	8,511.3	15,452.1	506.6
1966 ASM	(NA)	(NA)	515.2	3,493.1	380.3	784.0	2,311.5	6,831.7	8,531.0	15,219.2	476.5
1965 ASM	(NA)	(NA)	494.5	3,199.0	365.1	749.6	2,125.1	6,179.0	7,878.1	14,007.5	353.8
1964 ASM	(NA)	(NA)	472.0	2,950.3	346.2	707.9	1,936.8	5,717.4	7,107.8	12,732.0	305.8
1963 Census	7,937	2,467	461.8	2,781.1	338.5	687.8	1,827.4	5,363.2	(NA)	(NA)	280.7
Wyoming:											
1977 Census	505	102	8.5	110.9	6.2	12.1	73.9	380.8	919.2	1,287.8	36.2
1976 ASM	(NA)	(NA)	7.0	82.9	4.9	10.0	54.9	279.0	559.2	833.2	30.5
1975 ASM	(NA)	(NA)	7.0	77.8	4.7	9.4	49.3	269.2	572.1	846.2	21.2
1974 ASM	(NA)	(NA)	7.0	68.3	4.8	10.1	43.7	233.3	503.4	712.6	17.2
1973 ASM	(NA)	(NA)	7.5	61.7	5.6	11.3	41.5	171.0	383.0	547.6	15.6
1972 Census	377	78	7.0	56.9	5.1	10.1	39.2	143.9	312.3	451.0	23.4
1971 ASM	(NA)	(NA)	6.4	51.1	4.8	9.8	37.8	119.4	244.2	362.6	6.3
1970 ASM	(NA)	(NA)	6.0	45.7	4.4	8.5	33.8	104.3	223.9	331.5	4.7
1969 ASM	(NA)	(NA)	5.9	41.5	4.0	8.2	26.1	98.7	222.8	323.7	9.0
1968 ASM	(NA)	(NA)	6.3	41.6	4.3	8.7	26.4	106.1	211.4	310.0	8.9
1967 Census	331	65	5.9	37.1	4.2	8.1	23.4	86.2	192.2	280.2	7.6
1966 ASM	(NA)	(NA)	6.7	38.3	4.6	9.3	25.4	93.2	189.9	282.6	16.7
1965 ASM	(NA)	(NA)	6.7	36.9	4.7	9.4	24.6	95.4	181.4	272.0	9.4
1964 ASM	(NA)	(NA)	6.3	37.7	4.3	8.9	24.5	80.5	177.1	256.8	14.3
1963 Census	342	69	6.8	38.0	4.6	9.1	24.7	81.7	(NA)	(NA)	14.0

(NA) Not available. (S) Withheld because estimate did not meet publication standards.

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. For data prior to 1963, see 1972 Census of Manufactures, vol. I, table 7, General Summary chapter.

[2]Including administrative offices and auxiliaries (see appendix B).

[3]Aggregate of cost of materials and value of shipments figures include extensive duplication, since products of some industries are used as materials by others (see appendix B).

General Summary—Industry Statistics

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Table 1. Selected Statistics by Major Industry Group and Industry: 1977 and 1972

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
	ALL INDUSTRIES, TOTAL	300 393	359 928	118 699	19 590.1	264 013.1	13 691.0	26 686.7	157 163.7	585 165.6	1358 526.4
20	FOOD AND KINDRED PRODUCTS	20 616	26 656	11 038	1 520.0	18 543.6	1 072.0	2 112.4	11 730.7	56 062.2	192 911.6
201	MEAT PRODUCTS	3 967	4 534	1 715	309.1	3 701.5	254.0	499.8	2 817.0	7 478.0	46 276.3
2011	MEATPACKING PLANTS	2 403	2 590	737	146.2	2 110.6	116.5	237.2	1 625.9	4 010.1	31 208.2
2013	SAUSAGES AND OTHER PREPARED MEATS	1 213	1 345	570	65.0	891.9	50.1	100.4	626.6	2 039.0	8 465.4
2016	POULTRY DRESSING PLANTS	313	446	313	86.8	612.3	77.7	143.6	496.3	1 236.9	5 746.1
2017	POULTRY AND EGG PROCESSING	124	153	95	11.1	86.8	9.8	18.6	68.1	192.0	856.6
202	DAIRY PRODUCTS	2 837	3 731	1 617	153.9	1 938.9	85.0	175.6	987.6	5 648.3	26 009.8
2021	CREAMERY BUTTER	123	138	39	2.3	26.3	1.7	3.6	18.1	74.6	900.5
2022	CHEESE, NATURAL AND PROCESSED	660	791	293	26.7	287.0	22.2	44.0	223.4	948.8	6 126.0
2023	CONDENSED AND EVAPORATED MILK	167	266	148	12.3	163.2	9.0	18.9	110.7	805.2	3 188.5
2024	ICE CREAM AND FROZEN DESSERTS	507	612	229	19.1	247.0	11.4	22.7	130.1	643.7	2 008.6
2026	FLUID MILK	1 516	1 924	908	93.5	1 215.4	40.8	86.3	505.4	3 175.9	13 786.2
203	PRESERVED FRUITS AND VEGETABLES	1 752	2 379	1 263	234.7	2 336.0	198.7	377.2	1 792.8	7 684.5	20 332.8
2032	CANNED SPECIALTIES	172	203	88	26.4	296.5	21.5	42.4	224.3	[2]1 142.6	[2]2 829.2
2033	CANNED FRUITS AND VEGETABLES	648	900	519	82.6	789.8	72.6	135.0	636.6	[2]2 542.4	[2]6 662.8
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	143	184	87	14.4	153.9	11.7	22.1	111.5	472.6	1 142.4
2035	PICKLES, SAUCES, SALAD DRESSINGS	380	438	168	23.5	250.2	18.9	35.7	184.9	[2]986.5	[2]2 996.5
2037	FROZEN FRUITS AND VEGETABLES	187	260	193	46.8	425.9	41.5	78.5	344.7	[2]1 322.5	[2]3 297.5
2038	FROZEN SPECIALTIES	330	394	208	41.0	419.8	32.5	63.4	290.9	[2]1 217.7	[2]3 404.4
204	GRAIN MILL PRODUCTS	2 094	3 043	1 076	112.8	1 575.6	79.3	165.5	1 034.2	6 625.6	22 344.2
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	301	407	173	15.6	222.3	11.3	24.6	153.4	824.5	3 683.3
2043	CFREAL BREAKFAST FOODS	32	48	35	16.4	287.4	13.8	28.8	230.0	1 447.0	2 497.5
2044	RICE MILLING	47	59	39	4.8	61.4	4.0	8.4	40.7	341.0	1 263.4
2045	BLENDED AND PREPARED FLOUR	111	137	60	8.4	104.5	5.8	12.1	68.0	408.7	1 011.7
2046	WET CORN MILLING	24	39	27	10.9	191.1	7.8	15.7	132.2	666.7	2 014.8
2047	DOG, CAT, AND OTHER PET FOOD	218	290	132	17.7	245.5	13.4	27.7	170.3	1 392.9	3 086.7
2048	PREPARED FEEDS, NEC	1 435	2 063	610	39.1	463.4	23.2	48.2	239.6	1 544.7	8 786.8
205	BAKERY PRODUCTS	2 797	3 386	1 289	221.7	2 866.1	131.4	258.7	1 525.0	7 073.2	[3]12 235.3
2051	BREAD, CAKE, AND RELATED PRODUCTS	2 549	3 062	1 117	178.0	2 335.8	97.4	191.7	1 152.8	5 377.2	9 274.9
2052	COOKIES AND CRACKERS	263	324	172	43.8	530.2	34.0	67.0	372.2	1 695.9	2 960.5
206	SUGAR, CONFECTIONERY PRODUCTS	990	1 198	518	105.4	1 206.2	83.7	164.8	868.3	4 150.9	10 839.8
2061	RAW CANE SUGAR	49	65	55	8.0	95.8	6.3	13.6	70.8	275.7	704.0
2062	CANE SUGAR REFINING	27	40	27	10.2	168.9	7.2	15.4	116.4	526.2	2 260.0
2063	BEET SUGAR	14	57	52	11.4	143.3	9.9	21.3	119.0	344.9	1 181.7
2065	CONFECTIONERY PRODUCTS	867	962	343	58.0	584.2	47.0	89.1	415.5	2 028.0	4 498.4
2066	CHOCOLATE AND COCOA PRODUCTS	47	56	27	10.0	130.2	7.2	13.9	84.0	640.6	1 629.2
2067	CHEWING GUM	14	18	14	7.7	83.9	6.0	11.6	62.7	335.5	566.5
207	FATS AND OILS	591	869	458	41.1	561.4	29.6	64.3	365.4	1 905.2	14 480.0
2074	COTTONSEED OIL MILLS	62	97	71	5.2	51.5	4.1	9.3	35.9	197.4	859.2
2075	SOYBEAN OIL MILLS	65	121	87	9.4	130.7	6.6	14.7	87.8	373.8	7 580.0
2076	VEGETABLE OIL MILLS, NEC	37	42	19	1.5	17.6	1.1	2.5	12.2	58.4	360.8
2077	ANIMAL AND MARINE FATS AND OILS	384	500	201	12.4	171.2	8.7	19.2	103.8	583.8	1 655.0
2079	SHORTENING AND COOKING OILS	66	109	80	12.7	190.5	9.0	18.7	125.8	691.8	4 025.0
208	BEVERAGES	2 440	3 104	1 689	195.1	2 848.9	99.5	200.1	1 368.7	9 900.9	23 329.0
2082	MALT BEVERAGES	81	131	91	44.0	857.5	31.1	61.1	589.1	2 602.3	6 652.6
2083	MALT	27	40	27	1.6	27.4	1.2	2.5	20.0	101.4	499.3
2084	WINES, BRANDY, AND BRANDY SPIRITS	233	269	76	9.2	134.1	5.4	10.5	69.6	510.4	1 362.5
2085	DISTILLED LIQUOR, EXCEPT BRANDY	64	104	77	15.7	232.1	12.0	23.8	168.1	[2]1 149.7	[2]2 296.1
2086	BOTTLED AND CANNED SOFT DRINKS	1 758	2 192	1 286	114.1	1 448.8	43.4	89.3	444.8	4 084.5	10 007.2
2087	FLAVORING EXTRACTS, SIRUPS, NEC	319	368	132	10.5	149.1	6.3	12.9	77.1	1 452.6	2 511.3
209	MISC. FOODS, KINDRED PRODUCTS	3 794	4 412	1 413	146.2	1 508.8	110.8	206.4	971.6	5 595.7	17 064.3
2091	CANNED AND CURED SEAFOODS	215	255	118	16.0	147.0	13.8	25.0	113.4	441.0	1 440.6
2092	FRESH OR FROZEN PACKAGED FISH	906	990	406	34.3	260.8	29.6	49.7	188.9	705.5	2 664.9
2095	ROASTED COFFEE	133	167	89	10.9	164.8	7.2	15.0	103.2	988.0	5 616.4
2097	MANUFACTURED ICE	543	678	63	5.3	47.8	3.5	6.7	25.5	106.1	149.4
2098	MACARONI AND SPAGHETTI	189	205	68	8.2	96.0	5.7	12.3	56.5	327.0	662.0
2099	FOOD PREPARATIONS, NEC	1 872	2 117	669	71.5	792.6	50.9	97.7	484.1	3 028.1	6 531.0
21	TOBACCO PRODUCTS	155	228	123	60.6	750.7	50.4	92.6	570.7	4 334.1	9 050.6
2111	CIGARETTES	8	14	13	39.0	567.7	32.5	58.9	442.0	3 803.1	6 377.4
2121	CIGARS	94	101	34	7.7	54.9	7.0	12.7	44.0	125.6	242.7
2131	CHEWING AND SMOKING TOBACCO	28	35	19	3.2	32.1	2.5	4.4	22.0	188.9	354.3
2141	TOBACCO STEMMING AND REDRYING	38	78	57	10.7	96.1	8.4	16.6	62.6	216.5	2 076.2
22	TEXTILE MILL PRODUCTS	5 733	7 202	4 131	875.7	7 881.4	764.6	1 523.1	6 202.8	16 104.5	40 550.5
2211	WEAVING MILLS, COTTON	211	314	192	117.2	1 046.8	107.2	214.3	902.0	1 944.5	4 431.2
2221	WEAV'G MILLS, MANMADE FIBER, SILK	267	449	351	151.0	1 428.7	134.6	275.4	1 168.7	2 790.9	6 325.9
2231	WEAVING AND FINISHING MILLS, WOOL	153	165	84	14.6	136.6	12.6	25.9	105.8	312.9	583.3
2241	NARROW FABRIC MILLS	291	335	182	20.8	171.6	18.1	35.7	130.9	350.8	682.9
225	KNITTING MILLS	2 318	2 617	1 511	235.9	1 911.0	205.9	389.4	1 469.9	3 863.0	9 470.0
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	176	200	119	26.6	191.3	23.8	44.1	156.6	457.0	871.2
2252	HOSIERY, NEC	382	415	257	32.2	218.7	29.0	52.6	179.4	401.5	921.3
2253	KNIT OUTERWEAR MILLS	903	953	551	73.0	582.0	62.7	114.0	422.0	1 159.5	2 335.9
2254	KNIT UNDERWEAR MILLS	80	92	74	25.2	175.2	23.4	42.7	151.8	305.7	648.9
2257	CIRCULAR KNIT FABRIC MILLS	462	530	310	51.8	493.0	44.0	88.2	371.2	1 033.5	3 169.4
2258	WARP KNIT FABRIC MILLS	213	235	153	23.7	226.7	20.0	41.9	169.8	464.8	1 427.6
2259	KNITTING MILLS, NEC	191	192	47	3.4	24.1	3.1	6.0	19.0	40.9	95.7
226	TEXTILE FINISHING, EXCEPT WOOL	602	678	395	72.1	740.0	59.8	123.5	554.0	1 416.7	3 994.3
2261	FINISHING PLANTS, COTTON	194	210	94	20.8	211.4	17.3	35.7	162.2	350.7	759.5
2262	FINISH. PLTS, MANMADE FIBER, SILK	248	285	189	37.2	396.2	30.4	63.7	293.4	792.0	2 404.3
2269	FINISHING PLANTS, NEC	176	183	112	14.1	132.3	12.1	24.1	98.4	274.0	830.6

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977—Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
	ALL INDUSTRIES, TOTAL. . . .	47 459.0	8 499.5	38 959.5	188 436.4	174 865.0	(NA)	(NA)	19 028.7	174 205.5	353 994.0	756 534.3	24 077.7
20	FOOD AND KINDRED PRODUCTS. . . .	4 214.9	908.5	3 306.4	16 984.9	16 416.3	(NA)	(NA)	1 569.3	12 920.2	35 614.8	115 051.5	2 355.0
201	MEAT PRODUCTS.	532.7	144.7	387.9	1 379.7	1 273.1	(NA)	(NA)	307.7	2 543.6	4 960.9	31 477.9	299.6
2011	MEATPACKING PLANTS	236.7	63.6	173.1	700.1	651.2	98	84	157.5	1 532.1	2 968.1	23 003.4	167.7
2013	SAUSAGES AND OTHER PREPARED MEATS. .	151.6	40.4	111.2	406.4	375.1	97	60	58.1	542.2	1 099.9	4 632.4	74.0
2016	POULTRY DRESSING PLANTS.	126.1	36.6	89.5	206.8	188.3	96	72	77.6	391.8	724.4	3 254.1	45.5
2017	POULTRY AND EGG PROCESSING	18.3	4.2	14.1	66.3	58.6	96	73	14.6	77.5	168.5	588.1	12.4
202	DAIRY PRODUCTS	389.0	89.3	299.7	1 180.2	1 096.9	(NA)	(NA)	188.7	1 596.4	4 054.1	16 311.5	274.7
2021	CREAMERY BUTTER.	8.3	1.9	6.4	24.2	25.4	80	61	4.0	31.0	82.3	808.3	7.8
2022	CHEESE, NATURAL AND PROCESSED. . . .	57.2	12.9	44.3	550.4	528.3	91	93	25.2	186.3	492.3	3 195.0	49.9
2023	CONDENSED AND EVAPORATED MILK. . .	56.2	12.1	44.2	175.0	164.4	79	76	12.3	108.3	467.3	1 667.8	32.1
2024	ICE CREAM AND FROZEN DESSERTS. . .	56.8	20.3	36.4	126.6	116.9	94	75	21.1	184.7	459.8	1 244.7	35.8
2026	FLUID MILK	210.5	42.0	168.5	304.0	261.8	88	94	126.1	1 086.1	2 552.4	9 395.7	149.2
203	PRESERVED FRUITS AND VEGETABLES. .	470.5	104.8	365.7	4 537.7	4 193.5	(NA)	(NA)	233.1	1 533.5	4 514.4	11 478.6	358.4
2032	CANNED SPECIALTIES	46.7	11.2	35.5	527.8	508.4	80	89	29.1	217.8	814.6	1 876.6	44.1
2033	CANNED FRUITS AND VEGETABLES . . .	147.1	33.3	113.8	2 233.5	2 062.1	90	89	89.8	559.9	1 625.1	4 043.8	113.1
2034	DEHYD. FRUITS, VEGETABLES, SOUPS . .	52.5	15.6	36.9	281.9	267.0	94	88	12.4	84.3	235.7	607.3	18.9
2035	PICKLES, SAUCES, SALAD DRESSINGS . .	52.3	11.7	40.6	447.8	426.7	69	86	20.8	146.2	428.0	1 166.7	43.4
2037	FROZEN FRUITS AND VEGETABLES . . .	87.7	14.1	73.6	724.4	640.3	89	89	42.8	261.2	694.6	1 848.8	57.8
2038	FROZEN SPECIALTIES	84.1	18.9	65.2	322.2	288.9	93	93	38.3	264.1	716.3	1 935.5	81.0
204	GRAIN MILL PRODUCTS.	620.0	126.2	493.8	1 714.5	1 674.5	(NA)	(NA)	111.4	1 012.8	3 698.7	12 162.2	266.6
2041	FLOUR, OTHER GRAIN MILL PRODUCTS . .	52.4	15.2	37.2	263.2	297.8	98	71	16.1	152.8	509.8	2 380.0	30.0
2043	CEREAL BREAKFAST FOODS	79.8	10.8	69.0	152.1	150.3	74	93	12.9	140.9	688.4	1 125.5	24.9
2044	RICE MILLING	40.0	11.5	28.5	411.4	329.4	100	96	4.0	30.9	148.3	680.6	6.3
2045	BLENDED AND PREPARED FLOUR	17.6	5.8	11.8	80.6	72.3	94	75	7.9	74.9	306.8	704.6	13.7
2046	WET CORN MILLING	232.2	34.2	198.0	158.4	169.8	94	93	12.1	137.7	331.2	832.3	59.7
2047	DOG, CAT, AND OTHER PET FOOD . . .	67.2	13.4	53.7	200.7	193.8	92	88	14.3	135.1	613.8	1 401.9	61.1
2048	PREPARED FEEDS, NEC.	130.9	35.3	95.6	448.2	461.0	96	95	44.0	340.5	1 100.5	5 037.1	70.8
205	BAKERY PRODUCTS.	365.4	78.4	287.1	407.1	382.5	(NA)	(NA)	234.6	2 029.0	4 537.0	7 895.5	207.3
2051	BREAD, CAKE, AND RELATED PRODUCTS. .	279.9	52.2	227.6	235.1	220.6	99	98	193.5	1 692.2	3 518.1	6 132.0	170.6
2052	COOKIES AND CRACKERS	85.6	26.1	59.4	172.0	161.9	94	94	41.1	336.9	1 018.9	1 763.5	36.7
206	SUGAR, CONFECTIONERY PRODUCTS. . .	313.0	60.3	252.6	1 661.8	1 551.8	(NA)	(NA)	107.1	831.5	2 472.9	6 620.1	186.2
2061	RAW CANE SUGAR	43.4	4.0	39.3	107.9	97.3	100	99	7.1	60.7	151.7	406.5	28.8
2062	CANE SUGAR REFINING.	53.4	10.8	42.7	345.1	275.9	99	100	10.9	119.5	383.9	1 742.7	23.6
2063	BEET SUGAR	43.5	4.6	38.9	467.1	469.2	99	99	11.5	92.3	310.5	880.2	34.9
2065	CONFECTIONERY PRODUCTS	115.5	25.9	89.5	450.2	442.6	95	94	60.7	428.2	1 115.7	2 472.5	53.4
2066	CHOCOLATE AND COCOA PRODUCTS . . .	35.0	11.2	23.8	175.1	139.2	94	94	10.0	83.3	282.6	735.5	26.5
2067	CHEWING GUM.	22.1	3.7	18.4	116.4	127.6	92	77	6.9	53.6	228.4	382.6	19.0
207	FATS AND OILS.	208.1	37.3	170.9	1 484.2	1 972.7	(NA)	(NA)	40.3	366.4	1 290.5	6 908.8	121.4
2074	COTTONSEED OIL MILLS	13.0	2.9	10.0	195.4	249.6	88	89	5.5	34.2	88.2	458.7	9.9
2075	SOYBEAN OIL MILLS.	72.3	14.1	58.2	804.9	1 205.9	87	98	9.1	82.4	350.0	3 357.2	41.9
2076	VEGETABLE OIL MILLS, NEC	7.4	2.1	5.3	89.3	83.1	86	58	1.2	11.6	44.8	261.0	3.1
2077	ANIMAL AND MARINE FATS AND OILS. .	53.3	8.9	44.3	70.2	54.0	94	68	11.6	106.0	296.7	764.7	31.0
2079	SHORTENING AND COOKING OILS. . . .	62.1	9.2	53.0	324.3	380.1	89	77	12.9	133.7	512.6	2 068.1	35.5
208	BEVERAGES.	993.9	197.0	796.8	2 940.0	2 759.8	(NA)	(NA)	212.3	2 032.7	6 689.0	13 869.4	468.2
2082	MALT BEVERAGES	410.3	74.8	335.5	444.6	406.5	100	100	51.5	652.8	1 993.6	4 054.4	155.6
2083	MALT	39.6	19.5	20.1	134.2	183.0	100	100	1.7	20.0	55.0	226.3	7.9
2084	WINES, BRANDY, AND BRANDY SPIRITS. .	51.1	13.6	37.6	559.5	513.5	98	97	9.4	91.5	407.9	865.0	43.7
2085	DISTILLED LIQUOR, EXCEPT BRANDY. . .	36.3	9.8	26.5	1 027.9	996.6	98	98	18.4	183.1	1 024.0	1 797.9	32.8
2086	BOTTLED AND CANNED SOFT DRINKS . . .	423.6	72.5	351.0	551.7	467.2	98	97	121.1	984.4	2 336.7	5 453.8	207.1
2087	FLAVORING EXTRACTS, SIRUPS, NEC. . .	33.1	6.9	26.2	222.1	193.1	92	86	10.1	100.9	871.9	1 472.0	21.1
209	MISC. FOODS, KINDRED PRODUCTS. . .	322.4	70.5	251.9	1 679.9	1 511.5	(NA)	(NA)	134.2	974.2	3 397.3	8 335.5	172.5
2091	CANNED AND CURED SEAFOODS.	28.1	8.9	19.2	311.1	256.6	81	96	16.0	99.0	231.4	809.8	15.5
2092	FRESH OR FROZEN PACKAGED FISH. . . .	56.8	19.0	37.8	376.7	313.3	97	97	25.0	129.6	287.5	1 084.4	17.8
2095	ROASTED COFFEE	41.9	1.4	40.4	405.3	383.9	96	98	12.9	131.5	825.8	2 328.7	31.5
2097	MANUFACTURED ICE	16.9	5.2	11.6	4.4	3.3	99	99	6.8	42.6	91.7	116.4	8.9
2098	MACARONI AND SPAGHETTI	12.6	3.3	9.2	48.4	45.1	99	83	7.3	59.4	155.7	348.3	7.1
2099	FOOD PREPARATIONS, NEC	166.2	32.6	133.6	534.1	509.4	89	83	66.2	512.1	1 805.2	3 647.9	91.8
21	TOBACCO PRODUCTS	181.5	56.7	124.7	3 711.9	3 615.2	(NA)	(NA)	66.3	502.1	2 637.2	5 920.2	133.2
2111	CIGARETTES	118.0	41.2	76.8	2 652.2	2 564.7	97	99	38.1	344.8	2 188.4	3 744.6	101.5
2121	CIGARS	3.3	.3	3.0	57.8	54.9	(D)	92	13.5	68.2	191.9	338.7	5.4
2131	CHEWING AND SMOKING TOBACCO. . . .	7.3	1.9	5.4	99.8	94.7	97	75	3.3	23.0	103.2	180.2	12.1
2141	TOBACCO STEMMING AND REDRYING. . .	52.8	13.3	39.6	902.2	900.9	(D)	94	11.4	66.0	153.6	1 656.8	14.1
22	TEXTILE MILL PRODUCTS.	1 223.5	198.9	1 024.5	5 509.9	5 103.5	(NA)	(NA)	952.6	6 051.0	11 715.8	28 063.9	1 127.4
2211	WEAVING MILLS, COTTON.	187.2	32.8	154.4	657.8	553.9	84	66	121.3	745.2	1 256.3	2 660.6	72.7
2221	WEAVING MILLS, MANMADE FIBER, SILK. .	260.2	23.3	236.9	871.0	834.8	86	74	149.7	979.4	1 831.6	3 856.6	136.2
2231	WEAVING AND FINISHING MILLS, WOOL. .	14.9	4.0	11.0	111.0	96.2	83	80	19.4	132.1	239.4	450.1	11.6
2241	NARROW FABRIC MILLS.	16.2	4.0	12.1	109.3	106.1	96	97	27.1	162.3	289.0	566.2	11.2
225	KNITTING MILLS	245.2	48.8	196.4	1 315.4	1 218.8	(NA)	(NA)	276.5	1 647.0	3 180.7	7 703.3	401.6
2251	WOMEN'S HOSIERY, EXCEPT SOCKS. . . .	16.6	3.9	12.6	122.9	119.8	91	95	49.5	247.4	438.8	984.7	15.9
2252	HOSIERY, NEC	14.8	3.6	11.3	127.3	118.8	96	96	32.6	159.7	295.2	600.6	12.5
2253	KNIT OUTERWEAR MILLS	49.9	5.3	44.6	393.4	342.5	90	53	74.4	430.4	799.5	1 703.8	45.9
2254	KNIT UNDERWEAR MILLS	14.5	4.2	10.2	131.3	116.8	80	86	26.0	134.6	251.5	544.6	7.0
2257	CIRCULAR KNIT FABRIC MILLS	91.6	11.5	80.0	316.2	307.2	90	88	68.1	492.6	1 036.0	2 808.8	270.1
2258	WARP KNIT FABRIC MILLS	56.3	20.1	36.2	209.0	198.8	93	83	22.0	159.2	317.8	987.7	48.2
2259	KNITTING MILLS, NEC.	1.5	.2	1.4	15.2	14.8	97	81	3.9	23.1	41.8	73.1	2.0
226	TEXTILE FINISHING, EXCEPT WOOL . .	125.2	20.6	104.6	434.6	396.7	(NA)	(NA)	79.5	564.0	1 113.9	2 625.8	115.5
2261	FINISHING PLANTS, COTTON	24.8	3.1	21.6	80.1	68.2	83	39	25.7	177.2	322.0	623.3	31.5
2262	FINISH. PLTS, MANMADE FIBER, SILK. .	75.9	12.2	63.6	266.5	258.4	80	57	35.2	263.2	521.5	1 365.2	48.8
2269	FINISHING PLANTS, NEC.	24.6	5.3	19.4	88.0	70.1	95	43	18.5	123.5	270.4	637.3	35.2

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
227	FLOOR COVERING MILLS	533	592	285	55.8	556.7	44.3	91.4	379.7	1 530.1	4 774.5
2271	WOVEN CARPETS AND RUGS	71	71	16	2.8	24.8	2.5	4.7	20.0	47.1	138.7
2272	TUFTED CARPETS AND RUGS	397	449	251	50.2	506.5	39.4	82.2	341.1	1 438.2	4 520.7
2279	CARPETS AND RUGS, NEC	72	72	18	2.8	25.3	2.4	4.5	18.6	44.8	115.2
228	YARN AND THREAD MILLS	529	798	608	140.5	1 184.4	127.3	258.2	994.3	2 254.5	6 114.4
2281	YARN MILLS, EXCEPT WOOL	274	456	370	93.0	782.7	85.6	175.2	675.5	1 480.3	3 864.9
2282	THROWING AND WINDING MILLS	170	196	148	30.5	262.3	27.1	54.5	210.4	490.4	1 510.1
2283	WOOL YARN MILLS	71	76	43	4.1	33.1	3.7	7.3	27.3	81.8	194.9
2284	THREAD MILLS	58	70	47	12.8	106.3	10.9	21.1	81.1	201.9	544.4
229	MISCELLANEOUS TEXTILE GOODS	1 150	1 254	523	67.9	705.6	54.8	109.2	497.5	1 641.1	4 173.9
2291	FELT GOODS, EXC. WOVEN FELT, HATS	37	46	27	4.3	50.7	3.3	6.7	33.1	103.0	197.7
2292	LACE GOODS	68	71	24	2.2	17.9	1.9	3.6	14.0	27.7	45.9
2293	PADDINGS AND UPHOLSTERY FILLING	113	120	56	5.2	52.9	4.1	8.4	36.4	124.5	251.8
2294	PROCESSED TEXTILE WASTE	95	99	39	3.7	31.2	3.1	6.3	23.1	61.7	178.4
2295	COATED FABRICS, NOT RUBBERIZED	175	191	109	13.6	182.3	9.9	20.9	117.1	413.1	1 059.0
2296	TIRE CORD AND FABRIC	8	20	20	9.6	94.7	8.5	16.2	78.1	242.1	1 013.2
2297	NONWOVEN FABRICS	81	100	74	13.0	139.8	10.4	21.1	100.2	386.0	864.4
2298	CORDAGE AND TWINE	151	171	84	9.5	79.5	7.9	14.2	53.7	173.8	332.2
2299	TEXTILE GOODS, NEC	432	436	90	6.7	56.6	5.7	11.8	41.8	109.2	231.1
23	APPAREL, OTHER TEXTILE PRODS	23 754	26 505	11 932	1 334.3	9 658.6	1 156.6	2 037.6	7 252.6	19 671.3	40 245.1
2311	MEN'S AND BOYS' SUITS AND COATS	619	737	467	98.7	822.2	86.2	152.9	645.4	1 574.4	2 767.5
232	MEN'S AND BOYS' FURNISHINGS	2 121	3 013	2 129	364.5	2 340.1	323.4	575.3	1 863.5	4 935.2	10 003.2
2321	MEN'S, BOYS' SHIRTS, NIGHTWEAR	669	928	679	114.7	711.3	103.0	184.1	569.9	1 445.7	2 934.6
2322	MEN'S AND BOYS' UNDERWEAR	56	76	59	15.1	92.2	13.7	23.8	79.0	218.2	419.8
2323	MEN'S AND BOYS' NECKWEAR	198	207	81	6.3	57.5	5.1	8.7	33.4	117.5	223.8
2327	MEN'S AND BOYS' SEPARATE TROUSERS	404	514	335	70.9	474.0	61.9	107.6	372.0	845.6	1 718.0
2328	MEN'S AND BOYS' WORK CLOTHING	347	656	575	113.7	719.4	101.6	183.7	589.9	1 765.4	3 641.9
2329	MEN'S AND BOYS' CLOTHING, NEC	553	632	400	43.8	285.8	38.1	67.4	219.3	542.8	1 065.1
233	WOMEN'S AND MISSES' OUTERWEAR	11 121	11 834	5 556	447.5	3 152.8	387.3	660.9	2 304.2	6 429.8	12 720.3
2331	WOMEN'S, MISSES' BLOUSES, WAISTS	1 292	1 415	952	83.3	569.0	73.8	125.0	424.3	1 192.5	2 333.6
2335	WOMEN'S AND MISSES' DRESSES	6 753	6 953	2 473	175.3	1 197.1	153.0	261.0	882.5	2 233.7	4 188.6
2337	WOMEN'S, MISSES' SUITS AND COATS	1 558	1 672	1 067	84.7	654.0	72.7	123.3	468.5	1 429.6	2 912.9
2339	WOMEN'S, MISSES' OUTERWEAR, NEC	1 625	1 794	1 064	104.1	732.7	87.9	151.5	528.9	1 574.0	3 285.1
234	WOMEN'S, CHILDREN'S UNDERGARMS	693	878	595	91.8	613.2	78.6	139.6	448.9	1 249.7	2 430.8
2341	WOMEN'S AND CHILDREN'S UNDERWEAR	548	698	479	72.9	472.1	63.4	112.6	359.8	915.3	1 780.8
2342	BRASSIERES AND ALLIED GARMENTS	150	180	116	18.9	141.1	15.2	27.0	89.1	334.4	650.0
235	HATS, CAPS, AND MILLINERY	381	409	169	15.1	105.2	13.3	23.8	79.1	185.5	359.9
2351	MILLINERY	151	151	47	2.7	20.2	2.2	3.7	13.7	32.8	75.1
2352	HATS AND CAPS, EXCEPT MILLINERY	230	258	122	12.4	85.1	11.1	20.1	65.3	152.7	284.8
236	CHILDREN'S OUTERWEAR	844	1 002	686	71.2	459.1	61.2	107.6	348.9	879.2	1 717.3
2361	CHILDREN'S DRESSES AND BLOUSES	455	519	374	35.2	228.4	30.4	52.5	169.7	444.6	824.7
2363	CHILDREN'S COATS AND SUITS	108	120	70	6.7	45.8	5.7	9.7	35.1	90.2	173.8
2369	CHILDREN'S OUTERWEAR, NEC	307	363	242	29.3	184.9	25.1	45.4	144.1	344.4	718.8
2371	FUR GOODS	620	620	48	4.0	51.5	3.2	5.1	36.2	112.8	383.4
238	MISC. APPAREL AND ACCESSORIES	1 207	1 284	593	56.3	407.5	47.9	84.8	288.2	845.3	1 649.5
2381	FABRIC DRESS AND WORK GLOVES	100	132	92	10.9	69.0	9.9	18.0	56.3	160.9	312.4
2384	ROBES AND DRESSING GOWNS	137	151	98	9.5	64.3	8.2	14.7	47.8	139.5	288.3
2385	WATERPROOF OUTERGARMENTS	157	167	105	12.0	89.4	10.1	17.9	61.6	194.4	348.8
2386	LEATHER AND SHEEP LINED CLOTHING	236	239	80	6.7	54.7	5.9	10.4	41.1	94.8	214.1
2387	APPAREL BELTS	281	284	119	9.4	76.1	7.3	12.6	44.6	150.3	286.9
2389	APPAREL AND ACCESSORIES, NEC	304	311	99	7.8	54.0	6.5	11.2	36.9	105.4	199.0
239	MISC. FABRICATED TEXTILE PRODS	6 444	6 728	1 689	185.2	1 706.9	155.5	287.6	1 238.3	3 459.4	8 213.2
2391	CURTAINS AND DRAPERIES	1 650	1 712	324	31.7	224.7	27.2	47.9	163.6	407.3	1 013.1
2392	HOUSEFURNISHINGS, NEC	980	1 051	403	47.5	366.4	39.8	75.4	260.0	782.9	2 294.0
2393	TEXTILE BAGS	211	228	90	8.2	66.7	6.8	12.9	46.8	122.2	321.8
2394	CANVAS AND RELATED PRODUCTS	987	1 003	148	13.9	121.6	11.0	19.3	75.1	237.4	486.8
2395	PLEATING AND STITCHING	770	778	206	16.1	130.9	13.2	22.9	89.0	281.8	620.2
2396	AUTOMOTIVE AND APPAREL TRIMMINGS	686	715	188	30.9	476.4	26.3	51.7	374.0	1 000.2	2 166.3
2397	SCHIFFLI MACHINE EMBROIDERIES	357	363	58	6.0	56.3	5.3	10.4	42.5	96.7	158.0
2399	FABRICATED TEXTILE PRODUCTS, NEC	845	878	272	31.1	263.8	26.0	47.1	187.4	531.0	1 152.9
24	LUMBER AND WOOD PRODUCTS	34 962	37 302	7 056	692.4	7 424.7	594.8	1 147.6	5 795.0	16 222.9	39 919.4
2411	LOGGING CAMPS, LOG CONTRACTORS	15 344	15 469	708	83.3	1 009.0	74.5	127.7	840.1	2 418.7	6 230.1
242	SAWMILLS AND PLANING MILLS	8 263	9 000	2 273	211.3	2 228.3	187.8	375.8	1 849.0	4 975.0	11 969.3
2421	SAWMILLS, PLANING MILLS, GENERAL	6 966	7 544	1 827	175.2	1 943.0	155.8	315.6	1 622.7	4 452.8	10 866.7
2426	HARDWOOD DIMENSION AND FLOORING	845	890	345	29.1	225.0	25.8	49.8	177.5	413.1	850.0
2429	SPECIAL PRODUCT SAWMILLS, NEC	522	566	101	7.0	60.3	6.1	10.4	48.8	109.1	252.6
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	5 710	6 149	1 878	197.1	2 216.4	167.4	328.8	1 714.9	4 700.4	11 381.9
2431	MILLWORK	2 209	2 333	692	68.6	742.2	56.6	108.4	542.0	1 497.9	3 928.1
2434	WOOD KITCHEN CABINETS	2 451	2 583	510	46.2	481.1	38.7	72.3	352.3	868.6	1 590.8
2435	HARDWOOD VENEER AND PLYWOOD	274	321	227	22.3	211.5	19.1	37.9	162.0	420.2	1 250.4
2436	SOFTWOOD VENEER AND PLYWOOD	129	256	224	46.2	634.6	41.9	89.4	556.9	1 583.7	3 804.8
2439	STRUCTURAL WOOD MEMBERS, NEC	620	656	225	13.8	147.0	11.0	20.8	101.6	330.0	807.7
244	WOOD CONTAINERS	1 882	1 949	540	37.8	299.6	33.4	61.3	233.7	539.7	1 217.1
2441	NAILED WOOD BOXES AND SHOOK	391	396	110	8.6	68.6	7.5	13.7	53.6	116.2	263.3
2448	WOOD PALLETS AND SKIDS	1 267	1 290	348	20.3	163.8	17.9	32.1	126.3	303.1	698.0
2449	WOOD CONTAINERS, NEC	238	263	82	8.9	67.2	8.0	15.5	53.7	120.4	255.8
245	WOOD BUILDINGS AND MOBILE HOMES	803	1 165	752	79.5	858.2	63.0	121.1	576.2	1 789.1	5 147.9

See footnotes at end of table.

Table 1. Selected Statistics by Major Industry Group and Industry: 1977 and 1972—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
227	FLOOR COVERING MILLS	82.5	12.1	70.4	753.5	694.2	(NA)	(NA)	59.9	415.3	1 076.0	3 153.0	74.7
2271	WOVEN CARPETS AND RUGS	1.1	.4	.8	26.9	23.9	(D)	81	6.5	44.5	93.2	212.3	3.2
2272	TUFTED CARPETS AND RUGS	78.7	11.1	67.6	696.8	644.1	96	99	50.1	348.0	926.8	2 775.2	67.1
2279	CARPETS AND RUGS, NEC	2.6	.6	2.0	29.9	26.2	(D)	74	3.3	23.6	58.2	165.5	4.4
228	YARN AND THREAD MILLS	180.0	23.9	156.1	616.0	592.1	(NA)	(NA)	147.5	866.1	1 579.5	4 242.8	221.7
2281	YARN MILLS, EXCEPT WOOL	114.4	13.5	101.0	363.6	362.2	92	72	89.6	516.3	867.2	2 248.3	96.3
2282	THROWING AND WINDING MILLS	51.1	8.3	42.9	132.3	122.1	92	55	38.0	230.9	477.8	1 427.6	113.7
2283	WOOL YARN MILLS	2.7	.2	2.5	17.4	18.7	90	71	8.3	49.7	92.7	221.4	4.2
2284	THREAD MILLS	11.8	2.0	9.8	102.7	89.2	96	91	11.7	69.2	141.8	345.4	7.5
229	MISCELLANEOUS TEXTILE GOODS	112.0	29.4	82.6	641.3	610.5	(NA)	(NA)	71.9	539.7	1 149.4	2 813.1	82.3
2291	FELT GOODS, EXC. WOVEN FELT, HATS	5.7	1.5	4.3	36.3	33.0	82	82	5.0	38.3	80.5	146.5	2.8
2292	LACE GOODS	1.0	.2	.8	12.6	11.7	98	98	2.9	17.3	29.4	47.1	1.7
2293	PADDINGS AND UPHOLSTERY FILLING	5.8	1.9	4.0	19.6	19.1	92	84	4.4	34.2	64.5	134.6	2.9
2294	PROCESSED TEXTILE WASTE	5.8	1.9	3.9	27.5	26.2	98	95	3.6	22.2	50.9	133.8	3.2
2295	COATED FABRICS, NOT RUBBERIZED	26.0	7.8	18.2	190.0	188.4	87	89	18.0	167.8	382.4	865.8	29.6
2296	TIRE CORD AND FABRIC	7.0	.5	6.6	126.7	130.0	90	99	10.0	70.0	145.8	685.1	8.8
2297	NONWOVEN FABRICS	41.1	10.5	30.5	121.5	104.0	86	66	10.8	80.6	191.8	397.4	15.0
2298	CORDAGE AND TWINE	6.5	1.7	4.9	79.4	73.4	90	95	9.0	55.4	96.3	191.0	4.9
2299	TEXTILE GOODS, NEC	13.0	3.5	9.4	27.8	24.7	96	68	8.3	53.9	107.7	211.8	13.4
23	APPAREL, OTHER TEXTILE PRODS	456.7	114.0	342.6	5 535.8	5 125.3	(NA)	(NA)	1 368.3	7 212.0	13 487.5	27 809.2	363.5
2311	MEN'S AND BOYS' SUITS AND COATS	25.8	5.8	20.0	470.5	416.8	93	92	124.8	770.3	1 342.2	2 396.9	22.5
232	MEN'S AND BOYS' FURNISHINGS	118.3	32.2	86.1	1 547.6	1 409.0	(NA)	(NA)	363.4	1 692.3	3 241.6	6 904.6	90.2
2321	MEN'S, BOYS' SHIRTS, NIGHTWEAR	25.9	6.2	19.7	501.4	442.6	92	92	113.4	514.9	1 003.8	2 104.3	24.1
2322	MEN'S AND BOYS' UNDERWEAR	2.6	.5	2.0	55.1	50.8	87	91	16.0	68.6	130.9	239.3	5.7
2323	MEN'S AND BOYS' NECKWEAR	2.6	.8	1.8	29.6	26.3	100	97	11.1	70.0	143.4	294.9	4.0
2327	MEN'S AND BOYS' SEPARATE TROUSERS	22.8	5.0	17.9	281.9	279.8	84	88	91.3	439.3	784.9	1 745.0	22.2
2328	MEN'S AND BOYS' WORK CLOTHING	44.1	13.8	30.3	477.7	427.4	89	94	89.6	389.0	784.8	1 738.0	24.1
2329	MEN'S AND BOYS' CLOTHING, NEC	20.2	5.9	14.3	201.9	182.2	83	80	41.9	210.4	393.8	783.2	10.1
233	WOMEN'S AND MISSES' OUTERWEAR	133.6	36.9	96.7	1 338.2	1 259.4	(NA)	(NA)	432.6	2 269.6	4 102.0	8 278.2	98.3
2331	WOMEN'S, MISSES' BLOUSES, WAISTS	24.0	4.9	19.2	222.5	197.3	85	75	63.0	328.1	592.4	1 254.9	30.0
2335	WOMEN'S AND MISSES' DRESSES	45.2	10.8	34.5	386.1	363.0	95	95	211.6	1 076.9	1 888.7	3 580.0	32.6
2337	WOMEN'S, MISSES' SUITS AND COATS	22.0	7.5	14.5	297.0	291.1	80	83	75.9	446.7	839.8	1 805.3	16.4
2339	WOMEN'S, MISSES' OUTERWEAR, NEC	42.4	13.8	28.5	432.6	408.0	80	81	82.1	417.9	781.0	1 638.0	19.3
234	WOMEN'S, CHILDREN'S UNDERGARMS	22.9	6.3	16.7	397.7	373.1	(NA)	(NA)	105.4	524.8	1 049.0	1 978.9	24.0
2341	WOMEN'S AND CHILDREN'S UNDERWEAR	18.7	5.5	13.2	275.9	256.5	95	87	77.5	372.0	709.0	1 331.9	19.3
2342	BRASSIERES AND ALLIED GARMENTS	4.2	.8	3.5	121.9	116.7	92	99	28.0	152.8	340.0	647.0	4.6
235	HATS, CAPS, AND MILLINERY	4.1	1.2	2.9	57.5	53.4	(NA)	(NA)	14.5	72.6	133.4	229.1	2.2
2351	MILLINERY	.2	(Z)	.2	5.8	5.7	99	(D)	3.2	17.0	33.2	58.1	.3
2352	HATS AND CAPS, EXCEPT MILLINERY	3.9	1.2	2.7	51.7	47.6	96	94	11.3	55.6	100.2	171.0	1.9
236	CHILDREN'S OUTERWEAR	14.4	2.5	12.0	245.7	239.5	(NA)	(NA)	74.8	367.5	709.1	1 421.9	19.8
2361	CHILDREN'S DRESSES AND BLOUSES	6.4	1.2	5.2	106.5	94.9	89	87	35.4	174.4	335.8	655.2	12.9
2363	CHILDREN'S COATS AND SUITS	1.3	.2	1.1	20.7	17.1	87	78	9.2	48.5	90.4	188.5	.8
2369	CHILDREN'S OUTERWEAR, NEC	6.7	1.1	5.6	118.5	127.5	84	77	30.1	144.6	282.9	578.2	6.1
2371	FUR GOODS	.5	.2	.3	46.5	41.3	100	99	4.7	41.2	86.2	220.0	1.1
238	MISC. APPAREL AND ACCESSORIES	20.7	5.2	15.5	274.7	242.9	(NA)	(NA)	61.9	334.6	635.9	1 280.0	14.9
2381	FABRIC DRESS AND WORK GLOVES	3.5	.4	3.1	42.1	39.1	91	84	11.9	56.3	100.3	198.8	1.9
2384	ROBES AND DRESSING GOWNS	3.3	.9	2.5	44.1	38.0	89	93	10.0	50.0	92.5	202.8	2.0
2385	WATERPROOF OUTERGARMENTS	5.6	2.1	3.5	59.6	52.6	91	90	15.4	86.4	168.8	332.1	2.4
2386	LEATHER AND SHEEP LINED CLOTHING	1.6	.6	.9	32.3	25.8	97	91	7.0	40.8	82.1	172.1	2.5
2387	APPAREL BELTS	2.5	.3	2.2	50.9	43.9	88	96	10.3	65.9	132.5	257.5	3.2
2389	APPAREL AND ACCESSORIES, NEC	4.2	1.0	3.2	45.7	43.4	90	95	7.3	35.3	59.7	116.8	2.8
239	MISC. FABRICATED TEXTILE PRODS	116.4	23.7	92.7	1 157.4	1 090.0	(NA)	(NA)	186.2	1 139.1	2 188.2	5 099.5	90.4
2391	CURTAINS AND DRAPERIES	7.2	1.6	5.6	151.2	140.5	95	93	33.9	167.1	302.3	754.9	9.5
2392	HOUSEFURNISHINGS, NEC	26.9	6.3	20.6	393.0	345.7	89	61	50.3	281.9	585.2	1 526.9	29.9
2393	TEXTILE BAGS	5.8	1.4	4.4	59.4	57.6	82	84	7.9	44.0	74.5	255.1	5.5
2394	CANVAS AND RELATED PRODUCTS	8.4	2.2	6.2	101.0	91.5	93	92	12.9	75.9	130.3	276.4	4.0
2395	PLEATING AND STITCHING	9.3	1.8	7.5	82.9	75.5	96	98	16.7	89.2	174.7	308.2	3.2
2396	AUTOMOTIVE AND APPAREL TRIMMINGS	36.1	6.4	29.6	194.3	214.7	98	96	27.6	266.6	530.8	1 133.0	10.4
2397	SCHIFFLI MACHINE EMBROIDERIES	3.3	.4	2.9	10.1	8.9	97	98	5.5	38.9	75.0	120.5	2.2
2399	FABRICATED TEXTILE PRODUCTS, NEC	19.4	3.7	15.7	165.4	155.6	94	89	31.4	175.3	315.5	724.7	25.9
24	LUMBER AND WOOD PRODUCTS	1 562.6	290.9	1 271.6	4 663.8	4 258.1	(NA)	(NA)	691.0	4 985.6	10 310.2	23 829.7	931.2
2411	LOGGING CAMPS, LOG CONTRACTORS	386.5	56.3	330.2	555.8	520.6	97	94	80.0	523.9	1 163.4	2 529.5	157.0
242	SAWMILLS AND PLANING MILLS	584.2	100.0	484.2	1 598.8	1 493.2	(NA)	(NA)	204.4	1 488.4	3 259.3	7 244.3	329.3
2421	SAWMILLS, PLANING MILLS, GENERAL	535.8	86.8	449.0	1 420.6	1 333.7	92	93	166.6	1 272.2	2 906.0	6 470.8	306.8
2426	HARDWOOD DIMENSION AND FLOORING	35.3	9.3	26.0	147.4	125.3	91	92	31.5	173.9	272.1	579.0	16.8
2429	SPECIAL PRODUCT SAWMILLS, NEC	13.1	3.9	9.2	30.8	34.2	98	92	6.4	40.0	80.4	180.8	5.7
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	272.7	58.5	214.2	1 344.9	1 208.3	(NA)	(NA)	190.7	1 474.3	2 908.4	6 703.3	194.8
2431	MILLWORK	81.0	27.6	53.3	605.0	545.3	94	94	70.5	524.5	962.7	2 426.8	57.2
2434	WOOD KITCHEN CABINETS	36.7	11.3	25.5	212.3	187.2	96	96	38.8	286.6	486.7	897.2	28.3
2435	HARDWOOD VENEER AND PLYWOOD	29.6	3.7	25.9	197.7	176.1	91	93	25.1	165.2	340.8	911.8	32.1
2436	SOFTWOOD VENEER AND PLYWOOD	105.6	10.6	95.1	242.6	229.2	88	91	43.7	403.6	935.4	2 011.5	65.4
2439	STRUCTURAL WOOD MEMBERS, NEC	19.7	5.4	14.4	87.3	70.5	94	93	12.6	94.4	182.8	456.0	11.8
244	WOOD CONTAINERS	29.6	6.3	23.3	139.9	134.4	(NA)	(NA)	36.8	203.8	358.8	773.5	21.2
2441	NAILED WOOD BOXES AND SHOOK	5.4	1.3	4.1	31.2	30.2	89	83	10.7	61.1	103.8	237.9	6.4
2448	WOOD PALLETS AND SKIDS	21.3	4.4	17.0	58.1	52.4	90	91	14.3	77.7	140.9	295.4	11.2
2449	WOOD CONTAINERS, NEC	2.9	.6	2.3	50.5	51.8	93	97	11.9	65.0	114.1	240.2	3.6
245	WOOD BUILDINGS AND MOBILE HOMES	110.0	43.0	66.9	422.4	350.0	(NA)	(NA)	97.1	745.4	1 490.9	4 289.0	93.0

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
2451	MOBILE HOMES	308	597	465	50.5	527.6	41.8	80.5	371.8	1 030.5	3 199.3
2452	PREFABRICATED WOOD BUILDINGS	512	568	287	29.0	330.6	21.2	40.6	204.4	758.6	1 948.6
249	MISCELLANEOUS WOOD PRODUCTS	3 292	3 570	905	83.4	813.3	68.8	132.8	581.2	1 799.9	3 973.1
2491	WOOD PRESERVING	366	457	192	12.6	126.1	9.9	19.7	82.9	327.1	962.6
2492	PARTICLEBOARD	36	63	51	6.2	79.1	5.0	10.9	60.3	207.2	452.9
2499	WOOD PRODUCTS, NEC	2 909	3 050	662	64.6	608.1	53.9	102.3	438.0	1 265.5	2 557.6
25	FURNITURE AND FIXTURES	9 421	10 235	3 588	463.8	4 448.3	383.6	736.4	3 191.8	8 921.7	16 978.0
251	HOUSEHOLD FURNITURE	5 585	6 161	2 224	309.7	2 669.2	265.2	505.3	1 998.7	5 212.7	10 392.1
2511	WOOD HOUSEHOLD FURNITURE	2 795	2 983	816	141.0	1 138.8	124.8	245.0	898.7	2 239.9	4 148.8
2512	UPHOLSTERED HOUSEHOLD FURNITURE	1 357	1 473	730	89.1	779.2	75.7	137.6	583.9	1 437.3	2 931.0
2514	METAL HOUSEHOLD FURNITURE	405	448	213	33.2	302.7	27.4	51.6	208.6	637.4	1 307.1
2515	MATTRESSES AND BEDSPRINGS	832	962	355	27.0	279.8	20.6	39.3	175.3	616.6	1 398.5
2517	WOOD TV AND RADIO CABINETS	91	94	51	10.7	89.0	9.3	17.6	70.5	150.4	304.8
2519	HOUSEHOLD FURNITURE, NEC	198	201	59	8.7	79.7	7.5	14.3	61.7	131.0	301.9
252	OFFICE FURNITURE	483	523	233	45.0	542.6	35.1	69.1	375.9	1 236.1	2 009.4
2521	WOOD OFFICE FURNITURE	319	331	119	16.0	165.0	12.8	25.5	110.2	381.3	612.0
2522	METAL OFFICE FURNITURE	167	192	114	29.0	377.6	22.3	43.6	265.7	854.8	1 397.4
2531	PUBLIC BLDG., RELATED FURNITURE	401	420	185	20.0	214.3	15.0	29.2	132.9	414.9	787.4
254	PARTITIONS AND FIXTURES	2 067	2 134	666	57.4	675.1	44.3	85.9	454.2	1 311.0	2 408.8
2541	WOOD PARTITIONS AND FIXTURES	1 572	1 598	394	29.4	352.9	23.0	45.3	241.0	621.4	1 105.8
2542	METAL PARTITIONS AND FIXTURES	508	536	272	28.0	322.2	21.3	40.5	213.2	689.7	1 303.0
259	MISC. FURNITURE AND FIXTURES	964	997	280	31.7	347.0	24.0	46.9	230.1	746.9	1 380.3
2591	DRAPERY HARDWARE, BLINDS, SHADES	435	456	85	13.6	145.6	10.3	20.0	99.1	345.0	675.1
2599	FURNITURE AND FIXTURES, NEC	528	541	195	18.1	201.4	13.7	27.0	131.0	401.9	705.2
26	PAPER AND ALLIED PRODUCTS	4 394	6 545	3 999	628.7	8 942.9	486.3	985.9	6 323.1	22 170.9	52 085.7
2611	PULPMILLS	26	45	42	16.2	293.2	12.5	25.4	220.7	906.1	2 091.1
2621	PAPERMILLS, EXCEPT BUILDING PAPER	171	339	287	127.0	2 167.0	100.4	210.4	1 631.7	5 406.6	12 613.3
2631	PAPERBOARD MILLS	120	249	232	67.6	1 175.8	53.0	112.5	888.0	3 080.7	7 124.3
264	MISC. CONVERTED PAPER PRODUCTS	2 323	2 994	1 435	206.7	2 608.1	158.0	316.1	1 771.3	7 263.0	16 433.2
2641	PAPER COATING AND GLAZING	454	529	239	39.7	551.2	27.2	56.8	335.1	1 507.0	3 392.0
2642	ENVELOPES	182	265	184	22.6	270.0	17.6	34.6	182.4	503.4	990.5
2643	BAGS, EXCEPT TEXTILE BAGS	462	596	355	48.7	584.1	38.8	77.6	411.7	1 349.6	3 482.3
2645	DIE-CUT PAPER AND BOARD	316	371	141	14.3	174.6	11.3	22.7	119.6	429.5	1 057.7
2646	PRESSED AND MOLDED PULP GOODS	25	38	27	4.9	58.8	4.0	8.4	48.7	153.7	240.3
2647	SANITARY PAPER PRODUCTS	72	120	89	34.5	509.1	27.4	54.5	381.8	2 194.5	4 921.2
2648	STATIONERY PRODUCTS	219	242	109	12.6	135.2	9.8	18.5	91.0	291.0	651.7
2649	CONVERTED PAPER PRODUCTS, NEC	783	833	291	29.4	325.1	21.9	43.3	201.1	834.3	1 697.5
265	PAPERBOARD CONTAINERS AND BOXES	1 794	2 860	1 950	204.1	2 601.8	156.5	309.0	1 733.4	5 296.3	13 350.1
2651	FOLDING PAPERBOARD BOXES	452	574	374	44.7	577.8	35.8	71.8	409.8	1 136.8	2 579.0
2652	SETUP PAPERBOARD BOXES	280	312	209	13.1	115.3	11.2	20.6	80.8	211.6	360.5
2653	CORRUGATED AND SOLID FIBER BOXES	863	1 472	1 034	101.5	1 374.8	73.5	146.5	867.0	2 704.1	7 351.1
2654	SANITARY FOOD CONTAINERS	122	193	138	28.7	336.7	22.7	43.5	228.2	836.8	2 048.4
2655	FIBER CANS, DRUMS, SIMILAR PRODS	166	309	195	16.1	197.3	13.4	26.7	147.6	406.9	1 011.1
2661	BUILDING PAPER AND BOARD MILLS	19	58	53	7.0	96.9	5.9	12.5	77.9	218.2	473.7
27	PRINTING AND PUBLISHING	46 604	49 767	9 132	1 092.2	14 024.5	625.8	1 152.8	7 322.1	31 979.5	49 716.2
2711	NEWSPAPERS	7 821	8 867	2 147	349.9	4 306.0	147.2	252.5	1 805.3	9 519.1	13 055.9
2721	PERIODICALS	2 860	2 994	525	69.9	1 019.8	10.6	20.5	115.7	3 762.7	6 056.5
273	BOOKS	2 536	2 694	716	106.4	1 378.5	50.9	97.5	544.2	4 291.1	6 485.7
2731	BOOK PUBLISHING	1 650	1 744	346	59.5	830.2	13.3	24.9	140.1	3 261.9	4 793.9
2732	BOOK PRINTING	897	950	370	46.9	548.2	37.6	72.6	404.1	1 029.2	1 691.8
2741	MISCELLANEOUS PUBLISHING	2 266	2 352	335	42.1	503.0	15.4	27.1	150.3	1 290.7	1 850.9
275	COMMERCIAL PRINTING	26 109	26 815	3 637	356.0	4 701.8	275.1	511.3	3 275.3	8 551.2	15 015.8
2751	COMMERCIAL PRINTING, LETTERPRESS	14 375	14 521	1 059	110.9	1 307.3	88.0	159.6	913.6	2 440.6	4 284.3
2752	COMMERCIAL PRINTING, LITHOGRAPHIC	10 964	11 320	2 362	216.3	2 984.1	163.7	307.4	2 045.7	5 338.4	9 359.7
2753	ENGRAVING AND PLATE PRINTING	511	550	118	9.8	118.9	7.6	13.5	84.5	230.8	314.9
2754	COMMERCIAL PRINTING, GRAVURE	401	424	98	19.0	291.6	15.8	30.8	231.5	541.4	1 056.8
2761	MANIFOLD BUSINESS FORMS	601	795	477	45.3	575.0	33.3	67.3	390.9	1 491.6	2 893.8
2771	GREETING CARD PUBLISHING	155	166	52	18.1	226.8	10.6	21.7	105.8	655.9	1 072.1
278	BLANKBOOKS AND BOOKBINDING	1 343	1 492	576	55.9	579.1	46.1	88.6	418.6	1 148.7	1 656.2
2782	BLANKBOOKS AND LOOSELEAF BINDERS	371	505	288	31.8	338.5	25.2	49.8	235.0	739.9	1 122.6
2789	BOOKBINDING AND RELATED WORK	974	987	288	24.1	240.6	20.9	38.8	183.6	408.8	533.6
279	PRINTING TRADE SERVICES	3 492	3 592	667	48.4	734.6	36.4	66.5	516.0	1 268.4	1 629.4
2791	TYPESETTING	2 370	2 406	389	27.2	364.7	21.7	38.8	271.6	623.4	730.6
2793	PHOTOENGRAVING	440	449	56	5.7	89.3	3.8	6.8	58.4	168.2	218.0
2794	ELECTROTYPING AND STEREOTYPING	40	40	5	.4	6.8	.3	.5	4.6	10.0	13.8
2795	LITHOGRAPHIC PLATEMAKING SERVICES	677	697	217	15.2	273.9	10.6	20.4	181.5	466.8	667.0
28	CHEMICALS AND ALLIED PRODUCTS	8 510	12 173	4 602	880.2	13 839.3	543.6	1 089.7	7 446.2	56 720.6	118 153.6
281	INDUSTRIAL INORGANIC CHEMICALS	550	1 282	490	110.0	1 847.2	67.8	138.6	1 033.4	6 487.2	12 845.0
2812	ALKALIES AND CHLORINE	30	49	33	11.8	215.9	8.0	16.0	136.2	822.5	1 654.8
2813	INDUSTRIAL GASES	109	562	102	7.5	117.2	4.6	9.6	67.0	732.8	1 234.6
2816	INORGANIC PIGMENTS	71	106	66	11.9	179.8	8.0	16.4	110.2	567.9	1 259.9

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
2451	MOBILE HOMES	69.8	27.1	42.7	193.3	165.5	99	99	71.9	547.3	1 033.9	3 242.9	63.4
2452	PREFABRICATED WOOD BUILDINGS	40.2	15.9	24.3	229.1	184.5	98	98	25.2	198.1	457.1	1 046.1	29.6
249	MISCELLANEOUS WOOD PRODUCTS	179.7	26.8	152.9	602.1	551.6	(NA)	(NA)	82.0	549.9	1 129.4	2 290.1	135.7
2491	WOOD PRESERVING	30.3	3.3	27.0	212.5	184.5	97	97	11.3	74.5	175.8	475.8	14.8
2492	PARTICLEBOARD	32.5	3.2	29.3	21.1	21.7	99	95	7.7	65.5	144.5	295.4	34.6
2499	WOOD PRODUCTS, NEC	116.9	20.3	96.5	368.5	345.4	94	93	63.0	410.0	809.1	1 518.9	86.3
25	FURNITURE AND FIXTURES	388.7	119.2	269.4	2 750.3	2 504.7	(NA)	(NA)	462.0	3 205.4	6 097.1	11 320.3	306.2
251	HOUSEHOLD FURNITURE	211.2	60.1	151.1	1 637.3	1 515.4	(NA)	(NA)	317.4	2 023.7	3 860.5	7 409.6	202.6
2511	WOOD HOUSEHOLD FURNITURE	101.9	26.8	75.2	821.5	771.6	94	96	133.8	806.8	1 556.9	2 870.0	93.8
2512	UPHOLSTERED HOUSEHOLD FURNITURE	50.4	16.6	33.9	378.6	341.2	91	96	92.0	605.3	1 104.0	2 104.7	54.7
2514	METAL HOUSEHOLD FURNITURE	22.8	4.7	18.1	217.0	197.9	89	91	34.4	222.5	447.2	890.4	16.9
2515	MATTRESSES AND BEDSPRINGS	14.5	3.7	10.8	155.6	142.7	95	86	31.4	233.7	479.9	1 041.7	20.7
2517	WOOD TV AND RADIO CABINETS	11.1	5.1	6.0	30.5	31.6	92	90	18.9	111.2	176.9	330.2	9.5
2519	HOUSEHOLD FURNITURE, NEC	10.4	3.3	7.1	34.1	30.5	79	84	6.9	44.2	95.6	172.6	7.0
252	OFFICE FURNITURE	67.6	23.8	43.8	344.4	299.6	(NA)	(NA)	39.3	330.0	659.9	1 111.2	31.8
2521	WOOD OFFICE FURNITURE	26.5	12.4	14.1	107.1	88.4	85	90	11.5	80.1	146.7	249.7	7.3
2522	METAL OFFICE FURNITURE	41.1	11.4	29.7	237.2	211.1	94	92	27.8	249.9	513.2	861.5	24.5
2531	PUBLIC BLDG., RELATED FURNITURE	22.3	6.8	15.5	138.3	122.0	88	87	-	-	-	-	-
254	PARTITIONS AND FIXTURES	58.9	19.4	39.5	394.7	351.2	(NA)	(NA)	57.4	483.9	871.0	1 527.7	34.0
2541	WOOD PARTITIONS AND FIXTURES	22.4	7.4	15.0	158.2	141.8	92	88	31.2	268.2	458.6	793.2	14.6
2542	METAL PARTITIONS AND FIXTURES	36.5	12.0	24.5	236.5	209.4	89	91	26.2	215.7	412.4	734.5	19.4
259	MISC. FURNITURE AND FIXTURES	28.7	9.2	19.5	235.7	216.5	(NA)	(NA)	26.5	209.9	409.9	736.5	24.7
2591	DRAPERY HARDWARE, BLINDS, SHADES	16.7	5.8	10.9	115.6	106.4	95	96	12.1	94.4	198.2	364.5	9.9
2599	FURNITURE AND FIXTURES, NEC	12.0	3.3	8.6	120.1	110.1	87	82	14.5	115.5	211.7	372.0	14.8
26	PAPER AND ALLIED PRODUCTS	3 295.0	326.0	2 969.0	5 641.5	5 281.0	(NA)	(NA)	633.4	5 992.1	13 064.1	28 261.9	1 335.3
2611	PULPMILLS	301.1	13.0	288.0	257.0	223.6	86	72	10.6	125.7	306.9	709.9	136.4
2621	PAPERMILLS, EXCEPT BUILDING PAPER	1 115.2	70.3	1 044.8	1 259.5	1 209.8	92	92	129.9	1 439.6	2 909.3	6 385.2	372.3
2631	PAPERBOARD MILLS	933.7	71.4	862.3	537.5	509.1	84	92	68.5	778.2	1 994.4	4 153.5	313.5
264	MISC. CONVERTED PAPER PRODUCTS	507.4	95.2	412.2	1 943.0	1 746.3	(NA)	(NA)	189.1	1 630.0	4 008.2	8 452.4	288.6
2641	PAPER COATING AND GLAZING	98.7	15.2	83.5	451.2	420.5	80	87	37.2	366.6	984.4	1 954.0	52.3
2642	ENVELOPES	22.9	3.5	19.4	122.2	109.9	97	93	22.9	194.6	347.1	620.8	17.4
2643	BAGS, EXCEPT TEXTILE BAGS	93.4	19.4	74.0	424.9	410.8	88	90	48.6	385.5	840.5	1 885.7	53.9
2645	DIE-CUT PAPER AND BOARD	15.3	2.8	12.5	114.3	94.0	88	84	15.2	132.5	301.6	676.3	10.6
2646	PRESSED AND MOLDED PULP GOODS	10.9	1.0	9.9	24.5	22.0	98	99	6.1	51.8	100.6	162.8	7.0
2647	SANITARY PAPER PRODUCTS	199.1	39.0	160.1	409.9	333.8	93	99	26.3	256.1	882.8	2 071.8	119.6
2648	STATIONERY PRODUCTS	15.9	4.1	11.8	118.2	114.4	86	80	14.7	106.3	225.6	450.5	9.3
2649	CONVERTED PAPER PRODUCTS, NEC	51.1	10.1	41.0	277.7	241.0	88	81	18.1	136.6	325.6	630.6	18.5
265	PAPERBOARD CONTAINERS AND BOXES	421.0	73.8	347.2	1 599.4	1 549.0	(NA)	(NA)	223.7	1 907.0	3 598.8	8 104.7	205.5
2651	FOLDING PAPERBOARD BOXES	89.8	14.2	75.5	421.8	402.2	87	91	45.3	398.1	739.7	1 487.0	37.4
2652	SETUP PAPERBOARD BOXES	8.8	2.0	6.8	48.2	46.4	93	87	18.1	111.6	195.9	321.3	6.4
2653	CORRUGATED AND SOLID FIBER BOXES	243.3	43.1	200.1	664.8	668.4	99	99	107.9	976.3	1 736.9	4 308.8	101.5
2654	SANITARY FOOD CONTAINERS	52.4	10.2	42.2	345.5	320.9	87	86	35.1	277.7	659.8	1 419.7	42.3
2655	FIBER CANS, DRUMS, SIMILAR PRODS	26.7	4.3	22.4	119.2	111.1	93	89	17.3	143.3	266.4	568.0	17.9
2661	BUILDING PAPER AND BOARD MILLS	16.6	2.2	14.4	45.0	43.1	93	83	11.6	111.6	246.5	456.2	18.8
27	PRINTING AND PUBLISHING	1 597.8	310.5	1 287.2	4 200.6	3 943.0	(NA)	(NA)	1 056.5	9 831.2	20 209.5	30 146.4	1 047.7
2711	NEWSPAPERS	478.1	93.5	384.6	382.1	371.8	96	100	348.5	3 168.1	6 219.9	8 262.8	359.5
2721	PERIODICALS	78.9	22.4	56.5	349.6	314.7	90	96	66.5	708.5	2 109.9	3 510.6	56.8
273	BOOKS	134.1	25.4	108.8	1 186.0	1 153.7	(NA)	(NA)	98.1	918.9	2 540.3	3 794.5	82.3
2731	BOOK PUBLISHING	79.8	16.3	63.5	992.0	963.4	94	88	57.1	557.7	1 935.8	2 856.8	48.4
2732	BOOK PRINTING	54.3	9.1	45.3	194.0	190.3	85	78	40.9	361.2	604.5	937.7	33.9
2741	MISCELLANEOUS PUBLISHING	39.1	14.1	25.0	139.1	121.7	95	89	38.8	331.2	775.8	1 070.2	22.7
275	COMMERCIAL PRINTING	639.5	114.9	524.6	1 359.8	1 200.1	(NA)	(NA)	344.2	3 277.4	5 695.0	9 329.7	377.8
2751	COMMERCIAL PRINTING, LETTERPRESS	163.0	32.0	131.0	372.7	345.8	89	81	130.1	1 131.7	2 003.0	3 291.8	129.2
2752	COMMERCIAL PRINTING, LITHOGRAPHIC	360.2	56.9	303.3	861.9	747.1	87	88	184.0	1 835.3	3 155.1	5 124.8	220.6
2753	ENGRAVING AND PLATE PRINTING	17.8	3.5	14.3	23.5	20.6	88	92	9.6	80.7	152.4	201.6	5.1
2754	COMMERCIAL PRINTING, GRAVURE	98.5	22.5	76.0	101.7	86.7	91	83	20.0	225.4	372.2	697.6	22.5
2761	MANIFOLD BUSINESS FORMS	82.1	12.5	69.6	336.7	313.7	93	95	38.6	343.6	823.6	1 429.7	45.8
2771	GREETING CARD PUBLISHING	18.8	5.8	13.0	160.6	207.8	78	95	23.5	191.5	527.0	774.4	46.4
278	BLANKBOOKS AND BOOKBINDING	55.3	11.1	44.2	175.9	155.1	(NA)	(NA)	51.7	371.6	686.8	968.2	25.6
2782	BLANKBOOKS AND LOOSELEAF BINDERS	36.0	9.0	27.1	130.2	112.0	86	91	26.6	192.7	390.6	591.1	14.4
2789	BOOKBINDING AND RELATED WORK	19.3	2.2	17.1	45.7	43.1	96	94	25.1	178.9	296.2	377.2	11.2
279	PRINTING TRADE SERVICES	71.7	10.7	61.1	110.8	104.5	(NA)	(NA)	46.6	520.5	831.3	1 006.3	30.6
2791	TYPESETTING	36.7	5.9	30.8	42.5	38.5	97	89	26.0	269.8	426.0	482.8	14.2
2793	PHOTOENGRAVING	7.5	1.2	6.3	13.2	11.6	83	79	9.9	119.3	191.7	229.7	5.4
2794	ELECTROTYPING AND STEREOTYPING	.1	(Z)	.1	.5	.5	79	66	1.7	19.0	28.5	36.8	.5
2795	LITHOGRAPHIC PLATEMAKING SERVICES	27.4	3.5	23.9	54.5	53.8	87	89	8.9	112.4	185.1	257.0	10.5
28	CHEMICALS AND ALLIED PRODUCTS	8 198.9	1 246.3	6 952.6	14 791.3	13 447.5	(NA)	(NA)	836.5	8 730.5	32 413.9	57 349.6	2 728.4
281	INDUSTRIAL INORGANIC CHEMICALS	1 055.5	138.8	916.6	1 305.7	1 161.2	(NA)	(NA)	99.5	1 078.5	3 343.1	6 132.7	333.4
2812	ALKALIES AND CHLORINE	220.0	22.2	197.7	141.8	132.4	63	58	13.3	152.0	455.6	823.2	61.5
2813	INDUSTRIAL GASES	243.0	23.2	219.8	45.6	27.8	97	93	9.6	87.2	466.7	679.3	84.1
2816	INORGANIC PIGMENTS	124.3	11.7	112.5	251.5	240.7	88	84	12.8	134.6	382.6	796.9	38.9

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977								
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
2819	INDUSTRIAL INORGANIC CHEM., NEC. . .	345	565	289	78.8	1 334.2	47.3	96.7	720.1	4 363.9	8 695.7
282	PLASTICS MATERIALS, SYNTHETICS . .	373	551	408	157.2	2 470.7	111.3	221.7	1 558.0	7 842.9	20 064.1
2821	PLASTICS MATERIALS AND RESINS. . . .	221	397	310	57.2	985.6	36.7	76.6	575.7	4 142.7	10 818.2
2822	SYNTHETIC RUBBER	56	63	30	10.0	185.2	7.1	14.2	125.7	568.6	1 863.3
2823	CELLULOSIC MANMADE FIBERS.	20	25	10	16.0	213.7	12.6	25.2	151.8	327.2	1 002.8
2824	ORGANIC FIBERS, NONCELLULOSIC. . . .	37	66	58	74.0	1 086.1	54.8	105.8	704.8	2 804.4	6 379.7
283	DRUGS.	1 020	1 243	482	156.4	2 459.6	80.3	157.5	997.2	9 939.9	14 247.8
2831	BIOLOGICAL PRODUCTS.	250	310	113	15.7	210.2	8.8	17.3	90.5	563.4	898.5
2833	MEDICINALS AND BOTANICALS.	153	177	76	14.4	219.9	8.4	17.1	127.2	1 162.2	1 889.9
2834	PHARMACEUTICAL PREPARATIONS.	655	756	293	126.4	2 029.5	63.1	123.1	779.4	8 214.4	11 459.4
284	SOAPS, CLEANERS, TOILET GOODS. . .	2 252	2 528	739	111.6	1 526.1	71.1	138.9	822.8	9 407.2	16 330.7
2841	SOAP AND OTHER DETERGENTS.	554	638	225	32.1	521.6	20.5	41.0	308.1	2 867.5	5 671.4
2842	POLISHES AND SANITATION GOODS. . . .	946	1 022	238	22.1	274.7	14.1	27.2	148.5	1 667.2	3 157.3
2843	SURFACE ACTIVE AGENTS.	148	175	84	6.6	101.9	3.7	7.7	47.3	345.7	944.8
2844	TOILET PREPARATIONS.	644	693	192	50.9	627.9	32.8	62.9	318.9	4 526.7	6 557.2
2851	PAINTS AND ALLIED PRODUCTS	1 288	1 579	653	61.4	882.6	33.0	66.2	394.1	2 821.3	5 629.7
286	INDUSTRIAL ORGANIC CHEMICALS . . .	574	879	510	152.8	2 794.2	97.8	200.1	1 625.3	12 875.1	30 261.1
2861	GUM AND WOOD CHEMICALS	100	119	37	4.8	54.0	3.8	7.8	38.9	185.0	391.3
2865	CYCLIC CRUDES AND INTERMEDIATES. . .	135	191	127	35.7	631.5	23.4	46.6	369.8	2 214.4	5 637.0
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. .	384	569	346	112.3	2 108.7	70.7	145.7	1 216.5	10 475.7	24 232.8
287	AGRICULTURAL CHEMICALS	885	1 325	482	53.9	784.0	35.3	72.8	454.8	3 807.9	9 932.2
2873	NITROGENOUS FERTILIZERS.	110	152	88	12.1	207.9	7.9	17.1	128.4	1 202.0	2 603.4
2874	PHOSPHATIC FERTILIZERS	45	91	69	14.4	212.8	10.1	21.7	139.2	817.7	2 681.7
2875	FERTILIZERS, MIXING ONLY	457	673	204	12.4	139.1	8.1	16.0	68.9	488.9	1 866.6
2879	AGRICULTURAL CHEMICALS, NEC.	338	409	121	15.0	224.1	9.3	17.9	118.2	1 299.3	2 780.4
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	2 146	2 786	838	76.9	1 075.0	47.1	94.2	560.9	3 539.0	7 843.2
2891	ADHESIVES AND SEALANTS	405	573	213	16.7	230.7	10.2	20.6	113.5	748.7	1 813.1
2892	EXPLOSIVES	63	97	53	12.3	173.2	8.4	16.1	101.4	410.7	666.3
2893	PRINTING INK	205	446	157	10.1	145.1	5.8	11.4	71.6	367.8	944.9
2895	CARBON BLACK	8	31	31	2.5	42.5	2.0	4.6	32.5	170.2	468.4
2899	CHEMICAL PREPARATIONS, NEC	1 479	1 639	384	35.3	483.4	20.7	41.5	242.0	1 841.7	3 950.6
29	PETROLEUM AND COAL PRODUCTS. . .	1 361	2 206	773	146.8	2 696.2	101.1	207.9	1 765.4	16 377.6	97 452.7
2911	PETROLEUM REFINING	192	349	279	102.5	2 055.3	70.8	144.4	1 366.4	14 423.9	91 688.8
295	PAVING AND ROOFING MATERIALS . . .	729	1 297	328	32.3	461.3	23.9	51.0	319.4	1 272.0	3 655.9
2951	PAVING MIXTURES AND BLOCKS	590	1 022	164	12.8	189.6	9.6	20.1	133.6	507.8	1 578.3
2952	ASPHALT FELTS AND COATINGS	146	275	164	19.5	271.7	14.3	31.0	185.9	764.2	2 077.6
299	MISC. PETROLEUM, COAL PRODUCTS . .	472	560	166	11.9	179.6	6.4	12.5	79.6	681.7	2 108.0
2992	LUBRICATING OILS AND GREASES	417	490	143	10.3	157.1	5.4	10.4	65.4	524.8	1 644.7
2999	PETROLEUM AND COAL PRODUCTS, NEC . .	60	70	23	1.6	22.5	1.1	2.1	14.2	157.0	463.3
30	RUBBER, MISC. PLASTICS PROD. . .	10 047	11 943	5 294	721.3	8 536.0	563.7	1 110.6	5 841.6	19 740.0	39 552.8
3011	TIRES AND INNER TUBES.	121	200	126	114.0	1 832.4	88.3	176.4	1 366.0	4 347.3	8 971.0
3021	RUBBER AND PLASTICS FOOTWEAR	67	84	50	19.8	159.1	16.4	30.0	115.9	272.3	517.0
3031	RECLAIMED RUBBER	21	21	9	.9	11.5	.7	1.5	8.4	24.8	41.6
3041	RUBBER, PLASTICS HOSE AND BELTING. .	101	146	103	34.4	457.4	23.4	45.3	274.9	973.5	1 765.7
3069	FABRICATED RUBBER PRODUCTS, NEC. . .	1 127	1 280	621	98.5	1 164.0	77.1	153.3	795.4	2 351.9	4 565.0
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	8 748	10 212	4 385	453.7	4 911.7	358.0	704.1	3 281.0	11 770.1	23 692.6
31	LEATHER AND LEATHER PRODUCTS . .	2 654	3 075	1 486	242.5	1 859.7	211.5	381.9	1 408.1	3 718.8	7 607.4
3111	LEATHER TANNING AND FINISHING. . . .	428	465	191	23.0	254.8	19.6	38.2	192.2	535.1	1 456.1
3131	BOOT, SHOE CUT STOCK AND FINDINGS. .	174	190	96	8.5	65.3	7.4	13.0	48.8	109.4	270.6
314	FOOTWEAR, EXCEPT RUBBER.	541	811	603	145.5	1 031.5	129.2	231.3	822.4	2 069.5	3 891.7
3142	HOUSE SLIPPERS	65	78	55	8.1	54.5	7.0	11.7	39.6	108.8	201.2
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. . .	115	213	180	55.0	417.0	49.2	90.1	332.2	871.9	1 734.5
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. .	243	328	241	57.6	388.6	51.3	91.3	315.6	755.0	1 361.2
3149	FOOTWEAR, EXCEPT RUBBER, NEC	159	192	127	24.8	171.4	21.8	38.2	135.1	333.7	594.8
3151	LEATHER GLOVES AND MITTENS	84	101	66	5.5	33.9	4.7	8.2	25.5	67.6	178.0
3161	LUGGAGE.	286	298	130	19.2	164.1	15.8	29.0	105.5	328.3	654.9
317	WOMEN'S HANDBAGS AND PURSES. . . .	654	678	283	32.1	242.2	27.8	49.9	170.0	472.2	872.0
3171	WOMEN'S HANDBAGS AND PURSES.	404	418	186	20.3	144.0	18.2	32.8	109.1	266.5	505.2
3172	PERSONAL LEATHER GOODS, NEC.	253	260	97	11.9	98.2	9.6	17.2	60.9	205.8	366.8
3199	LEATHER GOODS, NEC	512	532	117	8.6	67.9	7.0	12.4	43.7	136.7	284.2
32	STONE, CLAY, GLASS PRODUCTS. . .	14 495	17 744	5 201	613.7	7 943.1	484.4	960.7	5 766.6	19 129.6	35 476.6
3211	FLAT GLASS	43	62	32	21.9	401.0	18.5	39.9	328.2	931.0	1 576.6
322	GLASS, PRESSED OR BLOWN.	353	508	249	117.0	1 548.2	101.1	194.5	1 268.9	3 592.0	5 784.2
3221	GLASS CONTAINERS	31	126	124	70.8	975.4	62.5	120.1	823.0	2 138.9	3 664.2
3229	PRESSED AND BLOWN GLASS, NEC	325	382	125	46.2	572.8	38.6	74.4	445.9	1 453.1	2 120.1
3231	PRODUCTS OF PURCHASED GLASS.	1 000	1 101	325	36.2	429.2	28.8	56.7	305.9	960.2	1 842.4
3241	CEMENT, HYDRAULIC.	87	201	160	27.8	485.1	22.2	44.4	380.0	1 671.5	3 042.3
325	STRUCTURAL CLAY PRODUCTS	504	711	471	45.0	486.4	36.6	73.3	360.3	1 057.8	1 852.0

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million Dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
2819	INDUSTRIAL INORGANIC CHEM., NEC. . .	468.2	81.7	386.6	866.9	760.3	[5]87	[5]77	63.8	704.7	2 038.2	3 833.3	149.0
282	PLASTICS MATERIALS, SYNTHETICS . .	1 316.1	151.9	1 164.3	2 020.5	1 854.1	(NA)	(NA)	161.9	1 666.3	4 935.4	9 796.0	693.9
2821	PLASTICS MATERIALS AND RESINS. . . .	895.2	101.2	794.0	1 093.6	982.3	85	74	54.8	632.8	2 160.5	4 478.2	253.2
2822	SYNTHETIC RUBBER	53.2	3.9	49.3	154.3	148.9	91	71	11.8	138.8	491.7	1 089.4	35.5
2823	CELLULOSIC MANMADE FIBERS.	29.3	1.0	28.3	110.8	107.9	(D)	(D)	17.1	135.2	243.5	589.5	32.7
2824	ORGANIC FIBERS, NONCELLULOSIC. . . .	338.5	45.8	292.7	661.8	614.9	84	97	78.2	759.5	2 039.8	3 638.9	372.5
283	DRUGS.	578.5	154.8	423.7	2 446.5	2 231.6	(NA)	(NA)	129.9	1 413.3	6 130.9	8 018.5	245.3
2831	BIOLOGICAL PRODUCTS.	35.4	11.3	24.2	246.9	222.3	93	73	10.1	102.9	231.4	360.0	27.2
2833	MEDICINALS AND BOTANICALS.	123.8	19.8	104.0	307.0	297.9	82	68	7.8	80.8	260.0	509.0	51.5
2834	PHARMACEUTICAL PREPARATIONS.	419.3	123.8	295.5	1 892.6	1 711.5	86	97	112.0	1 229.7	5 639.5	7 149.5	166.7
284	SOAPS, CLEANERS, TOILET GOODS. . .	334.0	65.8	268.2	1 794.9	1 699.8	(NA)	(NA)	111.6	1 058.2	6 200.6	9 777.6	236.1
2841	SOAP AND OTHER DETERGENTS.	135.5	15.9	119.6	643.4	616.7	84	89	31.5	341.6	2 038.8	3 394.4	90.7
2842	POLISHES AND SANITATION GOODS. . . .	51.8	12.7	39.2	274.9	264.3	76	79	25.1	216.9	1 118.1	1 867.6	54.3
2843	SURFACE ACTIVE AGENTS.	41.1	8.2	32.8	116.3	106.9	81	55	6.9	71.5	209.5	462.6	19.7
2844	TOILET PREPARATIONS.	105.6	29.0	76.6	760.3	712.0	95	87	48.2	428.2	2 834.1	4 053.0	71.4
2851	PAINTS AND ALLIED PRODUCTS	167.4	52.5	114.9	937.6	864.2	96	97	65.9	647.2	1 791.7	3 821.8	81.5
286	INDUSTRIAL ORGANIC CHEMICALS . . .	3 352.5	511.1	2 841.5	3 852.8	3 439.3	(NA)	(NA)	136.6	1 614.3	6 073.1	11 605.4	831.6
2861	GUM AND WOOD CHEMICALS	27.0	10.8	16.2	65.7	63.6	76	67	5.9	47.6	155.4	332.3	11.1
2865	CYCLIC CRUDES AND INTERMEDIATES. . .	443.1	52.6	390.5	844.4	784.2	68	67	28.2	318.2	929.7	2 049.6	158.8
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC. .	2 882.6	447.7	2 434.9	2 942.7	2 591.5	69	84	102.4	1 248.6	4 988.0	9 223.5	661.7
287	AGRICULTURAL CHEMICALS	1 107.2	99.0	1 008.2	1 564.7	1 394.3	(NA)	(NA)	47.9	438.4	1 736.5	3 929.1	155.8
2873	NITROGENOUS FERTILIZERS.	734.4	34.7	699.6	378.0	296.9	84	72	9.4	104.3	447.6	799.4	33.2
2874	PHOSPHATIC FERTILIZERS	111.8	13.8	97.9	419.7	353.9	93	91	14.9	135.1	426.4	1 178.9	65.8
2875	FERTILIZERS, MIXING ONLY	41.9	9.3	32.6	306.5	303.3	95	98	11.4	82.5	263.6	800.0	17.2
2879	AGRICULTURAL CHEMICALS, NEC.	219.2	41.1	178.0	460.6	440.2	83	77	12.2	116.5	598.9	1 150.8	39.5
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	287.4	72.3	215.2	868.1	802.8	(NA)	(NA)	83.1	814.3	2 202.6	4 268.4	150.8
2891	ADHESIVES AND SEALANTS	39.0	9.4	29.6	202.5	187.3	89	81	14.9	148.2	426.6	928.0	24.9
2892	EXPLOSIVES	26.1	7.3	18.8	59.8	54.8	86	95	18.6	178.9	281.7	402.7	30.1
2893	PRINTING INK	17.0	4.3	12.8	116.7	101.7	97	97	9.6	99.3	232.0	508.4	12.6
2895	CARBON BLACK	22.7	1.5	21.2	32.7	27.3	[6]95	[6]95	2.9	31.9	137.6	227.0	11.8
2899	CHEMICAL PREPARATIONS, NEC	182.6	49.8	132.9	456.5	431.7	87	77	37.1	356.0	1 124.7	2 202.3	71.3
29	PETROLEUM AND COAL PRODUCTS. . .	2 261.3	617.8	1 643.5	5 656.3	4 912.9	(NA)	(NA)	139.5	1 637.5	5 793.1	28 694.7	1 154.2
2911	PETROLEUM REFINING	2 108.6	589.2	1 519.5	5 196.2	4 471.6	99	97	100.8	1 247.1	4 594.7	25 921.1	1 061.6
295	PAVING AND ROOFING MATERIALS . . .	112.5	21.3	91.2	220.0	196.1	(NA)	(NA)	29.5	296.5	846.4	1 932.9	75.9
2951	PAVING MIXTURES AND BLOCKS	57.3	8.4	48.9	62.8	53.5	95	93	13.9	147.7	403.1	922.5	56.3
2952	ASPHALT FELTS AND COATINGS	55.2	13.0	42.2	157.2	142.6	91	97	15.6	148.7	443.3	1 010.4	19.6
299	MISC. PETROLEUM, COAL PRODUCTS . .	40.1	7.2	32.9	240.1	245.2	(NA)	(NA)	9.2	93.9	352.1	840.7	16.7
2992	LUBRICATING OILS AND GREASES	25.6	5.7	19.9	180.8	192.9	94	44	8.1	83.3	295.8	703.1	13.7
2999	PETROLEUM AND COAL PRODUCTS, NEC . .	14.5	1.5	13.0	59.3	52.3	97	87	1.1	10.6	56.3	137.6	3.0
30	RUBBER, MISC. PLASTICS PROD. . . .	1 645.3	306.4	1 338.9	4 952.7	4 441.4	(NA)	(NA)	617.7	5 165.2	11 653.3	20 923.7	1 059.6
3011	TIRES AND INNER TUBES.	289.0	38.4	250.6	1 172.1	1 015.0	96	99	107.5	1 214.1	3 070.8	5 747.1	267.1
3021	RUBBER AND PLASTICS FOOTWEAR	11.3	.9	10.4	140.7	129.0	93	99	31.6	182.6	370.3	600.0	17.7
3031	RECLAIMED RUBBER	.5	(Z)	.5	3.7	3.7	100	62	.9	9.1	15.6	29.7	.7
3041	RUBBER, PLASTICS HOSE AND BELTING. .	55.3	15.3	40.1	275.4	267.6	88	92	31.9	309.0	618.7	1 020.1	31.6
3069	FABRICATED RUBBER PRODUCTS, NEC. . .	135.0	28.2	106.9	510.5	476.6	88	90	99.0	808.8	1 573.1	2 830.9	88.5
3079	MISCELLANEOUS PLASTICS PRODUCTS. . .	1 154.2	223.7	930.5	2 850.3	2 549.6	94	91	346.9	2 641.6	6 004.7	10 695.9	654.0
31	LEATHER AND LEATHER PRODUCTS . .	96.2	21.6	74.6	1 098.9	1 033.0	(NA)	(NA)	273.4	1 589.3	2 917.2	5 769.5	74.5
3111	LEATHER TANNING AND FINISHING. . . .	30.7	6.8	23.9	187.6	176.1	99	99	25.7	200.0	368.3	1 059.5	16.3
3131	BOOT, SHOE CUT STOCK AND FINDINGS. .	3.0	.8	2.2	31.2	33.0	90	92	8.7	50.1	86.2	206.5	2.9
314	FOOTWEAR, EXCEPT RUBBER.	37.1	9.0	28.1	558.0	518.8	(NA)	(NA)	176.2	972.7	1 796.1	3 272.2	37.1
3142	HOUSE SLIPPERS	2.3	.7	1.6	29.7	28.9	94	96	8.5	48.1	85.7	151.4	1.6
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. . .	14.5	3.4	11.0	272.2	245.6	92	96	61.5	358.1	674.4	1 288.9	14.3
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC. .	9.7	2.1	7.6	147.4	148.3	97	92	77.4	408.4	763.6	1 346.1	14.8
3149	FOOTWEAR, EXCEPT RUBBER, NEC	10.6	2.8	7.8	108.7	96.0	84	83	28.7	158.1	272.5	485.8	6.4
3151	LEATHER GLOVES AND MITTENS	1.9	.3	1.6	33.7	30.9	83	85	4.9	22.1	43.0	98.2	.5
3161	LUGGAGE.	8.1	1.0	7.1	113.5	114.8	94	98	17.1	106.8	194.1	364.5	8.9
317	WOMEN'S HANDBAGS AND PURSES. . . .	11.4	2.4	9.0	124.5	116.2	(NA)	(NA)	33.6	195.1	345.1	607.2	6.5
3171	WOMEN'S HANDBAGS AND PURSES.	6.6	1.7	4.9	61.9	56.1	97	97	22.2	121.7	201.5	365.0	3.7
3172	PERSONAL LEATHER GOODS, NEC.	4.8	.7	4.1	62.5	60.2	96	91	11.5	73.4	143.7	242.2	2.8
3199	LEATHER GOODS, NEC	4.1	1.4	2.7	50.6	43.2	94	95	7.2	42.5	84.3	161.3	2.2
32	STONE, CLAY, GLASS PRODUCTS. . .	1 881.4	337.2	1 544.2	4 279.3	3 995.3	(NA)	(NA)	623.2	5 546.9	12 586.5	21 537.5	1 195.5
3211	FLAT GLASS	81.1	11.8	69.3	211.4	191.9	[6]90	(D)	20.9	241.9	662.1	937.1	95.0
322	GLASS, PRESSED OR BLOWN.	364.5	59.1	305.4	759.4	760.9	(NA)	(NA)	118.8	1 057.5	2 341.1	3 393.8	176.7
3221	GLASS CONTAINERS	220.9	34.3	186.7	408.7	429.6	99	99	72.9	659.4	1 399.7	2 126.5	121.1
3229	PRESSED AND BLOWN GLASS, NEC	143.6	24.9	118.7	350.7	331.2	97	96	45.9	398.1	941.4	1 267.3	55.6
3231	PRODUCTS OF PURCHASED GLASS.	73.4	23.0	50.4	285.6	261.5	[6]95	(D)	33.7	296.1	668.9	1 330.1	34.5
3241	CEMENT, HYDRAULIC.	296.6	41.7	254.9	484.8	463.2	99	99	30.0	349.2	1 153.5	1 791.2	179.5
325	STRUCTURAL CLAY PRODUCTS	82.3	16.7	65.6	299.0	304.5	(NA)	(NA)	51.8	391.4	770.6	1 205.3	64.0

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
3251	BRICK AND STRUCTURAL CLAY TILE	250	352	262	20.5	197.3	17.0	34.0	149.2	467.9	777.7
3253	CERAMIC WALL AND FLOOR TILE	62	79	48	7.8	78.3	6.3	12.8	56.4	155.4	252.5
3255	CLAY REFRACTORIES	98	167	104	11.3	146.8	8.8	17.6	106.5	308.4	607.2
3259	STRUCTURAL CLAY PRODUCTS, NEC	94	113	57	5.5	64.0	4.5	8.9	48.2	126.1	214.6
326	POTTERY AND RELATED PRODUCTS	885	934	241	43.2	459.6	35.6	67.8	341.9	893.6	1 260.9
3261	VITREOUS PLUMBING FIXTURES	54	70	38	9.2	117.2	7.8	15.6	96.9	277.3	411.4
3262	VITREOUS CHINA FOOD UTENSILS	26	28	14	7.3	72.3	6.0	11.1	53.6	140.0	170.7
3263	FINE EARTHENWARE FOOD UTENSILS	22	23	17	4.7	38.4	3.5	6.4	27.1	61.2	81.3
3264	PORCELAIN ELECTRICAL SUPPLIES	77	86	56	11.4	144.4	9.1	17.6	98.0	253.9	367.5
3269	POTTERY PRODUCTS, NEC	713	727	116	10.6	87.4	9.2	17.1	66.2	161.2	230.0
327	CONCRETE, GYPSUM, PLASTER PRODS.	8 899	10 844	2 711	183.7	2 366.8	134.4	272.6	1 558.6	5 390.8	11 804.8
3271	CONCRETE BLOCK AND BRICK	1 162	1 273	348	18.7	237.1	11.8	24.1	126.6	520.3	1 143.8
3272	CONCRETE PRODUCTS, NEC	3 475	3 916	862	61.7	734.9	48.1	96.0	494.5	1 529.3	2 736.2
3273	READY-MIXED CONCRETE	4 317	5 433	1 357	87.9	1 175.8	62.0	125.3	766.6	2 693.2	6 440.6
3274	LIME	64	94	63	5.9	75.4	4.8	9.8	59.4	218.2	484.2
3275	GYPSUM PRODUCTS	58	128	81	9.5	143.6	7.6	17.3	111.5	429.6	1 000.0
3281	CUT STONE AND STONE PRODUCTS	963	993	164	12.7	131.5	10.6	21.4	98.8	238.2	393.0
329	MISC. NONMETALLIC MINERAL PRODS.	1 960	2 390	848	126.2	1 635.2	96.6	190.0	1 123.9	4 394.5	7 920.2
3291	ABRASIVE PRODUCTS	353	410	178	28.3	392.3	20.1	38.5	241.2	1 097.7	1 955.8
3292	ASBESTOS PRODUCTS	86	123	76	13.9	179.9	11.0	22.6	137.4	439.3	882.1
3293	GASKETS, PACKING, SEALING DEVICES	384	433	217	33.0	371.3	25.0	47.5	237.3	748.3	1 267.1
3295	MINERALS, GROUND OR TREATED	318	466	151	11.5	156.3	8.9	18.1	111.8	479.4	957.3
3296	MINERAL WOOL	95	153	90	22.6	313.8	18.6	38.3	244.5	1 053.7	1 790.5
3297	NONCLAY REFRACTORIES	74	109	66	9.1	134.3	6.8	13.5	92.5	352.1	680.2
3299	NONMETALLIC MINERAL PRODUCTS, NEC	681	696	70	7.7	87.2	6.2	11.4	59.1	224.1	387.3
33	PRIMARY METAL INDUSTRIES	5 929	7 375	3 980	1 113.6	18 745.0	885.3	1 744.0	14 065.2	37 568.2	103 179.4
331	BLAST FURNACE, BASIC STEEL PROD.	887	1 216	740	529.7	10 085.5	417.9	804.5	7 631.3	18 318.4	50 582.1
3312	BLAST FURNACES AND STEEL MILLS	395	504	250	441.9	8 725.7	350.2	668.7	6 653.0	15 331.9	41 998.2
3313	ELECTROMETALLURGICAL PRODUCTS	28	42	31	8.9	139.2	7.0	14.3	103.9	274.6	930.6
3315	STEEL WIRE AND RELATED PRODUCTS	262	335	223	31.7	436.6	24.3	49.0	304.9	924.4	2 258.6
3316	COLD FINISHING OF STEEL SHAPES	118	155	94	19.4	334.6	14.6	28.7	238.8	799.6	2 713.2
3317	STEEL PIPE AND TUBES	130	180	142	27.8	449.4	21.8	43.7	330.6	987.9	2 681.4
332	IRON AND STEEL FOUNDRIES	1 251	1 465	1 033	222.3	3 329.2	183.8	367.9	2 582.6	6 236.6	10 830.2
3321	GRAY IRON FOUNDRIES	865	984	683	138.8	2 146.0	116.8	236.1	1 703.2	4 070.7	7 388.7
3322	MALLEABLE IRON FOUNDRIES	58	66	53	18.2	273.0	14.6	27.9	202.5	458.8	721.9
3324	STEEL INVESTMENT FOUNDRIES	80	92	68	10.5	128.7	8.1	16.5	85.9	267.4	407.5
3325	STEEL FOUNDRIES, NEC	287	323	229	54.8	781.5	44.2	87.3	591.0	1 439.8	2 312.1
333	PRIMARY NONFERROUS METALS	103	160	99	57.3	1 032.1	44.9	89.1	768.4	3 618.6	10 660.2
3331	PRIMARY COPPER	8	27	27	13.1	217.3	10.6	20.6	167.5	904.3	3 918.1
3332	PRIMARY LEAD	4	7	7	2.5	40.5	2.0	4.1	30.2	189.5	699.6
3333	PRIMARY ZINC	8	9	7	4.6	70.5	3.5	6.9	49.3	114.3	430.7
3334	PRIMARY ALUMINUM	12	32	32	28.6	555.0	22.8	45.5	426.3	1 980.9	4 647.8
3339	PRIMARY NONFERROUS METALS, NEC	81	85	26	8.6	148.8	6.0	12.1	95.1	429.5	963.9
3341	SECONDARY NONFERROUS METALS	393	460	200	18.9	269.8	14.0	28.4	169.7	769.3	3 558.0
335	NONFERROUS ROLLING AND DRAWING	626	1 002	711	177.4	2 640.0	136.0	278.5	1 901.5	5 902.3	22 227.3
3351	COPPER ROLLING AND DRAWING	102	140	99	31.3	455.5	24.2	50.5	338.7	973.7	4 013.8
3353	ALUMINUM SHEET, PLATE, AND FOIL	31	53	45	31.4	613.5	25.0	50.6	480.1	1 340.6	5 970.7
3354	ALUMINUM EXTRUDED PRODUCTS	133	193	146	26.5	355.9	21.2	44.0	264.1	678.6	2 050.0
3355	ALUMINUM ROLLING AND DRAWING, NEC	18	22	15	4.7	78.1	3.6	6.9	56.5	222.8	1 001.0
3356	NONFERROUS ROLLING & DRAWING, NEC	153	173	86	17.2	260.2	12.0	24.7	158.7	569.0	22 596.5
3357	NONFERROUS WIREDRAWING, INSULATING	245	421	320	66.3	876.8	50.0	101.8	603.4	2 117.6	6 595.4
336	NONFERROUS FOUNDRIES	1 806	1 892	805	82.1	1 043.8	68.6	134.1	782.6	1 959.6	3 826.1
3361	ALUMINUM FOUNDRIES	994	1 038	461	52.2	691.4	44.2	86.3	531.0	1 262.7	2 459.1
3362	BRASS, BRONZE, COPPER FOUNDRIES	476	489	180	12.6	148.3	10.2	19.8	106.7	283.0	553.3
3369	NONFERROUS FOUNDRIES, NEC	359	365	164	17.3	204.1	14.2	28.0	144.9	413.9	813.7
339	MISC. PRIMARY METAL PRODUCTS	1 102	1 180	392	26.0	344.5	20.2	41.5	229.2	763.3	1 495.5
3398	METAL HEAT TREATING	682	753	273	16.9	220.1	13.3	27.6	147.9	466.8	744.9
3399	PRIMARY METAL PRODUCTS, NEC	406	427	119	9.0	124.4	6.9	13.9	81.2	296.5	750.6
34	FABRICATED METAL PRODUCTS	29 966	33 712	12 739	1 555.7	21 035.9	1 191.6	2 373.8	14 428.8	45 511.5	90 023.5
341	METAL CANS, SHIPPING CONTAINERS	269	587	413	72.3	1 246.5	60.0	126.5	999.6	3 643.9	9 180.0
3411	METAL CANS	153	403	300	59.8	1 066.3	50.2	106.4	870.8	3 254.3	8 242.8
3412	METAL BARRELS, DRUMS, AND PAILS	120	184	113	12.4	180.3	9.8	20.1	128.8	389.6	937.1
342	CUTLERY, HANDTOOLS AND HARDWARE	1 924	2 137	877	168.6	2 179.3	132.6	264.5	1 553.4	5 176.6	8 556.5
3421	CUTLERY	119	130	62	14.9	159.6	12.1	23.5	118.3	492.0	711.4
3423	HAND AND EDGE TOOLS, NEC	662	724	296	47.0	566.4	36.9	72.8	394.7	1 421.4	2 279.2
3425	HANDSAWS AND SAW BLADES	105	115	55	7.6	94.3	5.7	11.4	62.7	230.6	363.3
3429	HARDWARE, NEC	1 063	1 168	464	99.2	1 359.0	77.9	156.8	977.7	3 032.6	5,202.6
343	PLUMBING, HEATING, EXCEPT ELEC	960	1 015	341	53.2	636.8	40.6	80.4	422.8	1 573.6	3 087.6
3431	METAL SANITARY WARE	96	101	37	8.1	109.7	6.7	14.4	87.5	248.7	477.6
3432	PLUMBING FITTINGS AND BRASS GOODS	191	213	110	19.3	215.0	15.3	30.0	145.0	579.3	1 166.4
3433	HEATING EQUIPMENT, EXC. ELECTRIC	678	701	194	25.8	312.2	18.7	36.0	190.3	745.6	1 443.6
344	FABRICATED STRUC. METAL PRODS.	10 725	11 817	4 279	425.7	5 491.9	308.5	603.3	3 467.2	11 785.3	24 993.8
3441	FABRICATED STRUCTURAL METAL	2 319	2 462	1 074	99.3	1 313.6	72.8	144.2	836.9	2 559.8	5 505.2
3442	METAL DOORS, SASH, AND TRIM	1 498	1 672	644	65.8	671.3	50.1	97.0	425.0	1 418.3	3 135.6
3443	FABRICATED PLATEWORK, BOILER SHOP	1 683	1 864	944	123.5	1 777.8	87.7	171.6	1 125.8	4 075.3	7 432.4
3444	SHEET METALWORK	3 222	3 430	1 008	77.4	980.2	56.7	109.5	636.6	2 095.1	4 863.5
3446	ARCHITECTURAL METALWORK	1 477	1 511	225	20.8	247.7	15.1	29.4	152.3	505.5	947.1
3448	PREFABRICATED METAL BUILDINGS	414	466	199	22.7	289.7	15.9	31.6	174.9	694.5	1 779.2

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
3251	BRICK AND STRUCTURAL CLAY TILE	49.6	10.2	39.5	93.2	98.3	99	99	24.1	168.4	336.4	513.0	38.6
3253	CERAMIC WALL AND FLOOR TILE	6.6	.7	6.0	42.1	40.3	99	95	8.3	58.5	112.3	175.6	7.6
3255	CLAY REFRACTORIES	20.0	4.4	15.6	126.4	131.4	89	95	11.2	100.5	202.1	336.0	10.8
3259	STRUCTURAL CLAY PRODUCTS, NEC	6.1	1.4	4.6	37.2	34.5	94	92	8.2	64.0	119.8	180.7	7.0
326	POTTERY AND RELATED PRODUCTS	45.2	11.5	33.7	182.0	169.0	(NA)	(NA)	44.9	335.3	600.6	834.8	23.1
3261	VITREOUS PLUMBING FIXTURES	7.3	1.9	5.4	48.9	49.1	92	95	9.6	86.5	186.8	270.0	5.8
3262	VITREOUS CHINA FOOD UTENSILS	5.4	1.6	3.8	30.0	26.2	[6]80	97	5.9	41.2	67.4	81.9	1.8
3263	FINE EARTHENWARE FOOD UTENSILS	1.7	.4	1.3	17.2	14.9	[6]85	76	6.8	41.4	56.2	74.3	3.1
3264	PORCELAIN ELECTRICAL SUPPLIES	20.9	5.3	15.6	59.3	54.3	86	82	13.4	114.0	190.4	274.6	7.2
3269	POTTERY PRODUCTS, NEC	9.8	2.4	7.5	26.7	24.6	95	85	9.1	52.2	99.9	134.0	5.2
327	CONCRETE, GYPSUM, PLASTER PRODS.	604.8	105.8	499.0	864.8	774.7	(NA)	(NA)	193.1	1 741.0	3 839.7	7 746.4	453.1
3271	CONCRETE BLOCK AND BRICK	55.6	9.8	45.9	124.0	118.4	93	85	22.8	196.0	438.5	855.7	46.2
3272	CONCRETE PRODUCTS, NEC	134.4	30.2	104.2	389.7	357.0	96	95	67.7	570.2	1 190.1	1 961.4	96.2
3273	READY-MIXED CONCRETE	353.1	54.1	299.0	231.5	193.7	93	98	85.7	809.3	1 756.7	4 050.9	247.8
3274	LIME	29.7	6.9	22.9	47.2	39.0	92	92	5.7	50.0	129.3	238.1	39.4
3275	GYPSUM PRODUCTS	31.9	4.9	27.0	72.4	66.6	96	98	11.2	115.5	325.1	640.3	23.3
3281	CUT STONE AND STONE PRODUCTS	10.4	2.1	8.3	53.8	50.0	96	95	15.0	109.2	191.4	304.5	12.6
329	MISC. NONMETALLIC MINERAL PRODS.	323.1	65.5	257.6	1 138.5	1 019.8	(NA)	(NA)	115.1	1 025.4	2 358.8	3 994.4	157.0
3291	ABRASIVE PRODUCTS	48.7	12.0	36.7	317.7	247.8	90	97	24.5	229.4	529.6	888.1	17.2
3292	ASBESTOS PRODUCTS	26.0	5.4	20.6	168.0	161.3	92	81	21.0	191.0	426.1	763.4	20.4
3293	GASKETS, PACKING, SEALING DEVICES	46.5	8.0	38.5	208.6	195.5	93	89	27.7	220.4	428.5	665.4	24.9
3295	MINERALS, GROUND OR TREATED	50.2	9.7	40.5	116.3	116.4	96	90	9.5	87.9	237.2	412.0	30.0
3296	MINERAL WOOL	85.9	12.2	73.7	121.5	116.5	93	96	18.0	172.3	441.5	755.4	50.1
3297	NONCLAY REFRACTORIES	37.1	6.9	30.2	159.5	141.8	92	83	8.1	78.3	191.1	343.6	9.3
3299	NONMETALLIC MINERAL PRODUCTS, NEC	28.7	11.2	17.4	46.9	40.5	93	89	6.3	46.0	104.7	166.5	5.0
33	PRIMARY METAL INDUSTRIES	4 496.8	652.8	3 844.0	18 458.3	17 884.5	(NA)	(NA)	1 142.8	12 166.5	23 258.1	58 429.7	2 160.6
331	BLAST FURNACE, BASIC STEEL PROD.	2 442.7	269.1	2 173.6	10 306.4	10 327.8	(NA)	(NA)	552.9	6 388.6	12 116.1	28 652.3	1 058.8
3312	BLAST FURNACES AND STEEL MILLS	2 143.0	225.5	1 917.6	8 471.6	8 620.6	(NA)	(NA)	469.1	5 537.8	10 304.7	23 946.7	961.2
3313	ELECTROMETALLURGICAL PRODUCTS	53.2	4.2	49.1	403.8	367.3	(D)	90	9.5	94.1	217.2	550.1	26.3
3315	STEEL WIRE AND RELATED PRODUCTS	79.4	14.3	65.1	422.8	409.7	95	47	30.6	287.9	583.5	1 227.7	26.6
3316	COLD FINISHING OF STEEL SHAPES	49.6	5.6	43.9	436.6	383.3	95	25	20.1	223.3	504.6	1 635.7	20.6
3317	STEEL PIPE AND TUBES	117.5	19.6	97.9	571.6	546.9	95	44	23.6	245.5	506.1	1 292.1	24.1
332	IRON AND STEEL FOUNDRIES	658.8	129.4	529.4	1 104.8	1 027.1	(NA)	(NA)	218.8	2 155.3	3 481.3	5 713.9	279.9
3321	GRAY IRON FOUNDRIES	503.1	102.3	400.8	654.4	596.2	96	88	138.4	1 387.4	2 257.0	3 876.5	202.5
3322	MALLEABLE IRON FOUNDRIES	28.9	6.5	22.4	43.6	41.1	86	93	22.5	234.5	342.6	507.9	34.9
3324	STEEL INVESTMENT FOUNDRIES	10.9	1.6	9.3	65.6	57.0	93	86	11.2	93.2	175.6	262.2	11.1
3325	STEEL FOUNDRIES, NEC	115.9	19.0	96.9	341.3	332.8	87	91	46.7	440.2	706.0	1 067.4	31.5
333	PRIMARY NONFERROUS METALS	587.2	110.7	476.5	1 952.0	1 819.4	(NA)	(NA)	58.6	626.9	1 705.5	5 964.2	292.2
3331	PRIMARY COPPER	(D)	(D)	(D)	756.6	700.0	(7)	(7)	17.2	173.2	487.8	2 771.1	119.7
3332	PRIMARY LEAD	(D)	(D)	(D)	186.0	162.3	(7)	(7)	2.8	26.5	128.7	460.9	5.7
3333	PRIMARY ZINC	39.8	5.3	34.6	154.1	176.6	83	67	6.3	59.3	121.6	376.4	9.8
3334	PRIMARY ALUMINUM	158.7	22.2	136.5	646.8	590.1	95	70	25.6	296.2	816.0	1 959.8	136.5
3339	PRIMARY NONFERROUS METALS, NEC	97.1	7.4	89.7	208.5	190.5	90	44	6.7	71.7	151.5	395.9	20.6
3341	SECONDARY NONFERROUS METALS	114.3	36.7	77.6	485.2	459.5	97	26	17.8	170.1	410.9	2 097.2	34.8
335	NONFERROUS ROLLING AND DRAWING	460.5	62.4	398.1	4 042.3	3 749.3	(NA)	(NA)	188.3	1 871.3	3 799.5	12 862.6	371.4
3351	COPPER ROLLING AND DRAWING	64.4	7.3	57.1	472.1	496.1	85	92	37.8	383.7	800.3	3 098.8	65.3
3353	ALUMINUM SHEET, PLATE, AND FOIL	157.7	19.0	138.7	1 625.2	1 325.2	92	99	31.3	370.7	692.3	2 685.2	90.3
3354	ALUMINUM EXTRUDED PRODUCTS	48.2	8.6	39.6	337.2	312.8	88	92	27.7	239.2	427.6	1 078.3	32.6
3355	ALUMINUM ROLLING AND DRAWING, NEC	16.1	2.2	13.9	169.5	183.6	91	65	4.6	48.0	57.3	343.4	9.2
3356	NONFERROUS ROLLING & DRAWING, NEC	34.3	5.7	28.6	477.5	483.7	94	93	18.1	184.2	374.1	1 244.6	24.3
3357	NONFERROUS WIREDRAW'G, INSULATING	139.8	19.6	120.2	960.7	948.0	94	93	68.8	645.6	1 448.0	4 412.3	149.7
336	NONFERROUS FOUNDRIES	163.7	32.0	131.8	349.2	316.9	(NA)	(NA)	81.4	721.5	1 269.1	2 323.8	73.5
3361	ALUMINUM FOUNDRIES	121.1	23.2	97.9	205.4	174.7	87	92	45.7	417.9	718.3	1 269.9	38.8
3362	BRASS, BRONZE, COPPER FOUNDRIES	17.9	3.7	14.2	59.2	55.6	85	74	15.4	129.6	236.9	465.3	17.4
3369	NONFERROUS FOUNDRIES, NEC	24.7	5.1	19.6	84.7	86.6	85	77	20.3	174.0	314.0	588.6	17.3
339	MISC. PRIMARY METAL PRODUCTS	69.5	12.5	57.0	218.2	184.4	(NA)	(NA)	25.0	232.8	475.7	815.7	50.0
3398	METAL HEAT TREATING	42.2	9.2	33.0	69.0	48.5	(8)	(8)	17.2	157.3	310.6	467.4	23.1
3399	PRIMARY METAL PRODUCTS, NEC	27.3	3.3	24.0	149.2	135.9	94	70	7.9	75.5	165.0	348.3	26.9
34	FABRICATED METAL PRODUCTS	2 606.1	480.9	2 125.3	15 306.2	14 111.8	(NA)	(NA)	1 493.3	13 820.6	26 914.5	51 739.3	1 323.2
341	METAL CANS, SHIPPING CONTAINERS	208.7	25.7	183.0	1 168.0	1 020.9	(NA)	(NA)	78.6	839.6	2 004.6	4 972.1	146.5
3411	METAL CANS	176.9	19.6	157.3	1 032.9	889.0	96	98	68.5	740.7	1 815.8	4 510.8	138.1
3412	METAL BARRELS, DRUMS, AND PAILS	31.8	6.1	25.7	135.0	132.0	94	90	10.2	98.9	188.8	461.3	8.4
342	CUTLERY, HANDTOOLS AND HARDWARE	298.9	45.9	253.1	1 544.7	1 385.2	(NA)	(NA)	159.2	1 404.9	3 253.4	5 094.3	143.0
3421	CUTLERY	23.3	5.0	18.3	132.1	129.0	92	94	13.4	102.6	322.3	427.5	11.7
3423	HAND AND EDGE TOOLS, NEC	72.0	14.1	58.0	487.4	437.3	91	90	39.3	343.0	780.0	1 233.1	33.5
3425	HANDSAWS AND SAW BLADES	13.4	1.4	12.0	75.5	68.3	86	77	6.6	56.7	127.5	194.4	6.4
3429	HARDWARE, NEC	190.2	25.4	164.8	849.7	750.6	94	94	99.9	902.6	2 023.6	3 239.4	91.4
343	PLUMBING, HEATING, EXCEPT ELEC	74.1	14.8	59.2	567.9	525.8	(NA)	(NA)	60.7	523.8	1 131.6	2 136.8	51.7
3431	METAL SANITARY WARE	11.3	2.0	9.3	65.5	72.1	82	92	11.2	104.4	208.2	370.2	8.2
3432	PLUMBING FITTINGS AND BRASS GOODS	30.3	3.8	26.5	239.8	219.6	96	92	18.6	151.5	361.8	708.2	19.0
3433	HEATING EQUIPMENT, EXC. ELECTRIC	32.4	9.0	23.5	262.6	234.0	87	84	30.9	268.0	561.6	1 058.4	24.5
344	FABRICATED STRUC. METAL PRODS.	580.2	158.7	421.5	4 832.4	4 576.9	(NA)	(NA)	394.8	3 531.8	6 742.9	14 179.6	317.5
3441	FABRICATED STRUCTURAL METAL	144.1	40.3	103.9	1 220.9	1 132.6	92	92	104.3	975.5	1 730.7	3 920.1	74.7
3442	METAL DOORS, SASH, AND TRIM	70.7	18.9	51.8	519.0	438.8	93	91	70.7	520.8	1 003.7	2 077.6	52.1
3443	FABRICATED PLATEWORK, BOILER SHOP	179.8	52.6	127.3	1 566.9	1 576.3	89	92	93.0	893.5	1 758.7	3 339.0	77.3
3444	SHEET METALWORK	110.6	26.5	84.1	841.9	771.5	92	90	74.0	678.5	1 299.9	2 680.0	59.0
3446	ARCHITECTURAL METALWORK	22.2	6.6	15.7	167.3	156.7	90	86	20.9	175.4	311.8	573.7	17.0
3448	PREFABRICATED METAL BUILDINGS	32.2	8.8	23.4	304.6	296.1	94	95	12.5	109.4	275.9	608.9	11.3

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
3449	MISCELLANEOUS METALWORK.	308	412	185	16.3	211.5	10.2	20.2	115.7	436.9	1 330.8
345	SCREW MACHINE PROD., BOLTS, ETC. .	2 431	2 627	1 102	104.7	1 414.0	81.6	168.2	983.2	2 864.2	5 091.2
3451	SCREW MACHINE PRODUCTS	1 727	1 770	654	43.8	551.6	36.0	74.3	395.5	1 023.9	1 771.7
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	723	857	448	60.9	862.4	45.6	93.9	587.6	1 840.3	3 319.5
346	METAL FORGINGS AND STAMPINGS . . .	3 389	3 715	1 875	288.0	4 511.3	236.1	479.6	3 418.9	8 913.4	18 264.2
3462	IRON AND STEEL FORGINGS.	312	358	231	39.1	641.5	31.0	60.8	474.8	1 301.4	2 795.7
3463	NONFERROUS FORGINGS.	43	47	31	5.4	93.7	4.2	8.2	64.8	240.7	456.7
3465	AUTOMOTIVE STAMPINGS	495	591	432	132.4	2 446.0	112.5	236.8	1 956.6	4 654.5	9 739.2
3466	CROWNS AND CLOSURES.	42	56	43	7.9	104.8	6.5	12.6	80.2	265.4	536.9
3469	METAL STAMPINGS, NEC	2 544	2 663	1 138	103.2	1 225.4	82.0	161.2	842.5	2 451.5	4 735.7
347	METAL SERVICES, NEC.	4 880	5 095	1 373	93.5	1 008.5	77.1	153.5	706.3	1 962.9	3 456.3
3471	PLATING AND POLISHING.	3 344	3 447	904	61.2	634.8	51.2	101.3	446.1	1 181.8	1 848.5
3479	METAL COATING AND ALLIED SERVICES. .	1 556	1 648	469	32.3	373.7	25.9	52.2	260.2	781.1	1 607.7
348	ORDNANCE AND ACCESSORIES, NEC. . .	306	346	151	70.2	991.7	46.9	91.7	559.2	1 736.8	2 641.4
3482	SMALL ARMS AMMUNITION.	59	65	16	10.3	138.1	7.7	15.4	95.3	247.5	436.2
3483	AMMUNITION, EXC. SMALL ARMS, NEC . .	68	80	48	18.9	248.1	12.4	23.5	133.2	448.7	716.5
3484	SMALL ARMS	105	112	46	17.5	237.8	13.1	27.1	157.3	481.5	754.9
3489	ORDNANCE AND ACCESSORIES NEC	89	89	41	23.6	367.7	13.7	25.8	173.3	559.2	733.8
349	MISC. FABRICATED METAL PRODUCTS. .	5 780	6 373	2 328	279.4	3 555.8	208.2	406.1	2 318.1	7 854.9	14 752.6
3493	STEEL SPRINGS, EXCEPT WIRE	116	131	59	8.2	119.8	6.6	13.3	88.0	249.9	500.5
3494	VALVES AND PIPE FITTINGS	741	902	532	108.7	1 467.3	76.0	149.6	909.8	3 385.9	5 662.3
3495	WIRE SPRINGS	254	332	226	21.7	253.5	18.0	35.4	187.8	497.7	957.7
3496	MISC. FABRICATED WIRE PRODUCTS . . .	1 048	1 114	387	32.4	354.5	25.5	49.4	232.2	721.7	1 435.0
3497	METAL FOIL AND LEAF.	63	77	52	9.4	125.8	6.6	13.0	87.1	298.0	895.1
3498	FABRICATED PIPE AND FITTINGS	513	579	278	28.2	390.0	21.4	40.6	265.4	887.2	1 872.7
3499	FABRICATED METAL PRODUCTS, NEC . . .	3 142	3 238	794	70.8	844.7	54.1	104.8	547.8	1 814.5	3 429.2
35	MACHINERY, EXCEPT ELECTRICAL . .	44 974	48 200	12 446	2 083.3	30 557.5	1 413.8	2 803.0	18 298.4	67 222.5	122 187.7
351	ENGINES AND TURBINES	251	315	168	129.6	2 237.6	90.1	181.2	1 404.7	4 959.6	10 426.2
3511	TURBINES, TURBINE GENERATOR SETS . .	68	83	37	40.8	709.1	24.8	51.1	368.5	1 553.1	2 729.7
3519	INTERNAL COMBUSTION ENGINES, NEC . .	187	232	131	88.8	1 528.6	65.3	130.1	1 036.2	3 406.5	7 696.5
352	FARM AND GARDEN MACHINERY. . . .	1 991	2 159	756	150.9	2 196.5	110.8	210.4	1 456.4	5 490.2	11 857.0
3523	FARM MACHINERY AND EQUIPMENT	1 868	2 004	664	131.3	1 971.9	96.2	182.7	1 313.3	4 854.4	10 281.7
3524	LAWN AND GARDEN EQUIPMENT.	137	155	92	19.6	224.6	14.7	27.7	143.1	635.8	1 575.3
353	CONSTRUCTION, RELATED MACHINERY. .	2 777	3 229	1 518	333.0	5 096.7	226.3	443.2	3 184.5	11 835.6	23 681.6
3531	CONSTRUCTION MACHINERY	807	922	446	155.3	2 547.1	111.2	212.7	1 708.1	5 744.3	12 628.7
3532	MINING MACHINERY	293	344	168	31.4	425.9	20.3	39.7	262.9	1 018.8	1 996.7
3533	OILFIELD MACHINERY	386	478	247	58.6	867.5	39.8	83.4	543.3	2 437.6	3 912.4
3534	ELEVATORS AND MOVING STAIRWAYS . . .	134	152	72	10.2	141.9	5.9	11.5	69.4	284.5	489.7
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	572	616	294	32.9	476.5	19.2	38.5	226.6	1 018.9	1 897.9
3536	HOISTS, CRANES, AND MONORAILS. . . .	231	242	121	15.8	210.5	10.6	20.6	122.0	453.2	836.0
3537	INDUSTRIAL TRUCKS AND TRACTORS . . .	450	475	170	28.8	427.3	19.4	36.7	252.2	878.2	1 920.1
354	METALWORKING MACHINERY	10 164	10 630	2 680	297.8	4 513.9	217.8	447.4	2 963.1	8 746.7	13 283.0
3541	MACHINE TOOLS, METAL-CUTTING	874	919	307	59.5	951.0	37.3	76.6	542.2	1 871.0	2 819.1
3542	MACHINE TOOLS, METAL-FORMING	411	426	163	23.7	360.7	16.1	32.8	219.4	721.9	1 130.6
3544	SPECIAL DIES, TOOLS, JIGS, ETC . . .	7 033	7 152	1 426	105.6	1 706.3	86.3	183.8	1 260.4	2 786.9	3 901.3
3545	MACHINE TOOL ACCESSORIES	1 271	1 412	492	54.1	762.5	39.9	80.2	498.2	1 585.8	2 384.5
3546	POWER DRIVEN HANDTOOLS	99	124	71	27.7	325.7	20.0	38.5	210.4	931.9	1 623.2
3547	ROLLING MILL MACHINERY	58	63	38	7.9	128.2	5.4	10.4	78.4	286.9	507.4
3549	METALWORKING MACHINERY, NEC.	522	534	183	19.4	279.5	12.8	25.2	154.1	562.2	916.8
355	SPECIAL INDUSTRY MACHINERY	3 798	4 090	1 487	185.0	2 615.9	117.6	235.7	1 449.9	5 271.4	9 128.2
3551	FOOD PRODUCTS MACHINERY.	685	740	315	36.3	522.1	22.8	45.4	292.6	1 056.4	1 786.8
3552	TEXTILE MACHINERY.	600	639	217	26.0	300.8	18.3	36.3	185.3	540.0	951.0
3553	WOODWORKING MACHINERY.	291	301	105	10.3	131.2	7.4	14.7	81.9	317.8	585.6
3554	PAPER INDUSTRIES MACHINERY	193	213	103	16.4	247.5	9.3	18.8	123.8	464.9	826.9
3555	PRINTING TRADES MACHINERY.	520	595	199	25.5	369.2	15.6	31.7	192.9	793.6	1 350.9
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	1 548	1 602	548	70.6	1 045.1	44.1	88.7	573.4	2 098.7	3 627.0
356	GENERAL INDUSTRIAL MACHINERY . . .	4 464	4 947	1 806	313.5	4 451.1	212.4	420.6	2 712.4	9 672.6	16 542.0
3561	PUMPS AND PUMPING EQUIPMENT.	515	613	285	63.0	900.6	39.8	79.5	506.9	2 141.6	3 773.7
3562	BALL AND ROLLER BEARINGS	102	149	104	50.6	752.6	41.3	82.4	579.9	1 472.7	2 567.3
3563	AIR AND GAS COMPRESSORS.	148	175	103	32.0	465.6	19.1	38.2	255.2	1 145.5	2 075.6
3564	BLOWERS AND FANS	432	482	198	28.0	356.8	18.6	36.7	209.6	776.7	1 430.8
3565	INDUSTRIAL PATTERNS.	1 001	1 002	115	9.3	152.7	8.0	15.8	122.2	252.5	320.6
3566	SPEED CHANGERS, DRIVES, AND GEARS. .	307	327	162	25.3	365.4	17.6	35.0	226.7	803.1	1 222.3
3567	INDUSTRIAL FURNACES AND OVENS. . . .	311	327	137	15.2	209.4	9.3	17.9	107.4	469.3	746.3
3568	POWER TRANSMISSION EQUIPMENT, NEC. .	184	226	163	32.5	464.8	23.8	45.8	306.8	1 009.1	1 626.0
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	1 586	1 646	539	57.5	783.2	34.9	69.2	397.7	1 602.2	2 779.5
357	OFFICE AND COMPUTING MACHINES. . .	1 175	1 317	610	259.3	3 948.8	123.5	243.3	1 384.4	9 921.4	16 841.9
3573	ELECTRONIC COMPUTING EQUIPMENT . . .	808	932	435	192.7	3 004.3	85.5	172.4	978.4	7 623.5	12 923.6
3574	CALCULATING, ACCOUNTING MACHINES . .	58	64	31	17.1	220.7	10.4	18.1	92.9	391.3	850.0
3576	SCALES, BALANCES, EXC. LABORATORY. .	92	103	46	7.1	84.5	4.7	9.1	46.9	214.9	348.1
3579	OFFICE MACHINES, TYPEWRITERS, ETC. .	191	215	98	42.4	639.1	22.9	43.7	266.1	1 691.4	2 719.7
358	REFRIGERATION AND SERVICE MACH . .	1 922	2 114	837	191.5	2 516.4	138.4	270.7	1 637.4	5 962.6	12 416.1
3581	AUTOMATIC MERCHANDISING MACHINES . .	108	113	35	8.8	103.2	6.4	12.4	65.1	211.7	410.1
3582	COMMERCIAL LAUNDRY EQUIPMENT	90	94	38	4.6	54.4	3.3	6.4	35.6	117.3	220.3
3585	REFRIGERATION, HEATING EQUIPMENT . .	731	860	457	138.6	1 849.7	104.4	205.4	1 270.2	4 469.2	9 638.1
3586	MEASURING AND DISPENSING PUMPS . . .	57	59	30	7.4	97.3	5.1	9.7	57.9	218.0	375.7
3589	SERVICE INDUSTRY MACHINERY, NEC. . .	959	988	277	32.1	411.8	19.2	36.9	208.6	946.4	1 771.8
359	MISC. MACHINERY, EXC. ELEC	19 257	19 399	2 584	222.7	2 980.4	176.8	350.5	2 105.6	5 362.4	8 011.8
3592	CARBURETORS, PISTONS, RINGS, ETC . .	131	151	84	32.2	508.5	26.0	52.5	388.5	924.9	1 400.6
3599	MACHINERY, EXCEPT ELECTRICAL, NEC. .	19 137	19 248	2 500	190.5	2 471.8	150.8	298.0	1 717.1	4 437.6	6 611.2

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
3449	MISCELLANEOUS METALWORK.	20.5	5.2	15.3	211.8	204.8	91	78	19.5	178.8	362.2	980.4	26.2
345	SCREW MACHINE PROD., BOLTS, ETC. .	184.1	26.6	157.5	944.9	881.3	(NA)	(NA)	100.6	948.0	1 845.3	3 091.5	88.9
3451	SCREW MACHINE PRODUCTS	71.9	9.1	62.8	230.6	207.9	96	92	40.5	357.3	648.5	1 063.8	33.2
3452	BOLTS, NUTS, RIVETS, AND WASHERS . .	112.3	17.5	94.8	714.3	673.3	94	94	60.1	590.7	1 196.8	2 027.6	55.7
346	METAL FORGINGS AND STAMPINGS . . .	604.4	78.9	525.6	2 361.4	2 160.0	(NA)	(NA)	263.5	2 791.4	5 057.3	9 956.9	237.7
3462	IRON AND STEEL FORGINGS.	126.7	16.5	110.2	452.7	429.8	92	84	34.3	387.2	661.8	1 416.1	28.1
3463	NONFERROUS FORGINGS.	13.7	3.6	10.1	123.8	101.1	87	67	5.8	63.7	104.0	222.5	7.0
3465	AUTOMOTIVE STAMPINGS	292.2	25.1	267.1	948.3	872.8	92	91	123.3	1 485.4	2 663.8	5 286.0	117.5
3466	CROWNS AND CLOSURES.	17.1	2.0	15.1	121.0	99.2	95	86	8.1	74.1	166.7	343.5	8.3
3469	METAL STAMPINGS, NEC	154.7	31.6	123.0	715.7	657.2	88	88	92.0	781.0	1 461.0	2 688.8	76.7
347	METAL SERVICES, NEC.	121.1	22.2	98.8	287.2	251.6	(NA)	(NA)	82.1	624.2	1 120.3	1 736.3	64.2
3471	PLATING AND POLISHING.	73.2	14.7	58.4	128.3	112.5	(8)	(8)	54.6	403.1	741.2	1 034.5	40.2
3479	METAL COATING AND ALLIED SERVICES. .	47.9	7.5	40.4	159.0	139.2	(8)	(8)	27.6	221.1	379.2	701.8	24.0
348	ORDNANCE AND ACCESSORIES, NEC. . .	82.5	15.0	67.5	518.8	462.1	(NA)	(NA)	109.5	1 015.3	1 476.0	2 787.0	61.6
3482	SMALL ARMS AMMUNITION.	42.9	5.7	37.1	117.6	121.9	95	90	13.9	129.3	228.6	438.0	10.8
3483	AMMUNITION, EXC. SMALL ARMS, NEC . .	9.2	2.0	7.2	58.3	62.7	83	76	54.9	479.1	624.1	1 477.9	24.5
3484	SMALL ARMS	20.5	6.1	14.4	166.7	153.5	94	99	16.1	152.1	278.6	393.5	11.3
3489	ORDNANCE AND ACCESSORIES NEC	10.1	1.3	8.8	176.2	123.9	81	68	24.6	254.8	344.7	477.7	15.0
349	MISC. FABRICATED METAL PRODUCTS. .	452.0	93.0	359.1	3 080.9	2 847.1	(NA)	(NA)	244.3	2 141.7	4 283.0	7 784.8	212.2
3493	STEEL SPRINGS, EXCEPT WIRE	14.1	2.4	11.7	81.6	73.7	84	72	8.5	79.9	149.7	331.4	6.6
3494	VALVES AND PIPE FITTINGS	201.2	42.5	158.7	1 508.2	1 374.8	89	88	94.3	879.9	1 751.2	2 956.9	79.0
3495	WIRE SPRINGS	27.6	4.5	23.1	104.5	105.9	92	92	23.7	193.2	340.7	611.9	12.9
3496	MISC. FABRICATED WIRE PRODUCTS . . .	47.3	10.6	36.6	252.8	233.6	91	37	33.2	261.4	504.4	959.7	28.9
3497	METAL FOIL AND LEAF.	16.1	1.8	14.3	141.1	124.6	80	63	5.4	51.9	126.5	282.0	8.2
3498	FABRICATED PIPE AND FITTINGS	51.0	12.7	38.3	418.4	395.3	94	93	17.5	164.7	363.1	704.4	14.7
3499	FABRICATED METAL PRODUCTS, NEC . . .	94.8	18.5	76.3	574.3	539.2	89	83	61.8	510.7	1 047.4	1 938.6	61.8
35	MACHINERY, EXCEPT ELECTRICAL . .	4 402.4	948.7	3 453.7	27 170.9	25 153.3	(NA)	(NA)	1 827.7	18 523.3	37 562.9	65 820.7	1 906.3
351	ENGINES AND TURBINES	329.9	44.5	285.4	2 169.6	1 909.0	(NA)	(NA)	116.0	1 320.3	2 899.5	5 507.4	185.5
3511	TURBINES, TURBINE GENERATOR SETS . .	44.1	5.4	38.8	827.6	775.5	92	82	46.2	548.9	1 225.3	2 189.0	93.5
3519	INTERNAL COMBUSTION ENGINES, NEC . .	285.8	39.1	246.7	1 342.0	1 133.5	91	88	69.9	771.4	1 674.2	3 318.4	92.0
352	FARM AND GARDEN MACHINERY.	370.5	75.4	295.1	2 464.1	2 441.7	(NA)	(NA)	125.3	1 211.2	2 701.2	5 590.4	163.6
3523	FARM MACHINERY AND EQUIPMENT	341.9	70.5	271.3	2 083.4	2 088.8	92	95	104.6	1 045.7	2 248.0	4 531.4	116.0
3524	LAWN AND GARDEN EQUIPMENT.	28.6	4.9	23.8	380.7	352.9	92	82	20.7	165.5	453.2	1 059.1	47.6
353	CONSTRUCTION, RELATED MACHINERY. .	932.4	268.4	664.0	6 156.5	6 095.7	(NA)	(NA)	275.4	2 855.7	5 962.2	11 089.5	282.1
3531	CONSTRUCTION MACHINERY	498.3	151.4	346.8	3 142.3	3 171.8	91	95	133.8	1 460.2	3 130.7	6 091.0	159.5
3532	MINING MACHINERY	67.0	23.8	43.2	646.1	603.7	88	86	21.3	197.6	393.2	771.2	13.4
3533	OILFIELD MACHINERY	257.5	67.9	189.7	1 212.5	1 216.0	88	95	35.9	357.5	788.6	1 213.0	54.7
3534	ELEVATORS AND MOVING STAIRWAYS . . .	8.8	1.8	7.1	119.1	123.0	96	93	15.0	144.5	310.2	483.6	7.8
3535	CONVEYORS AND CONVEYING EQUIPMENT. .	34.7	9.0	25.7	363.8	329.9	90	87	27.2	275.5	540.1	968.0	13.2
3536	HOISTS, CRANES, AND MONORAILS. . . .	17.9	4.5	13.3	203.6	196.6	87	76	16.3	160.9	274.7	527.3	13.8
3537	INDUSTRIAL TRUCKS AND TRACTORS . . .	48.3	10.0	38.3	469.1	454.7	94	95	25.8	259.5	524.7	1 035.4	19.7
354	METALWORKING MACHINERY	438.6	79.1	359.5	2 848.1	2 510.1	(NA)	(NA)	268.1	2 858.6	4 901.7	7 267.0	218.8
3541	MACHINE TOOLS, METAL-CUTTING	82.2	15.4	66.8	878.4	741.5	87	92	52.5	573.8	901.7	1 418.1	35.2
3542	MACHINE TOOLS, METAL-FORMING	24.7	3.2	21.5	359.6	317.2	90	87	24.1	265.4	417.7	696.3	17.5
3544	SPECIAL DIES, TOOLS, JIGS, ETC . . .	175.7	29.3	146.4	449.9	378.6	94	79	97.8	1 113.8	1 797.4	2 423.7	97.0
3545	MACHINE TOOL ACCESSORIES	77.2	13.8	63.4	468.5	413.3	89	88	46.7	456.6	876.1	1 243.4	30.2
3546	POWER DRIVEN HANDTOOLS	39.0	7.4	31.6	326.0	311.4	91	90	23.1	202.3	434.5	730.5	20.3
3547	ROLLING MILL MACHINERY	9.1	.6	8.4	131.8	154.5	78	86	10.4	115.2	206.4	327.8	6.3
3549	METALWORKING MACHINERY, NEC.	30.7	9.3	21.5	233.8	193.7	88	82	13.6	131.5	267.9	427.3	12.3
355	SPECIAL INDUSTRY MACHINERY	243.6	58.4	185.2	2 309.2	2 172.4	(NA)	(NA)	190.1	1 853.9	3 731.9	6 207.2	160.0
3551	FOOD PRODUCTS MACHINERY.	46.9	9.0	37.9	499.4	453.4	90	92	31.9	315.9	605.2	1 000.1	21.8
3552	TEXTILE MACHINERY.	32.2	7.9	24.3	233.5	256.7	93	94	32.7	271.0	487.9	823.7	27.6
3553	WOODWORKING MACHINERY.	13.8	3.0	10.8	111.6	100.6	94	95	13.7	123.9	285.1	495.2	12.4
3554	PAPER INDUSTRIES MACHINERY	17.2	4.5	12.6	220.2	225.0	84	90	15.3	159.0	254.0	447.8	8.3
3555	PRINTING TRADES MACHINERY.	46.8	14.0	32.7	355.4	316.7	97	92	23.9	249.4	503.6	823.5	16.1
3559	SPECIAL INDUSTRY MACHINERY, NEC. . .	86.8	20.0	66.8	889.2	820.0	88	85	72.6	734.7	1 596.1	2 616.9	73.8
356	GENERAL INDUSTRIAL MACHINERY . . .	552.7	116.8	435.9	4 013.9	3 698.0	(NA)	(NA)	262.0	2 585.4	5 019.7	8 433.7	232.1
3561	PUMPS AND PUMPING EQUIPMENT.	123.5	26.0	97.5	1 024.0	925.1	88	88	55.5	532.9	1 095.6	1 917.3	56.9
3562	BALL AND ROLLER BEARINGS	132.9	21.6	111.3	621.7	569.0	96	98	50.9	525.5	931.3	1 530.5	51.3
3563	AIR AND GAS COMPRESSORS.	55.8	10.8	45.0	610.9	589.0	88	89	22.9	226.6	467.5	858.4	15.3
3564	BLOWERS AND FANS	37.5	11.2	26.3	242.9	232.6	89	87	23.5	216.1	468.8	805.3	22.2
3565	INDUSTRIAL PATTERNS.	11.1	2.1	9.0	25.2	20.6	97	75	8.5	103.1	161.0	198.0	5.3
3566	SPEED CHANGERS, DRIVES, AND GEARS. .	48.5	11.6	36.9	297.8	283.6	87	84	22.5	224.2	409.0	632.7	21.8
3567	INDUSTRIAL FURNACES AND OVENS. . . .	13.4	2.6	10.8	151.4	118.1	91	90	13.6	138.5	244.3	443.2	7.5
3568	POWER TRANSMISSION EQUIPMENT, NEC. .	50.3	8.1	42.3	418.8	381.8	82	74	27.7	266.5	544.4	876.4	20.4
3569	GENERAL INDUSTRIAL MACHINERY, NEC. .	79.6	22.8	56.8	621.2	578.2	88	86	37.0	351.8	697.7	1 171.9	31.3
357	OFFICE AND COMPUTING MACHINES. . .	826.1	166.1	660.1	3 887.3	3 331.9	(NA)	(NA)	208.4	2 277.3	4 904.5	8 604.9	287.0
3573	ELECTRONIC COMPUTING EQUIPMENT . . .	651.5	107.3	544.2	3 007.9	2 526.0	94	91	144.8	1 668.3	3 497.6	6 471.2	212.8
3574	CALCULATING, ACCOUNTING MACHINES . .	56.3	26.2	30.2	218.2	222.0	84	77	22.5	207.2	407.0	637.1	19.0
3576	SCALES, BALANCES, EXC. LABORATORY. .	6.8	1.5	5.4	85.7	79.6	96	99	6.7	59.3	129.7	200.4	5.7
3579	OFFICE MACHINES, TYPEWRITERS, ETC. .	111.5	31.1	80.4	575.3	504.2	76	91	34.5	342.5	870.1	1 296.2	49.6
358	REFRIGERATION AND SERVICE MACH . .	287.9	55.1	232.8	2 259.5	2 054.1	(NA)	(NA)	197.9	1 863.9	4 426.7	8 711.0	228.2
3581	AUTOMATIC MERCHANDISING MACHINES . .	7.9	1.6	6.3	109.6	83.2	94	93	10.5	83.6	183.4	324.4	5.6
3582	COMMERCIAL LAUNDRY EQUIPMENT	2.2	.4	1.9	53.5	49.1	90	81	4.8	42.2	88.2	157.0	1.2
3585	REFRIGERATION, HEATING EQUIPMENT . .	233.0	42.2	190.8	1 632.7	1 507.9	89	95	150.8	1 442.1	3 517.4	7 083.5	201.2
3586	MEASURING AND DISPENSING PUMPS . . .	6.2	1.1	5.2	97.9	89.5	61	82	7.2	67.3	134.1	232.3	4.5
3589	SERVICE INDUSTRY MACHINERY, NEC. . .	38.5	9.8	28.7	365.9	324.4	91	90	24.4	228.8	503.6	913.8	15.7
359	MISC. MACHINERY, EXC. ELEC	420.8	85.1	335.7	1 062.6	940.4	(NA)	(NA)	184.4	1 697.0	3 015.5	4 409.5	149.2
3592	CARBURETORS, PISTONS, RINGS, ETC . .	79.9	16.7	63.3	240.0	202.7	82	87	26.7	272.3	500.0	744.3	27.1
3599	MACHINERY, EXCEPT ELECTRICAL, NEC. .	340.9	68.4	272.5	822.7	737.6	96	94	157.8	1 424.7	2 515.5	3 665.2	122.2

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977										
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)			
36	ELECTRIC, ELECTRONIC EQUIP . . .	12 554	14 973	6 338	1 723.1	22 544.2	1 191.4	2 309.2	12 951.6	50 365.7	88 433.1	
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	753	947	459	115.3	1 431.3	84.9	162.3	909.9	3 335.9	5 771.7	
3612	TRANSFORMERS	229	279	143	43.3	529.6	32.8	62.5	349.8	1 170.0	2 209.1	
3613	SWITCHGEAR, SWITCHBOARD APPARATUS. .	542	668	316	72.0	901.7	52.1	99.9	560.1	2 165.9	3 562.6	
362	ELECTRICAL INDUSTRIAL APPARATUS. .	1 407	1 646	819	198.4	2 542.6	142.0	278.8	1 572.1	5 614.2	9 591.4	
3621	MOTORS AND GENERATORS.	343	447	299	96.9	1 177.6	74.2	145.8	802.6	2 609.8	4 462.7	
3622	INDUSTRIAL CONTROLS.	676	726	283	55.4	726.6	35.3	69.0	380.1	1 602.2	2 511.4	
3623	WELDING APPARATUS, ELECTRIC. . . .	160	176	87	17.5	285.7	11.3	23.0	165.1	582.7	1 189.6	
3624	CARBON AND GRAPHITE PRODUCTS . . .	58	74	48	12.1	164.1	9.0	17.7	110.9	408.4	735.2	
3629	ELEC. INDUSTRIAL APPARATUS, NEC. . .	213	223	102	16.5	188.6	12.2	23.4	113.4	411.0	692.4	
363	HOUSEHOLD APPLIANCES	528	666	342	162.3	1 898.1	128.7	243.1	1 352.1	5 276.2	10 736.5	
3631	HOUSEHOLD COOKING EQUIPMENT. . . .	84	96	58	25.4	289.1	19.1	36.8	197.9	[9]784.1	[9]1 707.2	
3632	HOUSEHOLD REFRIGERATORS, FREEZERS. .	33	42	25	35.8	468.6	29.8	56.9	358.0	1 166.1	2 576.6	
3633	HOUSEHOLD LAUNDRY EQUIPMENT. . . .	21	31	24	19.4	262.4	15.9	29.4	202.4	844.7	1 792.8	
3634	ELECTRIC HOUSEWARES AND FANS . . .	239	291	148	47.3	458.7	37.6	71.4	305.0	1 365.7	2 531.2	
3635	HOUSEHOLD VACUUM CLEANERS.	32	35	22	10.4	116.6	7.3	12.9	78.9	378.8	639.9	
3636	SEWING MACHINES.	86	91	25	8.2	107.0	6.1	10.6	66.8	208.9	304.9	
3639	HOUSEHOLD APPLIANCES, NEC.	65	80	40	15.7	195.6	12.8	25.1	143.2	527.9	1 184.0	
364	ELEC. LIGHTING, WIRING EQUIP . . .	1 762	2 009	913	165.0	1 925.4	127.2	244.6	1 292.1	4 741.2	8 357.0	
3641	ELECTRIC LAMPS	128	167	64	28.7	322.4	25.3	47.5	266.3	1 089.2	1 651.4	
3643	CURRENT-CARRYING WIRING DEVICES. . .	361	413	198	43.9	480.3	33.6	66.2	312.1	1 100.1	1 795.2	
3644	NONCURRENT-CARRYING WIR'G DEVICES. .	174	202	123	25.8	330.1	18.4	35.9	210.9	744.4	1 421.8	
3645	RESIDENTIAL LIGHTING FIXTURES. . . .	675	710	244	23.7	229.5	18.2	33.4	139.4	494.2	986.6	
3646	COMMERCIAL LIGHTING FIXTURES	192	218	122	15.6	169.1	11.1	20.6	98.8	434.7	922.7	
3647	VEHICULAR LIGHTING EQUIPMENT	70	75	43	14.5	246.0	11.4	23.3	178.8	536.0	908.5	
3648	LIGHTING EQUIPMENT, NEC.	211	224	119	12.8	148.0	9.1	17.7	85.8	342.6	671.0	
365	RADIO, TV RECEIVING EQUIPMENT. . .	1 223	1 290	325	97.7	1 097.0	75.4	143.8	740.0	3 078.1	6 913.2	
3651	RADIO AND TV RECEIVING SETS.	546	581	192	74.6	852.4	57.6	106.6	570.0	2 350.9	5 731.6	
3652	PHONO. RECORDS, PRERECORDED TAPE . .	679	709	133	23.1	244.6	17.8	37.2	170.0	727.3	1 181.7	
366	COMMUNICATION EQUIPMENT.	2 068	2 385	1 126	458.5	6 995.0	259.6	499.5	3 226.2	14 130.0	22 744.2	
3661	TELEPHONE AND TELEGRAPH APPARATUS. .	208	264	154	124.4	1 818.0	87.1	164.2	1 125.9	4 192.0	7 858.3	
3662	RADIO AND TV COMMUNICATION EQUIP . .	1 873	2 121	972	334.1	5 177.0	172.4	335.2	2 100.3	9 938.0	14 886.0	
367	ELECTRONIC COMPONENTS, ACCESS. . .	4 019	4 455	1 671	373.5	4 556.5	257.9	508.7	2 457.4	9 259.6	15 389.6	
3671	ELECTRON TUBES, RECEIVING TYPE . . .	125	146	60	36.7	514.1	27.5	53.7	324.5	909.6	1 581.7	
3674	SEMICONDUCTORS, RELATED DEVICES. . .	499	545	219	114.0	1 601.1	63.5	126.5	670.3	3 414.0	5 327.1	
3675	ELECTRONIC CAPACITORS.	86	118	97	28.9	260.5	23.4	45.7	179.0	486.1	742.3	
3676	ELECTRONIC RESISTORS	77	101	80	21.3	210.9	15.9	32.4	130.6	401.0	578.3	
3677	ELECTRONIC COILS AND TRANSFORMERS. .	276	294	194	20.7	166.6	17.1	31.8	113.1	289.1	506.4	
3678	ELECTRONIC CONNECTORS.	106	133	107	26.0	303.6	19.1	37.6	185.1	754.2	1 104.6	
3679	ELECTRONIC COMPONENTS, NEC	3 005	3 118	914	125.9	1 499.7	91.4	181.0	854.7	3 005.7	5 549.2	
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	1 340	1 575	683	152.4	2 098.3	115.7	228.4	1 401.8	4 930.4	8 929.5	
3691	STORAGE BATTERIES.	134	218	134	25.9	358.7	21.1	43.4	276.4	927.8	1 982.5	
3692	PRIMARY BATTERIES, DRY AND WET . . .	41	58	33	11.0	118.2	9.0	18.0	87.4	343.2	666.1	
3693	X-RAY APPARATUS AND TUBES.	212	243	126	30.9	467.6	17.1	33.3	195.5	1 231.9	1 884.7	
3694	ENGINE ELECTRICAL EQUIPMENT. . . .	372	409	181	63.8	948.4	51.8	102.6	708.6	2 041.3	3 647.2	
3699	ELECTRICAL EQUIP., SUPPLIES, NEC . .	612	647	209	20.7	205.3	16.7	31.1	133.9	386.2	749.0	
37	TRANSPORTATION EQUIPMENT	8 934	10 176	3 653	1 768.2	30 673.5	1 284.4	2 612.7	20 314.3	64 291.1	166 954.0	
371	MOTOR VEHICLES AND EQUIPMENT . . .	3 591	4 234	1 708	876.3	16 037.7	727.6	1 524.2	12 682.4	37 023.1	117 746.5	
3711	MOTOR VEHICLES AND CAR BODIES. . . .	254	322	119	343.6	7 077.6	289.9	620.4	5 724.9	18 723.7	76 517.8	
3713	TRUCK AND BUS BODIES	770	820	313	34.8	428.6	27.4	53.9	307.6	946.3	2 003.3	
3714	MOTOR VEHICLE PARTS, ACCESSORIES . .	2 194	2 623	997	450.7	8 004.0	372.5	777.2	6 284.9	16 263.8	35 750.8	
3715	TRUCK TRAILERS	316	353	165	28.1	322.0	22.5	43.1	229.9	645.9	1 910.1	
3716	MOTOR HOMES.	80	116	114	19.2	205.4	15.4	29.6	135.1	443.3	1 564.5	
372	AIRCRAFT AND PARTS	1 027	1 173	549	430.8	7 620.5	240.1	475.0	3 563.5	14 731.7	25 867.1	
3721	AIRCRAFT	151	176	74	222.7	3 975.9	119.0	232.7	1 765.2	8 134.1	14 834.2	
3724	AIRCRAFT ENGINES AND ENGINE PARTS. .	226	269	177	106.1	1 939.4	62.4	128.7	970.0	3 599.1	6 272.3	
3728	AIRCRAFT EQUIPMENT, NEC.	681	728	298	102.0	1 705.2	58.7	113.7	828.3	2 998.4	4 760.6	
373	SHIP, BOAT BUILDING, REPAIRING . .	2 692	2 795	736	220.2	2 939.8	175.5	345.6	2 132.1	4 681.4	8 317.8	
3731	SHIP BUILDING AND REPAIRING. . . .	542	605	314	176.4	2 494.0	139.9	277.2	1 807.4	3 825.0	6 495.1	
3732	BOAT BUILDING AND REPAIRING. . . .	2 148	2 190	422	43.8	445.8	35.6	68.4	324.7	856.3	1 822.6	
3743	RAILROAD EQUIPMENT	145	201	118	56.3	888.6	42.6	79.4	619.9	1 882.8	4 278.3	
3751	MOTORCYCLES, BICYCLES, AND PARTS . .	343	350	63	15.6	168.9	13.3	24.6	129.9	369.8	1 007.6	
376	GUIDED MISSILES, SPACE VEHICLES. .	74	109	86	119.8	2 427.3	46.2	90.2	770.6	4 421.9	6 599.3	
3761	GUIDED MISSILES, SPACE VEHICLES. . .	20	40	37	94.0	1 931.5	35.2	67.0	603.8	[2]3 564.8	[2]5 314.4	
3764	SPACE PROPULSION UNITS AND PARTS . .	18	25	24	18.6	356.6	7.1	14.9	111.5	620.7	945.5	
3769	SPACE VEHICLE EQUIPMENT, NEC	41	42	25	7.2	139.2	3.9	8.3	55.3	236.3	339.4	
379	MISC. TRANSPORTATION EQUIPMENT . .	1 206	1 314	393	49.1	590.7	39.1	73.8	415.9	1 180.5	3 137.5	
3792	TRAVEL TRAILERS AND CAMPERS. . . .	775	861	266	26.3	275.7	21.8	40.7	197.1	510.3	1 582.4	
3795	TANKS AND TANK COMPONENTS.	20	24	18	12.4	208.5	10.0	19.8	156.2	437.6	934.2	
3799	TRANSPORTATION EQUIPMENT, NEC. . . .	408	429	109	10.3	106.6	7.4	13.3	62.6	232.7	620.9	
38	INSTRUMENTS, RELATED PRODUCTS. .	6 616	7 481	2 538	559.1	7 520.4	347.2	677.9	3 743.2	18 762.0	28 897.8	
3811	ENGINEERING, SCIENTIFIC INSTRU . . .	740	786	279	42.3	584.4	24.7	48.7	280.7	1 287.2	1 926.7	
382	MEASURING, CONTROLLING DEVICES . .	1 847	2 079	849	200.1	2 665.8	121.4	237.6	1 288.4	5 242.3	7 910.3	
3822	ENVIRONMENTAL CONTROLS	182	201	91	39.0	450.3	30.6	57.9	315.6	859.6	1 358.7	
3823	PROCESS CONTROL INSTRUMENTS. . . .	383	426	207	46.5	664.8	23.4	47.0	265.9	1 399.4	2 022.0	
3824	FLUID METERS AND COUNTING DEVICES. .	100	111	62	15.9	197.6	11.2	22.5	118.0	429.0	650.4	
3825	INSTRU. TO MEASURE ELECTRICITY . . .	622	671	279	66.5	889.1	40.4	78.3	414.5	1 807.7	2 761.0	
3829	MEASUR'G, CONTROL'G DEVICES, NEC . .	649	670	210	32.3	464.0	15.8	31.8	174.5	746.6	1 118.1	

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2 866.5	519.9	2 346.6	16 058.7	14 273.0	(NA)	(NA)	1 661.1	15 189.0	30 578.5	53 394.3	1 417.5
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	141.2	24.7	116.5	1 039.6	944.2	(NA)	(NA)	116.0	1 040.0	2 060.3	3 585.4	63.7
3612	TRANSFORMERS	67.2	8.7	58.5	385.8	344.1	95	97	46.8	420.2	757.3	1 461.9	26.8
3613	SWITCHGEAR, SWITCHBOARD APPARATUS. .	73.9	16.0	58.0	653.8	600.1	91	91	69.2	619.8	1 303.0	2 123.5	36.9
362	ELECTRICAL INDUSTRIAL APPARATUS. .	311.0	64.5	246.5	2 002.1	1 791.4	(NA)	(NA)	188.0	1 665.1	3 217.9	5 402.3	148.3
3621	MOTORS AND GENERATORS.	162.6	28.7	133.8	771.4	678.0	92	80	90.3	764.4	1 475.2	2 501.7	58.9
3622	INDUSTRIAL CONTROLS.	57.5	12.8	44.7	616.1	563.9	87	86	51.1	465.6	908.4	1 424.1	46.8
3623	WELDING APPARATUS, ELECTRIC. . . .	38.7	14.5	24.1	258.8	226.2	86	94	15.5	173.9	353.5	659.6	11.4
3624	CARBON AND GRAPHITE PRODUCTS	35.4	4.6	30.8	215.9	200.0	94	93	11.3	99.6	217.4	377.4	20.2
3629	ELEC. INDUSTRIAL APPARATUS, NEC. . .	16.8	3.8	13.0	140.0	123.3	87	81	20.2	165.0	270.0	449.4	11.2
363	HOUSEHOLD APPLIANCES	207.0	42.4	164.6	1 674.7	1 524.3	(NA)	(NA)	163.0	1 369.2	3 563.7	6 940.3	151.8
3631	HOUSEHOLD COOKING EQUIPMENT. . . .	36.1	8.9	27.1	303.8	283.7	92	80	23.3	205.7	412.0	939.8	25.5
3632	HOUSEHOLD REFRIGERATORS, FREEZERS. .	46.9	10.7	36.2	399.1	352.1	77	98	34.1	305.3	790.8	1 719.7	25.5
3633	HOUSEHOLD LAUNDRY EQUIPMENT. . . .	27.3	7.6	19.7	170.6	162.1	87	90	23.6	223.1	684.7	1 356.5	31.0
3634	ELECTRIC HOUSEWARES AND FANS	47.8	8.3	39.5	429.5	409.2	87	90	51.3	357.5	909.2	1 613.3	32.6
3635	HOUSEHOLD VACUUM CLEANERS.	16.2	.7	15.5	85.2	81.0	(D)	81	11.2	98.7	299.5	467.7	9.7
3636	SEWING MACHINES.	8.1	.8	7.2	122.3	103.6	(D)	(D)	5.3	54.6	124.6	159.6	9.3
3639	HOUSEHOLD APPLIANCES, NEC.	24.6	5.4	19.2	164.2	132.6	93	79	14.0	123.5	341.4	681.9	18.3
364	ELEC. LIGHTING, WIRING EQUIP . . .	217.1	36.9	180.3	1 414.7	1 267.1	(NA)	(NA)	177.1	1 415.7	3 276.8	5 650.8	159.7
3641	ELECTRIC LAMPS	36.6	5.9	30.7	121.4	104.3	97	98	31.5	239.7	724.4	1 095.7	31.1
3643	CURRENT-CARRYING WIRING DEVICES. . .	55.8	10.3	45.5	341.5	284.7	84	79	50.4	382.5	792.1	1 255.9	53.7
3644	NONCURRENT-CARRYING WIR'G DEVICES. .	32.8	9.4	23.4	350.5	335.3	82	83	25.7	217.0	490.8	886.4	25.2
3645	RESIDENTIAL LIGHTING FIXTURES. . . .	11.8	2.6	9.2	193.2	183.1	95	92	26.5	189.3	390.2	767.2	13.7
3646	COMMERCIAL LIGHTING FIXTURES	18.0	3.5	14.6	182.3	162.5	90	86	18.8	148.3	350.4	718.7	13.7
3647	VEHICULAR LIGHTING EQUIPMENT	46.3	2.5	43.8	97.1	78.2	68	94	13.6	142.1	299.8	499.8	7.2
3648	LIGHTING EQUIPMENT, NEC.	15.8	2.8	13.0	128.6	118.8	85	81	12.7	107.9	254.3	466.5	16.6
365	RADIO, TV RECEIVING EQUIPMENT. . .	135.7	31.4	104.3	956.2	903.6	(NA)	(NA)	106.9	797.9	2 183.4	5 007.8	75.5
3651	RADIO AND TV RECEIVING SETS.	105.8	26.4	79.4	835.0	794.8	94	98	86.5	651.4	1 807.8	4 440.1	58.6
3652	PHONO. RECORDS, PRERECORDED TAPE . .	29.8	5.0	24.8	121.3	108.8	99	99	20.3	146.5	375.6	567.7	16.9
366	COMMUNICATION EQUIPMENT.	688.7	118.5	570.2	4 662.0	4 110.5	(NA)	(NA)	453.6	4 912.1	8 453.1	13 665.0	381.4
3661	TELEPHONE AND TELEGRAPH APPARATUS. .	217.3	17.1	200.2	1 503.3	1 220.2	94	97	134.4	1 323.0	2 650.1	4 524.7	169.2
3662	RADIO AND TV COMMUNICATION EQUIP . .	471.4	101.4	370.0	3 158.7	2 890.3	92	92	319.2	3 589.1	5 803.1	9 140.2	212.2
367	ELECTRONIC COMPONENTS, ACCESS. . .	782.6	126.3	656.3	2 773.3	2 445.6	(NA)	(NA)	335.8	2 869.3	5 305.8	8 825.9	344.4
3671	ELECTRON TUBES, RECEIVING TYPE . . .	52.6	15.2	37.4	254.7	231.1	78	93	11.4	87.7	173.8	230.4	1.8
3674	SEMICONDUCTORS, RELATED DEVICES. . .	409.0	60.8	348.2	909.5	819.3	93	94	97.6	953.1	1 735.1	2 704.8	170.5
3675	ELECTRONIC CAPACITORS.	34.0	6.7	27.3	152.4	135.8	92	91	27.6	169.2	298.6	445.8	13.4
3676	ELECTRONIC RESISTORS	25.1	2.7	22.4	104.2	93.7	87	81	20.5	144.5	263.5	372.2	10.4
3677	ELECTRONIC COILS AND TRANSFORMERS. .	9.2	2.1	7.1	74.5	73.2	9	75	24.2	147.8	228.7	377.8	9.9
3678	ELECTRONIC CONNECTORS.	40.4	3.9	36.6	234.5	204.5	78	86	18.1	141.2	345.6	483.3	12.2
3679	ELECTRONIC COMPONENTS, NEC	212.3	34.9	177.4	1 043.4	888.0	79	74	100.5	846.4	1 577.2	3 046.6	86.1
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	383.2	75.3	308.0	1 536.1	1 286.3	(NA)	(NA)	120.4	1 121.4	2 497.6	4 315.0	93.5
3691	STORAGE BATTERIES.	122.2	31.6	90.7	292.9	239.4	97	99	22.1	209.3	477.8	968.6	30.8
3692	PRIMARY BATTERIES, DRY AND WET . . .	35.4	5.8	29.6	100.1	90.2	96	97	8.4	64.6	221.6	348.1	7.2
3693	X-RAY APPARATUS AND TUBES.	63.4	13.1	50.3	542.3	412.6	98	92	12.1	120.9	311.3	443.7	8.1
3694	ENGINE ELECTRICAL EQUIPMENT.	146.0	21.6	124.3	488.3	442.1	81	89	57.9	591.3	1 212.6	2 035.0	30.8
3699	ELECTRICAL EQUIP., SUPPLIES, NEC . .	16.2	3.1	13.1	112.4	102.1	94	77	19.3	130.0	263.9	501.8	16.0
37	TRANSPORTATION EQUIPMENT	4 670.9	695.6	3 975.3	22 240.5	20 745.1	(NA)	(NA)	1 719.0	19 880.0	39 799.4	94 704.9	2 660.2
371	MOTOR VEHICLES AND EQUIPMENT . . .	3 636.1	455.0	3 181.2	9 062.6	7 826.8	(NA)	(NA)	807.5	9 460.5	22 056.2	63 921.4	2 093.2
3711	MOTOR VEHICLES AND CAR BODIES. . . .	1 706.1	229.1	1 477.1	4 010.8	3 325.8	95	99	339.2	4 299.5	11 782.5	42 905.6	917.2
3713	TRUCK AND BUS BODIES	44.2	11.2	33.0	352.1	306.0	94	93	42.6	353.8	659.7	1 564.4	48.3
3714	MOTOR VEHICLE PARTS, ACCESSORIES . .	1 833.2	189.9	1 643.3	4 124.1	3 699.6	94	87	400.9	4 601.5	9 164.7	18 333.5	1 113.1
3715	TRUCK TRAILERS	36.2	15.8	20.3	355.0	283.0	94	96	24.7	205.6	449.3	1 117.9	14.6
3716	MOTOR HOMES.	16.4	8.9	7.5	220.6	212.5	92	94	-	-	-	-	-
372	AIRCRAFT AND PARTS	508.3	89.8	418.5	9 301.8	9 166.0	(NA)	(NA)	438.7	5 281.7	9 123.6	15 451.4	169.0
3721	AIRCRAFT	202.4	40.2	162.2	6 618.5	6 550.7	83	98	231.8	2 867.1	5 083.0	8 779.3	57.1
3724	AIRCRAFT ENGINES AND ENGINE PARTS. .	174.9	25.4	149.5	1 440.2	1 360.2	81	95	104.7	1 256.6	1 991.7	3 640.2	73.0
3728	AIRCRAFT EQUIPMENT, NEC.	131.1	24.3	106.8	1 243.1	1 255.2	72	57	102.2	1 158.1	2 048.9	3 031.9	38.9
373	SHIP, BOAT BUILDING, REPAIRING . .	203.6	82.7	120.9	1 410.6	1 404.9	(NA)	(NA)	185.2	1 703.6	2 398.2	4 329.2	179.1
3731	SHIP BUILDING AND REPAIRING. . . .	161.3	68.0	93.3	1 072.5	1 098.5	97	99	144.6	1 422.3	1 881.3	3 281.0	142.0
3732	BOAT BUILDING AND REPAIRING. . . .	42.3	14.7	27.6	338.0	306.3	98	96	40.6	281.3	516.8	1 048.2	37.2
3743	RAILROAD EQUIPMENT	80.4	16.6	63.8	850.6	822.8	91	94	50.8	529.1	1 113.3	2 446.2	55.3
3751	MOTORCYCLES, BICYCLES, AND PARTS . .	24.1	6.0	18.1	226.5	182.1	84	97	17.6	139.6	315.2	659.5	16.0
376	GUIDED MISSILES, SPACE VEHICLES. .	164.2	27.7	136.5	797.6	850.9	(NA)	(NA)	160.0	2 317.1	3 969.2	5 628.2	92.3
3761	GUIDED MISSILES, SPACE VEHICLES. . .	125.6	21.8	103.8	600.2	653.0	87	91	118.4	1 751.5	2 948.7	4 123.7	62.9
3764	SPACE PROPULSION UNITS AND PARTS . .	25.3	5.0	20.3	167.5	175.8	92	88	20.8	276.2	506.6	716.3	18.4
3769	SPACE VEHICLE EQUIPMENT, NEC	13.3	.8	12.5	29.8	22.1	85	(D)	20.9	289.3	513.9	788.2	11.0
379	MISC. TRANSPORTATION EQUIPMENT . .	54.1	17.7	36.4	590.8	492.4	(NA)	(NA)	59.1	448.4	823.7	2 268.9	55.2
3792	TRAVEL TRAILERS AND CAMPERS.	31.0	12.4	18.6	193.6	196.0	88	90	37.1	266.3	479.9	1 342.2	35.2
3795	TANKS AND TANK COMPONENTS.	13.2	3.2	10.0	287.8	187.9	92	82	5.9	65.0	111.7	272.2	3.1
3799	TRANSPORTATION EQUIPMENT, NEC. . . .	9.8	2.2	7.7	109.4	108.5	94	79	16.1	117.2	232.1	654.6	16.9
38	INSTRUMENTS, RELATED PRODUCTS. .	938.9	235.3	703.6	5 810.6	5 311.1	(NA)	(NA)	453.2	4 286.2	10 580.1	15 526.7	480.0
3811	ENGINEERING, SCIENTIFIC INSTRU . . .	57.4	13.2	44.2	470.1	421.4	(NA)	(NA)	-	-	-	-	-
382	MEASURING, CONTROLLING DEVICES . .	268.0	74.4	193.7	1 979.4	1 752.3	(NA)	(NA)	152.8	1 436.5	2 723.5	3 992.4	104.8
3822	ENVIRONMENTAL CONTROLS	47.7	11.0	36.7	285.9	250.7	80	92	30.7	253.6	511.8	728.1	17.1
3823	PROCESS CONTROL INSTRUMENTS.	52.1	14.9	37.2	555.9	507.8	90	80	35.6	342.9	620.4	883.6	27.3
3824	FLUID METERS AND COUNTING DEVICES. .	19.9	4.9	15.0	148.8	136.7	80	80	8.8	76.8	180.9	296.2	7.0
3825	INSTRU. TO MEASURE ELECTRICITY . . .	99.1	28.8	70.3	668.9	580.1	90	89	54.7	523.5	1 046.8	1 540.8	39.3
3829	MEASUR'G, CONTROL'G DEVICES, NEC . .	49.3	14.8	34.5	320.0	277.0	89	83	24.6	256.7	394.9	601.4	14.7

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977									
			All establishments		All employees		Production workers			Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)
		Companies (number)	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (million)	Wages (million dollars)		
3832	OPTICAL INSTRUMENTS AND LENSES	515	545	199	30.0	421.2	16.9	33.6	188.0	897.4	1 330.4
384	MEDICAL INSTRUMENTS, SUPPLIES	2 058	2 355	679	113.5	1 318.8	76.8	149.2	711.8	3 261.9	5 217.0
3841	SURGICAL AND MEDICAL INSTRUMENTS	575	651	238	43.2	491.4	29.2	57.5	261.4	1 208.8	1 833.1
3842	SURGICAL APPLIANCES AND SUPPLIES	1 017	1 154	322	53.9	624.1	36.8	70.5	345.6	1 594.5	2 597.3
3843	DENTAL EQUIPMENT AND SUPPLIES	507	550	119	16.3	203.3	10.7	21.2	104.8	458.6	786.7
3851	OPHTHALMIC GOODS	593	634	155	30.0	314.1	21.7	43.1	188.4	656.2	971.8
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	702	780	265	111.7	1 899.6	61.7	119.4	886.5	6 732.4	9 946.9
3873	WATCHES, CLOCKS, AND WATCHCASES	283	302	112	31.5	316.6	24.0	46.3	199.4	684.5	1 594.7
39	MISC. MANUFACTUR'G INDUSTRIES	16 550	17 259	3 794	440.7	4 406.4	338.7	626.7	2 745.3	10 291.0	19 150.7
391	JEWELRY, SILVER AND PLATED WARE	3 053	3 118	564	61.3	637.6	44.3	81.2	372.8	1 448.5	3 249.3
3911	JEWELRY, PRECIOUS METAL	2 165	2 206	405	42.1	432.0	29.2	53.3	241.4	979.8	2 107.0
3914	SILVERWARE AND PLATED WARE	247	258	67	10.8	119.8	8.3	15.7	80.2	255.1	457.0
3915	JEWELERS' MATS., LAPIDARY WORK	650	654	92	8.3	85.9	6.8	12.2	51.3	213.6	685.2
3931	MUSICAL INSTRUMENTS	400	450	127	25.2	252.7	20.6	38.2	178.2	488.2	924.9
394	TOYS AND SPORTING GOODS	2 713	2 910	835	119.4	1 111.8	93.3	172.4	697.0	2 999.8	5 485.0
3942	DOLLS	223	231	88	9.1	65.3	8.0	13.3	43.5	181.6	340.2
3944	GAMES, TOYS, CHILDREN'S VEHICLES	754	801	251	53.1	520.6	39.2	73.2	295.0	1 544.6	2 719.7
3949	SPORTING AND ATHLETIC GOODS, NEC	1 757	1 878	496	57.2	525.8	46.1	85.9	358.6	1 273.6	2 425.1
395	PENS, OFFICE AND ART GOODS	913	987	261	31.8	331.1	23.3	45.8	203.2	867.6	1 538.4
3951	PENS AND MECHNICAL PENCILS	133	141	78	13.2	135.6	10.4	20.6	92.9	419.8	669.8
3952	LEAD PENCILS AND ART GOODS	127	134	46	6.6	63.1	4.7	9.2	37.6	145.5	275.9
3953	MARKING DEVICES	583	612	86	7.4	78.7	4.7	9.1	39.6	160.0	248.7
3955	CARBON PAPER AND INKED RIBBONS	78	100	51	4.6	53.7	3.4	6.9	33.1	142.4	344.0
396	COSTUME JEWELRY AND NOTIONS	1 458	1 514	467	51.0	450.5	41.6	75.4	293.0	1 002.0	1 766.2
3961	COSTUME JEWELRY	837	847	236	25.0	215.9	20.8	36.1	136.1	485.1	816.6
3962	ARTIFICIAL FLOWERS	222	233	67	5.0	38.2	4.2	7.1	25.2	91.5	180.2
3963	BUTTONS	150	159	47	3.2	30.8	2.6	4.7	20.0	50.0	95.2
3964	NEEDLES, PINS, AND FASTENERS	249	275	117	17.7	165.6	14.0	27.5	111.8	375.4	674.2
399	MISCELLANEOUS MANUFACTURES	8 073	8 280	1 540	152.0	1 622.6	115.7	213.7	1 001.0	3 484.8	6 186.9
3991	BROOMS AND BRUSHES	391	409	153	16.5	163.8	12.7	24.0	101.1	353.6	673.1
3993	SIGNS AND ADVERTISING DISPLAYS	3 373	3 468	627	49.7	566.6	36.8	69.2	343.1	1 060.9	1 738.7
3995	BURIAL CASKETS	376	406	133	12.0	129.7	9.3	17.8	79.7	264.2	505.9
3996	HARD SURFACE FLOOR COVERINGS	20	21	13	6.4	93.5	5.0	10.4	68.6	321.3	607.2
3999	MANUFACTURING INDUSTRIES, NEC	3 921	3 976	614	67.3	669.1	52.0	92.3	408.5	1 484.7	2 662.0
60	ADMINISTRATIVE AND AUXILIARY[10]	-	9 171	4 856	1 074.2	21 981.2	-	-	-	-	-

See footnotes at end of table.

Table 1. **Selected Statistics by Major Industry Group and Industry: 1977 and 1972**—Con.

Code	Industry group and industry	1977--Continued							1972				
		New capital expenditures[4]			Inventories		Ratios		All employees				
		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	End of year (million dollars)	Beginning of year (million dollars)	Specialization (percent)	Coverage (percent)	Number (1,000)	Payroll (million dollars)	Value added by manufacture (million dollars)	Value of shipments[1] (million dollars)	New capital expenditures (million dollars)
3832	OPTICAL INSTRUMENTS AND LENSES	51.3	18.4	32.9	302.9	271.8	84	82	18.8	193.3	384.3	538.4	12.7
384	MEDICAL INSTRUMENTS, SUPPLIES	172.0	41.6	130.5	1 038.6	941.6	(NA)	(NA)	90.8	757.7	1 821.3	2 824.5	104.4
3841	SURGICAL AND MEDICAL INSTRUMENTS	87.2	21.7	65.5	360.7	322.5	88	80	34.5	282.4	630.0	961.8	42.0
3842	SURGICAL APPLIANCES AND SUPPLIES	68.6	16.2	52.5	503.7	454.7	87	85	43.9	365.3	929.0	1 453.5	47.5
3843	DENTAL EQUIPMENT AND SUPPLIES	16.2	3.7	12.5	174.1	164.3	92	98	12.4	110.0	262.3	409.2	14.9
3851	OPHTHALMIC GOODS	44.1	13.2	30.9	244.9	224.6	92	98	26.6	183.4	416.3	568.3	17.4
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	322.7	69.2	253.5	1 503.0	1 428.2	95	95	96.0	1 119.7	4 087.9	5 623.9	202.9
3873	WATCHES, CLOCKS, AND WATCHCASES	23.2	5.4	17.9	271.7	271.2	91	95	30.8	230.3	466.0	937.2	18.8
39	MISC. MANUFACTURING INDUSTRIES	473.6	112.1	361.5	3 614.2	3 309.0	(NA)	(NA)	445.6	3 179.8	6 768.7	12 173.2	313.6
391	JEWELRY, SILVER AND PLATED WARE	39.6	10.1	29.4	752.5	670.8	(NA)	(NA)	53.2	424.5	850.8	1 812.5	21.9
3911	JEWELRY, PRECIOUS METAL	25.6	7.9	17.8	489.8	437.4	92	97	32.6	267.2	536.0	1 124.6	10.3
3914	SILVERWARE AND PLATED WARE	8.0	.7	7.3	142.8	136.8	93	98	13.1	106.4	206.8	377.4	9.8
3915	JEWELERS' MATS., LAPIDARY WORK	5.9	1.6	4.4	119.9	96.5	96	89	8.0	55.7	116.4	323.3	5.3
3931	MUSICAL INSTRUMENTS	13.8	2.7	11.2	243.2	245.4	(NA)	(NA)	24.5	173.4	339.3	617.5	10.6
394	TOYS AND SPORTING GOODS	147.6	33.2	114.4	1 079.2	976.0	(NA)	(NA)	132.7	880.9	1 999.3	3 662.6	121.2
3942	DOLLS	6.4	1.4	5.0	62.5	46.6	94	59	10.2	54.0	98.3	199.1	1.7
3944	GAMES, TOYS, CHILDREN'S VEHICLES	78.5	19.5	58.9	437.7	383.3	86	93	61.5	421.0	980.6	1 734.3	72.7
3949	SPORTING AND ATHLETIC GOODS, NEC	62.7	12.3	50.4	579.1	546.1	95	94	61.0	405.9	920.4	1 729.2	46.7
395	PENS, OFFICE AND ART GOODS	55.3	12.6	42.7	276.1	248.4	(NA)	(NA)	31.7	244.3	556.8	926.7	19.8
3951	PENS AND MECHNICAL PENCILS	32.8	9.1	23.7	123.1	108.6	85	94	10.9	81.9	213.7	310.5	7.6
3952	LEAD PENCILS AND ART GOODS	10.8	1.8	9.0	70.9	64.2	85	79	7.1	50.0	108.2	198.8	3.9
3953	MARKING DEVICES	5.5	.8	4.7	34.3	30.8	85	88	8.1	63.2	121.5	180.0	2.6
3955	CARBON PAPER AND INKED RIBBONS	6.2	.9	5.3	47.8	44.7	96	64	5.7	49.1	113.4	237.5	5.7
396	COSTUME JEWELRY AND NOTIONS	44.0	12.0	32.0	274.6	261.1	(NA)	(NA)	50.4	323.1	719.6	1 248.7	33.5
3961	COSTUME JEWELRY	17.6	7.8	9.8	119.6	110.6	92	89	21.4	132.1	275.7	471.6	6.7
3962	ARTIFICIAL FLOWERS	3.0	1.0	2.0	29.5	27.2	98	91	4.8	26.7	57.5	108.7	3.3
3963	BUTTONS	1.4	.3	1.2	13.9	17.6	98	82	4.0	26.7	51.8	93.7	2.3
3964	NEEDLES, PINS, AND FASTENERS	22.0	3.0	19.0	111.6	105.8	92	95	20.2	137.7	334.5	574.7	21.2
399	MISCELLANEOUS MANUFACTURES	173.3	41.4	131.8	988.6	907.3	(NA)	(NA)	153.0	1 133.6	2 302.8	3 905.2	106.6
3991	BROOMS AND BRUSHES	15.7	2.4	13.3	129.9	119.9	91	89	17.5	118.5	235.5	438.3	13.0
3993	SIGNS AND ADVERTISING DISPLAYS	43.0	13.5	29.5	210.8	190.0	98	97	49.8	415.9	747.7	1 198.1	30.6
3995	BURIAL CASKETS	16.3	2.2	14.2	81.8	78.2	99	98	14.8	109.3	210.3	391.9	8.8
3996	HARD SURFACE FLOOR COVERINGS	16.9	1.9	15.1	84.9	76.2	92	98	5.8	59.4	212.0	342.3	14.0
3999	MANUFACTURING INDUSTRIES, NEC	81.3	21.5	59.8	481.1	442.9	91	90	65.1	430.5	897.2	1 534.7	40.2
--	ADMINISTRATIVE AND AUXILIARY[10]	-	-	-	-	-	-	-	994.3	13 772.3	-	-	-

Note: 1977 and 1972 payroll and sales data for small establishments (generally single-unit companies with less than 10 employees) were obtained from administrative records of other government agencies instead of from a census report form. These data were then used in conjunction with industry averages to estimate the balance of the items shown in the table for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time the data were tabulated.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. (X) Not applicable.

[1]The total value of shipments for industry groups (2- and 3-digit) and a few individual industries (4-digit) includes extensive duplication arising from shipments between establishments in the same industry classification.

[2]Establishments in this industry reported value of production instead of value of shipments. Consequently, the formula for computing value added by manufacture was modified to exclude any change in finished product inventories between the beginning and end of the year.

[3]Value added data include government-owned, contractor-operated plants which were estimated based upon averages reported for commercial establishments in prior years. Cost of materials data exclude government-owned materials furnished to government-owned, contractor-operated plants and include fuel and electricity purchased by or for the establishments. Value of shipments data include a calculated value of shipments for government-owned, contractor-operated plants comprised of adjusted value added plus the cost of fuels and electric energy. New capital expenditures include expenditures for plants under construction but not in operation. Capital expenditures of government-owned, contractor-operated plants are excluded from the totals for the industry.

[4]Includes expenditures for plants in operation and for plants under construction but not yet in operation.

[5]Government-owned, privately-operated establishments did not enter into the calculation of "primary product specialization ratio" or "coverage ratio" as all other dollar receipts for these establishments were included in "miscellaneous receipts."

[6]Minumum percentage; exact percentage withheld to avoid disclosing operations of individual companies.

[7]The value of shipments and cost of materials for this industry include substantial duplication; therefore, the specialization ratios and coverage ratios were not calculated.

[8]Relationships are not meaningful because of the predominance of receipts for contract and commission work on materials owned by others. Such receipts are treated as primary products for this industry.

[9]Establishments in this industry were requested to report value of work done instead of value of shipments. Consequently, the formula for computing value added by manufacture was not adjusted for any inventory change between the beginning and end of the year.

[10]In 1977 and 1972, in addition to the employment and payroll reported for operating manufacturing establishments, manufacturing concerns reported separately for administrative offices or auxiliary units which serve the manufacturing establishments of a company (e.g., storage warehouses, power plants, research laboratories, garages, repair shops, etc.) rather than the general public. Separate reports were obtained if these units were at different general locations from the establishments served or if they serviced more than one manufacturing establishment. The figures shown for these units do not represent a separate industry but rather a balancing total for all manufacturing industries.

Table 2. Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
		Employees[1] (1,000)	Labor costs[1] (million dollars)				Employees[1] (1,000)	Labor costs[1] (million dollars)					
			Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
	All industries	18,515.9	292,020.8	242,031.9	19,359.6	30,629.7	18,043.9	185,370.2	160,732.9	9,673.6	14,963.7	1	1
20	Food and kindred products	1,520.0	22,170.0	18,543.6	1,629.8	1,996.7	1,569.3	14,742.8	12,920.2	821.8	1,000.8	1	1
21	Tobacco products	60.6	956.8	750.7	55.4	150.7	66.3	593.1	502.0	29.1	62.0	1	1
22	Textile mill products	875.7	9,038.3	7,881.4	637.4	519.5	956.1	6,689.8	6,050.9	372.9	266.0	1	1
23	Apparel, other textile prods	1,334.3	11,071.9	9,658.6	795.0	618.4	1,368.2	7,976.2	7,211.8	466.8	297.6	1	1
24	Lumber and wood products	692.4	8,777.7	7,424.7	739.7	613.2	691.2	5,623.2	4,985.7	389.4	248.1	1	1
25	Furniture and fixtures	463.8	5,182.8	4,448.3	378.5	356.1	462.1	3,579.1	3,205.3	205.0	168.8	1	2
26	Paper and allied products	628.7	10,724.9	8,942.9	728.4	1,053.5	633.4	6,856.5	5,992.1	360.9	503.5	1	1
27	Printing and publishing	1,092.2	16,195.7	14,024.5	979.2	1,192.0	1,056.2	10,907.9	9,832.0	503.8	572.1	1	1
28	Chemicals and allied products	880.2	16,735.7	13,839.3	984.9	1,911.5	836.4	10,080.4	8,730.7	453.1	896.6	1	1
29	Petroleum and coal products	146.8	3,329.6	2,696.2	184.4	449.1	139.5	1,920.4	1,637.4	82.6	200.4	1	1
30	Rubber, misc. plastics prod	721.3	10,331.0	8,536.0	734.2	1,060.8	617.8	6,010.1	5,165.2	326.0	518.9	1	1
31	Leather and leather products	242.5	2,150.1	1,859.7	155.5	134.9	273.4	1,770.8	1,589.3	107.1	74.4	1	3
32	Stone, clay, glass products	613.7	9,619.4	7,943.1	712.4	963.9	623.2	6,389.5	5,546.9	361.9	480.7	1	1
33	Primary metal industries	1,113.7	23,718.2	18,745.0	1,502.5	3,470.7	1,142.9	14,621.5	12,166.6	740.2	1,714.7	1	1
34	Fabricated metal products	1,555.7	25,413.9	21,035.9	1,783.1	2,594.9	1,493.7	16,034.0	13,820.9	900.1	1,313.0	1	1
35	Machinery, except electrical	2,083.3	36,624.9	30,557.5	2,329.0	3,738.3	1,827.8	21,334.0	18,523.2	1,057.2	1,753.6	1	1
36	Electric, electronic equip	1,723.1	27,072.2	22,544.2	1,717.5	2,810.5	1,660.9	17,511.6	15,189.0	880.1	1,438.9	1	1
37	Transportation equipment	1,768.2	38,948.1	30,673.5	2,408.2	5,866.5	1,718.9	23,979.8	19,880.0	1,170.9	2,928.9	1	1
38	Instruments, related products	559.1	8,854.4	7,520.4	544.6	789.5	456.2	4,929.8	4,334.7	243.6	351.5	1	1
39	Misc. manufactur'g industries	440.7	5,105.2	4,406.4	359.9	339.0	445.6	3,554.2	3,179.9	201.1	173.2	1	1
20	Food and kindred products	1,520.0	22,170.0	18,543.6	1,629.8	1,996.7	1,569.3	14,742.8	12,920.2	821.8	1,000.8	1	1
201	Meat products	309.1	4,388.6	3,701.5	321.5	365.5	307.8	2,886.6	2,543.6	156.6	186.4	1	1
2011	Meatpacking plants	146.2	2,515.1	2,110.6	176.5	228.0	157.5	1,750.6	1,532.1	89.6	128.9	2	1
2013	Sausages and other prepared meats	65.0	1,063.2	891.9	76.6	94.7	58.1	615.2	542.2	33.2	39.8	2	2
2016	Poultry dressing plants	86.8	709.9	612.3	60.9	36.7	77.6	434.0	391.8	27.7	14.5	1	4
2017	Poultry and egg processing	11.1	100.4	86.8	7.5	6.1	14.6	86.8	77.5	6.1	3.2	2	6
202	Dairy products	153.9	2,301.2	1,938.9	156.4	205.9	188.7	1,811.1	1,596.4	93.7	121.0	1	1
2021	Creamery butter	2.3	31.6	26.3	2.4	2.9	4.0	35.2	31.0	2.0	2.2	6	6
2022	Cheese, natural and processed	26.7	339.3	287.0	23.6	28.7	25.2	210.3	186.3	11.5	12.5	1	2
2023	Condensed and evaporated milk	12.3	199.3	163.2	13.3	22.8	12.3	124.1	108.3	6.3	9.5	1	4
2024	Ice cream and frozen desserts	19.1	291.0	247.0	20.6	23.4	21.1	209.3	184.7	10.3	14.3	5	3
2026	Fluid milk	93.5	1,440.0	1,215.4	96.6	128.1	126.1	1,232.2	1,086.1	63.6	82.5	1	2
203	Preserved fruits and vegetables	234.7	2,812.7	2,336.0	244.4	232.3	233.2	1,758.8	1,533.5	122.1	103.2	1	1
2032	Canned specialties	26.4	359.6	296.5	27.9	35.2	29.1	253.5	217.8	15.1	20.6	1	2
2033	Canned fruits and vegetables	82.6	955.9	789.8	88.4	77.8	89.8	642.4	559.9	47.6	34.9	1	1
2034	Dehy. fruits, vegetables, soups	14.4	183.8	153.9	14.8	15.1	12.4	96.9	84.3	7.0	5.6	5	2
2035	Pickles, sauces, salad dressings	23.5	299.8	250.2	22.8	26.9	20.8	165.7	146.2	9.6	9.9	2	5
2037	Frozen fruits and vegetables	46.8	516.6	425.9	52.4	38.2	42.8	301.7	261.2	24.3	16.2	1	2
2038	Frozen specialties	41.0	497.0	419.8	38.2	39.0	38.3	298.6	264.1	18.5	16.0	1	2
204	Grain mill products	112.8	1,900.8	1,575.6	127.9	197.4	111.3	1,163.4	1,012.8	63.0	87.6	1	1
2041	Flour, other grain mill products	15.6	268.7	222.3	19.3	27.1	16.1	175.0	152.8	10.2	12.0	2	2
2043	Cereal breakfast foods	16.4	362.2	287.4	21.3	53.5	12.9	169.6	140.9	8.4	20.3	1	2
2044	Rice milling	4.8	74.5	61.4	5.4	7.8	4.0	36.1	30.9	2.1	3.1	3	3
2045	Blended and prepared flour	8.4	125.6	104.5	8.2	12.9	7.9	86.1	74.9	4.2	7.0	4	4
2046	Wet corn milling	10.9	241.1	191.1	14.5	35.5	12.1	164.3	137.7	7.9	18.7	1	1
2047	Dog, cat, and other pet food	17.7	291.1	245.5	20.9	24.7	14.3	153.9	135.1	8.2	10.6	3	2
2048	Prepared feeds, n.e.c	39.1	537.7	463.4	38.3	36 0	44.0	378.4	340.5	22.0	15.9	3	4
205	Bakery products	221.7	3,444.5	2,866.1	244.9	333.5	234.6	2,319.9	2,029.1	121.6	169.2	2	2
2051	Bread, cake, and related products	178.0	2,794.1	2,335.8	194.7	263.6	193.5	1,931.5	1,692.2	100.0	139.3	2	2
2052	Cookies and crackers	43.8	650.4	530.2	50.2	69.9	41.1	388.4	336.9	21.6	29.9	2	2
206	Sugar, confectionery products	105.4	1,459.7	1,206.2	105.0	148.5	107.1	959.4	831.6	56.8	71.0	1	1
2061	Raw cane sugar	8.0	118.7	95.8	9.8	13.1	7.1	72.8	60.7	4.9	7.2	1	1
2062	Cane sugar refining	10.2	204.7	168.9	13.0	22.9	10.9	137.6	119.5	6.6	11.5	1	1
2063	Beet sugar	11.4	171.5	143.3	13.9	14.3	11.5	106.0	92.3	7.5	6.2	1	1
2065	Confectionery products	58.0	699.1	584.2	50.4	64.5	60.7	482.0	422.2	28.3	31.5	1	2
2066	Chocolate and cocoa products	10.0	162.7	130.2	10.8	21.6	10.0	98.2	83.3	6.0	8.9	1	1
2067	Chewing gum	7.7	102.9	83.9	7.0	12.0	6.9	62.8	53.6	3.5	5.7	1	1
207	Fats and oils	41.1	671.0	561.4	49.6	60.0	40.2	419.7	366.3	24.0	29.4	2	2
2074	Cottonseed oil mills	5.2	63.5	51.5	7.2	4.8	5.5	39.3	34.2	3.1	2.0	6	5
2075	Soybean oil mills	9.4	157.9	130.7	11.5	15.8	9.1	94.2	82.4	5.5	6.3	1	1
2076	Vegetable oil mills, n.e.c	1.5	20.5	17.6	1.4	1.5	1.1	11.4	10.0	0.8	0.6	1	1
2077	Animal and marine fats and oils	12.4	199.0	171.2	14.6	13.2	11.6	119.4	106.0	6.7	6.7	4	7
2079	Shortening and cooking oils	12.7	230.2	190.5	14.9	24.8	12.9	155.4	133.7	7.9	13.8	1	1
208	Beverages	195.1	3,404.1	2,848.9	244.1	311.1	212.2	2,318.8	2,032.7	118.6	167.5	1	1
2082	Malt beverages	44.0	1,046.2	857.5	71.4	117.3	51.5	764.0	652.8	36.4	74.8	3	2
2083	Malt	1.6	33.7	27.4	2.1	4.3	1.7	23.5	20.0	1.1	2.4	4	4
2084	Wines, brandy, and brandy spirits	9.2	165.3	134.1	13.3	17.9	9.4	106.0	91.5	6.5	8.0	2	3
2085	Distilled liquor, except brandy	15.7	287.7	232.1	18.6	37.1	18.4	215.2	183.1	12.1	20.0	1	2
2086	Bottled and canned soft drinks	114.1	1,694.5	1,448.8	127.3	118.3	121.1	1,096.3	984.4	57.3	54.6	2	2
2087	Flavoring extracts, sirups, n.e.c	10.5	176.6	149.1	11.3	16.2	10.1	113.8	100.9	5.2	7.7	3	5

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
20	Food and kindred products--Con.												
209	Misc. foods, kindred products	146.2	1,787.3	1,508.8	136.0	142.5	134.2	1,105.1	974.2	65.4	65.5	2	2
2091	Canned and cured seafoods	16.0	175.9	147.0	16.6	12.3	16.0	112.6	99.0	8.5	5.1	4	5
2092	Fresh or frozen packaged fish	34.3	293.0	260.8	21.1	11.1	25.0	143.4	129.6	9.8	4.0	5	5
2095	Roasted coffee	10.9	202.7	164.8	14.4	23.6	12.9	153.1	131.5	8.2	13.4	4	2
2097	Manufactured ice	5.3	57.0	47.8	(7.0)	2.2	6.8	47.0	42.6	3.2	1.2	28	15
2098	Macaroni and spaghetti	8.2	112.2	96.0	7.6	8.6	7.3	66.9	59.4	3.7	3.8	3	8
2099	Food preparations, n.e.c	71.5	946.5	792.6	69.2	84.7	66.2	582.1	512.1	32.0	38.0	2	2
21	Tobacco products	60.6	956.8	750.7	55.4	150.7	66.3	593.1	502.0	29.1	62.0	1	1
2111	Cigarettes	39.0	734.9	567.7	40.1	127.2	38.1	412.2	344.8	18.6	48.8	1	1
2121	Cigars	7.7	66.6	54.9	4.7	7.1	13.5	77.7	68.2	4.6	4.9	1	1
2131	Chewing and smoking tobacco	3.2	39.7	32.1	2.3	5.3	3.3	27.4	23.0	1.3	3.1	5	1
2141	Tobacco stemming and redrying	10.7	115.5	96.1	8.3	11.1	11.4	75.8	66.0	4.6	5.2	1	3
22	Textile mill products	875.7	9,038.3	7,881.4	637.4	519.5	956.1	6,689.8	6,050.9	372.9	266.0	1	1
2211	Weaving mills, cotton	117.2	1,195.9	1,046.8	80.9	68.3	121.3	822.2	745.2	46.0	31.0	1	1
2221	Weav'g mills, manmade fiber, silk	151.0	1,631.5	1,428.7	111.5	91.3	149.7	1,079.4	979.4	58.9	41.1	1	1
2231	Weaving and finishing mills, wool	14.6	157.5	136.6	12.7	8.2	19.4	148.1	132.1	9.1	6.9	4	2
2241	Narrow fabric mills	20.8	196.2	171.6	13.9	10.7	27.1	179.1	162.3	9.6	7.2	3	4
225	Knitting mills	235.9	2,176.4	1,911.0	155.4	110.0	276.5	1,811.4	647.0	104.6	59.8	2	2
2251	Women's hosiery, except socks	26.6	218.4	191.3	15.5	11.6	49.5	269.9	247.4	14.9	7.6	1	2
2252	Hosiery, n.e.c	32.2	244.2	218.7	16.1	9.4	32.6	176.8	159.7	11.8	5.3	2	5
2253	Knit outerwear mills	73.0	666.2	582.0	52.7	31.5	74.4	474.6	430.4	27.8	16.4	4	4
2254	Knit underwear mills	25.2	201.6	175.2	13.6	12.7	26.0	144.7	134.6	6.2	3.9	2	2
2257	Circular knit fabric mills	51.8	560.4	493.0	37.6	29.9	68.1	542.6	492.6	31.4	18.6	6	5
2258	Warp knit fabric mills	23.7	258.1	226.7	17.6	13.7	22.0	176.3	159.2	10.5	6.6	2	4
2259	Knitting mills, n.e.c	3.4	27.5	24.1	2.2	(1.2)	3.9	26.5	23.1	2.0	1.4	2	26
226	Textile finishing, except wool	72.1	848.1	740.0	59.6	48.5	79.4	619.8	563.9	31.3	24.6	3	3
2261	Finishing plants, cotton	20.8	243.7	211.4	18.0	14.4	25.7	195.8	177.2	9.8	8.8	8	7
2262	Finish,. plts, manmade fiber, silk	37.2	453.2	396.2	31.1	25.9	35.2	288.1	263.2	14.4	10.5	2	2
2269	Finishing plants, n.e.c	14.1	151.1	132.3	10.5	8.2	18.5	135.9	123.5	7.1	5.3	3	3
227	Floor covering mills	55.8	640.1	556.7	45.5	38.0	63.1	456.5	415.2	24.8	16.5	1	2
2271	Woven carpets and rugs	2.8	28.3	24.8	1.9	1.6	6.5	49.6	44.5	3.0	2.1	5	3
2272	Tufted carpets and rugs	50.2	582.0	506.5	41.4	34.2	50.1	381.0	348.0	20.0	13.0	1	2
2279	Carpets and rugs, n.e.c	2.8	29.7	25.3	2.2	(2.2)	3.2	25.9	22.7	1.8	1.4	1	24
228	Yarn and thread mills	140.5	1,356.7	1,184.4	95.5	76.7	147.6	960.5	866.1	53.1	41.3	1	1
2281	Yarn mills, except wool	93.0	890.7	782.7	62.1	45.9	89.6	570.8	516.3	31.4	23.1	1	1
2282	Throwing and winding mills	30.5	305.1	262.3	21.9	20.9	38.0	256.7	230.9	14.2	11.6	4	4
2283	Wool yarn mills	4.1	37.7	33.1	2.8	1.9	8.3	55.3	49.7	3.3	2.3	2	6
2284	Thread mills	12.8	123.2	106.3	8.8	8.1	11.7	77.7	69.2	4.2	4.3	1	2
229	Miscellaneous textile goods	67.9	835.9	705.6	62.5	67.9	72.0	612.8	539.7	35.5	37.6	1	1
2291	Felt goods, exc. woven felt, hats	4.3	61.2	50.7	4.4	6.1	5.0	44.8	38.3	2.9	3.6	1	1
2292	Lace goods	2.2	20.3	17.9	1.5	.9	2.9	19.1	17.3	1.2	.6	4	2
2293	Paddings and upholstery filling	5.2	62.4	52.9	5.1	4.4	4.4	38.8	34.2	2.8	1.8	8	8
2294	Processed textile waste	3.7	36.3	31.2	3.0	2.2	3.6	25.1	22.2	1.6	1.3	4	5
2295	Coated fabrics, not rubberized	13.6	220.0	182.3	15.6	22.1	18.0	192.8	167.8	10.1	14.9	1	2
2296	Tire cord and fabric	9.6	112.6	94.7	7.7	10.2	10.0	78.9	70.0	4.2	4.7	1	1
2297	Nonwoven fabrics	13.0	165.5	139.8	13.2	12.4	10.8	91.1	80.6	5.4	5.1	1	1
2298	Cordage and twine	9.5	92.8	79.5	6.9	6.5	9.0	62.6	55.4	3.9	3.3	2	5
2299	Textile goods, n.e.c	6.7	64.9	56.6	5.1	3.2	8.3	59.6	53.9	3.4	2.3	3	3
23	Apparel, other textile prods	1,334.3	11,071.9	9,658.6	795.0	618.4	1,368.2	7,976.2	7,211.8	466.8	297.6	1	1
2311	Men's and boys' suit and coats	98.7	964.3	822.2	73.8	68.2	124.8	870.9	770.3	54.2	46.4	4	2
232	Men's and boys' furnishings	364.5	2,671.4	2,340.1	193.6	137.7	363.3	1,862.7	1,692,2	107,6	62.9	2	2
2321	Men's, boys' shirts, nightwear	114.7	813.3	711.3	58.8	43.2	113.4	568.8	514.9	32.9	21.0	2	3
2322	Men's and boys' underwear	15.1	105.9	92.2	7.2	6.5	16.0	75.8	68.6	4.0	3.2	1	1
2323	Men's and boys' neckwear	6.3	64.9	57.5	4.2	3.3	11.1	76.0	70.0	3.8	2.2	6	7
2327	Men's and boys' separate trousers	70.9	538.0	474.0	37.7	26.4	91.3	482.7	439.3	27.0	16.4	2	2
2328	Men's and boys' work clothing	113.7	822.6	719.4	60.6	42.7	89.6	425.5	389.0	23.5	13.0	1	2
2329	Men's and boys' clothing, n.e.c	43.8	326.6	285.8	25.2	15.7	41.9	233.9	210.4	16.4	7.1	8	6
233	Women's and misses' outerwear	447.5	3,554.9	3,152.8	251.7	150.4	432.6	2,475.6	2,269.6	139.0	67.0	2	3
2331	Women's, misses' blouses, waists	83.3	640.4	569.0	44.9	26.5	63.0	357.0	328.1	18.5	10.4	4	4
2335	Women's and misses' dresses	175.3	1,343.1	1,197.1	94.3	51.7	211.6	1,170.4	1,076.9	65.3	28.2	2	4
2337	Women's, misses' suits and coats	84.7	744.8	654.0	54.1	36.7	75.9	491.8	446.7	28.8	16.3	2	3
2339	Women's, misses' outerwear, n.e.c	104.1	826.7	732.7	58.4	35.5	82.1	456.4	417.9	26.4	12.1	2	7
234	Women's, children's undergarms	91.8	697.5	613.2	49.2	35.0	105.5	583.7	524.8	37.7	21.2	1	2
2341	Women's and children's underwear	72.9	535.5	472.1	38.1	25.3	77.5	410.8	372.0	25.3	13.5	1	2
2342	Brassieres and allied garments	18.9	162.0	141.1	11.1	9.7	28.0	172.9	152.8	12.4	7.7	3	2

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
		Employees[1] (1,000)	Labor costs[1] (million dollars)				Employees[1] (1,000)	Labor costs[1] (million dollars)					
			Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
23	Apparel, other textile prods--Con.												
235	Hats, caps, and millinery	15.1	120.5	105.2	9.7	5.5	14.5	79.7	72.6	4.8	2.3	7	10
2351	Millinery	2.7	22.8	20.2	1.8	.8	3.2	19.0	17.0	1.1	.9	7	14
2352	Hats and caps, except millinery	12.4	97.7	85.1	8.0	4.7	11.3	60.7	55.6	3.7	1.4	8	11
236	Children's outerwear	71.2	520.1	459.1	38.0	23.1	74.7	405.8	367.5	23.7	14.6	3	5
2361	Children's dresses and blouses	35.2	258.3	228.4	18.3	11.6	35.4	192.5	174.4	10.9	7.2	5	8
2363	Children's coats and suits	6.7	52.1	45.8	4.2	2.1	9.2	53.9	48.5	3.2	2.2	8	13
2369	Children's outerwear, n.e.c	29.3	209.7	184.9	15.5	9.4	30.1	159.4	144.6	9.6	5.2	2	4
2371	Fur goods	4.0	58.1	51.5	4.8	1.8	4.7	45.7	41.2	3.5	1.0	8	11
238	Misc. apparel and accessories	56.3	464.6	407.5	34.5	22.6	61.9	367.7	334.7	20.2	12.8	4	6
2381	Fabric dress and work gloves	10.9	78.5	69.0	5.7	3.9	11.9	60.9	56.3	3.0	1.6	2	10
2384	Robes and dressing gowns	9.5	71.9	64.3	4.9	2.7	10.0	54.8	50.0	3.1	1.7	4	8
2385	Waterproof outergarments	12.0	106.0	89.4	9.2	7.4	15.4	97.9	86.4	6.1	5.4	2	5
2386	Leather and sheep lined clothing	6.7	61.3	54.7	(4.5)	(2.1)	7.0	44.6	40.8	2.4	1.4	22	36
2387	Apparel belts	9.4	86.3	76.1	6.4	3.7	10.3	71.4	65.9	3.6	1.9	4	6
2389	Apparel and accessories, n.e.c	7.8	60.6	54.0	3.8	(2.7)	7.3	38.1	35.3	2.0	.8	11	30
239	Misc. fabricated textile prods	185.2	2,020.6	1,706.9	139.6	174.1	186.2	1,284.4	1,138.9	76.1	69.4	2	2
2391	Curtains and draperies	31.7	252.3	224.7	18.6	9.0	33.9	180.8	167.1	9.9	3.8	3	6
2392	Housefurnishings, n.e.c	47.5	417.2	366.4	29.4	21.4	50.3	308.0	281.9	16.9	9.2	2	3
2393	Textile bags	8.2	76.0	66.7	5.1	4.1	7.9	48.2	44.0	2.6	1.6	4	6
2394	Canvas and related products	13.9	139.2	121.6	9.5	(8.0)	12.9	83.7	75.9	5.5	2.3	3	17
2395	Pleating and stitching	16.1	146.3	130.9	9.8	5.7	16.7	98.0	89.2	6.6	2.2	9	13
2396	Automotive and apparel trimmings	30.9	625.5	476.4	42.5	106.6	27.6	330.0	266.6	19.4	44.0	2	1
2397	Schiffli machine embroideries	6.0	61.5	56.3	3.7	(1.5)	5.5	42.0	38.9	2.4	.7	9	16
2399	Fabricated textile products, n.e.c	31.1	302.6	263.8	20.9	17.9	31.4	193.7	175.3	12.8	5.6	4	6
24	Lumber and wood products	692.4	8,777.7	7,424.7	739.7	613.2	691.2	5,623.2	4,985.7	389.4	248.1	1	1
2411	Logging camps, log contractors	83.3	1,207.9	1,009.0	117.5	81.4	80.0	596.4	523.9	54.7	17.8	4	3
242	Sawmills and planing mills	211.3	2,669.8	2,228.3	233.8	207.8	204.5	1,698.4	1,488.3	121.3	88.8	2	1
2421	Sawmills, planing mills, general	175.2	2,338.5	1,943.0	205.5	190.0	166.6	1,460.8	1,274.4	105.2	81.2	2	1
2426	Hardwood dimension and flooring	29.1	261.4	225.0	21.3	15.1	31.5	192.9	173.9	12.5	6.5	4	6
2429	Special product sawmills, n.e.c	7.0	69.9	60.3	7.0	2.6	6.4	44.7	40.0	3.6	1.1	13	15
243	Millwork, plywood, struc. membs	197.1	2,617.9	2,216.4	209.7	191.8	190.7	1,662.9	1,474.3	108.2	80.4	1	2
2431	Millwork	68.6	865.6	742.2	71.1	52.3	70.5	587.2	524.5	37.3	25.4	2	3
2434	Wood kitchen cabinets	46.2	553.2	481.1	39.2	32.9	38.8	319.3	286.6	19.9	12.8	3	4
2435	Hardwood veneer and plywood	22.3	247.1	211.5	19.0	16.6	25.1	184.9	165.2	11.4	8.3	3	4
2436	Softwood veneer and plywood	46.2	782.6	634.6	67.4	80.6	43.7	464.9	403.6	31.3	30.0	1	1
2439	Structural wood members, n.e.c	13.8	169.4	147.0	13.0	9.4	12.6	106.6	94.4	8.3	3.9	5	11
244	Wood containers	37.8	338.4	299.6	25.7	13.1	36.9	225.5	203.8	15.2	6.5	4	9
2441	Nailed wood boxes and shook	8.6	77.9	68.6	6.5	2.9	10.7	68.3	61.1	5.0	2.2	9	19
2448	Wood pallets and skids	20.3	183.4	163.8	13.5	6.1	14.3	84.9	77.7	5.3	1.9	5	15
2449	Wood containers, n.e.c	8.9	77.1	67.2	5.8	4.1	11.9	72.3	65.0	4.9	2.4	6	14
245	Wood buildings and mobile homes	79.5	990.7	858.2	81.2	51.2	97.1	821.3	745.4	52.2	23.7	1	2
2451	Mobile homes	50.5	608.6	527.6	53.9	27.1	71.9	601.7	547.3	38.9	15.5	1	3
2452	Prefabricated wood buildings	29.0	382.1	330.6	27.4	24.1	25.2	219.6	198.1	13.3	8.2	3	3
249	Miscellaneous wood products	83.4	953.0	813.3	71.7	68.0	82.0	618.7	550.0	37.8	30.9	3	3
2491	Wood preserving	12.6	148.1	126.1	11.9	10.1	11.3	83.5	74.5	6.2	2.8	4	5
2492	Particleboard	6.2	96.1	79.1	7.3	9.7	7.7	74.6	65.5	4.3	4.8	2	2
2499	Wood products, n.e.c	64.6	708.8	608.1	52.6	48.1	63.0	460.6	410.0	27.3	23.3	3	4
25	Furniture and fixtures	463.8	5,182.8	4,448.3	378.5	356.1	462.1	3,579.1	3,205.3	205.0	168.8	1	2
251	Household furniture	309.7	3,088.0	2,669.2	228.3	190.5	317.4	2,247.0	2,023.7	128.3	95.0	1	2
2511	Wood household furniture	141.0	1,321.8	1,138.8	103.1	80.0	133.8	892.1	806.8	50.6	34.7	1	2
2512	Upholstered household furniture	89.1	892.8	779.2	61.7	51.9	92.0	671.8	605.3	36.6	29.9	2	3
2514	Metal household furniture	33.2	351.3	302.7	27.0	21.6	34.4	247.8	222.5	14.8	10.5	4	7
2515	Mattresses and bedsprings	27.0	322.2	279.8	22.4	20.0	31.4	259.9	233.7	14.8	11.4	2	3
2517	Wood TV and radio cabinets	10.7	105.1	89.0	7.8	8.2	18.9	126.3	111.2	8.4	6.7	2	3
2519	Household furniture, n.e.c	8.7	94.8	79.7	6.3	8.8	6.9	49.1	44.2	3.1	1.8	2	3
252	Office furniture	45.0	651.6	542.6	48.3	60.7	39.3	379.0	330.0	21.5	27.5	1	1
2521	Wood office furniture	16.0	192.2	165.0	13.9	13.3	11.5	88.7	80.1	4.5	4.1	3	4
2522	Metal office furniture	29.0	459.4	377.6	34.4	47.4	27.8	290.3	249.9	17.0	23.4	1	1
2531	Public bldg., related furniture	20.0	250.2	214.3	18.1	17.8	21.4	177.6	157.8	10.5	9.3	4	7
254	Partitions and fixtures	57.4	790.9	675.1	56.6	59.1	57.4	541.5	483.9	32.3	25.3	3	5
2541	Wood partitions and fixtures	29.4	406.7	352.9	29.0	24.8	31.2	296.1	268.2	17.0	10.9	4	5
2542	Metal partitions and fixtures	28.0	384.2	322.2	27.6	34.3	26.2	245.4	215.7	15.3	14.4	3	7
259	Misc. furniture and fixtures	31.7	402.1	347.0	27.2	28.0	26.6	234.0	209.9	12.4	11.7	2	3
2591	Drapery hardware, blinds, shades	13.6	170.4	145.6	11.7	13.2	12.1	106.5	94.4	5.3	6.8	3	3
2599	Furniture and fixtures, n.e.c	18.1	231.7	201.4	15.5	14.8	14.5	127.5	115.5	7.1	4.9	3	4

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
26	Paper and allied products	628.7	10,724.9	8,942.9	728.4	1,053.5	633.4	6,856.5	5,992.1	360.9	503.5	1	1
2611	Pulpmills	16.2	351.9	293.2	22.1	36.5	10.6	145.9	125.7	7.9	12.3	1	1
2621	Papermills, except building paper	127.0	2,624.1	2,167.0	172.0	285.1	129.9	1,662.5	1,439.6	82.5	140.4	1	1
2631	Paperboard mills	67.6	1,418.5	1,175.8	93.4	149.3	68.5	900.9	778.2	44.0	78.7	1	1
264	Misc. converted paper products	206.7	3,101.8	2,608.1	210.2	283.5	189.1	1,846.6	1,630.0	98.2	118.4	1	1
2641	Paper coating and glazing	39.7	656.6	551.2	44.5	60.8	37.2	414.5	366.6	21.2	26.7	2	2
2642	Envelopes	22.6	317.5	270.0	21.7	25.8	22.9	217.9	194.6	12.2	11.1	2	3
2643	Bags, except textile bags	48.7	686.6	584.1	45.3	57.2	48.6	438.7	385.5	23.9	29.3	4	4
2645	Die-cut paper and board	14.3	206.6	174.6	13.5	18.5	15.2	148.5	132.5	7.2	8.8	3	2
2646	Pressed and molded pulp goods	4.9	72.7	58.8	6.0	7.8	6.1	60.0	51.8	3.6	4.6	1	1
2647	Sanitary paper products	34.5	624.1	509.1	43.0	72.0	26.3	293.0	256.1	14.6	22.3	1	1
2648	Stationery products	12.6	159.0	135.2	11.0	12.8	14.7	120.1	106.3	6.6	7.2	5	5
2649	Converted paper products, n.e.c.	29.4	378.8	325.1	25.2	28.5	18.1	153.9	136.6	8.9	8.4	3	7
265	Paperboard containers and boxes	204.1	3,109.5	2,601.8	221.5	286.2	223.7	2,171.1	1,907.0	121.0	143.1	1	1
2651	Folding paperboard boxes	44.7	690.8	577.8	49.1	64.0	45.3	452.9	398.1	24.5	30.3	2	2
2652	Setup paperboard boxes	13.1	133.8	115.3	8.6	9.9	18.1	124.6	111.6	6.5	6.5	6	10
2653	Corrugated and solid fiber boxes	101.5	1,644.2	1,374.8	118.1	151.3	107.9	1,111.9	976.3	63.6	72.0	1	1
2654	Sanitary food containers	28.7	404.6	336.7	28.3	39.6	35.1	319.1	277.7	17.6	23.8	1	1
2655	Fiber cans, drums, similar prods	16.1	236.1	197.3	17.4	21.4	17.3	162.6	143.3	8.8	10.5	2	2
2661	Building paper and board mills	7.0	119.0	96.9	9.1	13.0	11.6	129.5	111.6	7.3	10.6	1	1
27	Printing and publishing	1,092.2	16,195.7	14,024.5	979.2	1,192.0	1,056.2	10,907.9	9,832.0	503.8	572.1	1	1
2711	Newspapers	349.9	5,005.5	4,306.0	294.3	405.2	348.5	3,525.3	3,168.1	157.2	200.0	1	1
2721	Periodicals	69.9	1,191.6	1,019.8	68.1	103.7	66.5	794.1	708.5	30.7	54.9	3	3
273	Books	106.4	1,600.6	1,378.5	95.8	126.4	98.0	1,019.2	918.9	47.2	53.1	1	2
2731	Book publishing	59.5	965.2	830.2	55.0	80.0	57.1	619.2	557.7	27.1	34.4	2	2
2732	Book printing	46.9	635.4	548.2	40.8	46.4	40.9	400.0	361.2	20.1	18.7	2	3
2741	Miscellaneous publishing	42.1	581.5	503.0	34.7	43.9	38.8	364.4	331.2	16.5	16.7	4	4
275	Commercial printing	356.0	5,373.2	4,701.8	332.1	339.3	344.1	3,607.9	3,278.1	167.3	162.5	2	2
2751	Commercial printing, letterpress	110.9	1,484.0	1,307.3	94.4	82.4	130.5	1,245.0	1,136.0	57.1	51.2	4	4
2752	Commercial printing, lithographic	216.3	3,416.1	2,984.1	209.3	222.7	184.0	2,019.5	1,835.3	93.9	90.3	2	3
2753	Engraving and plate printing	9.8	136.9	118.9	8.5	9.5	9.6	91.0	80.7	5.5	4.8	3	6
2754	Commercial printing, gravure	19.0	336.2	291.6	19.9	24.8	20.0	252.4	225.4	10.8	16.2	3	3
2761	Manifold business forms	45.3	662.6	575.0	42.6	45.0	38.6	384.5	343.6	20.5	20.4	2	3
2771	Greeting card publishing	18.1	267.3	226.8	15.7	24.8	23.5	223.6	191.5	16.2	15.9	2	2
278	Blankbooks and bookbinding	55.9	678.5	579.1	45.4	54.0	51.7	425.5	371.6	25.3	28.6	2	3
2782	Blankbooks and looseleaf binders	31.8	405.6	338.5	27.5	39.6	26.6	224.7	192.7	12.5	19.5	2	2
2789	Bookbinding and related work	24.1	272.9	240.6	17.9	14.5	25.1	200.8	178.9	12.8	9.1	5	8
279	Printing trade services	48.4	834.9	734.6	50.6	49.7	46.5	563.4	520.5	22.9	20.0	4	5
2791	Typesetting	27.2	414.7	364.7	25.6	24.4	26.0	290.2	269.8	11.4	9.0	4	6
2793	Photoengraving	5.7	101.3	89.3	6.8	5.2	9.9	130.4	119.3	5.3	5.8	6	12
2794	Electrotyping and stereotyping	.4	7.9	6.8	.6	.5	1.7	21.3	19.0	1.2	1.1	1	1
2795	Lithographic platemaking services	15.2	311.0	273.9	17.5	19.6	8.9	121.5	112.4	5.0	4.1	8	7
28	Chemicals and allied products	880.2	16,735.7	13,839.3	984.9	1,911.5	836.4	10,080.4	8,730.7	453.1	896.6	1	1
281	Industrial inorganic chemicals	110.0	2,278.7	1,847.2	138.3	293.1	99.5	1,261.0	1,078.5	54.8	127.7	1	1
2812	Alkalies and chlorine	11.8	265.2	215.9	18.4	30.8	13.3	175.6	152.0	8.8	14.8	2	1
2813	Industrial gases	7.5	141.5	117.2	8.6	15.7	9.6	96.7	87.2	4.3	5.2	1	1
2816	Inorganic pigments	11.9	223.2	179.8	14.4	29.0	12.8	156.2	134.6	7.2	14.4	1	2
2819	Industrial inorganic chem., n.e.c.	78.8	1,648.8	1,334.2	96.9	217.6	63.8	832.5	704.7	34.5	93.3	1	1
282	Plastics materials, synthetics	157.2	3,036.5	2,470.7	166.3	399.5	161.9	1,944.8	1,666.3	85.1	193.4	1	1
2821	Plastics materials and resins	57.2	1,211.5	985.6	70.3	155.5	54.8	737.1	632.8	32.0	72.3	1	1
2822	Synthetic rubber	10.0	228.8	185.2	12.3	31.3	11.8	163.5	138.8	6.9	17.8	1	1
2823	Cellolosic manmade fibers	16.0	260.7	213.7	15.0	32.0	17.1	159.3	135.2	9.1	15.0	1	1
2824	Organic fibers, noncellulosic	74.0	1,335.7	1,086.1	68.8	180.8	78.2	884.9	759.5	37.1	88.3	1	1
283	Drugs	156.4	2,918.2	2,459.6	167.6	291.1	129.9	1,621.8	1,413.4	67.6	140.8	1	1
2831	Biological products	15.7	252.1	210.2	20.4	21.5	10.1	116.3	102.9	4.8	8.6	1	4
2833	Medicinals and botanicals	14.4	261.8	219.9	13.8	28.1	7.8	92.6	80.8	4.2	7.6	4	2
2834	Pharmaceutical preparations	126.4	2,404.4	2,029.5	133.4	241.5	112.0	1,412.9	1,229.7	58.6	124.6	1	1
284	Soaps, cleaners, toilet goods	111.6	1,824.4	1,526.1	119.0	179.3	111.7	1,217.3	1,058.2	58.9	100.2	1	2
2841	Soap and other detergents	32.1	639.5	521.6	38.8	79.1	31.5	400.6	341.6	17.8	41.2	2	2
2842	Polishes and sanitation goods	22.1	320.2	274.7	20.4	25.1	25.1	246.4	216.9	11.1	18.4	3	5
2843	Surface active agents	6.6	117.3	101.9	6.3	9.1	6.9	81.1	71.5	3.7	5.9	9	8
2844	Toilet preparations	50.9	747.4	627.9	53.5	66.0	48.2	489.2	428.2	26.3	34.7	2	2
2851	Paints and allied products	61.4	1,041.6	882.6	65.3	93.7	65.9	731.5	647.2	34.5	49.8	2	2

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
		Employees[1] (1,000)	Labor costs[1] (million dollars)				Employees[1] (1,000)	Labor costs[1] (million dollars)					
			Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	D	E
		A	B	C	D	E	F	G	H	I	J		
28	Chemicals and allied products--Con.												
286	Industrial organic chemicals	152.8	3,418.0	2,794.2	183.3	440.5	136.5	1,877.6	1,614.4	80.6	182.6	1	1
2861	Gum and wood chemicals	4.8	64.6	54.0	4.2	6.5	5.9	54.5	47.6	2.4	4.5	2	3
2865	Cyclic crudes and intermediates	35.7	772.8	631.5	47.0	94.3	28.2	365.9	318.2	17.3	30.4	1	1
2869	Industrial organic chemicals, n.e.c.	112.3	2,580.5	2,108.7	132.1	339.7	102.4	1,457.2	1,248.6	60.9	147.7	1	1
287	Agricultural chemicals	53.9	934.8	784.0	60.9	89.9	47.9	499.2	438.4	25.0	35.8	1	1
2873	Nitrogenous fertilizers	12.1	249.4	207.9	15.7	25.7	9.4	120.1	104.3	5.5	10.3	1	2
2874	Phosphatic fertilizers	14.4	256.7	212.8	17.7	26.3	14.9	153.2	135.1	7.8	10.3	1	1
2875	Fertilizers, mixing only	12.4	162.5	139.1	11.9	11.5	11.4	92.9	82.5	5.5	4.9	4	5
2879	Agricultural chemicals, n.e.c.	15.0	266.2	224.1	15.6	26.4	12.2	133.0	116.5	6.2	10.3	2	2
289	Miscellaneous chemical products	76.9	1,283.5	1,075.0	84.2	124.3	83.1	927.2	814.3	46.6	66.3	3	2
2891	Adhesives and sealants	16.7	272.2	230.7	18.7	22.8	14.9	166.4	148.2	8.2	10.0	3	3
2892	Explosives	12.3	216.8	173.2	14.5	29.1	18.6	207.8	178.9	10.8	18.1	12	2
2893	Printing ink	10.1	169.6	145.1	10.8	13.7	9.6	111.9	99.3	5.5	7.1	2	6
2895	Carbon black	2.5	52.0	42.5	2.6	6.8	2.9	37.8	31.9	1.8	4.1	1	1
2899	Chemical preparations, n.e.c.	35.3	572.8	483.4	37.6	51.8	37.1	403.3	356.0	20.3	27.0	2	3
29	Petroleum and coal products	146.8	3,329.6	2,696.2	184.4	449.1	139.5	1,920.4	1,637.4	82.6	200.4	1	1
2911	Petroleum refining	102.5	2,561.4	2,055.3	125.0	381.2	100.8	1,480.6	1,247.1	57.8	175.7	1	1
295	Paving and roofing materials	32.3	554.1	461.3	46.3	46.5	29.5	333.1	296.4	19.9	16.8	4	3
2951	Paving mixtures and blocks	12.8	225.7	189.6	19.5	16.6	13.9	165.1	147.7	9.6	7.8	8	6
2952	Asphalt felts and coatings	19.5	328.4	271.7	26.8	29.9	15.6	168.0	148.7	10.3	9.0	2	2
299	Misc. petroleum, coal products	11.9	214.1	179.6	13.1	21.4	9.2	106.7	93.9	4.9	7.9	6	4
2992	Lubricating oils and greases	10.3	186.7	157.1	11.2	18.4	8.1	94.7	83.3	4.2	7.2	7	4
2999	Petroleum and coal products, n.e.c.	1.6	27.3	22.5	1.9	2.9	1.1	12.0	10.6	.7	.7	2	11
30	Rubber, misc. plastics prod.	721.3	10,331.0	8,536.0	734.2	1,060.8	617.8	6,010.1	5,165.2	326.0	518.9	1	1
3011	Tires and inner tubes	114.0	2,331.9	1,832.4	151.5	348.0	107.5	1,469.3	1,214.1	71.0	184.2	1	1
3021	Rubber and plastics footwear	19.8	200.5	159.1	17.9	23.5	31.6	216.4	182.6	12.6	21.2	1	4
3031	Reclaimed rubber	.9	15.3	11.5	1.0	2.8	.9	11.2	9.1	0.6	1.5	2	2
3041	Rubber, plastics hose and belting	34.4	563.4	457.4	37.5	68.4	31.9	378.1	309.0	20.4	48.7	2	1
3069	Fabricated rubber products, n.e.c.	98.5	1,411.8	1,164.0	97.2	150.6	99.0	944.8	808.8	51.1	84.9	2	2
3079	Miscellaneous plastics products	453.7	5,808.1	4,911.7	428.9	467.5	346.9	2,990.3	2,641.6	170.3	178.4	1	1
31	Leather and leather products	242.5	2,150.1	1,859.7	155.5	134.9	273.4	1,770.8	1,589.3	107.1	74.4	1	3
3111	Leather tanning and finishing	23.0	300.6	254.8	22.8	23.0	25.7	229.7	200.0	13.9	15.8	3	3
3131	Boot, shoe cut stock and findings	8.5	75.5	65.3	5.7	4.4	8.7	55.7	50.1	3.4	2.2	4	7
314	Footwear, except rubber	145.5	1,187.5	1,031.5	85.8	70.1	176.1	1,083.4	972.7	66.7	44.0	1	4
3142	House slippers	8.1	63.2	54.5	4.3	4.4	8.5	53.2	48.1	3.1	2.0	1	1
3143	Men's footwear, except athletic	55.0	481.0	417.0	33.4	30.6	61.5	398.9	359.1	23.7	17.1	1	1
3144	Women's footwear, except athletic	57.6	447.5	388.6	34.2	24.6	77.4	454.7	408.4	28.9	17.4	1	9
3149	Footwear, except rubber, n.e.c.	24.8	195.8	171.4	13.9	10.5	28.7	176.6	158.1	11.0	7.5	1	6
3151	Leather gloves and mittens	5.5	39.0	33.9	3.4	(1.7)	4.9	24.4	22.1	1.4	.9	15	46
3161	Luggage	19.2	188.3	164.1	12.4	11.9	17.1	116.4	106.8	6.1	3.5	3	6
317	Women's handbags and purses	32.1	281.2	242.2	20.5	18.6	33.7	214.8	195.1	12.9	6.8	3	6
3171	Women's handbags and purses	20.3	165.4	144.0	12.3	9.1	22.2	133.8	121.7	8.4	3.7	5	9
3172	Personal leather goods, n.e.c.	11.9	115.8	98.2	8.2	9.5	11.5	81.0	73.4	4.5	3.1	4	6
3199	Leather goods, n.e.c.	8.6	78.0	67.9	4.9	(5.2)	7.2	46.4	42.5	2.7	1.2	8	16
32	Stone, clay, glass products	613.7	9,619.4	7,943.1	712.4	963.9	623.2	6,389.5	5,546.9	361.9	480.7	1	1
3211	Flat glass	21.9	510.8	401.0	29.7	80.2	20.9	294.0	241.9	14.2	37.9	1	1
322	Glass, pressed or blown	117.0	1,937.9	1,548.2	141.5	248.2	118.8	1,236.9	1,057.5	68.5	110.9	2	1
3221	Glass containers	70.8	1,238.6	975.4	95.8	167.4	72.9	778.1	659.4	44.6	74.1	3	2
3229	Pressed and blown glass, n.e.c.	46.2	699.3	572.8	45.7	80.8	45.9	458.8	398.1	23.9	36.8	1	1
3231	Products of purchased glass	36.2	520.6	429.2	38.2	53.2	33.7	347.3	296.1	18.2	33.0	5	3
3241	Cement, hydraulic	27.8	617.1	485.1	38.8	93.3	30.0	420.4	349.2	19.7	51.5	1	1
325	Structural clay products	45.0	582.1	486.4	44.8	50.9	51.8	442.4	391.4	25.7	25.3	2	2
3251	Brick and structural clay tile	20.5	226.5	197.3	16.9	12.3	24.1	186.5	168.4	10.9	7.2	3	5
3253	Ceramic wall and floor tile	7.8	92.4	78.3	7.3	6.8	8.3	66.1	58.5	3.8	3.8	6	6
3255	Clay refractories	11.3	186.2	146.8	13.9	25.5	11.2	116.3	100.5	5.8	10.0	3	2
3259	Structural clay products, n.e.c.	5.5	76.8	64.0	6.5	6.4	8.2	73.5	64.0	5.2	4.3	8	6

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	D	E
		A	B	C	D	E	F	G	H	I	J		
32	Stone, clay, glass products--Con.												
326	Pottery and related products	43.2	550.2	459.6	41.0	49.6	44.8	385.7	335.3	22.6	27.8	2	2
3261	Vitreous plumbing fixtures	9.2	141.1	117.2	10.9	12.9	9.6	99.9	86.5	5.8	7.6	2	2
3262	Vitreous china food utensils	7.3	89.3	72.3	7.9	9.1	5.9	48.3	41.2	3.1	4.0	2	2
3263	Fine earthenware food utensils	4.7	45.5	38.4	2.9	4.3	6.8	46.5	41.4	2.9	2.2	5	5
3264	Porcelain electrical supplies	11.4	175.3	144.4	12.2	18.7	13.4	133.4	114.0	7.4	12.0	2	3
3269	Pottery products, n.e.c	10.6	99.0	87.4	7.1	(4.6)	9.1	57.6	52.2	3.4	2.0	9	16
327	Concrete, gypsum, plaster prods	183.7	2,765.8	2,366.8	221.9	177.1	193.1	1,956.8	1,741.0	120.0	95.8	3	3
3271	Concrete block and brick	18.7	270.7	237.1	19.1	14.5	22.8	217.9	196.0	13.8	8.0	4	7
3272	Concrete products, n.e.c	61.7	855.1	734.9	74.1	46.1	67.7	640.7	570.2	42.6	27.9	6	4
3273	Ready-mixed concrete	87.9	1,375.2	1,175.8	108.7	90.7	85.7	910.4	809.3	53.6	47.5	4	6
3274	Lime	5.9	94.1	75.4	7.5	11.2	5.7	57.9	50.0	3.3	4.6	10	4
3275	Gypsum products	9.5	170.7	143.6	12.5	14.6	11.2	129.9	115.5	6.7	7.7	1	2
3281	Cut stone and stone products	12.7	148.4	131.5	10.5	6.4	15.0	120.6	109.2	7.1	4.3	4	11
329	Misc. nonmetallic mineral prods	126.2	1,986.4	1,635.2	146.1	205.1	115.1	1,185.4	1,025.3	65.9	94.2	1	1
3291	Abrasive products	28.3	476.8	392.3	30.8	53.6	24.5	267.4	229.4	14.4	23.6	2	3
3292	Asbestos products	13.9	220.2	179.9	18.4	21.9	21.0	223.1	191.0	12.5	19.6	1	3
3293	Gaskets, packing, sealing devices	33.0	449.5	371.3	34.1	44.1	27.7	252.5	220.4	14.3	17.8	2	3
3295	Minerals, ground or treated	11.5	186.9	156.3	14.1	16.5	9.5	99.6	87.9	5.5	6.2	3	4
3296	Mineral wool	22.6	380.0	313.8	28.3	37.9	18.0	199.2	172.3	10.9	16.0	1	1
3297	Nonclay refractories	9.1	170.0	134.3	13.6	22.1	8.1	92.2	78.3	5.4	8.5	5	4
3299	Nonmetallic mineral products, n.e.c	7.7	103.1	87.2	6.8	9.0	6.3	51.4	46.0	2.9	2.5	2	2
33	Primary metal industries	1,113.7	23,718.2	18,745.0	1,502.5	3,470.7	1,142.9	14,621.5	12,166.6	740.2	1,714.7	1	1
331	Blast furnace, basic steel prod	529.7	12,923.4	10,085.5	732.2	2,105.7	552.9	7,780.1	6,388.6	362.0	1,029.5	1	1
3312	Blast furnaces and steel mills	441.9	11,223.2	8,725.7	616.1	1,881.4	469.1	6,764.2	5,537.8	308.6	917.8	1	1
3313	Electrometallurgical products	8.9	180.8	139.2	12.4	29.1	9.5	113.4	94.1	6.2	13.1	1	2
3315	Steel wire and related products	31.7	536.9	436.6	39.1	61.1	30.6	337.9	287.9	18.5	31.5	2	2
3316	Cold finishing of steel shapes	19.4	420.9	334.6	27.0	59.3	20.1	269.2	223.3	13.3	32.6	1	1
3317	Steel pipe and tubes	27.8	561.7	449.4	37.5	74.7	23.6	295.4	245.5	15.4	34.5	1	2
332	Iron and steel foundries	222.3	4,178.5	3,329.2	309.9	539.4	218.8	2,567.1	2,155.3	147.5	264.3	1	2
3321	Gray iron foundries	138.8	2,695.1	2,146.0	193.0	356.0	138.4	1,656.6	1,387.4	94.4	174.8	2	2
3322	Malleable iron foundries	18.2	345.7	273.0	24.7	48.0	22.5	278.2	234.5	15.7	28.0	2	2
3324	Steel investment foundries	10.5	154.3	128.7	11.9	13.7	11.2	108.4	93.2	6.5	8.7	9	7
3325	Steel foundries, n.e.c	54.8	983.5	781.5	80.4	121.7	46.7	523.9	440.2	30.9	52.8	2	2
333	Primary nonferrous metals	57.3	1,315.2	1,032.1	84.3	198.7	58.6	763.3	626.9	38.3	98.1	1	1
3331	Primary copper	13.1	292.7	217.3	19.9	55.4	17.2	213.6	173.2	11.7	28.7	1	1
3332	Primary lead	2.5	51.3	40.5	3.0	7.8	2.8	31.4	26.5	1.7	3.2	1	1
3333	Primary zinc	4.6	90.0	70.5	5.9	13.6	6.3	71.5	59.3	3.6	8.6	1	1
3334	Primary aluminum	28.6	698.9	555.0	44.1	99.7	25.6	362.8	296.2	17.7	48.9	1	1
3339	Primary nonferrous metals, n.e.c	8.6	182.3	148.8	11.3	22.1	6.7	84.0	71.7	3.6	8.7	2	2
3341	Secondary nonferrous metals	18.9	329.7	269.8	25.5	34.3	17.8	196.6	170.1	11.6	14.9	3	3
335	Nonferrous rolling and drawing	177.5	3,302.6	2,640.0	227.7	434.8	188.3	2,221.6	1,871.4	117.6	232.6	1	1
3351	Copper rolling and drawing	31.3	583.3	455.5	45.3	82.5	37.8	461.6	383.7	26.3	51.6	1	1
3353	Aluminum sheet, plate, and foil	31.4	774.8	613.5	44.6	116.7	31.3	447.8	370.7	19.7	57.4	1	1
3354	Aluminum exctrued products	26.5	438.4	355.9	34.4	48.0	27.7	282.2	239.2	17.1	25.9	2	2
3355	Aluminum rolling and drawing, n.e.c	4.7	99.8	78.1	6.0	15.7	4.6	58.5	48.0	2.8	7.7	1	1
3356	Nonferrous rolling & drawing, n.e.c	17.3	332.5	260.2	20.7	42.8	18.1	217.2	184.2	10.0	23.0	2	1
3357	Nonferrous wiredraw'g, insulating	66.3	1,082.6	876.8	76.8	129.0	68.8	754.3	645.6	41.7	67.0	1	1
336	Nonferrous foundries	82.1	1,266.5	1,043.8	95.3	127.4	81.4	830.4	721.5	48.6	60.3	2	3
3361	Aluminum foundries	52.2	841.0	691.4	60.9	88.7	45.7	484.5	417.9	26.8	39.8	3	3
3362	Brass, bronze, copper foundries	12.6	174.4	148.3	13.5	12.6	15.4	146.2	129.6	8.1	8.5	4	7
3369	Nonferrous foundries, n.e.c	17.3	251.0	204.1	20.9	26.0	20.3	199.7	174.0	13.7	12.0	3	4
339	Misc. primary metal products	26.0	402.4	344.5	27.5	30.4	25.1	262.4	232.8	14.6	15.0	3	5
3398	Metal heat treating	16.0	255.4	220.1	17.4	17.9	17.2	176.1	157.3	9.8	9.0	4	8
3399	Primary metal products, n.e.c	9.0	147.1	124.4	10.1	12.6	7.9	86.3	75.5	4.8	6.0	3	5
34	Fabricated metal products	1,555.7	25,413.6	21,035.9	1,783.1	2,594.9	1,493.7	16,034.0	13,820.9	900.1	1,313.0	1	2
341	Metal cans, shipping containers	72.3	1,560.6	1,246.5	104.9	209.2	78.7	1,009.2	839.6	51.8	117.8	1	1
3411	Metal cans	59.8	1,342.0	1,066.3	90.1	185.6	68.5	895.1	740.7	46.6	107.8	1	1
3412	Metal barrels, drums, and pails	12.4	218.6	180.3	14.7	23.6	10.2	114.1	98.9	5.2	10.0	3	4
342	Cutlery, handtools and hardware	168.6	2,669.0	2,179.3	185.3	304.3	159.2	1,650.5	1,404.9	92.6	153.0	1	2
3421	Cutlery	14.9	193.1	159.6	14.4	19.0	13.4	118.2	102.6	6.8	8.8	4	4
3423	Hand and edge tools, n.e.c	47.0	685.4	566.4	51.0	68.0	39.3	397.4	343.0	22.2	32.2	2	2
3425	Handsaws and saw blades	7.6	111.9	94.3	7.5	10.1	6.6	64.0	56.7	3.6	3.7	2	5
3429	Hardware, n.e.c	99.2	1,678.6	1,359.0	112.3	207.2	99.9	1,070.9	902.6	60.0	108.3	1	2
343	Plumbing, heating, except elec	53.2	761.2	636.8	57.3	67.1	60.7	602.0	523.9	34.2	43.9	3	2
3431	Metal sanitary ware	8.1	132.6	109.7	10.2	12.8	11.2	120.4	104.4	7.0	9.0	2	4
3432	Plumbing fittings and brass goods	19.3	258.8	215.0	19.7	24.2	18.6	173.0	151.5	9.7	11.8	2	2
3433	Heating equipment, exc. electric	25.8	369.7	312.2	27.4	30.0	30.9	308.6	268.0	17.5	23.1	5	4

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
34	Fabricated metal products--Con.												
344	Fabricated struc. metal prods.....	425.7	6,509.3	5,491.9	481.0	536.4	394.9	4,034.2	3,531.9	247.1	255.2	1	1
3441	Fabricated structural metal.....	99.3	1,548.6	1,313.6	117.6	117.5	104.3	1,123.4	975.5	70.3	77.6	2	3
3442	Metal doors, sash, and trim.....	65.8	781.8	671.3	60.5	49.9	70.7	585.5	520.8	35.4	29.3	3	3
3443	Fabricated platework, boiler shop.....	123.5	2,145.8	1,777.8	153.8	214.2	93.0	1,022.6	893.5	62.0	67.1	2	2
3444	Sheet metalwork.....	77.4	1,146.8	980.2	80.6	86.0	74.0	765.1	678.5	43.3	43.3	3	3
3446	Architectural metalwork.....	20.8	291.4	247.7	21.1	22.6	20.9	198.7	175.4	11.3	12.0	4	5
3448	Prefabricated metal buildings.....	22.7	343.5	289.7	27.3	26.5	12.5	134.3	109.4	12.3	12.6	1	3
3449	Miscellaneous metalwork.....	16.3	251.3	211.5	20.1	19.7	19.5	204.6	178.8	12.5	13.3	3	4
345	Screw machine prod., bolts, etc.....	104.7	1,682.7	1,414.0	114.5	154.1	100.6	1,079.6	948.0	55.0	76.6	2	2
3451	Screw machine products.....	43.8	636.9	551.6	43.6	41.7	40.5	396.6	357.3	20.7	18.6	3	4
3452	Bolts, nuts, rivets, and washers.....	60.9	1,045.8	862.4	71.0	112.3	60.1	683.0	590.7	34.3	58.0	2	2
346	Metal forgings and stampings.....	288.0	5,627.0	4,511.3	375.2	740.5	263.5	3,347.3	2,791.4	178.9	377.0	1	1
3462	Iron and steel forgings.....	39.1	802.7	641.5	59.9	101.4	34.3	456.3	387.2	23.9	45.2	2	2
3463	Nonferrous forgings.....	5.4	118.9	93.7	6.9	18.3	5.8	76.4	63.7	3.7	9.0	5	5
3465	Automotive stampings.....	132.4	3,136.2	2,446.0	194.3	495.9	123.3	1,836.1	1,485.4	96.1	254.6	1	1
3466	Crowns and closures.....	7.9	131.4	104.8	8.6	17.9	8.1	88.1	74.1	4.8	9.2	2	3
3469	Metal stampings, n.e.c.....	103.2	1,437.8	1,225.4	105.4	107.0	92.0	890.4	781.0	50.4	59.0	2	3
347	Metal services, n.e.c.....	93.5	1,155.6	1,008.5	84.8	62.3	82.2	686.7	624.2	38.7	23.8	3	4
3471	Plating and polishing.....	61.2	724.8	634.8	54.1	35.9	54.6	441.2	403.1	25.0	13.1	4	6
3479	Metal coating and allied services.....	32.3	430.8	373.7	30.7	26.4	27.6	245.5	221.1	13.7	10.7	4	6
348	Ordnance and accessories, n.e.c.....	70.2	1,211.8	991.7	81.9	138.2	109.5	1,184.2	1,015.3	71.7	97.2	6	4
3482	Small arms ammunition.....	10.3	173.8	138.1	(10.3)	(25.4)	13.9	153.7	129.3	9.7	14.7	43	19
3483	Ammunition, exc. small arms, n.e.c....	18.9	304.6	248.1	23.6	32.9	54.9	558.3	479.1	34.6	44.6	1	1
3484	Small arms.....	17.5	289.9	237.8	18.0	34.1	16.1	176.2	152.1	8.6	15.5	2	3
3489	Ordance and accessories n.e.c.....	23.6	443.5	367.7	30.0	45.8	24.6	296.0	254.8	18.8	22.4	1	1
349	Misc. fabricated metal products.....	279.4	4,236.8	3,555.8	298.2	382.9	244.4	2,440.3	2,141.7	130.1	168.5	1	2
3493	Steel springs, except wire.....	8.2	144.9	119.8	9.4	15.7	8.5	96.7	79.9	5.8	11.0	3	4
3494	Valves and pipe fittings.....	108.7	1,765.7	1,467.3	122.8	175.6	94.3	1,000.7	879.9	49.3	71.5	1	2
3495	Wire springs.....	21.7	308.8	253.5	23.1	32.2	23.7	222.7	193.2	12.6	16.9	3	14
3496	Misc. fabricated wire products.....	32.4	415.7	354.5	30.5	30.6	33.2	296.4	261.4	16.3	18.7	3	4
3497	Metal foil and leaf.....	9.4	151.9	125.8	10.6	15.5	5.4	59.8	51.9	3.0	4.9	2	3
3498	Fabricated pipe and fittings.....	28.2	462.8	390.0	33.5	39.4	17.5	186.4	164.7	9.9	11.8	5	4
3499	Fabricated metal products, n.e.c.....	70.8	986.9	844.7	68.4	73.7	61.8	577.6	510.7	33.2	33.7	2	2
35	Machinery, except electrical.....	2,083.3	36,624.9	30,557.5	2,329.0	3,738.3	1,827.8	21,334.0	18,523.2	1,057.2	1,753.6	1	1
351	Engines and turbines.....	129.6	2,763.8	2,237.6	161.4	364.8	116.1	1,555.9	1,320.3	74.8	160.8	1	1
3511	Turbines, turbine generator sets.....	40.8	867.6	709.1	51.5	107.1	46.2	634.4	548.9	31.4	54.1	1	1
3519	Internal combustion engines, n.e.c....	88.8	1,896.2	1,528.6	110.0	257.7	69.9	921.5	771.4	43.4	106.7	1	1
352	Farm and garden machinery.....	150.9	2,744.2	2,196.5	171.2	376.5	125.3	1,446.2	1,211.2	73.5	161.5	1	1
3523	Farm machinery and equipment.....	131.3	2,472.5	1,971.9	151.8	348.8	104.6	1,254.6	1,045.7	62.0	146.9	1	1
3524	Lawn and garden equipment.....	19.6	271.7	224.6	19.4	27.7	20.7	191.6	165.5	11.5	14.6	2	3
353	Construction, related machinery.....	333.0	6,195.9	5,096.7	406.0	693.1	275.3	3,334.0	2,855.7	166.3	312.0	1	1
3531	Construction machinery.....	155.3	3,161.4	2,547.1	193.6	420.7	133.8	1,730.8	1,460.2	82.1	188.5	1	1
3532	Mining machinery.....	31.4	514.1	425.9	34.6	53.6	21.3	227.8	197.6	11.5	18.7	1	4
3533	Oilfield machinery.....	58.6	1,033.0	867.5	72.3	93.2	35.9	408.1	357.5	20.2	30.4	1	3
3534	Elevators and moving stairways.....	10.2	167.3	141.9	12.0	13.4	15.0	164.4	144.5	9.0	10.9	3	6
3535	Conveyors and conveying equipment.....	32.9	557.5	476.5	41.0	40.0	27.2	312.1	275.5	17.6	19.0	2	4
3536	Hoists, cranes, and monorails.....	15.8	247.9	210.5	16.8	20.6	16.3	186.7	160.9	9.8	16.0	3	4
3537	Industrial trucks and tractors.....	28.8	514.7	427.3	35.8	51.6	25.8	304.1	259.5	16.1	28.5	2	2
354	Metalworking machinery.....	297.8	5,307.3	4,513.9	341.2	452.2	268.2	3,245.9	2,858.6	157.2	230.1	1	2
3541	Machine tools, metal-cutting.....	59.5	1,142.4	951.0	72.6	118.8	52.5	654.8	573.8	31.3	49.7	1	3
3542	Machine tools, metal-forming.....	23.7	434.2	360.7	30.1	43.4	24.1	304.2	265.4	14.2	24.6	1	5
3544	Special dies, tools, jigs, etc.....	105.6	1,938.4	1,706.3	118.4	113.7	97.8	1,234.0	1,113.8	56.5	63.7	2	5
3545	Machine tool accessories.....	54.1	913.2	762.5	62.7	88.0	46.7	529.4	456.6	26.7	46.1	2	4
3546	Power driven handtools.....	27.7	392.9	325.7	26.9	40.3	23.1	234.4	202.3	13.3	18.8	1	2
3547	Rolling mill machinery.....	7.9	166.4	128.2	10.0	28.3	10.4	140.1	115.2	7.0	17.9	3	5
3549	Metalworking machinery, n.e.c.....	19.4	319.8	279.5	20.6	19.7	13.6	149.0	131.5	8.2	9.3	2	6
355	Special industry machinery.....	185.0	3,109.3	2,615.9	211.3	282.0	190.1	2,107.3	1,853.9	106.9	146.5	1	2
3551	Food products machinery.....	36.3	615.7	522.1	42.3	51.3	31.9	355.6	315.9	17.7	22.0	1	3
3552	Textile machinery.....	26.0	356.5	300.8	24.4	31.3	32.7	307.1	271.0	15.9	20.2	2	2
3553	Woodworking machinery.....	10.3	154.3	131.2	11.4	11.7	13.7	140.1	123.9	7.8	8.4	6	6
3554	Paper industries machinery.....	16.4	296.8	247.5	21.0	28.3	15.3	182.2	159.0	10.2	13.0	2	2
3555	Printing trades machinery.....	25.5	431.6	369.2	30.0	32.5	23.9	284.5	249.4	14.8	20.3	2	2
3559	Special industry machinery, n.e.c.....	70.6	1,254.3	1,045.1	82.2	127.0	72.6	837.8	734.7	40.5	62.6	2	3
356	General industrial machinery.....	313.5	5,374.2	4,451.1	346.9	576.2	262.1	2,999.6	2,585.2	151.6	262.8	1	1
3561	Pumps and pumping equipment.....	63.0	1,077.1	900.6	71.8	104.6	55.5	606.9	532.9	30.3	43.7	1	2
3562	Ball and roller bearings.....	50.6	947.7	752.6	58.6	136.5	50.9	629.5	525.5	31.7	72.3	1	2
3563	Air and gas compressors.....	32.0	566.5	465.6	36.3	64.6	22.9	268.5	226.6	14.6	27.3	1	2
3564	Blowers and fans.....	28.0	423.6	356.8	28.7	38.1	23.5	249.2	216.1	13.9	19.2	3	4
3565	Industrial patterns.....	9.3	173.4	152.7	10.5	10.2	8.5	113.6	103.1	5.0	5.4	8	14
3566	Speed changers, drives, and gears.....	25.3	438.1	365.4	27.7	45.0	22.5	257.4	224.2	12.5	20.7	2	2
3567	Industrial furnaces and ovens.....	15.2	250.1	209.4	16.5	24.2	13.6	159.7	138.5	8.1	13.1	5	4
3568	Power transmission equipment, n.e.c....	32.5	584.2	464.8	37.9	81.4	27.7	317.2	266.5	16.5	34.2	1	2
3569	General industrial machinery, n.e.c...	57.5	913.6	783.2	58.9	71.5	37.0	397.6	351.8	18.9	26.9	2	2

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
35	Machinery, except electrical --Con.												
357	Office and computing machines	259.3	4,656.2	3,948.8	269.8	437.6	208.5	2,577.1	2,277.3	114.4	185.4	1	1
3573	Electronic computing equipment	192.7	3,531.8	3,004.3	205.1	322.4	144.8	1,873.4	1,668.3	80.5	124.6	1	1
3574	Calculating, accounting machines	17.1	259.2	220.7	15.2	23.2	22.5	240.3	207.2	11.2	21.9	1	1
3576	Scales, balances, exc. laboratory	7.1	100.6	84.5	6.8	9.3	6.7	70.5	59.3	4.9	6.3	2	2
3579	Office machines, typewriters, etc	42.4	764.5	639.1	42.7	82.6	34.5	392.9	342.5	17.8	32.6	1	1
358	Refrigeration and service mach	191.5	3,053.4	2,516.4	200.3	336.7	197.7	2,170.5	1,864.0	110.9	195.6	1	1
3581	Automatic merchandisings machines	8.8	121.7	103.2	8.4	10.1	10.5	93.2	83.6	4.9	4.7	2	3
3582	Commercial laundry equipment	4.6	63.4	54.4	4.5	4.5	4.8	48.1	42.2	2.6	3.3	6	10
3585	Refrigeration, heating equipment	138.6	2,272.1	1,849.7	148.4	274.0	150.8	1,696.0	1,442.1	87.6	166.3	1	1
3586	Measuring and dispensing pumps	7.4	115.8	97.3	8.4	10.1	7.2	77.0	67.3	3.7	6.0	8	6
3589	Service industry machinery, n.e.c	32.1	480.3	411.8	30.6	38.0	24.4	256.2	228.8	12.1	15.3	2	3
359	Misc. machinery, exc. elec	222.7	3,420.5	2,980.4	221.0	219.2	184.5	1,897.5	1,697.0	101.6	98.9	2	2
3592	Carburetors, pistons, rings, etc	32.2	638.9	508.5	39.1	91.3	26.7	324.6	272.3	16.2	36.1	1	1
3599	Machinery, except electrical, n.e.c	190.5	2,781.6	2,471.8	181.9	127.9	157.8	1,572.9	1,424.7	85.4	62.8	2	4
36	Electric, electronic equip	1,723.1	27,072.2	22,544.2	1,717.5	2,810.5	1,660.9	17,511.6	15,189.0	880.1	1,438.9	1	1
361	Electric distributing equipment	115.3	1,720.4	1,431.3	114.5	174.6	116.0	1,193.1	1,040.0	60.1	93.0	1	2
3612	Tranformers	43.3	637.0	529.6	40.2	67.3	46.8	483.9	420.2	22.3	41.4	2	3
3613	Switchgear, switchboard apparatus	72.0	1,083.3	901.7	74.3	107.3	69.2	709.2	619.8	37.8	51.6	1	1
362	Electrical industrial apparatus	198.4	3,022.9	2,542.6	203.0	277.3	188.1	1,914.5	1,665.0	102.9	146.6	1	2
3621	Motors and generators	96.9	1,416.8	1,177.6	97.3	141.8	90.6	888.8	767.1	49.5	72.2	1	1
3622	Industrial controls	55.4	845.9	726.6	55.3	64.0	50.5	523.5	459.4	25.7	38.4	1	2
3623	Welding apparatus, electric	17.5	335.4	285.7	21.5	28.2	15.5	195.5	173.9	8.2	13.4	8	7
3624	Carbon and graphite products	12.1	205.4	164.1	14.4	26.9	11.3	118.7	99.6	6.5	12.6	1	3
3629	Elec. industrial apparatus, n.e.c	16.5	219.4	188.6	14.5	16.3	20.2	188.0	165.0	13.0	10.0	5	9
363	Household appliances	162.3	2,332.0	1,898.1	161.2	272.7	163.0	1,582.0	1,369.3	87.5	125.2	1	1
3631	Household cooking equipment	25.4	355.6	289.1	25.1	41.3	23.3	235.4	205.7	13.5	16.2	2	1
3632	Household refrigerators, freezers	35.8	597.6	468.6	39.5	89.4	34.1	361.4	305.3	20.1	36.0	1	1
3633	Household laundry equipment	19.4	325.7	262.4	22.0	41.3	23.6	258.7	223.1	12.8	22.8	1	1
3634	Electric housewares and fans	47.3	538.1	458.7	39.9	39.5	51.5	407.1	358.4	24.3	24.4	2	2
3635	Household vacuum cleaners	10.4	144.0	116.6	10.4	17.0	11.2	113.8	98.7	6.3	8.8	2	2
3636	Sewing machines	8.2	134.9	107.0	8.5	19.4	5.3	62.4	54.6	3.0	4.8	1	7
3639	Household appliances, n.e.c	15.7	236.1	195.6	15.8	24.7	14.0	143.2	123.5	7.5	12.2	1	1
364	Elec. lighting, wiring equip	165.0	2,300.4	1,925.4	158.4	216.5	177.1	1,633.1	1,413.7	90.1	129.3	1	1
3641	Electric lamps	28.7	395.3	322.4	24.8	48.1	31.5	283.5	239.7	16.1	27.7	1	1
3643	Current-carrying wiring devices	43.9	569.1	480.3	43.0	45.7	48.3	425.7	369.4	23.7	32.6	1	2
3644	Noncurrent-carrying wir'g devices	25.8	396.4	330.1	27.5	38.8	25.7	249.1	217.0	14.0	18.1	1	2
3645	Residential lighting fixtures	23.7	260.9	229.5	19.9	11.6	26.5	211.2	189.3	11.6	10.3	2	9
3646	Commerical lighting fixtures	15.6	197.6	169.1	15.3	13.2	18.8	167.6	148.3	10.3	9.0	1	4
3647	Vehicular lighting equipment	14.5	308.2	246.0	16.0	46.3	13.6	173.7	142.1	7.9	23.7	2	2
3648	Lighting equipment, n.e.c	12.8	172.9	148.0	12.0	12.9	12.7	122.3	107.9	6.5	7.9	1	6
365	Radio, TV receiving equipment	97.7	1,313.0	1,097.0	86.7	129.3	106.8	936.3	797.9	52.5	85.9	1	1
3651	Radio and TV receiving sets	74.6	1,035.2	852.4	69.0	113.8	86.5	767.6	651.4	42.6	73.6	1	1
3652	Phono. records, prerecorded tape	23.1	277.8	244.6	17.7	15.5	20.3	168.7	146.5	9.9	12.3	2	2
366	Communication equipment	458.5	8,447.4	6,995.0	483.8	968.6	453.6	5,658.9	4,912.1	254.5	492.3	1	1
3661	Telephone and telegraph apparatus	124.4	2,291.0	1,818.0	124.2	348.8	134.4	1,582.5	1,323.0	71.4	188.1	1	1
3662	Radio and TV communication equip	334.1	6,156.4	5,177.0	359.6	619.8	319.2	4,076.4	3,589.1	183.1	304.2	1	1
367	Electronic components, access	373.5	5,367.7	4,556.5	353.0	458.2	336.0	3,255.9	2,869.5	166.7	219.7	1	1
3671	Electron tubes, receiving type	36.7	616.2	514.1	39.3	62.9	47.1	538.1	468.4	26.9	42.8	1	2
3674	Semiconductors, related devices	114.0	1,895.1	1,601.1	117.3	176.7	97.6	1,080.3	953.1	50.7	76.5	1	2
3675	Electronic capacitors	28.9	303.9	260.5	21.2	22.3	27.6	190.2	169.2	10.2	10.8	1	5
3676	Electronic resistors	21.3	246.8	210.9	17.6	18.3	20.5	164.7	144.5	9.8	10.4	2	6
3677	Electronic coils and transformers	20.7	191.8	166.6	14.4	10.8	23.9	158.2	142.0	8.9	7.3	3	15
3678	Electronic connectors	26.0	361.8	303.6	26.3	31.9	18.1	163.3	141.2	10.3	11.8	2	2
3679	Electronic components, n.e.c	125.9	1,752.0	1,499.7	116.9	135.4	101.2	961.1	851.1	49.9	60.1	1	3
369	Misc. elec. equipment, supplies	152.4	2,568.5	2,098.3	156.8	313.3	120.3	1,334.2	1,121.5	65.8	146.9	1	1
3691	Storage batteries	25.9	441.1	358.7	31.2	51.1	22.1	246.4	209.3	13.8	23.3	2	1
3692	Primary batteries, dry and wet	11.0	143.8	118.2	9.6	16.0	8.4	75.5	64.6	4.2	6.7	2	1
3693	X-ray apparatus and tubes	30.9	546.5	467.6	32.7	46.2	12.1	139.7	120.9	8.0	10.8	2	6
3694	Engine electrical equipment	63.8	1,200.7	948.4	66.8	185.4	57.9	722.0	591.3	32.1	98.6	1	1
3699	Electrical equip., supplies, n.e.c	20.7	236.4	205.3	16.5	14.6	19.8	150.6	135.4	7.7	7.5	3	5
37	Transportation equipment	1,768.2	38,948.1	30,673.5	2,408.2	5,866.5	1,718.9	23,979.8	19,880.0	1,170.9	2,928.9	1	1
371	Motor vehicles and equipment	876.3	20,716.9	16,037.7	1,280.4	3,398.8	807.4	1,685.8	9,460.4	585.8	1,639.6	1	1
3711	Motor vehicles and car bodies	343.6	9,344.4	7,077.6	548.1	1,718.6	339.2	5,447.0	4,299.5	280.5	867.0	1	1
3713	Truck and bus bodies	34.8	508.6	428.6	34.8	45.2	42.6	400.8	353.8	23.8	23.2	3	4
3714	Motor vehicle parts, accessories	450.7	10,246.6	8,004.0	644.8	1,597.7	400.9	5,604.0	4,601.5	267.0	735.5	1	1
3715	Truck trailers	28.1	381.3	322.0	32.9	26.4	24.7	234.0	205.6	14.5	13.9	3	4
3716	Motor homes	19.2	236.1	205.4	19.8	10.9	(NA)	(NA)	(NA)	(NA)	(NA)	6	8
372	Aircraft and parts	430.8	9,679.7	7,620.5	541.7	1,517.4	438.7	6,310.9	5,281.8	285.3	743.8	1	1
3721	Aircraft	222.7	5,152.3	3,975.9	290.4	886.1	231.8	3,445.5	2,867.1	153.7	424.7	1	1
3724	Aircraft engines and engine parts	106.1	2,432.7	1,939.4	125.5	367.7	104.7	1,506.2	1,256.6	67.1	182.5	1	1
3728	Aircraft equipment, n.e.c	102.0	2,094.7	1,705.2	125.8	263.6	102.2	1,359.2	1,158.1	64.5	136.6	1	2

See footnotes at end of table.

Table 2. **Employment and Labor Cost by Major Industry Group and Industry: 1977 and 1972**–Con.

(For meaning of abbreviations and symbols, see introductory text)

Code	Industry group and industry	1977					1972					Standard error of estimate[2] (percent) for column--	
			Labor costs[1] (million dollars)					Labor costs[1] (million dollars)					
		Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs	Employees[1] (1,000)	Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
		A	B	C	D	E	F	G	H	I	J	D	E
37	Transportation equipment--Con.												
373	Ship, boat building, repairing	220.2	3,522.6	2,939.8	288.0	294.8	185.2	1,929.8	1,703.6	119.9	106.3	2	3
3731	Ship building and repairing	176.4	3,017.8	2,494.0	247.2	276.6	144.6	1,617.3	1,422.3	99.4	95.6	2	3
3732	Boat building and repairing	43.8	504.9	445.8	40.8	18.3	40.6	312.5	281.3	20.5	10.7	3	10
3743	Railroad equipment	56.3	1,131.8	888.6	77.0	166.2	50.8	644.4	529.1	33.4	81.9	1	1
3751	Motorcycles, bicycles, and parts	15.6	196.4	168.9	15.2	12.3	17.6	157.3	139.6	9.3	8.4	2	4
376	Guided missiles, space vehicles	119.8	3,009.8	2,427.3	153.9	428.5	160.1	2,748.1	2,317.0	104.2	326.9	1	1
3761	Guided missiles, space vehicles	94.0	2,405.3	1,931.5	122.4	351.4	118.4	2,087.9	1,751.5	77.7	258.7	1	1
3764	Space propulsion units and parts	18.6	436.0	356.6	22.1	57.3	20.8	321.4	276.2	13.9	31.3	1	1
3769	Space vehicle equipment, n.e.c.	7.2	168.4	139.2	9.5	19.8	20.9	338.8	289.3	12.6	36.9	1	1
379	Misc. transportation equipment	49.1	691.0	590.7	51.9	48.4	59.1	503.5	448.5	33.0	22.0	2	4
3792	Travel trailers and campers	26.3	313.1	275.7	25.9	11.6	37.1	291.1	266.3	18.1	6.7	3	7
3795	Tanks and tank components	12.4	253.4	208.5	15.9	29.0	5.9	78.8	65.0	4.2	9.6	1	1
3799	Transportation equipment, n.e.c.	10.3	124.5	106.6	10.1	(7.8)	16.1	133.6	117.2	10.7	5.7	3	18
38	Instruments, related products	559.1	8,854.4	7,520.4	544.6	789.5	456.2	4,929.8	4,334.7	243.6	351.5	1	1
3811	Engineering, scientific instru.	42.3	687.7	584.4	46.6	56.7	37.4	409.1	365.4	20.4	23.3	2	3
382	Measuring, controlling devices	200.1	3,124.2	2,665.8	200.4	258.1	154.4	1,673.3	1,484.9	79.5	109.3	1	2
3822	Environmental controls	39.0	544.6	450.3	37.9	56.4	30.7	291.0	253.6	15.5	21.9	1	1
3823	Process control instruments	46.5	781.4	664.8	47.0	69.5	38.8	444.3	391.1	19.8	33.4	2	3
3824	Fluid meters and counting devices	15.9	228.9	197.6	15.5	15.9	8.8	87.1	76.8	4.3	6.0	1	3
3825	Instru. to measure electricity	66.5	1,030.6	889.1	73.9	67.6	52.9	569.0	506.7	28.8	33.5	1	4
3829	Measur'g, control'g devices, n.e.c.	32.3	538.7	464.0	26.1	48.6	24.6	282.3	256.7	11.1	14.5	2	3
3832	Optical instruments and lenses	30.0	487.3	421.2	30.1	36.0	18.8	214.0	193.3	9.5	11.2	2	9
384	Medical instruments, supplies	113.5	1,529.5	1,318.8	100.4	110.2	90.8	854.5	757.7	45.0	51.8	1	3
3841	Surgical and medical instruments	43.2	568.3	491.4	36.9	40.0	34.5	321.7	282.4	18.8	20.5	2	4
3842	Surgical appliances and supplies	53.9	723.3	624.1	48.3	51.0	43.9	408.9	365.3	20.5	23.1	1	4
3843	Dental equipment and supplies	16.3	237.9	203.3	15.3	19.2	12.4	123.9	110.0	5.7	8.2	3	10
3851	Ophthalmic goods	30.0	365.1	314.1	24.9	26.2	26.6	213.1	183.4	13.0	16.7	1	3
3861	Photographic equip. and supplies	111.7	2,284.1	1,899.6	115.7	268.8	96.0	1,305.5	1,119.7	62.0	123.8	1	1
3873	Watches, clocks, and watchcases	31.5	376.5	316.6	26.4	33.5	30.8	259.9	230.3	14.2	15.4	1	4
39	Misc. manufactur'g industries	440.7	5,105.2	4,406.4	359.9	339.0	445.6	3,554.2	3,179.9	201.1	173.2	1	1
391	Jewelry, silver and plated ware	61.3	724.6	637.6	47.3	39.7	53.2	470.0	424.6	24.2	21.2	2	4
3911	Jewelry, precious metal	42.1	482.8	432.0	30.2	20.6	32.6	290.3	267.2	14.0	9.1	2	4
3914	Silverware and plated ware	10.8	146.0	119.8	11.2	15.1	12.6	117.2	101.7	6.6	8.9	4	6
3915	Jewelers' mats., lapidary work	8.3	95.7	85.9	5.9	4.0	8.0	62.5	55.7	3.6	3.2	6	11
3931	Musical instruments	25.2	293.0	252.7	20.6	19.8	24.5	197.6	173.4	12.8	11.4	2	2
394	Toys and sporting goods	119.4	1,316.8	1,111.8	100.8	104.2	132.7	992.4	880.9	60.6	50.9	2	2
3942	Dolls	9.1	75.0	65.3	5.4	(4.3)	10.2	59.4	54.0	3.6	1.8	5	18
3944	Games, toys, children's vehicles	53.1	627.0	520.6	49.4	57.0	61.5	474.8	421.0	30.0	23.8	2	2
3949	Sporting and athletic goods, n.e.c.	57.2	614.8	525.8	46.0	43.0	61.0	458.2	405.9	27.0	25.3	2	4
395	Pens, office and art goods	31.8	390.2	331.1	27.3	31.7	31.8	272.6	244.2	13.3	15.1	2	2
3951	Pens and mechanical pencils	13.2	161.1	135.6	11.3	14.2	10.9	92.5	81.9	4.7	5.9	1	3
3952	Lead pencils and art goods	6.6	76.0	63.1	6.3	6.6	7.1	56.9	50.0	3.2	3.7	2	2
3953	Marking devices	7.4	89.0	78.7	5.4	4.9	8.1	69.1	63.2	3.1	2.8	7	10
3955	Carbon paper and inked ribbons	4.6	64.0	53.7	4.3	6.0	5.7	54.1	49.1	2.3	2.7	1	2
396	Costume jewelry and notions	51.0	523.3	450.5	39.0	33.8	50.4	365.6	323.2	21.3	21.1	2	2
3961	Costume jewelry	25.0	245.1	215.9	16.6	12.6	21.4	146.1	132.1	8.5	5.5	5	4
3962	Artificial flowers	5.0	42.8	38.2	3.3	1.3	4.8	29.3	26.7	1.9	0.7	5	6
3963	Buttons	3.2	35.2	30.8	2.6	1.8	4.0	30.1	26.7	1.9	1.5	3	8
3964	Needles, pins, and fasteners	17.7	200.2	165.6	16.5	18.0	20.2	160.1	137.7	9.0	13.4	1	2
399	Miscellaneous manufactures	152.0	1,857.3	1,622.6	124.8	109.8	153.0	1,256.0	1,133.6	68.9	53.5	2	3
3991	Brooms and brushes	16.5	190.4	163.8	12.3	14.3	17.5	133.5	118.5	7.3	7.7	4	4
3993	Signs and advertising displays	49.7	638.2	566.6	43.4	28.1	49.8	454.6	415.9	25.4	13.3	4	8
3995	Burial caskets	12.0	147.5	129.7	9.2	8.7	14.8	121.2	109.3	6.1	5.8	3	4
3996	Hard surface floor coverings	6.4	111.8	93.5	7.4	10.9	5.8	67.4	59.4	3.2	4.8	1	1
3999	Manufacturing industries, n.e.c.	67.3	769.4	669.1	52.5	47.9	65.1	479.3	430.5	26.9	21.9	3	2

[1]Data exclude administrative and auxiliary operations. For explanation of terms, see appendix A.

[2]A description of the standard error is given in appendix B . The percentage standard errors shown are the approximate relative standard errors of the estimates of level. The figures shown in parenthesis have associated standard errors exceeding 15 percent.

Table 3a. Summary Statistics by Major Industry Group: 1977

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

Item	All establishments[1]	Major industry groups					
		20	21	22	23	24	25
All industries.....number..	359,928	26,656	228	7,202	26,505	37,302	10,235
With 1 to 19 employees.....do..	241,229	15,618	105	3,071	14,573	30,246	6,647
With 20 to 99 employees.....do..	81,118	7,235	38	2,108	8,414	5,481	2,500
With 100 employees or more.....do..	37,581	3,803	85	2,023	3,518	1,575	1,088
All employees, average for year.....1,000..	19,590.1	1,520.0	60.6	875.7	1,334.3	692.4	463.8
Payroll for year, all employees.....mil. dol..	264,013.1	18,543.6	750.7	7,881.4	9,658.6	7,424.7	4,448.3
Production workers:							
Average for year.....1,000..	13,691.0	1,072.0	50.4	764.6	1,156.6	594.8	383.6
March.....do..	13,354.1	1,008.1	50.4	757.5	1,145.3	555.7	374.1
May.....do..	13,627.1	1,029.3	45.0	768.3	1,161.6	590.1	379.0
August.....do..	13,842.3	1,167.4	52.5	768.9	1,157.0	623.8	384.6
November.....do..	13,900.0	1,080.4	53.8	763.5	1,160.3	605.1	395.9
Hours.....millions..	26,686.7	2,112.4	92.6	1,523.1	2,037.6	1,147.6	736.4
January to March.....do..	6,445.7	491.9	22.9	376.7	499.4	264.9	175.8
April to June.....do..	6,762.2	510.8	20.8	395.6	523.1	290.9	186.6
July to Spetember.....do..	6,693.2	571.9	23.7	369.9	503.3	300.1	183.4
October to December.....do..	6,785.4	537.7	25.2	380.9	511.9	291.7	190.6
Wages.....mil. dol..	157,163.7	11,730.7	570.7	6,202.8	7,252.8	5,795.0	3,191.8
Cost of materials, etc.[2].....do..	782,417.7	136,963.7	4,729.8	24,753.2	20,865.5	23,918.7	8,187.4
Materials, parts, containers, etc., consumed.....do..	689,922.1	121,610.4	4,289.4	22,253.7	16,083.0	20,583.0	7,421.9
Resales.....do..	40,146.2	12,455.2	365.5	418.0	705.9	1,390.0	457.5
Fuels consumed.....do..	18,910.3	1,495.4	31.1	495.1	86.1	368.5	76.9
Purchased electric energy.....do..	14,594.4	1,063.0	32.8	649.2	204.1	370.1	123.8
Contract work.....do..	18,844.9	339.7	10.9	937.1	3,786.4	1,207.1	107.3
Value of shipments, including resales[2].....do..	1,358,526.4	192,911.6	9,050.6	40,550.5	40,245.1	39,919.4	16,978.0
Value of resales.....do..	49,804.6	14,627.6	347.2	507.2	930.3	1,488.0	574.7
Value added by manufacture.....do..	585,165.6	56,062.2	4,334.1	16,104.5	19,671.3	16,222.8	8,921.7
Manufacturers' inventories:							
Beginning of year.....do..	174,865.0	16,416.3	3,615.2	5,103.5	5,125.3	4,258.1	2,504.7
Finished products.....do..	55,205.5	8,578.3	215.0	1,839.1	2,144.2	1,653.3	741.6
Work in process.....do..	55,600.2	1,587.0	47.4	1,513.8	1,081.7	888.9	604.6
Materials, supplies, fuel, etc.....do..	64,059.3	6,250.9	3,352.8	1,750.6	1,899.5	1,715.9	1,158.5
End of year.....do..	188,436.4	16,984.9	3,711.9	5,509.9	5,535.8	4,663.8	2,750.3
Finished products.....do..	59,429.9	9,046.7	208.2	1,966.1	2,309.0	1,774.4	788.6
Work in process.....do..	60,732.6	1,584.5	60.6	1,694.0	1,208.9	989.8	688.7
Materials, supplies, fuels, etc.....do..	68,273.9	6,353.6	3,443.1	1,849.9	2,017.9	1,899.6	1,273.0
Capital expenditures for plant and equipment.....do..	50,329.4	4,468.7	189.8	1,354.6	522.9	1,693.4	416.8
New capital expenditures.....do..	47,459.0	4,214.9	181.5	1,223.5	456.7	1,562.6	388.7
New buildings and structures.....do..	8,499.5	908.5	56.7	198.9	114.0	290.9	119.2
New machinery and equipment.....do..	38,959.5	3,306.4	124.7	1,024.5	342.6	1,271.6	269.4
Used capital expenditures.....do..	2,870.4	253.8	8.3	131.1	66.2	130.9	28.1

Item	Major industry groups--Con.						
	26	27	28	29	30	31	32
All industries.....number..	6,545	49,767	12,173	2,206	11,943	3,075	17,744
With 1 to 19 employees.....do..	2,546	40,635	7,571	1,433	6,649	1,589	12,543
With 20 to 99 employees.....do..	2,276	7,230	3,085	495	3,740	823	3,965
With 100 employees or more.....do..	1,723	1,902	1,517	278	1,554	663	1,236
All employees, average for year.....1,000..	628.7	1,092.2	880.2	146.8	721.3	242.5	613.7
Payroll for year, all employees.....mil. dol..	8,942.9	14,024.5	13,839.3	2,696.2	8,536.0	1,859.7	7,943.1
Production workers:							
Average for year.....1,000..	486.3	625.8	543.8	101.1	563.7	211.5	484.4
March.....do..	476.3	614.8	537.5	95.2	548.9	208.5	459.0
May.....do..	485.5	619.6	545.2	102.0	561.6	212.8	485.5
August.....do..	492.4	623.4	548.1	104.5	570.7	212.4	499.3
November.....do..	490.6	631.3	542.5	102.5	572.7	212.1	491.9
Hours.....millions..	985.9	1,152.8	1,089.9	207.9	1,110.6	381.9	960.7
January to March.....do..	241.5	286.4	268.4	47.4	271.9	93.2	219.0
April to June.....do..	248.7	285.2	276.2	53.1	281.9	98.0	245.6
July to September.....do..	246.9	287.0	272.9	54.3	275.8	93.5	252.5
October to December.....do..	248.8	294.3	272.2	53.2	281.0	97.2	243.5
Wages.....mil. dol..	6,323.1	7,322.1	7,446.2	1,765.4	5,841.6	1,408.1	5,766.6
Cost of materials, etc[2].....do..	30,148.2	17,794.7	62,293.8	81,655.4	20,217.8	3,932.6	16,444.8
Materials, parts, containers, etc., consumed.....do..	26,380.3	13,216.7	51,501.5	75,368.3	17,790.7	3,441.8	12,491.9
Resales.....do..	627.2	589.5	3,487.4	3,487.0	1,221.2	283.3	1,149.7
Fuels consumed.....do..	2,039.6	114.7	3,725.1	1,805.4	364.6	37.0	1,833.6
Purchased electric energy.....do..	926.2	312.2	2,725.6	639.9	604.0	46.3	769.5
Contract work.....do..	175.0	3,561.5	854.0	354.9	237.3	124.2	200.1

See footnotes at end of table.

Table 3a. **Summary Statistics by Major Industry Group: 1977**—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

Item	Major industry groups--Con.						
	26	27	28	29	30	31	32
Value of shipments, including resales[2]...do..	52,085.7	49,716.2	118,153.6	97,452.7	39,552.8	7,607.4	35,476.6
Value of resales...do..	774.7	821.2	4,891.5	3,698.6	1,514.0	363.6	1,360.9
Value added by manufacture...do..	22,170.9	31,979.5	56,720.6	16,377.6	19,740.0	3,718.8	19,129.6
Manufacturers' inventories:							
Beginning of year...do..	5,281.0	3,943.0	13,447.5	4,912.9	4,441.4	1,033.0	3,995.3
Finished products...do..	1,811.1	1,367.1	6,338.7	2,426.4	1,931.3	428.1	1,923.2
Work in process...do..	568.6	868.7	2,032.0	1,192.7	741.6	240.9	560.8
Materials, supplies, fuel, etc...do..	2,901.3	1,707.2	5,076.3	1,293.8	1,768.5	364.1	1,511.3
End of year...do..	5,641.5	4,200.6	14,791.3	5,656.3	4,952.7	1,098.9	4,279.3
Finished products...do..	1,964.3	1,349.8	6,993.5	2,796.2	2,244.8	457.0	1,987.7
Work in process...do..	648.8	944.0	2,239.2	1,403.2	833.0	255.9	594.1
Materials, supplies, fuel, etc...do..	3,028.3	1,906.8	5,558.6	1,457.0	1,874.9	386.0	1,697.5
Capital expenditures, for plant and equipment...do..	3,503.4	1,728.3	8,402.5	2,349.9	1,763.7	106.6	2,001.0
New capital expenditures...do..	3,295.0	1,597.8	8,198.9	2,261.3	1,645.3	96.2	1,881.4
New buildings and structures...do..	326.0	310.5	1,246.3	617.8	306.4	21.6	337.2
New machinery and equipment...do..	2,969.0	1,287.2	6,952.6	1,643.5	1,338.9	74.6	1,544.2
Used capital expenditures...do..	208.4	130.6	203.6	88.6	118.4	10.4	119.6

Item	Major industry groups--Con.						
	33	34	35	36	37	38	39
All industries...number..	7,375	33,712	48,200	14,973	10,176	7,481	17,259
With 1 to 19 employees...do..	3,395	20,973	35,754	8,635	6,523	4,943	13,465
With 20 to 99 employees...do..	2,248	9,421	9,081	3,468	2,091	1,630	2,884
With 100 employees or more...do..	1,732	3,318	3,365	2,870	1,562	908	910
All employees, average for year...1,000..	1,113.6	1,555.7	2,083.3	1,723.1	1,768.2	559.1	440.7
Payroll for year, all employees...mil. dol..	18,745.0	21,035.9	30,557.5	22,544.2	30,673.5	7,520.4	4,406.4
Production workers:							
Average for year...1,000..	885.3	1,191.6	1,413.8	1,191.4	1,284.4	347.2	338.7
March...do..	871.7	1,158.2	1,392.3	1,160.3	1,274.6	340.5	325.1
May...do..	897.2	1,184.6	1,403.0	1,179.7	1,297.2	344.6	335.4
August...do..	890.2	1,202.3	1,412.5	1,196.8	1,239.5	350.7	345.5
November...do..	881.6	1,219.2	1,445.4	1,227.6	1,325.4	351.9	346.3
Hours...millions..	1,744.0	2,373.8	2,803.0	2,309.2	2,612.7	677.9	626.7
January to March...do..	424.3	569.0	679.7	561.5	634.6	167.7	149.8
April to June...do..	453.5	601.1	695.8	587.1	677.1	171.5	159.4
July to September...do..	431.6	597.2	696.3	564.3	647.2	166.1	155.3
October to December...do..	434.7	606.5	731.2	596.3	653.9	172.6	162.1
Wages...mil. dol..	14,065.2	14,428.8	18,298.4	12,951.6	20,314.3	3,743.2	2,745.3
Cost of materials, etc.[2]...do..	66,171.3	45,384.8	56,531.6	39,369.5	103,489.6	10,503.9	9,061.4
Materials, parts, containers, etc., consumed...do..	56,899.6	39,722.6	49,813.5	34,741.7	99,361.8	9,052.3	7,897.9
Resales...do..	1,239.0	2,783.6	3,376.3	2,850.5	1,605.1	961.6	692.6
Fuels consumed...do..	4,299.5	607.2	475.4	318.8	554.3	107.7	74.2
Purchased electric energy...do..	2,750.3	753.0	802.9	672.9	850.9	168.9	128.8
Contract work...do..	983.0	1,518.4	2,063.5	785.6	1,117.5	213.5	267.9
Value of shipments, including resales[2]...do..	103,179.4	90,023.5	122,187.7	88,433.1	166,954.0	28,897.8	19,150.7
Value of resales...do..	1,425.8	3,410.4	4,652.2	3,935.7	1,994.4	1,488.0	998.6
Value added by manufacture...do..	37,568.2	45,511.5	67,222.5	50,365.7	64,291.1	18,762.0	10,291.0
Manufacturers' inventories:							
Beginning of year...do..	17,884.5	14,111.8	25,153.3	14,273.0	20,745.1	5,311.1	3,309.0
Finished products...do..	4,401.0	3,400.0	7,030.1	3,645.7	2,662.2	1,369.9	1,299.3
Work in process...do..	6,056.2	4,877.8	10,998.2	6,305.3	12,375.6	2,248.6	810.0
Materials, supplies, fuel, etc...do..	7,427.9	5,834.0	7,125.1	4,322.1	5,707.3	1,692.6	1,199.6
End of year...do..	18,458.3	15,306.2	27,170.9	16,058.7	22,240.5	5,810.6	3,614.2
Finished products...do..	4,675.5	3,688.9	7,506.7	3,962.5	2,817.0	1,495.9	1,397.2
Work in process...do..	6,340.5	5,461.9	12,088.0	7,290.5	13,002.5	2,490.7	913.8
Materials, supplies, fuel, etc...do..	7,442.3	6,155.4	7,576.2	4,805.7	6,421.0	1,824.1	1,303.1
Capital expenditures for plant and equipment...do..	4,746.4	2,880.0	4,762.5	3,118.2	4,820.2	983.2	517.0
New capital expenditures...do..	4,496.8	2,606.1	4,402.4	2,866.5	4,670.9	938.9	473.6
New buildings and structures...do..	652.8	480.9	948.7	519.9	695.6	235.3	112.1
New machinery and equipment...do..	3,844.0	2,125.3	3,453.7	2,346.6	3,975.3	703.6	361.5
Used capital expenditures...do..	249.6	273.9	360.0	251.7	149.3	44.3	43.4

[1]Includes administrative offices and auxiliaries.
[2]Aggregate of cost of materials and value of shipments for industry groups and for all manufacturing industries includes extensive duplication, since products of some industries are used as materials by others.

Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery by Major Industry Group: 1977

Item description	Total (million dollars)	Buildings and other structures (million dollars)	Machinery and equipment (million dollars)	Standard error of estimate for total (percent)
ALL INDUSTRIES				
ASSETS, BEGINNING OF YEAR.	402 067.0	104 196.3	297 870.6	1
CAPITAL EXPEND., NEW . .	48 641.4	8 605.5	40 035.9	1
CAPITAL EXPEND., USED. .	3 265.9	867.6	2 398.3	1
RETIREMENTS.	14 954.0	2 415.8	12 538.4	1
ASSETS, END OF YEAR. . . .	439 020.3	111 257.7	327 762.6	1
DEPRECIATION CHARGES . . .	26 734.9	4 587.4	22 147.3	1
RENTAL PAYMENTS.	7 064.2	3 207.9	3 856.3	1
20-FOOD AND KINDRED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	35 088.4	10 853.8	24 234.7	1
CAPITAL EXPEND., NEW . .	4 319.3	947.6	3 371.6	1
CAPITAL EXPEND., USED. .	274.8	81.5	193.3	4
RETIREMENTS.	1 256.2	263.7	992.9	1
ASSETS, END OF YEAR. . . .	38 426.1	11 619.3	26 806.8	1
DEPRECIATION CHARGES . . .	2 432.9	504.1	1 928.8	1
RENTAL PAYMENTS.	787.5	285.0	502.3	2
21-TOBACCO PRODUCTS				
ASSETS, BEGINNING OF YEAR.	1 663.8	559.7	1 104.1	1
CAPITAL EXPEND., NEW . .	181.5	56.9	124.6	1
CAPITAL EXPEND., USED. .	8.5	1.7	6.8	4
RETIREMENTS.	64.2	4.0	60.2	1
ASSETS, END OF YEAR. . . .	1 789.7	614.3	1 175.4	1
DEPRECIATION CHARGES . . .	111.0	29.5	81.5	1
RENTAL PAYMENTS.	14.4	9.0	5.4	2
22-TEXTILE MILL PRODUCTS				
ASSETS, BEGINNING OF YEAR.	13 992.5	3 592.4	10 400.2	1
CAPITAL EXPEND., NEW . .	1 285.6	216.7	1 068.9	1
CAPITAL EXPEND., USED. .	163.1	32.8	130.3	4
RETIREMENTS.	600.8	98.4	502.3	2
ASSETS, END OF YEAR. . . .	14 840.2	3 742.9	11 097.1	1
DEPRECIATION CHARGES . . .	921.1	139.9	781.2	1
RENTAL PAYMENTS.	192.4	94.4	98.1	3
23-APPAREL, OTHER TEXTILE PRODS				
ASSETS, BEGINNING OF YEAR.	3 773.6	1 276.7	2 497.1	1
CAPITAL EXPEND., NEW . .	528.9	127.3	401.6	3
CAPITAL EXPEND., USED. .	114.3	24.1	90.2	3
RETIREMENTS.	311.6	80.5	231.6	4
ASSETS, END OF YEAR. . . .	4 105.3	1 347.7	2 757.3	1
DEPRECIATION CHARGES . . .	329.1	64.7	264.4	5
RENTAL PAYMENTS.	326.6	231.6	94.9	4
24-LUMBER AND WOOD PRODUCTS				
ASSETS, BEGINNING OF YEAR.	11 258.6	2 430.2	8 828.4	1
CAPITAL EXPEND., NEW . .	1 709.5	275.8	1 433.6	1
CAPITAL EXPEND., USED. .	150.4	21.4	129.0	6
RETIREMENTS.	666.1	125.3	541.0	1
ASSETS, END OF YEAR. . . .	12 452.4	2 602.0	9 850.0	1
DEPRECIATION CHARGES . . .	1 128.5	167.0	961.4	2
RENTAL PAYMENTS.	243.4	96.5	146.4	4
25-FURNITURE AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	3 621.6	1 532.0	2 089.4	1
CAPITAL EXPEND., NEW . .	447.3	142.5	304.9	4
CAPITAL EXPEND., USED. .	36.3	15.8	20.5	12
RETIREMENTS.	173.6	67.3	106.3	4
ASSETS, END OF YEAR. . . .	3 931.7	1 622.9	2 308.6	1
DEPRECIATION CHARGES . . .	275.9	69.0	206.9	2
RENTAL PAYMENTS.	169.8	109.5	60.2	4
26-PAPER AND ALLIED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	28 362.6	4 997.2	23 365.4	1
CAPITAL EXPEND., NEW . .	3 352.2	332.6	3 019.6	1
CAPITAL EXPEND., USED. .	228.6	41.7	186.9	5
RETIREMENTS.	572.2	74.7	497.8	2
ASSETS, END OF YEAR. . . .	31 371.1	5 297.0	26 074.0	1
DEPRECIATION CHARGES . . .	1 602.8	213.3	1 389.5	1
RENTAL PAYMENTS.	322.7	131.3	191.3	3
27-PRINTING AND PUBLISHING				
ASSETS, BEGINNING OF YEAR.	13 873.3	3 831.9	10 041.2	1
CAPITAL EXPEND., NEW . .	1 799.7	329.7	1 470.0	1
CAPITAL EXPEND., USED. .	198.0	68.6	129.4	1
RETIREMENTS.	631.5	93.1	539.1	1
ASSETS, END OF YEAR. . . .	15 239.3	4 137.1	11 101.5	1
DEPRECIATION CHARGES . . .	1 110.1	180.8	929.3	2
RENTAL PAYMENTS.	604.1	345.3	258.2	2
28-CHEMICALS AND ALLIED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	58 531.2	11 440.4	47 090.6	1
CAPITAL EXPEND., NEW . .	8 180.7	1 222.4	6 957.4	1
CAPITAL EXPEND., USED. .	211.4	49.3	162.0	3
RETIREMENTS.	1 623.1	264.6	1 358.4	1
ASSETS, END OF YEAR. . . .	65 300.3	12 447.9	52 851.8	1
DEPRECIATION CHARGES . . .	4 001.4	577.9	3 423.4	1
RENTAL PAYMENTS.	513.3	157.2	355.8	2
29-PETROLEUM AND COAL PRODUCTS				
ASSETS, BEGINNING OF YEAR.	23 677.4	9 335.1	14 342.2	1
CAPITAL EXPEND., NEW . .	2 250.7	607.0	1 643.7	1
CAPITAL EXPEND., USED. .	98.8	39.7	59.1	10
RETIREMENTS.	309.3	124.9	184.5	2
ASSETS, END OF YEAR. . . .	25 717.5	9 856.8	15 860.5	1
DEPRECIATION CHARGES . . .	1 068.2	394.9	673.2	1
RENTAL PAYMENTS.	136.0	33.4	102.4	3
30-RUBBER, MISC PLASTICS PROD				
ASSETS, BEGINNING OF YEAR.	14 774.0	3 582.5	11 191.8	1
CAPITAL EXPEND., NEW . .	1 700.2	329.9	1 370.3	1
CAPITAL EXPEND., USED. .	129.7	35.6	94.1	7
RETIREMENTS.	566.9	80.3	486.8	2
ASSETS, END OF YEAR. . . .	16 036.9	3 867.6	12 169.4	1
DEPRECIATION CHARGES . . .	1 131.4	160.0	971.4	1
RENTAL PAYMENTS.	284.2	152.3	131.5	3
31-LEATHER AND LEATHER PRODUCTS				
ASSETS, BEGINNING OF YEAR.	895.9	327.0	568.9	2
CAPITAL EXPEND., NEW . .	109.0	25.6	83.3	7
CAPITAL EXPEND., USED. .	12.9	4.9	8.0	10
RETIREMENTS.	45.0	9.2	35.9	8
ASSETS, END OF YEAR. . . .	972.7	348.4	624.3	2
DEPRECIATION CHARGES . . .	71.7	15.5	56.2	4
RENTAL PAYMENTS.	64.0	31.1	32.9	3
32-STONE, CLAY, GLASS PRODUCTS				
ASSETS, BEGINNING OF YEAR.	18 511.0	4 438.2	14 072.6	1
CAPITAL EXPEND., NEW . .	2 017.5	346.0	1 671.5	1
CAPITAL EXPEND., USED. .	133.8	24.6	109.1	9
RETIREMENTS.	592.2	80.0	512.4	3
ASSETS, END OF YEAR. . . .	20 070.0	4 728.8	15 340.9	1
DEPRECIATION CHARGES . . .	1 247.4	191.3	1 056.0	2
RENTAL PAYMENTS.	225.1	82.9	142.0	4
33-PRIMARY METAL INDUSTRIES				
ASSETS, BEGINNING OF YEAR.	55 272.7	10 708.2	44 563.3	1
CAPITAL EXPEND., NEW . .	4 549.3	653.9	3 895.3	1
CAPITAL EXPEND., USED. .	262.7	38.9	223.8	3
RETIREMENTS.	1 773.1	285.4	1 488.0	1
ASSETS, END OF YEAR. . . .	58 311.6	11 115.8	47 195.5	1
DEPRECIATION CHARGES . . .	2 482.9	325.6	2 157.5	1
RENTAL PAYMENTS.	330.3	85.9	244.2	3
34-FABRICATED METAL PRODUCTS				
ASSETS, BEGINNING OF YEAR.	23 743.9	6 350.7	17 393.8	1
CAPITAL EXPEND., NEW . .	2 761.8	481.0	2 280.8	7
CAPITAL EXPEND., USED. .	304.8	82.1	222.5	6
RETIREMENTS.	892.6	160.4	732.2	2
ASSETS, END OF YEAR. . . .	25 917.9	6 753.3	19 164.5	1
DEPRECIATION CHARGES . . .	1 786.8	322.8	1 464.0	1
RENTAL PAYMENTS.	612.9	323.4	289.7	1
35-MACHINERY, EXCEPT ELECTRICAL				
ASSETS, BEGINNING OF YEAR.	32 563.6	9 316.5	23 247.3	1
CAPITAL EXPEND., NEW . .	4 435.9	933.0	3 502.5	1
CAPITAL EXPEND., USED. .	426.9	148.9	278.0	1
RETIREMENTS.	1 334.2	186.1	1 148.3	1
ASSETS, END OF YEAR. . . .	36 091.8	10 212.1	25 879.0	1
DEPRECIATION CHARGES . . .	2 494.3	401.1	2 093.4	1
RENTAL PAYMENTS.	848.6	397.0	451.4	2
36-ELECTRIC, ELECTRONIC EQUIP				
ASSETS, BEGINNING OF YEAR.	21 845.9	6 716.2	15 129.5	1
CAPITAL EXPEND., NEW . .	2 873.2	512.7	2 360.2	1
CAPITAL EXPEND., USED. .	248.8	83.3	165.5	2
RETIREMENTS.	1 045.0	134.7	910.3	1
ASSETS, END OF YEAR. . . .	23 922.5	7 177.5	16 744.7	1
DEPRECIATION CHARGES . . .	1 710.5	291.9	1 418.5	1
RENTAL PAYMENTS.	529.8	249.8	279.9	1
37-TRANSPORTATION EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	28 978.2	8 889.0	20 089.1	1
CAPITAL EXPEND., NEW . .	4 685.1	714.5	3 970.1	4
CAPITAL EXPEND., USED. .	158.1	29.9	128.3	8
RETIREMENTS.	1 976.7	165.8	1 811.0	1
ASSETS, END OF YEAR. . . .	31 844.7	9 467.5	22 376.8	1
DEPRECIATION CHARGES . . .	1 894.8	344.1	1 550.6	1
RENTAL PAYMENTS.	475.1	178.3	296.8	2
38-INSTRUMENTS, RELATED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	7 732.0	2 712.5	5 019.4	1
CAPITAL EXPEND., NEW . .	930.5	225.9	704.6	2
CAPITAL EXPEND., USED. .	54.2	24.4	29.8	13
RETIREMENTS.	296.4	70.4	226.0	4
ASSETS, END OF YEAR. . . .	8 420.2	2 892.2	5 528.0	1
DEPRECIATION CHARGES . . .	602.0	125.3	476.7	1
RENTAL PAYMENTS.	212.4	100.4	111.8	3
39-MISC MANUFACTURING INDUSTRIES				
ASSETS, BEGINNING OF YEAR.	3 906.8	1 306.1	2 600.6	1
CAPITAL EXPEND., NEW . .	523.5	122.6	400.9	4
CAPITAL EXPEND., USED. .	49.8	18.4	31.4	7
RETIREMENTS.	223.3	47.9	175.4	7
ASSETS, END OF YEAR. . . .	4 256.7	1 399.3	2 857.5	1
DEPRECIATION CHARGES . . .	332.1	68.7	263.4	2
RENTAL PAYMENTS.	171.6	112.3	59.3	3

Note: Expenditures data, shown in table 3a, are census universe figures and may differ from ASM sample estimates shown in this table. Table 3b figures represent best estimate of year-to-year change as measured by continuing ASM sample, but are subject to sampling errors. Hence, as estimates of level, they are not as reliable as universe figures. For a description of the standard error of estimate, see the section "Qualifications of data" in appendix B.

Table 3c. **Cost of Purchased Services by Major Industry Group: 1977**

Code	Industry group	Repair of buildings			Repair of machinery			Communication services		
		Cost (million dollars)	Response coverage ratio (percent)	Standard error of estimate (percent)	Cost (million dollars)	Response coverage ratio (percent)	Standard error of estimate (percent)	Cost (million dollars)	Response coverage ratio (percent)	Standard error of estimate (percent)
	United States	2,300.2	61	(NA)	9,569.2	59	(NA)	3,576.7	63	(NA)
20	Food and kindred products	321.8	59	7	1,392.5	61	6	(347.7)	62	24
21	Tobacco products	13.5	72	3	6.7	61	14	4.2	72	3
22	Textile mill products	118.0	59	2	454.8	62	3	207.5	68	4
23	Apparel and other textile products	(227.9)	57	82	(519.0)	58	19	(406.5)	60	20
24	Lumber and wood products	(33.8)	60	16	(283.2)	60	59	(66.8)	59	(A)
25	Furniture and fixtures	(23.0)	58	(A)	(69.8)	55	40	(40.1)	56	58
26	Paper and allied products	79.4	53	10	(524.0)	56	31	(100.4)	56	75
27	Printing and publishing	75.4	60	4	(501.1)	63	29	351.4	60	6
28	Chemicals and allied products	231.8	63	3	989.2	61	1	249.6	68	3
29	Petroleum and coal products	174.0	57	2	410.4	51	7	(25.2)	55	88
30	Rubber and miscellaneous plastics products	58.9	58	4	306.7	63	3	89.6	62	5
31	Leather and leather products	10.5	54	8	31.8	59	10	12.0	53	8
32	Stone, clay, and glass products	62.3	59	6	424.5	57	8	(72.1)	59	(A)
33	Primary metal products	178.5	61	2	1127.4	56	2	105.3	68	6
34	Fabricated metal products	140.8	57	7	898.5	57	20	(314.6)	59	30
35	Machinery, except electrical	(192.4)	62	32	(556.4)	62	20	(423.9)	64	22
36	Electric and electronic equipment	141.1	65	6	348.4	66	6	(296.9)	63	23
37	Transportation equipment	154.3	73	2	(562.0)	69	24	(244.1)	69	49
38	Instruments and related products	41.8	68	5	80.0	66	4	113.4	78	7
39	Miscellaneous manufacturing industries	21.0	65	5	(82.8)	65	22	(105.4)	67	46

Note: Figures are estimates collected on the continuing ASM sample and, as such, are subject to sampling errors. Figures in parenthesis have standard errors of 15 percent or more.

(A) Indicates standard errors of 100 percent or more. The estimates are of limited reliability and should be used with caution.
(NA) Not available.

Table 4. Selected Statistics for Major Industry Groups by Employment Size of Establishment: 1977

Item	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
ALL INDUSTRIES, TOTAL[1]											
ESTABLISHMENTS, TOTAL	350 757	18 515.1	242 031.9	13 691.0	26 686.7	157 163.7	585 165.6	782 417.7	1 358 526.4	47 459.0	188 436.4
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	140 626	218.5	2 549.8	198.7	320.2	1 674.6	5 628.1	6 486.7	12 651.7	807.1	1 419.2
5 TO 9 EMPLOYEES E4	48 004	322.9	3 696.1	243.9	462.0	2 392.0	8 157.9	9 158.7	17 270.7	570.5	1 990.0
10 TO 19 EMPLOYEES E2	48 250	664.6	7 466.9	492.1	932.2	4 744.8	16 295.4	19 208.0	35 338.4	1 162.4	4 090.0
20 TO 49 EMPLOYEES E1	51 522	1 618.7	18 030.0	1 218.9	2 334.1	11 405.6	41 270.5	53 756.3	94 476.6	3 118.0	10 867.8
50 TO 99 EMPLOYEES	26 707	1 870.8	20 660.2	1 419.2	2 741.3	13 301.2	48 558.3	69 003.1	116 945.7	3 560.3	14 880.5
100 TO 249 EMPLOYEES	21 546	3 336.4	37 772.2	2 532.9	4 930.2	24 928.7	92 231.6	129 861.6	220 484.9	7 812.1	30 940.7
250 TO 499 EMPLOYEES	8 364	2 886.2	33 659.6	2 193.9	4 287.5	22 579.7	85 872.6	119 291.5	203 486.7	7 095.6	29 864.4
500 TO 999 EMPLOYEES	3 677	2 506.3	32 588.8	1 844.0	3 640.7	21 489.1	86 734.0	116 369.8	201 275.9	6 231.8	29 046.5
1,000 TO 2,499 EMPLOYEES	1 480	2 179.7	32 565.3	1 554.6	3 090.3	21 095.3	84 148.4	109 896.2	188 800.0	7 868.6	26 561.8
2,500 OR MORE EMPLOYEES	581	2 911.1	53 043.4	1 991.0	3 948.2	33 552.7	116 268.8	149 385.8	267 795.8	9 232.6	38 774.6
ADMIN. RECORDS ESTABS.[2] E9	144 662	460.7	5 177.7	378.4	669.5	3 348.2	11 110.9	11 591.2	22 702.1	713.5	3 117.4
20 FOOD AND KINDRED PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	26 656	1 520.0	18 543.6	1 072.0	2 112.4	11 730.7	56 062.2	136 963.7	192 911.6	4 214.9	16 984.9
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	8 843	13.9	164.6	11.7	19.1	101.5	401.0	1 169.8	1 624.3	157.8	104.4
5 TO 9 EMPLOYEES E5	3 332	22.4	246.2	15.4	30.2	148.5	701.1	1 860.8	2 558.1	57.2	179.6
10 TO 19 EMPLOYEES E2	3 439	47.5	523.4	32.8	64.4	309.3	1 526.9	4 496.9	6 014.8	118.8	445.9
20 TO 49 EMPLOYEES	4 420	143.0	1 605.4	95.8	188.7	904.2	4 962.8	14 787.5	19 725.1	393.1	1 413.3
50 TO 99 EMPLOYEES	2 817	197.2	2 271.2	132.8	264.2	1 317.7	6 898.2	21 837.4	28 798.9	556.5	2 394.0
100 TO 249 EMPLOYEES	2 424	377.4	4 464.3	255.6	507.8	2 663.4	13 376.2	33 531.0	46 887.9	1 060.2	4 313.2
250 TO 499 EMPLOYEES	947	330.4	4 007.3	235.3	461.7	2 554.1	12 063.8	25 909.1	37 902.8	857.9	3 800.6
500 TO 999 EMPLOYEES	335	224.9	2 903.1	170.8	337.5	2 038.5	9 314.4	19 385.7	28 624.9	570.1	2 695.0
1,000 TO 2,499 EMPLOYEES	86	119.4	1 616.4	90.6	178.0	1 171.9	4 998.2	10 790.2	15 765.8	305.6	1 219.4
2,500 OR MORE EMPLOYEES	13	43.9	741.7	31.3	60.7	521.8	1 819.6	3 195.4	5 008.9	157.7	419.5
ADMIN. RECORDS ESTABS.[2] E9	9 760	34.2	393.8	25.3	46.1	240.1	988.8	2 393.2	3 382.1	58.0	248.6
21 TOBACCO PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	228	60.6	750.7	50.4	92.6	570.7	4 334.1	4 729.8	9 050.6	181.5	3 711.9
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E9	71	.1	.8	.1	.2	.6	2.0	6.0	8.5	.6	2.8
5 TO 9 EMPLOYEES E7	20	.1	1.0	.1	.2	.7	2.6	6.5	9.2	.1	3.0
10 TO 19 EMPLOYEES E3	14	.2	1.4	.2	.3	1.1	1.8	10.1	13.4	.2	6.9
20 TO 49 EMPLOYEES	22	.8	5.4	.6	1.2	3.8	8.8	15.9	25.1	.3	9.0
50 TO 99 EMPLOYEES	16	1.1	11.0	.9	1.7	7.1	36.1	80.3	117.4	1.2	41.7
100 TO 249 EMPLOYEES	41	(15.7)	(137.3)	(12.9)	(24.6)	(95.1)	(465.2)	(1 878.4)	(2 326.4)	(62.5)	(990.9)
250 TO 499 EMPLOYEES	27	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 TO 999 EMPLOYEES	7	4.8	44.2	4.1	7.3	33.2	183.4	269.8	452.8	5.0	71.8
1,000 TO 2,499 EMPLOYEES	4	5.9	83.1	5.1	9.6	71.4	539.1	388.8	927.3	7.5	206.0
2,500 OR MORE EMPLOYEES	6	31.9	466.7	26.4	47.6	357.7	3 095.1	2 073.9	5 170.5	104.0	2 379.7
ADMIN. RECORDS ESTABS.[2] E0	82	.3	2.0	.3	.4	1.5	5.7	10.5	16.2	.2	4.6
22 TEXTILE MILL PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	7 202	875.7	7 881.4	764.6	1 523.1	6 202.8	16 104.5	24 753.2	40 550.5	1 223.5	5 509.9
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E6	1 499	2.3	21.5	2.3	4.1	16.1	27.3	69.5	120.3	3.7	14.8
5 TO 9 EMPLOYEES E6	693	4.7	40.6	4.1	7.8	29.4	77.0	124.0	201.4	5.0	29.9
10 TO 19 EMPLOYEES E4	879	12.2	105.9	10.2	20.0	75.6	217.9	359.2	574.8	14.2	74.3
20 TO 49 EMPLOYEES E1	1 278	41.2	358.3	34.9	66.9	258.4	706.1	1 020.5	1 723.1	46.9	206.3
50 TO 99 EMPLOYEES	830	59.5	514.2	51.4	99.9	386.9	1 028.7	1 481.9	2 496.4	73.0	311.8
100 TO 249 EMPLOYEES	1 018	160.8	1 425.7	139.5	276.7	1 099.3	2 936.5	4 586.7	7 492.5	235.2	902.4
250 TO 499 EMPLOYEES	587	205.0	1 837.1	179.5	361.3	1 463.5	3 735.7	6 123.9	9 805.4	303.3	1 292.2
500 TO 999 EMPLOYEES	309	208.5	1 936.6	183.0	369.9	1 556.5	4 061.2	5 879.5	9 858.3	271.2	1 342.5
1,000 TO 2,499 EMPLOYEES	97	132.3	1 203.5	115.2	230.7	947.8	2 449.5	3 805.4	6 188.6	230.8	954.2
2,500 OR MORE EMPLOYEES	12	49.4	438.0	44.4	85.9	369.4	864.4	1 302.7	2 089.7	40.2	381.4
ADMIN. RECORDS ESTABS.[2] E0	2 062	13.2	109.7	11.8	22.6	82.8	201.0	304.0	505.1	12.4	70.9
23 APPAREL, OTHER TEXTILE PRODS.											
ESTABLISHMENTS, TOTAL[1]	26 505	1 334.3	9 658.6	1 156.6	2 037.6	7 252.8	19 671.3	20 865.5	40 245.1	456.7	5 535.8
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E5	7 826	12.7	115.0	12.5	19.4	85.2	235.8	406.6	700.2	4.7	75.4
5 TO 9 EMPLOYEES E4	3 086	20.9	168.1	18.2	31.3	116.0	352.2	468.5	818.9	7.1	98.5
10 TO 19 EMPLOYEES E2	3 660	51.4	409.5	42.5	74.5	274.0	836.8	1 092.1	1 915.5	16.0	228.2
20 TO 49 EMPLOYEES E1	5 405	173.6	1 274.9	148.1	254.0	902.9	2 633.8	3 140.7	5 724.7	52.7	702.0
50 TO 99 EMPLOYEES E1	3 010	210.6	1 466.1	184.1	317.8	1 091.8	2 953.2	2 985.7	5 903.9	67.4	701.8
100 TO 249 EMPLOYEES	2 424	377.1	2 537.7	330.1	578.0	1 955.1	4 978.6	4 624.5	9 516.3	126.3	1 323.3
250 TO 499 EMPLOYEES	845	286.8	1 950.4	252.3	452.2	1 527.0	3 907.7	3 846.8	7 685.2	100.3	1 173.2
500 TO 999 EMPLOYEES	208	131.8	986.2	112.1	204.3	728.4	2 241.2	2 464.3	4 625.9	40.4	776.2
1,000 TO 2,499 EMPLOYEES	35	48.1	501.9	40.2	77.2	388.0	1 065.5	1 309.9	2 355.7	28.3	353.5
2,500 OR MORE EMPLOYEES	6	21.4	248.7	16.5	29.0	184.3	466.5	526.5	998.8	13.6	103.7
ADMIN. RECORDS ESTABS.[2] E9	8 792	41.9	290.1	38.6	64.6	217.0	538.7	517.8	1 056.6	9.8	138.4

See footnotes at end of table.

Table 4. **Selected Statistics for Major Industry Groups by Employment Size of Establishment: 1977**—Con.

Item	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
24 LUMBER AND WOOD PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	37 302	692.4	7 424.7	594.8	1 147.6	5 795.0	16 222.8	23 918.7	39 919.4	1 562.6	4 663.8
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	21 273	28.9	296.9	28.7	48.3	239.7	717.4	898.3	1 629.5	114.9	155.2
5 TO 9 EMPLOYEES E3	4 756	31.5	304.6	28.1	49.8	240.5	677.1	833.3	1 504.8	73.9	156.0
10 TO 19 EMPLOYEES E1	4 217	57.4	530.3	48.9	86.3	407.7	1 166.3	1 375.9	2 526.0	118.2	274.1
20 TO 49 EMPLOYEES E1	3 695	114.2	1 077.8	96.7	178.9	804.9	2 361.8	3 024.1	5 352.4	219.1	654.6
50 TO 99 EMPLOYEES	1 786	127.2	1 290.8	108.0	210.8	980.9	2 810.3	4 393.5	7 144.8	230.8	920.7
100 TO 249 EMPLOYEES	1 224	183.0	2 032.7	155.8	311.5	1 589.3	4 370.9	6 990.1	11 286.7	369.6	1 289.9
250 TO 499 EMPLOYEES	278	92.8	1 116.9	80.1	162.9	906.9	2 450.6	3 737.6	6 151.3	234.4	695.9
500 TO 999 EMPLOYEES	60	39.3	510.7	33.4	68.7	409.7	1 135.9	1 901.8	3 027.8	144.8	349.5
1,000 TO 2,499 EMPLOYEES	12	(18.1)	(264.1)	(15.2)	(30.4)	(215.4)	(532.5)	(763.9)	(1 296.2)	(56.9)	(167.9)
2,500 OR MORE EMPLOYEES	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
ADMIN. RECORDS ESTABS.[2] E9	19 523	37.5	363.0	36.0	61.9	287.5	803.9	1 037.2	1 841.1	101.0	188.5
25 FURNITURE AND FIXTURES											
ESTABLISHMENTS, TOTAL[1]	10 235	463.8	4 448.3	383.6	736.4	3 191.8	8 921.7	8 187.4	16 978.0	388.7	2 750.3
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	3 762	6.1	57.9	5.9	9.7	40.8	113.0	109.1	235.9	7.2	35.2
5 TO 9 EMPLOYEES E5	1 445	9.8	94.3	8.2	15.2	65.9	186.2	168.1	352.8	7.5	51.9
10 TO 19 EMPLOYEES E3	1 440	19.9	192.2	16.0	30.5	132.8	365.6	355.7	715.9	13.8	97.3
20 TO 49 EMPLOYEES E1	1 615	51.1	495.0	41.2	78.5	340.9	952.4	939.5	1 880.4	35.5	257.3
50 TO 99 EMPLOYEES	885	62.6	586.9	51.4	97.6	410.4	1 197.7	1 159.2	2 337.4	52.2	343.9
100 TO 249 EMPLOYEES	690	106.6	1 003.3	87.4	166.5	713.9	2 013.7	1 908.8	3 876.0	84.8	651.9
250 TO 499 EMPLOYEES	254	87.5	811.2	74.0	142.1	606.5	1 686.2	1 596.9	3 254.4	80.8	558.2
500 TO 999 EMPLOYEES	116	75.8	722.9	62.7	124.0	532.7	1 413.0	1 261.3	2 654.1	57.0	454.4
1,000 TO 2,499 EMPLOYEES	26	(44.5)	(484.5)	(36.8)	(72.2)	(347.9)	(993.9)	(688.9)	(1 671.2)	(49.8)	(300.2)
2,500 OR MORE EMPLOYEES	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
ADMIN. RECORDS ESTABS.[2] E9	4 368	17.4	153.0	15.6	27.6	110.3	289.9	276.7	566.7	11.0	92.0
26 PAPER AND ALLIED PRODUCTS											
ESTABLISHMENTS, TOTAL	6 545	628.7	8 942.9	486.3	985.9	6 323.1	22 170.9	30 148.2	52 085.7	3 295.0	5 641.5
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E6	1 126	2.2	22.3	1.7	2.8	14.9	44.6	65.9	118.3	(61.8)	14.2
5 TO 9 EMPLOYEES E5	600	4.2	48.2	3.2	6.3	31.8	108.6	161.9	270.2	(D)	31.4
10 TO 19 EMPLOYEES E4	819	11.4	132.4	8.7	17.0	85.8	294.3	403.9	697.8	44.3	77.0
20 TO 49 EMPLOYEES	1 313	42.9	491.9	33.5	65.6	317.7	1 121.3	1 511.6	2 622.4	133.0	252.3
50 TO 99 EMPLOYEES	963	69.1	832.7	53.9	108.1	562.8	1 899.9	2 687.4	4 565.3	162.0	511.7
100 TO 249 EMPLOYEES	1 185	178.8	2 378.1	137.1	278.1	1 642.8	5 101.0	8 056.1	13 111.8	504.7	1 516.5
250 TO 499 EMPLOYEES	315	106.6	1 531.3	84.0	173.0	1 120.4	3 961.6	5 406.2	9 304.3	465.9	1 045.9
500 TO 999 EMPLOYEES	153	105.9	1 737.0	83.7	172.9	1 319.1	4 990.5	6 693.5	11 594.5	995.1	1 201.5
1,000 TO 2,499 EMPLOYEES	68	99.3	1 652.9	75.0	151.7	1 167.2	4 354.4	4 905.4	9 253.4	920.7	926.6
2,500 OR MORE EMPLOYEES	3	8.7	116.0	5.5	10.4	60.5	294.7	256.2	547.7	47.4	64.3
ADMIN. RECORDS ESTABS.[2] E9	1 523	9.5	114.7	7.4	14.3	75.5	230.3	332.2	562.5	16.0	67.8
27 PRINTING AND PUBLISHING											
ESTABLISHMENTS, TOTAL[1]	49 676	1 092.2	14 024.5	625.8	1 152.8	7 322.1	31 979.5	17 794.7	49 716.2	1 597.8	4 200.6
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	27 530	40.7	508.1	33.1	48.4	295.1	1 157.7	674.9	1 866.1	62.8	140.4
5 TO 9 EMPLOYEES E3	6 933	46.3	539.4	30.3	52.7	316.4	1 100.3	649.6	1 744.1	57.6	126.7
10 TO 19 EMPLOYEES E1	6 159	84.0	941.6	54.3	94.2	550.6	1 847.1	1 076.7	2 909.4	87.7	224.3
20 TO 49 EMPLOYEES E1	5 122	156.0	1 865.0	100.8	188.8	1 061.8	3 804.4	2 143.5	5 924.1	214.1	450.3
50 TO 99 EMPLOYEES	2 114	145.0	1 803.8	90.3	172.6	1 014.5	3 804.2	2 219.4	5 998.8	209.3	535.4
100 TO 249 EMPLOYEES	1 258	189.0	2 367.4	114.5	220.3	1 327.2	5 461.4	3 211.4	8 620.7	311.5	805.0
250 TO 499 EMPLOYEES	375	128.6	1 619.7	69.0	130.2	845.3	4 075.1	2 310.2	6 373.7	245.7	666.1
500 TO 999 EMPLOYEES	182	123.9	1 657.2	57.5	107.8	738.2	4 583.8	2 440.2	7 018.7	147.8	620.1
1,000 TO 2,499 EMPLOYEES	75	112.8	1 643.0	50.7	94.1	740.3	3 844.6	1 853.1	5 673.4	170.3	433.7
2,500 OR MORE EMPLOYEES	19	65.9	1 079.4	25.3	43.7	432.7	2 300.9	1 215.8	3 587.2	90.9	198.6
ADMIN. RECORDS ESTABS.[2] E9	24 655	45.1	554.9	34.1	52.7	314.5	1 226.7	693.3	1 920.1	58.8	151.9
28 CHEMICALS AND ALLIED PRODUCTS[1]											
ESTABLISHMENTS, TOTAL	12 173	880.2	13 839.3	543.8	1 089.9	7 446.2	56 720.6	62 293.8	118 153.6	8 198.9	14 791.3
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E5	4 086	6.5	89.4	4.8	8.1	45.2	334.8	429.6	800.9	148.9	95.0
5 TO 9 EMPLOYEES E3	1 738	11.8	159.5	7.3	14.7	82.9	662.8	784.8	1 447.9	62.4	157.4
10 TO 19 EMPLOYEES E1	1 744	24.0	327.0	14.5	28.7	160.7	1 335.5	1 680.0	3 005.5	144.5	343.5
20 TO 49 EMPLOYEES	2 026	63.3	859.4	38.2	76.6	422.3	3 363.1	4 947.4	8 260.9	442.4	975.6
50 TO 99 EMPLOYEES	1 061	74.0	1 013.7	44.5	90.0	512.4	4 073.8	5 886.0	9 904.7	479.7	1 274.0
100 TO 249 EMPLOYEES	812	125.2	1 830.5	78.4	160.7	1 014.7	7 941.7	10 318.3	18 095.8	1 628.9	2 411.8
250 TO 499 EMPLOYEES	348	121.4	1 886.4	77.4	158.5	1 104.5	8 987.2	10 761.5	19 590.7	1 526.6	2 422.0
500 TO 999 EMPLOYEES	213	146.8	2 410.6	93.9	189.5	1 384.3	11 261.9	11 163.9	22 283.9	974.0	2 642.5
1,000 TO 2,499 EMPLOYEES	109	165.3	2 764.6	103.0	205.1	1 516.9	11 635.3	10 598.3	22 009.5	2 158.7	2 921.9
2,500 OR MORE EMPLOYEES	36	141.8	2 498.2	81.7	157.9	1 202.5	7 124.5	5 723.9	12 753.7	632.8	1 547.6
ADMIN. RECORDS ESTABS.[2] E9	3 965	13.6	189.3	8.9	16.4	95.0	674.8	663.1	1 337.8	57.0	171.6

See footnotes at end of table.

Table 4. **Selected Statistics for Major Industry Groups by Employment Size of Establishment: 1977**—Con.

Item	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
29 PETROLEUM AND COAL PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	2 206	146.8	2 696.2	101.1	207.9	1 765.4	16 377.6	81 655.4	97 452.7	2 261.3	5 656.3
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E1	710	1.4	21.1	1.2	2.2	13.9	96.0	327.1	431.8	11.5	19.3
5 TO 9 EMPLOYEES E1	422	2.8	40.1	1.9	4.1	25.4	139.2	422.2	559.3	18.7	28.1
10 TO 19 EMPLOYEES	300	4.1	57.3	2.8	5.8	34.8	201.0	549.3	749.3	17.8	52.0
20 TO 49 EMPLOYEES	348	10.8	159.6	7.2	14.8	94.4	701.0	2 399.5	3 096.0	160.7	210.1
50 TO 99 EMPLOYEES	148	10.6	157.0	7.1	14.5	95.9	586.6	2 406.4	2 986.6	68.6	198.2
100 TO 249 EMPLOYEES	150	24.6	412.2	17.9	38.1	287.0	2 092.3	10 211.0	12 213.3	249.5	876.8
250 TO 499 EMPLOYEES	63	21.2	401.1	14.8	31.3	271.6	2 575.9	15 786.3	18 166.2	610.9	1 278.8
500 TO 999 EMPLOYEES	45	31.6	632.9	20.9	42.4	406.9	4 396.4	22 669.4	26 952.8	489.5	1 461.0
1,000 TO 2,499 EMPLOYEES	18	(39.8)	(814.8)	(27.4)	(54.7)	(535.4)	(5 589.1)	(26 884.3)	(32 297.5)	(634.2)	(1 532.1)
2,500 OR MORE EMPLOYEES	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
ADMIN. RECORDS ESTABS.[2] E0	324	.9	12.7	.7	1.3	7.6	36.2	65.7	101.9	3.3	7.5
30 RUBBER, MISC. PLASTICS PROD.											
ESTABLISHMENTS, TOTAL[1]	11 943	721.3	8 536.0	563.7	1 110.6	5 841.6	19 740.0	20 217.8	39 552.8	1 645.3	4 952.7
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	3 402	5.5	60.0	5.3	8.6	39.6	140.1	161.3	315.0	14.6	35.9
5 TO 9 EMPLOYEES E5	1 604	10.8	119.2	8.4	16.5	78.4	263.4	289.9	552.7	25.4	63.6
10 TO 19 EMPLOYEES E2	1 643	22.9	246.8	17.7	34.4	156.9	567.2	627.1	1 187.4	53.9	137.0
20 TO 49 EMPLOYEES	2 257	71.7	730.6	57.0	110.4	472.8	1 803.3	1 986.0	3 761.0	185.6	409.8
50 TO 99 EMPLOYEES	1 483	104.9	1 049.9	83.5	162.5	697.5	2 473.9	2 906.4	5 346.6	230.0	596.5
100 TO 249 EMPLOYEES	1 025	159.7	1 694.0	127.7	251.2	1 164.3	3 788.1	4 098.0	7 838.0	391.1	963.5
250 TO 499 EMPLOYEES	340	113.5	1 288.3	88.2	177.6	867.5	3 113.9	2 825.2	5 873.7	217.1	770.0
500 TO 999 EMPLOYEES	105	69.4	821.1	54.7	109.3	586.6	1 928.7	1 772.9	3 698.6	138.5	461.8
1,000 TO 2,499 EMPLOYEES	70	108.5	1 575.6	83.3	163.6	1 143.8	3 967.7	3 907.7	7 695.2	248.0	1 129.0
2,500 OR MORE EMPLOYEES	14	54.4	950.4	37.9	76.5	634.3	1 693.7	1 643.3	3 284.7	141.0	385.5
ADMIN. RECORDS ESTABS.[2] E9	4 093	16.6	177.2	13.9	25.6	118.1	389.5	402.0	791.5	52.5	95.7
31 LEATHER AND LEATHER PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	3 075	242.5	1 859.7	211.5	381.9	1 408.1	3 718.8	3 932.6	7 607.4	96.2	1 098.9
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	930	1.6	12.5	1.5	2.4	8.7	15.4	31.2	58.3	.6	7.9
5 TO 9 EMPLOYEES E4	326	2.2	18.2	1.9	3.5	12.5	36.7	58.8	95.7	1.1	11.5
10 TO 19 EMPLOYEES E2	332	4.7	38.4	3.9	7.2	26.1	77.3	115.0	191.1	1.5	24.4
20 TO 49 EMPLOYEES E2	456	14.5	110.3	12.5	22.1	80.9	204.0	251.9	454.2	7.7	59.7
50 TO 99 EMPLOYEES	368	25.9	200.7	22.1	39.6	145.1	380.3	460.5	843.6	11.4	116.1
100 TO 249 EMPLOYEES	337	55.9	421.5	49.1	88.1	320.2	859.0	907.9	1 748.3	23.1	256.5
250 TO 499 EMPLOYEES	265	93.6	681.5	83.6	149.9	552.4	1 421.7	1 396.9	2 796.2	32.9	354.4
500 TO 999 EMPLOYEES	56	36.1	286.5	30.8	57.8	210.5	554.5	531.3	1 068.5	14.2	196.0
1,000 TO 2,499 EMPLOYEES	5	8.0	90.1	6.0	11.3	51.8	169.9	179.0	351.5	3.6	72.4
ADMIN. RECORDS ESTABS.[2] E9	1 000	3.6	27.2	3.3	5.6	19.8	50.7	56.7	107.4	1.4	14.8
32 STONE, CLAY, GLASS PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	17 744	613.7	7 943.1	484.4	960.7	5 766.6	19 129.6	16 444.8	35 476.6	1 881.4	4 279.3
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E6	6 648	11.2	131.9	10.4	18.0	91.0	334.1	342.9	694.5	61.4	58.2
5 TO 9 EMPLOYEES E3	2 844	19.2	234.0	14.6	28.6	158.0	559.9	621.2	1 178.0	52.1	94.1
10 TO 19 EMPLOYEES E1	3 051	42.3	502.9	31.0	60.7	327.5	1 191.9	1 364.0	2 550.4	121.2	198.0
20 TO 49 EMPLOYEES	2 862	87.4	1 067.8	63.5	129.2	683.2	2 398.3	2 703.1	5 082.6	253.8	437.6
50 TO 99 EMPLOYEES	1 103	76.1	919.6	58.5	117.1	634.1	2 138.8	2 094.4	4 214.4	212.4	454.8
100 TO 249 EMPLOYEES	803	122.4	1 597.8	97.4	196.9	1 175.8	4 042.1	3 555.0	7 591.4	514.2	1 037.1
250 TO 499 EMPLOYEES	257	89.0	1 164.0	72.0	144.2	881.0	2 918.6	2 296.2	5 188.7	301.3	715.9
500 TO 999 EMPLOYEES	128	90.7	1 213.4	75.9	148.0	959.3	3 090.5	1 950.8	5 059.0	212.3	703.0
1,000 TO 2,499 EMPLOYEES	42	57.7	822.4	47.6	91.8	649.8	1 777.3	1 043.8	2 821.7	111.5	393.5
2,500 OR MORE EMPLOYEES	6	17.6	289.3	13.4	26.2	207.0	677.9	473.4	1 095.9	41.2	187.1
ADMIN. RECORDS ESTABS.[2] E9	6 310	17.8	202.1	15.4	27.4	138.6	453.6	421.5	875.1	41.0	93.5
33 PRIMARY METAL INDUSTRIES											
ESTABLISHMENTS, TOTAL[1]	7 375	1 113.6	18 745.0	885.3	1 744.0	14 065.2	37 568.2	66 171.3	103 179.4	4 496.8	18 458.3
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	1 589	2.7	35.6	2.7	4.4	25.6	31.1	113.9	186.6	19.4	26.7
5 TO 9 EMPLOYEES E6	817	5.6	72.4	4.5	8.7	50.9	138.5	210.2	346.7	13.0	49.8
10 TO 19 EMPLOYEES E3	988	13.6	174.2	10.8	21.2	120.4	351.9	492.6	842.1	30.4	110.3
20 TO 49 EMPLOYEES E1	1 347	43.6	542.4	35.2	68.9	373.7	1 226.2	1 942.2	3 149.9	119.6	385.1
50 TO 99 EMPLOYEES	901	64.0	795.5	51.4	102.1	559.7	1 812.7	3 414.1	5 214.5	181.5	743.5
100 TO 249 EMPLOYEES	934	148.8	1 960.8	118.7	238.1	1 418.9	4 191.7	7 641.7	11 801.9	426.0	1 785.8
250 TO 499 EMPLOYEES	412	142.2	2 080.7	112.0	223.4	1 519.2	4 484.0	8 593.0	12 974.2	422.7	2 310.1
500 TO 999 EMPLOYEES	215	146.5	2 380.1	115.5	231.4	1 788.2	5 450.9	10 462.2	15 864.1	495.9	2 771.7
1,000 TO 2,499 EMPLOYEES	99	142.2	2 569.9	112.0	222.7	1 963.5	5 026.1	8 908.0	13 776.4	767.9	2 466.4
2,500 OR MORE EMPLOYEES	73	404.5	8 133.4	322.6	623.1	6 245.2	14 855.2	24 393.6	39 023.0	2 020.4	7 809.1
ADMIN. RECORDS ESTABS.[2] E9	2 189	11.4	151.8	9.6	17.8	109.9	275.7	435.6	711.4	28.2	111.1

See footnotes at end of table.

Table 4. **Selected Statistics for Major Industry Groups by Employment Size of Establishment: 1977**—Con.

Item	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
34 FABRICATED METAL PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	33 712	1 555.7	21 035.9	1 191.6	2 373.8	14 428.8	45 511.5	45 384.8	90 023.5	2 606.1	15 306.2
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	10 614	17.9	212.6	16.9	27.8	141.1	421.4	426.3	892.0	29.2	140.5
5 TO 9 EMPLOYEES E4	4 746	32.3	390.3	25.1	50.0	259.8	776.5	713.8	1 485.4	50.2	221.7
10 TO 19 EMPLOYEES E2	5 612	78.1	938.3	59.2	117.0	606.7	1 848.0	1 835.9	3 670.3	110.5	520.8
20 TO 49 EMPLOYEES E1	6 452	202.5	2 463.9	156.4	308.6	1 609.9	5 181.3	5 321.4	10 432.7	294.4	1 481.6
50 TO 99 EMPLOYEES	2 970	205.3	2 498.8	159.3	316.6	1 667.8	5 464.6	5 816.9	11 183.7	369.1	1 816.8
100 TO 249 EMPLOYEES	2 182	335.1	4 244.5	256.8	512.6	2 881.2	9 715.8	10 822.1	20 301.1	645.7	3 657.6
250 TO 499 EMPLOYEES	746	255.1	3 382.9	193.5	384.3	2 340.0	7 683.9	8 225.7	15 726.2	396.5	2 945.7
500 TO 999 EMPLOYEES	277	187.6	2 574.4	140.2	276.6	1 782.9	5 766.5	5 034.9	10 685.2	251.5	2 268.8
1,000 TO 2,499 EMPLOYEES	78	115.6	1 780.6	82.6	168.3	1 177.5	4 035.6	2 886.8	6 813.7	186.8	1 322.2
2,500 OR MORE EMPLOYEES	35	126.1	2 549.7	101.6	212.1	1 961.9	4 618.0	4 301.0	8 853.1	272.2	930.6
ADMIN. RECORDS ESTABS.[2] E9	11 868	47.2	565.2	38.9	71.5	377.5	1 140.3	1 068.5	2 208.8	64.0	392.9
35 MACHINERY, EXCEPT ELECTRICAL											
ESTABLISHMENTS, TOTAL[1]	48 200	2 083.3	30 557.5	1 413.8	2 803.0	18 298.4	67 222.5	56 531.6	122 187.7	4 402.4	27 170.9
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	20 186	33.5	439.0	31.2	51.7	295.1	845.7	523.5	1 441.8	69.7	219.2
5 TO 9 EMPLOYEES E5	7 909	53.2	704.1	39.5	79.7	463.5	1 310.9	798.8	2 096.6	85.7	328.9
10 TO 19 EMPLOYEES E2	7 654	104.8	1 383.2	76.7	153.2	906.0	2 495.6	1 592.6	4 050.4	168.3	613.6
20 TO 49 EMPLOYEES E1	6 450	198.2	2 688.9	146.7	295.1	1 742.2	5 139.6	3 463.7	8 487.0	307.0	1 456.4
50 TO 99 EMPLOYEES	2 632	182.0	2 482.3	129.9	261.6	1 539.2	5 027.7	3 802.9	8 703.8	341.5	1 843.0
100 TO 249 EMPLOYEES	1 854	287.8	3 901.1	195.7	392.8	2 324.6	8 661.7	7 154.0	15 504.6	467.5	3 859.1
250 TO 499 EMPLOYEES	775	270.0	3 724.1	178.8	358.1	2 170.9	8 379.6	6 981.1	15 107.0	517.3	4 020.9
500 TO 999 EMPLOYEES	453	317.2	4 590.0	201.6	398.8	2 597.9	10 214.5	9 227.2	19 148.5	594.8	5 167.0
1,000 TO 2,499 EMPLOYEES	218	325.2	5 023.2	215.8	425.8	3 028.4	12 242.2	10 296.3	22 337.5	756.5	5 045.0
2,500 OR MORE EMPLOYEES	69	311.2	5 621.7	197.9	386.1	3 230.7	12 905.1	12 691.6	25 310.5	1 094.1	4 617.9
ADMIN. RECORDS ESTABS.[2] E9	22 030	69.1	906.4	55.3	100.0	577.8	1 825.2	1 239.6	3 064.9	119.5	576.9
36 ELECTRIC, ELECTRONIC EQUIP.											
ESTABLISHMENTS, TOTAL	14 973	1 723.1	22 544.2	1 191.4	2 309.2	12 951.6	50 365.7	39 369.5	88 433.1	2 866.5	16 058.7
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	4 904	7.7	91.4	6.7	10.6	52.6	154.8	155.2	351.5	11.1	63.8
5 TO 9 EMPLOYEES E7	1 926	12.9	151.1	9.1	17.5	86.8	316.4	251.3	567.2	17.8	102.6
10 TO 19 EMPLOYEES E5	1 805	24.9	293.8	17.4	34.0	164.4	604.0	487.7	1 086.6	32.9	202.7
20 TO 49 EMPLOYEES E1	2 087	67.4	751.3	48.7	93.7	429.1	1 605.4	1 281.4	2 860.6	81.8	494.8
50 TO 99 EMPLOYEES	1 381	98.2	1 057.4	72.1	138.1	619.1	2 296.6	1 834.5	4 070.4	133.4	761.0
100 TO 249 EMPLOYEES	1 436	226.3	2 445.7	164.5	317.7	1 449.2	5 743.9	4 860.7	10 421.9	312.0	2 115.5
250 TO 499 EMPLOYEES	709	246.8	2 785.1	178.1	346.8	1 672.6	6 595.9	5 511.6	11 949.8	399.0	2 422.8
500 TO 999 EMPLOYEES	420	293.8	3 596.8	209.3	404.9	2 167.0	8 434.4	6 020.1	14 216.1	484.6	2 785.2
1,000 TO 2,499 EMPLOYEES	204	305.1	4 255.2	209.9	408.0	2 448.6	9 511.0	7 436.5	16 722.3	493.2	2 905.1
2,500 OR MORE EMPLOYEES	101	440.0	7 116.4	275.5	537.8	3 862.4	15 103.3	11 530.5	26 186.8	900.6	4 205.3
ADMIN. RECORDS ESTABS.[2] E9	6 203	31.5	377.2	22.9	42.5	211.9	764.7	584.8	1 349.5	42.5	255.2
37 TRANSPORTATION EQUIPMENT											
ESTABLISHMENTS, TOTAL[1]	10 176	1 768.2	30 673.5	1 284.4	2 612.7	20 314.3	64 291.1	103 489.6	166 954.0	4 670.9	22 240.5
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	4 032	6.2	77.9	6.0	9.7	56.6	139.7	191.3	344.3	9.2	58.0
5 TO 9 EMPLOYEES E7	1 312	8.8	109.6	7.1	13.7	78.4	199.6	245.8	445.6	12.3	73.9
10 TO 19 EMPLOYEES E4	1 179	16.0	191.4	12.5	24.1	133.6	353.8	424.5	776.0	25.5	137.2
20 TO 49 EMPLOYEES E1	1 271	40.5	476.8	31.7	61.9	323.0	897.6	1 080.8	1 963.3	70.3	337.2
50 TO 99 EMPLOYEES	820	58.1	684.4	45.4	88.4	463.7	1 368.2	1 709.5	3 028.7	79.7	542.4
100 TO 249 EMPLOYEES	685	107.2	1 293.1	82.8	159.9	868.7	2 712.0	3 281.2	5 946.9	232.8	1 081.4
250 TO 499 EMPLOYEES	378	132.1	1 643.0	103.7	203.3	1 150.2	3 582.6	4 148.4	7 655.0	166.7	1 429.3
500 TO 999 EMPLOYEES	192	133.1	1 850.4	98.8	194.3	1 237.1	3 718.4	4 255.4	7 943.5	195.9	1 588.0
1,000 TO 2,499 EMPLOYEES	146	221.2	3 682.7	170.4	336.4	2 641.5	8 276.8	10 992.8	19 223.3	519.3	2 792.0
2,500 OR MORE EMPLOYEES	161	1 044.9	20 664.3	726.0	1 520.9	13 361.4	43 042.5	77 159.9	119 627.5	3 359.2	14 201.1
ADMIN. RECORDS ESTABS.[2] E9	4 514	17.2	227.2	14.5	26.7	161.5	411.6	503.9	915.5	23.7	159.4
38 INSTRUMENTS, RELATED PRODUCTS											
ESTABLISHMENTS, TOTAL[1]	7 481	559.1	7 520.4	347.2	677.9	3 743.2	18 762.0	10 503.9	28 897.8	938.9	5 810.6
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E8	2 878	4.5	56.7	3.6	5.8	28.8	121.3	78.3	213.8	6.7	45.3
5 TO 9 EMPLOYEES E6	1 071	7.1	89.0	4.6	8.8	45.3	198.3	121.2	318.0	9.3	61.9
10 TO 19 EMPLOYEES E4	992	13.7	166.6	8.8	16.7	85.0	362.7	231.0	589.7	18.3	112.5
20 TO 49 EMPLOYEES E1	1 070	33.6	398.8	22.3	43.1	207.1	909.7	577.0	1 473.4	44.1	274.3
50 TO 99 EMPLOYEES	560	39.6	464.7	25.8	50.1	238.6	1 076.0	675.7	1 718.9	52.7	370.6
100 TO 249 EMPLOYEES	462	71.4	824.0	46.3	89.6	432.4	1 983.6	1 325.7	3 298.5	89.1	741.5
250 TO 499 EMPLOYEES	237	84.5	992.7	55.8	110.8	537.5	2 346.3	1 425.0	3 694.5	119.8	886.0
500 TO 999 EMPLOYEES	129	89.0	1 114.0	57.7	113.1	592.0	2 674.6	1 527.9	4 149.3	127.9	956.1
1,000 TO 2,499 EMPLOYEES	62	90.4	1 284.5	56.0	109.7	655.6	2 858.6	1 644.1	4 427.5	133.6	1 019.2
2,500 OR MORE EMPLOYEES	20	125.3	2 129.5	66.4	130.3	920.9	6 230.8	2 898.1	9 054.2	337.3	1 343.2
ADMIN. RECORDS ESTABS.[2] E9	3 340	13.8	173.6	9.3	17.1	85.8	393.6	221.3	615.0	18.1	132.4

See footnotes at end of table.

Table 4. Selected Statistics for Major Industry Groups by Employment Size of Establishment: 1977—Con.

Item	All establishments (no.)	All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories (million dollars)
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
39 MISC. MANUFACTUR'G INDUSTRIES											
ESTABLISHMENTS, TOTAL[1]	17 259	440.7	4 406.4	338.7	626.7	2 745.3	10 291.0	9 061.4	19 150.7	473.6	3 614.2
ESTABLISHMENTS WITH AN AVERAGE OF-											
1 TO 4 EMPLOYEES E7	8 717	13.1	134.6	12.3	18.9	82.5	294.9	306.0	618.1	11.3	107.0
5 TO 9 EMPLOYEES E3	2 424	16.2	166.2	12.3	22.7	100.9	350.6	368.0	718.1	14.1	119.5
10 TO 19 EMPLOYEES E2	2 323	31.6	310.3	23.4	42.1	185.8	649.8	637.8	1 272.0	24.4	210.9
20 TO 49 EMPLOYEES E1	2 026	62.8	606.5	48.2	87.1	372.4	1 289.6	1 218.6	2 477.7	55.9	400.5
50 TO 99 EMPLOYEES	859	59.9	559.5	47.0	88.1	356.0	1 230.8	1 157.0	2 366.9	47.9	402.6
100 TO 249 EMPLOYEES	602	(162.8)	(1 556.4)	(126.9)	(236.9)	(994.2)	(3 698.5)	(3 308.9)	(6 932.3)	(174.8)	(1 437.4)
250 TO 499 EMPLOYEES	206	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
500 TO 999 EMPLOYEES	74	49.5	537.6	37.3	72.6	348.7	1 319.3	1 068.9	2 349.4	53.8	534.4
1,000 TO 2,499 EMPLOYEES	26	(44.7)	(535.4)	(31.2)	(58.3)	(305.0)	(1 457.6)	(996.3)	(2 416.3)	(91.5)	(401.9)
2,500 OR MORE EMPLOYEES	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
ADMIN. RECORDS ESTABS.[2] E9	8 061	18.9	186.3	16.5	27.3	115.4	409.9	363.3	773.2	15.0	143.8

Note: Data for administrative offices and auxiliary operations are excluded from this table.

(D) Withheld to avoid disclosing operations of individual companies. Data for this item are included in figures in parentheses above.

[1]Payroll and sales data for small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the balance of items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data based on administrative records data account for 10 percent or more of figures shown: E1--10 to 19 percent; E2--20 to 29 percent; E3--30 to 39 percent; E4--40 to 49 percent; E5--50 to 59 percent; E5--50 to 59 percent; E6--60 to 69 percent; E7--70 to 79 percent; E8--80 to 89 percent; E9--90 to 99 percent; E0--100 percent.

[2]Data are also included in respective size classes shown.

Table 5. **Selected Statistics for Administrative Offices and Auxiliaries by Major Industry Group of Establishments Serviced: 1977**

1977 code	Major industry group and central administrative offices and auxiliaries	Establishments[1] (number)	Employees (1,000)	Total payroll[2] (million dollars)
	Manufacturing, total[1]	9,171	1,074.2	21,981.2
	Central administrative offices	7,309	694.4	14,776.4
	Research, development, and testing	1,838	202.3	4,380.9
	Warehousing	1,647	36.6	438.7
	Electronic data processing	1,739	51.2	908.8
	Other activities	3,029	89.6	1,476.4
20	Food and kindred products	1,341	102.1	1,929.1
	Central administrative offices	1,061	76.8	1,532.2
	Research, development, and testing	215	8.0	134.2
	Warehousing	270	3.9	48.6
	Electronic data processing	261	5.7	115.3
	Other activities	422	7.7	98.8
21	Tobacco manufactures	48	8.0	146.9
	Central administrative offices	36	5.5	107.4
	Research, development, and testing	9	.4	5.4
	Warehousing	14	.3	1.8
	Electronic data processing	11	.5	6.0
	Other activities	9	1.3	26.3
22	Textile mill products	375	33.2	553.0
	Central administrative offices	309	22.2	389.2
	Research, development, and testing	68	2.5	39.6
	Warehousing	82	2.3	24.5
	Electronic data processing	75	1.8	25.6
	Other activities	121	4.4	74.1
23	Apparel and other textile products	424	27.5	403.6
	Central administrative offices	353	18.6	296.9
	Research, development, and testing	38	.8	13.1
	Warehousing	113	4.3	39.3
	Electronic data processing	76	1.4	14.8
	Other activities	119	2.4	39.5
24	Lumber and wood products	320	14.5	270.2
	Central administrative offices	265	10.6	204.6
	Research, development, and testing	34	1.0	20.0
	Warehousing	56	.3	3.3
	Electronic data processing	57	.8	12.7
	Other activities	115	1.7	29.6
25	Furniture and fixtures	124	9.0	140.1
	Central administrative offices	110	6.8	107.1
	Research, development, and testing	16	.4	7.1
	Warehousing	31	.7	7.1
	Electronic data processing	31	.5	5.9
	Other activities	32	.5	12.9
26	Paper and allied products	251	37.6	902.4
	Central administrative offices	219	31.7	802.0
	Research, development, and testing	65	3.0	57.9
	Warehousing	15	.1	1.3
	Electronic data processing	61	1.6	20.6
	Other activities	59	1.2	20.6
27	Printing and publishing	644	38.9	621.4
	Central administrative offices	490	23.5	405.9
	Research, development, and testing	26	1.0	18.2
	Warehousing	66	4.1	38.5
	Electronic data processing	57	1.8	23.5
	Other activities	343	8.5	135.3
28	Chemicals and allied products	1,170	181.4	3,798.9
	Central administrative offices	857	114.1	2,470.3
	Research, development, and testing	360	46.3	953.3
	Warehousing	242	2.5	30.6
	Electronic data processing	212	7.1	120.6
	Other activities	279	11.4	224.1
29	Petroleum and coal products	287	65.3	1,562.0
	Central administrative offices	233	47.0	1,150.3
	Research, development, and testing	57	12.1	301.9
	Warehousing	30	.3	4.5
	Electronic data processing	47	4.1	68.7
	Other activities	82	1.8	36.6
30	Rubber and miscellaneous plastics products	215	25.2	458.3
	Central administrative offices	180	19.1	343.2
	Research, development, and testing	52	2.8	72.2
	Warehousing	54	.9	10.5
	Electronic data processing	44	1.0	12.2
	Other activities	69	1.4	20.2
31	Leather and leather products	103	10.8	132.3
	Central administrative offices	87	6.9	89.5
	Research, development, and testing	7	(Z)	.5
	Warehousing	40	3.1	28.9
	Electronic data processing	26	.4	5.4
	Other activities	57	.4	8.0
32	Stone, clay, and glass products	600	41.1	797.2
	Central administrative offices	511	29.9	581.0
	Research, development, and testing	107	5.0	89.0
	Warehousing	75	.4	4.7
	Electronic data processing	132	2.0	24.3
	Other activities	333	3.8	98.2
33	Primary metal industries	484	46.8	1,031.0
	Central administrative offices	346	35.1	806.9
	Research, development, and testing	95	7.3	140.0
	Warehousing	60	.5	5.0
	Electronic data processing	82	2.0	50.4
	Other activities	172	1.9	28.7
34	Fabricated metal products	549	50.1	986.5
	Central administrative offices	477	36.7	744.3
	Research, development, and testing	110	6.7	120.6
	Warehousing	73	.9	10.9
	Electronic data processing	113	2.3	42.4
	Other activities	168	3.6	68.3
35	Machinery, except electrical	754	93.1	1,884.8
	Central administrative offices	592	61.4	1,330.0
	Research, development, and testing	178	15.2	248.5
	Warehousing	146	3.7	57.4
	Electronic data processing	140	4.9	93.3
	Other activities	300	7.9	155.6
36	Electric and electronic equipment	694	140.0	2,840.9
	Central administrative offices	553	69.8	1,535.1
	Research, development, and testing	185	37.1	775.8
	Warehousing	153	4.9	68.5
	Electronic data processing	153	8.0	158.2
	Other activities	168	20.2	303.3
37	Transportation equipment	403	105.5	2,640.9
	Central administrative offices	307	50.5	1,312.5
	Research, development, and testing	108	42.8	1,159.1
	Warehousing	51	2.2	38.1
	Electronic data processing	80	3.0	65.7
	Other activities	88	7.0	65.5
38	Instruments and related products	228	32.8	691.6
	Central administrative offices	195	19.7	420.7
	Research, development, and testing	78	9.2	208.0
	Warehousing	38	.6	7.8
	Electronic data processing	44	1.7	33.7
	Other activities	43	1.5	21.4
39	Miscellaneous manufacturing industries	157	11.2	190.1
	Central administrative offices	128	8.4	147.3
	Research, development, and testing	30	.7	16.5
	Warehousing	38	.6	7.4
	Electronic data processing	37	.7	9.5
	Other activities	50	.8	9.4

(Z) Less than 50 employees.

[1]Detailed establishment data exceed totals since some establishments participate in more than one activity.

[2]Total payroll data for each industry group are actual. Detail data are estimates based on reported employment and average annual salaries determined from data collected in the 1977 Enterprise Statistics series.

General Summary—Product Class Statistics

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Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2011-	MEAT PACKING PLANT PRODUCTS	23,359.4	26,217.6	25,080.7	22,866.1	21,461.8	18,284.4	11,830.2	9,259.8
20111	BEEF, NOT CANNED OR MADE INTO SAUSAGE	14,095.8	16,946.8	16,590.8	15,045.1	13,629.7	21,703.2	7,398.5	5,707.8
20112	VEAL, NOT CANNED OR MADE INTO SAUSAGE	319.3	326.1	279.5	237.4	238.1	241.5	307.7	310.8
20113	LAMB AND MUTTON, NOT CANNED OR MADE INTO SAUSAGE	329.5	450.7	388.1	364.1	346.8	330.4	312.7	300.1
20114	PORK, FRESH AND FROZEN	5,647.5	6,045.8	5,928.0	5,367.8	5,319.6	4,221.0	2,791.0	2,202.5
20115	LARD	214.1	229.6	326.0	349.5	231.7	171.0	182.2	223.6
20119	HIDES, SKINS, AND PELTS	807.7	712.7	477.9	555.8	728.0	580.4	276.3	223.4
20110	MISCELLANEOUS BYPRODUCTS OF MEATPACKING PLANTS	1,945.5	1,506.0	1,090.4	946.4	967.9	950.0	(NA)	(NA)
2013-	SAUSAGES AND OTHER PREPARED MEATS	11,663.0	10,513.7	10,175.2	8,859.2	8,471.6	7,278.5	5,418.2	4,285.8
20116	PORK, PROC., CURED, NOT CANNED OR MADE INTO SAUS.	3,778.6	3,775.2	3,623.8	3,057.4	2,922.7	2,413.5	(NA)	(NA)
20136	PORK, PROCESSED, FROZEN OR CURED, NOT CANNED								
20117	SAUSAGE AND SIMILAR PRODUCTS, NOT CANNED	4,680.0	4,980.6	4,771.1	3,947.4	3,894.2	3,264.3	(NA)	(NA)
20137	SAUSAGE AND SIMILAR PRODUCTS, NOT CANNED								
20118	CANNED MEATS, CONTAINING 20 PERCENT OR MORE MEAT	1,256.3	1,292.1	1,263.0	1,381.2	1,177.2	1,106.2	(NA)	(NA)
20138	CANNED MEATS, CONTAINING 20 PERCENT OR MORE MEAT								
20139	NATURAL SAUSAGE CASINGS	33.2	(113.2)	(104.0)	90.9	99.8	114.8	83.4	(NA)
20130	MEAT PROCESSING PLANT PRODUCTS, N.S.K.	1,914.9	(424.6)	413.3	382.3	377.7	379.2	183.8	(NA)
2016-	DRESSED POULTRY AND SMALL GAME	5,291.9	[2]5,026.9	[2]4,777.4	[2]4,264.7	[2]4,321.6	[2]3,071.5	(NA)	(NA)
20161	YOUNG CHICKENS	3,961.1	3,788.0	3,590.0	3,163.9	3,186.0	2,198.0	(NA)	(NA)
20171	YOUNG CHICKENS, FROZEN								
20162	HENS AND/OR FOWL	229.5	163.1	180.7	155.3	164.0	147.8	(NA)	(NA)
20172	HENS AND/OR FOWL, FROZEN								
20163	TURKEYS	927.3	898.3	834.1	823.2	813.6	538.9	(NA)	(NA)
20173	TURKEYS, FROZEN								
20164	OTHER POULTRY AND SMALL GAME	57.9	(84.2)	(93.4)	32.0	35.6	23.7	(NA)	(NA)
20174	OTHER POULTRY AND SMALL GAME, FROZEN								
20160	POULTRY DRESSING PLANT PRODUCTS, N.S.K.	116.1	(93.3)	(79.2)	90.3	122.4	163.1	134.3	64.7
2017-	PROCESSED POULTRY AND EGGS	1,066.5	[3]980.9	[3]815.0	[3]763.8	[3]709.0	[3]525.5	(NA)	(NA)
20165	PROCESSED POULTRY AND SMALL GAME	657.7	662.7	536.7	485.7	491.5	358.1	(NA)	(NA)
20175	PROCESSED POULTRY AND SMALL GAME								
20179	LIQUID, DRIED, AND FROZEN EGGS	312.7	310.6	275.8	276.6	204.1	156.7	159.6	139.7
20170	POULTRY AND EGG PROCESSING PRODUCTS, N.S.K.	96.1	(S)	(S)	1.5	(13.4)	10.7	(NA)	(NA)
20210	CREAMERY BUTTER (INCLUDING ANHYDROUS BUTTERFAT)	1,109.7	853.9	789.5	656.3	755.6	791.1	836.5	820.4
2022-	CHEESE, NATURAL AND PROCESSED	5,528.1	5,233.3	4,391.8	4,048.7	3,238.8	2,753.7	1,533.8	1,070.0
20221	NATURAL CHEESE, EXCEPT COTTAGE CHEESE	2,727.2	3,269.9	2,668.7	2,458.7	1,705.9	1,400.0	829.2	681.5
20222	PROCESSED CHEESE AND RELATED PRODUCTS	2,518.5	1,859.7	1,654.4	1,496.6	1,363.5	1,134.1	562.6	388.5
20220	CHEESE, NATURAL AND PROCESSED, N.S.K.	282.3	(103.7)	(68.7)	(93.4)	169.4	219.6	142.1	-
2023-	CONDENSED AND EVAPORATED MILK	3,086.1	2,569.2	2,503.7	2,315.1	1,916.0	1,706.2	1,422.7	1,104.5
20231	DRY MILK PRODUCTS	1,735.4	1,456.7	1,432.0	1,338.8	980.7	880.4	632.0	504.4
20232	CANNED MILK PRODUCTS, CONSUMER TYPE CANS	672.4	584.1	560.5	526.3	492.8	427.6	475.5	363.0
20233	CONDENSED AND EVAPORATED MILK PRODUCTS, BULK	264.2	170.4	148.8	134.2	140.8	132.0	79.3	75.3
20234	ICE CREAM MIX AND ICE MILK MIX	293.2	344.8	353.0	304.3	261.6	227.7	201.1	157.8
20230	CONDENSED AND EVAPORATED MILK, N.S.K.	121.0	(S)	(S)	11.5	40.1	38.5	34.8	3.9
20240	ICE CREAM AND FROZEN DESSERT	2,229.4	2,063.3	2,012.9	1,787.9	1,639.5	1,519.4	1,273.6	1,210.0
2026-	FLUID MILK	11,602.8	11,151.2	10,328.9	9,578.5	8,503.5	7,662.7	6,603.4	6,016.6
20261	BULK FLUID MILK AND CREAM (INCLUDING BUTTERMILK)	2,123.8	2,675.0	2,251.1	1,949.2	1,373.7	1,258.9	923.5	950.5
20262	PACKAGED FLUID MILK AND RELATED PRODUCTS	7,345.5	7,170.3	6,793.4	6,378.1	5,754.1	5,078.9	4,454.9	4,285.1
20263	COTTAGE CHEESE	545.6	530.7	508.7	456.0	405.6	340.9	218.0	189.1
20264	BUTTERMILK AND FLAVORED MILK PRODUCTS	851.7	643.0	572.3	512.0	449.8	423.1	286.0	252.7
20260	FLUID MILK, N.S.K.	736.3	(132.2)	(203.4)	(283.2)	520.3	560.9	721.0	339.2
2032-	CANNED SPECIALTIES	2,429.0	2,294.2	2,131.7	2,015.3	1,837.1	1,629.9	944.4	872.8
20321	CANNED BABY FOODS, EXCEPT CEREAL AND BISCUIT[4]	401.3	379.6	339.1	344.3	302.3	346.7	(NA)	(NA)
20323	CANNED DRY BEANS	556.5	544.3	518.5	470.8	379.2	305.8	246.1	200.3
20322	CANNED SOUPS, EXCEPT FROZEN OR SEAFOOD								
20324	CANNED SPECIALTIES AND NATIONALITY FOODS	1,471.2	1,370.3	1,274.0	1,200.2	1,155.6	977.4	698.3	672.5
20320	CANNED SPECIALTIES, N.S.K.								
2033-	CANNED FRUITS AND VEGETABLES	6,621.4	5,983.2	5,931.3	5,362.9	4,480.5	3,922.9	3,222.3	2,583.6
20331	CANNED FRUITS, EXCEPT BABY FOODS	1,289.3	1,207.5	1,286.4	1,327.4	1,075.4	828.6	818.3	721.7
20332	CANNED VEGETABLES, EXCEPT HOMINY AND MUSHROOMS	1,650.9	1,574.1	1,556.9	1,456.4	1,257.4	1,067.1	957.5	767.6
20333	CANNED HOMINY AND MUSHROOMS	149.8	149.2	(109.0)	97.1	100.5	98.2	51.6	39.0
20334	CANNED FRUIT JUICES, NECTARS, AND CONCENTRATES	1,223.4	1,057.1	963.6	849.1	781.7	709.2	413.5	380.5
20335	CANNED VEGETABLE JUICES (INCLUDING MIXTURES)	251.8	263.8	241.0	197.0	164.4	155.7	104.2	91.1
20336	CATSUP AND OTHER TOMATO SAUCES, PASTES, ETC.	1,350.0	1,266.0	1,267.4	992.8	664.2	603.3	507.7	297.9
20338	JAMS, JELLIES, AND PRESERVES	396.9	424.8	474.4	407.9	290.3	280.3	245.2	227.3
20330	CANNED FRUITS AND VEGETABLES, N.S.K.	309.2	(40.7)	(32.6)	(35.2)	146.6	180.5	124.3	58.5
2034-	DEHYDRATED FRUITS, VEGETABLES, AND SOUPS[5]	1,200.2	1,155.7	1,011.0	1,041.7	808.8	625.6	450.9	334.9
20341	DRIED AND DEHYDRATED FRUITS AND VEGETABLES[5]	898.6	897.6	804.5	807.1	605.1	466.2	344.9	284.5
20342	SOUP MIXES, DRIED (DEHYDRATED OR FREEZE DRIED)[5]	224.7	(255.3)	206.5	218.7	170.5	126.7	76.4	44.5
20340	DEHYDRATED FRUITS, VEGETABLES, AND SOUPS, N.S.K.[5]	76.9	(2.8)	-	15.9	33.2	32.7	29.6	5.9
2035-	PICKLES, SAUCES, AND SALAD DRESSINGS	2,242.8	1,888.1	1,904.7	1,688.2	1,341.6	1,165.1	792.9	619.0
20352	PICKLES AND OTHER PICKLED PRODUCTS	553.2	473.9	454.1	392.2	412.1	362.5	260.6	228.1
20353	MEAT SAUCES, EXCEPT TOMATO	261.6	271.3	255.6	206.3	187.2	151.3	98.5	94.4
20354	MAYONNAISE, SALAD DRESSINGS, AND SANDWICH SPREAD	1,292.3	1,099.6	1,142.4	1,001.2	662.8	576.0	373.9	278.6
20350	PICKLES, SAUCES, AND SALAD DRESSING, N.S.K.	135.7	(43.3)	(52.6)	(88.5)	(79.5)	75.3	59.9	(18.0)
2037-	FROZEN FRUITS AND VEGETABLES	3,047.2	2,708.2	2,479.0	2,220.2	1,824.1	1,648.7	[6]999.4	[6]832.3
20371	FROZEN FRUITS, JUICES, AND ADES	1,153.5	1,133.7	968.1	814.3	766.7	733.6	419.5	436.3
20372	FROZEN VEGETABLES	1,797.9	1,562.7	1,498.1	1,405.9	1,057.4	915.1	579.9	396.0
20370	FROZEN FRUITS AND VEGETABLES, N.S.K.	95.8	(NA)	(NA)	(NA)	(NA)	(NA)	([6])	([6])
2038-	FROZEN SPECIALTIES	2,911.9	2,799.8	2,562.5	2,372.6	2,106.8	1,742.6	[6]1,021.3	[6]628.6
20381	FROZEN PIES AND OTHER FROZEN BAKED GOODS	770.3	803.4	740.1	574.5	467.4	387.5		
20382	FROZEN DINNERS, POT PIES, AND NATIONALITY FOOD	1,297.7	849.6	861.0	907.1	844.2	702.0	889.4	608.1
20383	OTHER FROZEN SPECIALTIES	718.2	1,021.7	831.3	734.1	645.7	492.5		
20380	FROZEN SPECIALTIES, N.S.K.	125.7	(125.1)	(130.1)	(156.9)	149.5	160.6	[6]131.9	[6]20.5
2041-	FLOUR AND OTHER GRAIN MILL PRODUCTS	3,678.6	4,002.3	4,133.9	4,348.8	3,366.6	2,374.1	2,322.5	2,091.5
20411	WHEAT FLOUR, EXCEPT FLOUR MIXES	2,208.9	2,563.9	2,681.7	2,938.7	2,273.5	1,626.7	1,557.7	1,511.7
20412	WHEAT MILL PRODUCTS OTHER THAN FLOUR	455.4	474.3	452.6	464.0	342.2	222.6	204.3	199.5
20413	CORN MILL PRODUCTS	413.3	492.3	551.7	499.9	385.0	242.0	261.8	193.0
20415	FLOUR MIXES AND REFRIGERATED DOUGH	287.2	242.7	245.2	240.4	156.3	143.5	148.6	115.0
20416	OTHER GRAIN MILL PRODUCTS, N.E.C.	98.3	207.9	186.7	155.3	(138.9)	45.5	43.4	46.0
20410	FLOUR AND OTHER GRAIN MILL PRODUCTS, N.S.K.	215.5	(21.2)	(S)	(50.5)	70.7	93.8	106.7	26.3
20430	CEREAL BREAKFAST FOODS	1,832.9	1,744.6	1,702.8	1,364.2	1,073.3	934.6	715.7	561.4
20440	MILLED RICE AND BYPRODUCTS	1,242.3	1,103.9	1,418.0	1,408.3	884.9	671.3	548.0	407.1
20455	PREPARED FLOUR MIXES AND REFRIGERATED DOUGHS	1,204.3	1,256.5	1,152.2	942.8	696.2	652.6	496.3	390.1
20460	WET CORN MILLING PRODUCTS	1,946.1	1,861.2	1,988.6	1,772.3	1,083.2	786.6	646.6	547.3

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2047-	DOG, CAT, AND OTHER PET FOOD	3,071.0	2,846.7	2,514.4	2,315.5	1,890.7	1,451.1	806.7	(NA)
20471	DOG AND CAT FOOD	2,717.1	2,585.9	2,255.4	2,081.5	1,727.1	1,303.7	699.9	(NA)
20472	OTHER PET AND SPECIALTY FEEDS	268.1	260.8	259.0	234.0	163.6	147.4	106.8	(NA)
20470	DOG, CAT, AND OTHER PET FOOD, N.S.K.	85.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
2048-	PREPARED FEEDS, N.E.C.	8,350.2	7,550.4	6,842.1	7,164.4	6,334.0	4,658.2	3,724.2	(NA)
20481	POULTRY FEEDS, EXCEPT DUCK AND GEESE	2,758.6	1,039.0	979.5	1,081.4	1,013.0	711.5	723.0	(NA)
20482	DAIRY CATTLE FEEDS, COMPLETE	1,145.6	1,490.7	1,364.4	1,337.5	1,131.9	569.1	504.4	(NA)
20483	DAIRY CATTLE FEED SUPPLEMENTS AND CONCENTRATES	308.5					159.9		
20484	SWINE FEEDS, COMPLETE	575.8	1,485.6	1,267.7	1,299.4	1,081.5	756.3	565.3	(NA)
20485	SWINE FEED SUPPLEMENTS AND CONCENTRATE	892.3					754.2		
20486	BEEF CATTLE FEEDS, COMPLETE	367.1	1,119.7	970.8	1,055.9	928.2	546.0	347.8	(NA)
20487	BEEF CATTLE FEED SUPPLEMENTS AND CONCENTRATES	603.8					92.3		
20488	OTHER POULTRY AND LIVESTOCK FEEDS	337.9	492.9	447.2	500.7	371.0	237.3	127.7	(NA)
20489	OTHER PREPARED ANIMAL FEEDS	338.0	(318.2)	(272.2)	(263.6)	294.2	167.7	168.5	(NA)
20480	PREPARED FEEDS, N.E.C., N.S.K.	1,022.6	(70.0)	(95.2)	(139.5)	(326.8)	756.2	609.8	(NA)
2051-	BREAD, CAKE, AND RELATED PRODUCTS	7,965.9	8,083.5	7,726.8	6,902.6	5,642.3	5,180.8	4,320.6	3,829.8
20511	BREAD, WHITE, WHEAT, AND RYE (INCLUDING FROZEN)[7]	3,500.7	4,009.6	3,897.7	3,328.1	2,648.9	2,454.8	2,793.5	2,496.6
20512	ROLLS, BREAD TYPE (INCLUDING FROZEN)[8]	1,679.6	1,598.4	1,480.3	1,255.7	1,032.0	917.5		
20513	SWEET YEAST GOODS, EXCEPT FROZEN	640.4	775.3	696.7	609.6	484.4	430.3	393.0	330.5
20514	SOFT CAKES, EXCEPT FROZEN	949.9	811.6	729.6	698.5	578.4	552.0	478.6	438.0
20515	PIES, FRUIT AND CUSTARD, EXCEPT FROZEN	297.1	347.6	319.0	326.0	254.8	224.2	226.7	205.9
20516	PASTRIES, EXCEPT FROZEN	31.2	(20.1)	(20.5)	(14.3)	38.5	49.5	51.2	51.2
20517	DOUGHNUTS, CAKE TYPE, BAKING POWDER LEAVENED	241.1	259.6	282.8	244.9	201.2	179.3	164.0	141.4
20510	BREAD, CAKE, AND RELATED PRODUCTS, N.S.K.	625.8	(261.3)	(300.2)	(425.5)	404.1	373.2	166.0	213.6
2052-	COOKIES AND CRACKERS	2,812.4	2,656.8	2,585.9	2,268.4	1,889.4	1,713.3	1,349.5	1,137.6
20521	CRACKERS, PRETZELS, BISCUITS, & RELATED PRODUCTS	1,168.9	1,195.3	1,102.1	934.9	782.8	715.1	494.0	450.2
20522	COOKIES, WAFERS, AND ICE CREAM CONES AND CUPS	1,578.4	1,448.3	1,467.0	1,307.5	1,089.4	976.4	832.2	679.8
20520	COOKIES AND CRACKERS, N.S.K.	65.1	(13.2)	(16.8)	(26.0)	17.2	21.8	23.3	7.6
20610	CANE SUGAR MILL PRODUCTS AND BYPRODUCTS	707.6	711.5	1,048.8	1,321.0	559.0	419.5	363.5	373.5
20620	REFINED CANE SUGAR AND BYPRODUCTS	2,168.0	2,524.2	3,379.4	4,424.4	1,925.3	1,746.4	1,336.2	1,255.0
20630	REFINED BEET SUGAR AND BYPRODUCTS	1,160.4	1,442.6	1,704.2	1,667.5	921.4	866.4	550.8	553.7
2065-	CONFECTIONERY PRODUCTS	4,170.2	3,688.8	3,422.9	3,074.1	2,524.1	2,334.8	1,812.7	1,393.9
20652	CHOCOLATE AND CHOCOLATE-TYPE CONFEC. PRODUCTS	1,709.3	2,651.4	2,568.9	3,048.2	2,431.1	2,231.1	1,170.3	1,046.7
20653	NONCHOCOLATE CONFECTIONERY PRODUCTS	1,241.7							
20658	CONFECTIONERY PRODUCTS, N.E.C.	1,004.0	949.8	805.9				526.8	316.8
20650	CONFECTIONERY PRODUCTS, N.S.K.	215.2	(87.6)	(48.1)	(25.9)	93.0	103.7	115.6	30.4
2066-	CHOCOLATE AND COCOA PRODUCTS	1,603.3	1,258.8	1,132.5	1,074.8	813.7	724.0	546.4	480.6
20661	CHOCOLATE COATINGS	340.9	270.4	253.5	244.6	202.6	167.0	137.8	139.6
20662	CHOCOLATE AND CHOCOLATE-TYPE CONFEC. PRODUCTS	565.4	375.2	379.5	382.1	311.3	288.7	205.1	179.9
20668	OTHER CHOCOLATE AND COCOA PRODUCTS	680.6	608.4	493.4	442.7	295.4	262.5	192.8	161.2
20660	CHOCOLATE AND COCOA PRODUCTS, N.S.K.	16.4	4.8	(6.1)	(5.4)	4.4	5.8	10.7	(NA)
20670	CHEWING GUM AND CHEWING GUM BASE	649.3	577.7	535.7	438.7	404.8	384.8	271.9	206.8
2074-	COTTONSEED OIL MILL PRODUCTS	763.1	658.0	946.1	905.0	564.9	410.7	365.7	490.7
20741	COTTONSEED OIL, CRUDE	146.6	192.8	313.4	294.3	145.8	125.9	114.8	174.1
20742	COTTONSEED OIL, ONCE-REFINED	236.5	133.2	240.5	173.5	102.5	73.4	56.2	65.7
20743	COTTON LINTERS	43.4	34.3	52.7	77.3	39.4	29.2	38.3	37.7
20744	COTTONSEED CAKE, MEAL, AND OTHER BYPRODUCTS	323.9	276.9	322.3	343.7	270.1	175.0	148.0	208.1
20740	COTTONSEED OIL MILL PRODUCTS, N.S.K.	12.6	20.8	17.2	16.2	7.1	7.2	8.4	5.1
2075-	SOYBEAN OIL MILL PRODUCTS	6,116.5	5,630.0	5,062.8	6,024.6	4,641.8	2,652.1	1,740.8	1,293.6
20751	SOYBEAN OIL, CRUDE OR ONCE-REFINED	2,070.1	1,928.3	2,422.9	2,779.4	1,320.1	802.2	594.3	458.9
20752	SOYBEAN CAKE, MEAL, AND OTHER BYPRODUCTS	4,016.7	3,674.4	2,611.5	3,233.6	3,315.4	1,844.1	1,143.4	831.4
20750	SOYBEAN OIL MILL PRODUCTS, N.S.K.	29.7	27.3	28.4	11.6	6.3	5.8	3.1	3.4
2076-	VEGETABLE OIL MILL PRODUCTS, N.E.C.	401.0	540.4	518.1	641.7	445.2	263.4	205.9	196.8
20761	LINSEED OIL (RAW, BOILED, AND PROCESSED)	72.5	83.8	99.5	140.0	99.0	44.4	48.2	50.2
20762	VEGETABLE OILS, N.E.C.	210.8	372.9	321.8	430.8	274.4	157.4	113.4	105.2
20763	OTHER VEG. OIL CAKE, MEAL, AND OTHER BYPRODUCTS	86.9	77.1	(94.7)	68.7	66.6	59.2	41.8	39.5
20760	VEGETABLE OIL MILL PRODUCTS, N.E.C., N.S.K.	30.8	6.6	2.1	2.2	5.2	2.4	2.5	1.9
2077-	ANIMAL AND MARINE FATS AND OILS	2,102.2	1,738.6	1,512.4	1,835.7	1,588.0	977.1	709.4	642.9
20771	GREASE AND INEDIBLE TALLOW	989.4	936.1	815.0	1,022.0	775.4	419.4	302.6	264.2
20772	FEED AND FERTILIZER BYPRODUCTS	753.9	666.5	543.6	627.2	614.4	389.2	277.8	246.7
20773	ANIMAL AND MARINE OIL MILL PRODUCTS	250.4	(157.9)	173.8	173.5	161.3	121.8	96.3	111.3
20770	ANIMAL AND MARINE FATS AND OILS, N.S.K.	108.4	(9)	(9)	(13.0)	36.9	46.7	32.7	20.7
2079-	SHORTENING AND COOKING OILS	4,272.2	3,591.1	4,248.5	4,308.1	2,648.2	2,274.6	1,690.4	1,230.7
20791	SHORTENING AND COOKING OILS	3,166.3	2,729.5	3,174.3	3,225.4	1,909.2	1,685.9	1,233.6	907.4
20792	MARGARINE	1,070.4	841.4	1,062.0	1,063.2	735.7	586.3	456.5	323.2
20790	SHORTENING AND COOKING OILS, N.S.K.	35.6	(20.2)	(S)	(19.5)	3.3	2.4	.3	(NA)
2082-	MALT BEVERAGES	6,612.9	5,986.3	5,615.1	5,018.0	4,341.6	4,038.7	2,900.3	2,282.0
20821	CANNED BEER AND ALE CASE GOODS	3,548.9	3,340.5	3,090.6	2,804.4	2,382.6	2,206.3	(NA)	(NA)
20822	BOTTLED BEER AND ALE CASE GOODS	2,263.1	2,010.8	1,923.8	1,667.4	1,456.2	1,416.6	(NA)	(NA)
20823	BEER AND ALE IN BARRELS AND KEGS	398.1	410.3	392.6	353.8	298.3	264.1	(NA)	(NA)
20824	OTHER MALT BEVERAGES AND BREWING BYPRODUCTS	379.7	235.5	218.7	202.3	139.4	116.6	(NA)	(NA)
20820	MALT BEVERAGES, N.S.K.	23.1	(S)	(S)	(S)	65.1	35.1	(NA)	(NA)
20830	MALT AND MALT BYPRODUCTS	488.9	507.5	583.1	473.4	268.7	212.8	200.0	185.1
20840	WINES, BRANDY, AND BRANDY SPIRITS	1,357.7	1,206.3	1,193.2	1,237.6	980.3	851.0	414.9	352.6
2085-	DISTILLED LIQUOR, EXCEPT BRANDY[10]	1,955.0	1,831.8	1,785.1	1,665.0	1,575.7	1,557.2	1,246.1	959.9
20851	DISTILLED LIQUOR, EXCEPT BRANDY[10]	205.7	194.1	206.6	185.7	176.9	153.7	202.3	163.0
20853	BOTTLED LIQUOR, EXCEPT BRANDY[10]	1,703.3	1,638.6	1,579.4	1,461.1	1,390.8	1,396.3	1,043.8	796.6
20850	DISTILLED LIQUOR, EXCEPT BRANDY, N.S.K.[10]	46.0	(S)	(S)	18.2	8.0	7.2	-	.4
20860	BOTTLED AND CANNED SOFT DRINKS	8,503.6	7,562.4	7,452.3	5,901.4	4,961.2	4,807.2	2,996.8	2,136.1
2087-	FLAVORING EXTRACTS AND SIRUPS, N.E.C.	2,620.7	2,390.2	2,483.9	2,194.7	1,589.4	1,452.9	1,037.9	790.3
20871	FLAVORS EXTRACTS, EMULSIONS, OTHER LIQUID FLAVOR	226.4	234.5	205.5	182.4	147.1	119.0	95.0	99.3
20872	LIQUID BEVERAGE BASES, NOT FOR USE BY BOTTLERS	213.0	232.4	213.6	199.2	163.2	97.9	129.9	76.1
20873	LIQUID BEVERAGE BASES FOR USE BY BOTTLERS	919.6	809.7	894.3	815.3	642.1	637.1	353.0	298.7
20874	OTHER FLAVORING AGENTS, EXCEPT CHOCOLATE SIRUP	1,062.7	1,124.0	1,181.1	939.0	583.3	527.0	410.6	299.1
20870	FLAVORING EXTRACTS AND SIRUPS, N.E.C., N.S.K.	199.0	(S)	(S)	(58.8)	53.7	71.9	49.4	17.1
20910	CANNED AND CURED SEAFOOD, INC. SOUP, EX. FROZEN	1,025.5	945.7	741.5	758.4	704.0	587.8	421.1	384.4
2092-	FRESH OR FROZEN PACKAGED FISH[10 11]	2,459.2	1,568.0	1,275.3	1,171.3	1,170.4	1,016.8	529.7	362.8
20922	FRESH PACKAGED FISH AND OTHER SEAFOOD	460.5	(219.1)	(162.8)	(121.1)	143.3	135.2	66.6	76.6
20923	FROZEN PACKAGED FISH, EXCLUDING SHELLFISH	744.4	624.2	464.8	447.4	390.2	314.7		
20924	FROZEN PKGD. SHELLFISH & OTHER SEAFOOD, INC. SOUP	887.6	602.7	527.0	491.2	516.8	415.8	463.1	286.2
20920	FRESH OR FROZEN PACKAGED FISH, N.S.K.	366.8	(122.0)	(120.7)	(111.6)	120.1	151.1		

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2095-	ROASTED COFFEE	5,217.8	4,275.1	2,806.0	2,440.4	2,405.3	2,163.4	1,793.9	1,602.7
20951	ROASTED COFFEE, WHOLE BEAN OR GROUND	3,674.5	2,947.3	1,901.1	1,752.3	1,676.6	1,517.7	1,375.3	1,206.4
20952	CONCENTRATED COFFEE	1,387.8	1,318.3	906.8	672.5	679.1	598.8	365.6	396.3
20950	ROASTED COFFEE, N.S.K.	155.5	(S)	(9)	(15.6)	49.6	46.9	53.0	(NA)
20970	MANU. ICE (CAN, BLOCK, CUBE, CRUSHED, ETC.	140.6	138.9	115.4	112.1	110.1	105.7	85.8	94.8
20980	MACARONI, SPAGHETTI, AND NOODLES	751.7	638.1	586.4	565.4	450.7	355.2	248.3	215.9
2099-	FOOD PREPARATIONS, N.E.C.	6,616.7	6,194.7	5,530.7	4,943.0	4,269.5	3,762.1	2,501.0	1,962.0
20991	DESSERTS, READY-TO-MIX	412.9	545.1	464.5	379.3	239.1	267.2	218.2	191.6
20992	CHIPS (POTATO, CORN, ETC.)	1,797.4	1,741.8	1,558.2	1,433.6	1,232.7	1,042.1	648.0	466.0
20993	SWEETENING SIRUPS AND MOLASSES	296.8	303.0	326.3	255.4	174.0	167.3	138.8	136.5
20994	BAKING POWDER AND YEAST	170.2	122.1	115.2	107.2	91.5	82.6	79.0	80.8
20995	TEA IN CONSUMER PACKAGES (BAGS, POWDERED, ETC.	616.8	563.9	470.8	434.6	406.6	359.8	254.1	181.2
20996	VINEGAR & CIDER (DISTILLED OR FERMENTED VINEGAR)	122.8	(126.0)	(106.5)	94.3	95.4	80.6	56.7	53.9
20998	CHOCOLATE AND COCOA PRODUCTS, EX. CONFECTIONERY	207.5	92.3	76.6	66.7	59.4	55.9	52.2	51.1
20999	OTHER FOOD PREPARATIONS, N.E.C.	2,159.8	2,436.6	2,135.0	1,863.8	1,610.0	1,358.9	819.2	702.1
20990	FOOD PREPARATIONS, N.E.C., N.S.K.	832.5	(263.9)	(277.6)	(308.1)	360.8	347.7	234.8	98.9
21110	CIGARETTES	6,098.2	5,830.3	5,208.9	4,380.3	4,004.1	3,589.4	2,942.1	2,568.2
21210	CIGARS	256.2	285.2	316.6	333.8	350.3	357.5	362.1	353.2
21310	CHEWING AND SMOKING TOBACCO AND SNUFF	401.4	345.8	328.1	282.0	269.8	257.5	193.8	217.9
2141-	STEMMED AND REDRIED TOBACCO	1,769.1	1,842.7	1,691.7	1,713.1	1,416.4	1,335.8	1,111.9	1,129.8
21411	UNSTEMMED LEAF TOBACCO REDRIED BEFORE PACKING	170.7	202.6	176.3	145.7	129.1	122.2	115.9	165.4
21412	STEMMED TOBACCO	1,531.7	1,631.4	1,507.0	1,561.0	1,276.0	1,194.3	974.2	964.3
21410	STEMMED AND REDRIED TOBACCO, N.S.K.	66.7	8.8	8.4	6.4	11.3	19.3	21.8	(NA)
2211-	COTTON BROAD WOVEN FABRICS[12]	5,218.1	4,560.0	3,655.4	3,768.2	3,407.4	3,418.6	3,536.4	3,396.8
22111	COTTON DUCK AND ALLIED GRAY FABRICS	287.7	144.3	122.5	177.1	128.1	122.1	202.2	124.1
22112	COTTON SHEETING AND ALLIED GRAY FABRICS	571.1	597.8	460.3	533.8	546.5	531.6	655.7	619.4
22113	COTTON PRINT CLOTH YARN GRAY FABRICS	344.7	337.5	286.5	411.6	305.3	299.3	376.7	419.0
22114	COTTON COLORED YARN GRAY FABRICS	842.4	513.4	433.5	396.7	307.2	274.5	169.9	207.2
22115	FINE COTTON GRAY FABRICS	99.1	81.9	57.3	64.6	52.4	73.2	330.1	474.3
22116	OTHER BROAD WOVEN COTTON GRAY FABRICS & SPEC.	636.2	404.8	295.3	281.8	317.3	329.7	243.5	181.0
22117	MADE IN WEAVING MILLS	762.7	899.9	657.7	621.5	490.0	445.4	375.7	411.7
22617	NOT MADE IN WEAVING MILLS	264.2	267.7	236.3	261.6	311.0	263.4	309.6	312.4
22118	MADE IN WEAVING MILLS, COTTON	-	-	-	4.1	62.9	77.8	268.4	328.8
23928	NOT MADE IN WEAVING MILLS	479.2	471.0	416.5	403.1	356.0	318.5	170.1	
22119	MADE IN WEAVING MILLS	416.4	462.2	395.8	401.5	350.5	319.0	270.9	226.4
23929	NOT MADE IN WEAVING MILLS	276.6	232.0	172.0	115.7	92.0	84.0	30.1	
22110	OTHER FABRICATED COTTON TEXTILE PRODUCTS MADE IN WEAVING MILLS, INCLUDING FABRICS, N.S.K.	238.2	147.5	121.7	95.1	88.2	296.2	133.5	92.6
2221-	MANMADE FIBER AND SILK BROAD WOVEN FABRICS[12]	7285.0	6,292.9	4,826.2	5,533.1	4,790.0	4,114.5	2,501.9	1,664.4
	GRAY GOODS:								
22211	100-PERCENT FIL. RAYON &/OR ACETATE GRAY FABRICS	265.7	254.8	210.4	243.0	258.7	261.5	277.8	184.7
22212	100-PCT. FILA. GRAY FAB., EX. RAYON &/OR ACETATE	1,149.5	964.8	759.7	752.3	644.7	514.3	292.5	191.3
22213	100-PERCENT SPUN RAYON &/OR ACETATE GRAY FABRICS	184.3	161.6	151.0	181.1	197.5	183.0	226.8	94.4
22214	100-PERCENT SPUN POLYESTER/COTTON GRAY FABRICS	1,664.1	1,827.7	1,382.8	1,492.1	1,213.9	1,004.6	502.0	40.8
22215	OTHER 100-PERCENT SPUN NONCELLULOSIC GRAY FABRICS	404.0	384.6	323.4	387.4	330.0	267.7	165.4	168.6
22216	COMBINATIONS OF FILAMENT AND SPUN GRAY FABRICS	461.5	371.5	319.5	385.9	348.4	279.3	195.0	122.9
22217	BLANKETING AND OTHER SPECIALTY GRAY FABRICS	171.7	158.7	129.1	129.6	104.1	101.8	219.1	514.0
	FINISHED MANMADE FIBER AND SILK BROAD WOVEN FABRICS:								
22218	MADE IN WEAVING MILLS	1,127.0	923.9	652.3	682.0	643.8	581.0	413.1	270.4
22628	NOT MADE IN WEAVING MILLS	1,303.5	1,100.3	908.0	881.6	659.3	594.5	178.0	66.5
	FABRICATED MANMADE FIBER AND SILK TEXTILE PRODUCTS:								
	SHEETS AND PILLOWCASES:								
23929	NOT MADE IN WEAVING MILLS	(14)	(14)	(14)	(14)	(14)	(14)	(NA)	(NA)
22219	MADE IN WEAVING MILLS	[13]426.8	500.0	433.3	385.6	347.3	280.1	(NA)	(NA)
22210	OTHER FABRICATED MANMADE FIBER AND SILK TEXTILE PRODUCTS MADE IN WEAVING MILLS, INCLUDING FABRICS, N.S.K.	126.9	(13.4)	(1.7)	(12.5)	42.3	46.7	29.5	10.8
2231-	BROAD WOVEN WOOL FABRICS	581.3	515.2	374.9	424.6	476.3	440.7	896.6	880.0
22311	FINISHED WOOL YARN, TOPS, OR RAW STOCK	39.5	(41.1)	(29.1)	34.8	51.7	61.5	65.7	63.7
22312	BROAD WOVEN WOOL GRAY FABRICS	97.3	39.9	(20.6)	18.8	30.0	31.4	137.3	129.9
22313	BROAD WOVEN WOOL APPAREL FINISHED FABRICS	299.3	312.8	224.4	238.3	268.2	213.5	533.6	547.5
22314	BROAD WOVEN WOOL NONAPPAREL FIN. FABRICS & FELTS	83.2	96.9	77.1	90.3	83.5	80.1	68.9	66.1
22315	COMM. FIN. OR SPONGING OF BROAD WOVEN WOOL FAB.	26.8	(25.6)	(24.6)	(16.9)	23.2	26.7	44.8	45.3
22319	BROAD WOVEN WOOL AND CHIEFLY WOOL BLANKETS	9.2	13.3	13.9	14.7	12.7	13.0	17.5	16.9
22310	BROAD WOVEN WOOL FAB. AND FINISHED PRODS., N.S.K.	26.0	(1)	(1)	(10.8)	(7.0)	14.5	28.8	10.6
2241-	NARROW FABRICS	645.0	578.0	476.1	546.9	576.7	521.5	411.0	303.2
22411	NARROW WOVEN FABRICS	413.5	372.6	314.2	358.7	388.4	355.2	292.0	211.1
22414	NARROW BRAIDED FABRICS	133.4	123.5	98.2	109.9	114.9	103.8	71.9	59.8
22415	COVERED RUBBER THREADS	56.1	58.5	42.6	57.3	50.7	40.0	35.6	26.9
22410	NARROW FABRICS, N.S.K.	42.0	(23.4)	(21.1)	(21.0)	22.7	22.5	11.5	5.4
2251-	WOMEN'S HOSIERY, EXCEPT SOCKS	819.1	704.7	723.3	713.6	810.7	899.0	772.7	588.0
22511	WOMEN'S FINISHED FULL-FASHIONED HOSIERY	(D)	(11.4)	(10.1)	(9.0)	9.5	8.1	27.9	56.4
22513	WOMEN'S FINISHED SEAMLESS HOSIERY	722.4	642.0	650.4	629.7	677.4	759.5	554.2	400.5
22514	WOMEN'S GRAY FULL-FASHIONED HOSIERY	(NA)	5.4	5.9	5.9	7.1	9.6	7.9	20.9
22515	WOMEN'S GRAY SEAMLESS HOSIERY	58.4	(49.3)	59.6	67.5	98.4	101.1	145.5	103.4
22510	WOMEN'S HOSIERY, EXCEPT SOCKS, N.S.K.	37.3	(9)	(9)	(1.5)	18.3	20.7	37.2	6.8
2252-	HOSIERY, N.E.C.	893.6	706.2	640.0	614.9	629.3	588.0	454.5	397.1
22522	MEN'S FINISHED SEAMLESS HOSIERY	464.6	414.7	351.9	328.1	302.7	285.9	238.3	202.1
22523	OTHER FINISHED SEAMLESS HOSIERY	274.3	212.4	202.6	199.0	205.3	188.7	131.7	144.4
22524	SEAMLESS GRAY HOS., EX. WOMEN'S FULL & KNEE LENGT	93.5	(74.4)	(66.5)	64.4	82.5	78.6	61.0	43.2
22520	HOSIERY, N.E.C., N.S.K.	61.2	(NA)	(19.0)	(23.4)	38.8	34.8	23.5	7.4
2253-	KNIT OUTERWEAR	[15]2,136.6	1,893.5	1,828.5	1,924.1	1,808.9	[15]1,571.1	[15]1,170.0	[15]944.9
22531	SWEATERS, KNIT JACKETS, AND JERSEY	[15]555.5	742.0	594.7	585.2	576.6	[15]473.8	[15]506.0	[15]483.2
22532	KNIT OUTERWEAR SPORT SHIRTS	[15]518.1	536.6	460.2	446.1	386.9	[15]342.8	[15]210.9	[15]159.9
22533	OTHER KNIT OUTERWEAR PRODUCTS	689.7	469.4	639.9	665.6	496.8	445.0	225.0	142.8
22539	COMMISSION KNITTING &/OR DYEING OF KNIT OUTERWEAR	154.2	(115.4)	(105.1)	176.8	240.7	205.8	131.1	104.9
22530	KNIT OUTERWEAR, N.S.K.	219.1	(30.1)	(28.6)	(50.4)	107.9	103.7	97.0	54.1

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2254-	KNIT UNDERWEAR AND NIGHTWEAR	579,5	609.1	551.2	546.7	486.1	481.5	396.7	336.4
22541	MEN'S AND BOYS' KNIT UNDERWEAR AND NIGHTWEAR	431.0	450.8	401.8	414.4	349.5	360.3	271.0	221.5
22542	WOMEN'S AND CHILDREN'S KNIT UNDERWEAR	95.4	82.5	77.5	67.5	75.9	73.0	76.5	70.8
22543	WOMEN'S AND CHILDREN'S KNIT NIGHTWEAR	50.0	69.3	63.3	61.0	56.1	45.9	45.5	43.1
22540	KNIT UNDERWEAR AND NIGHTWEAR, N.S.K.	3.1	(6.5)	8.6	3.8	4.6	2.3	3.7	1.1
2257-	CIRCULAR KNIT FABRICS	3,111.2	2,953.1	2,859.6	3,020.4	3,045.5	2,770.2	794.3	464.5
22571	CIRCULAR KNIT GRAY FABRICS, EXCEPT HOSIERY	343.5	367.7	382.7	383.0	248.6	163.2		
22572	CIRCULAR KNIT UNDERWEAR & NIGHTWEAR FIN. FABRICS	139.5	130.5	109.1	97.8	96.0	88.4		
22574	CIRCULAR KNIT HIGH PILE FINISHED FABRICS	202.3	205.6	191.5	159.4	175.5	185.0	694.7	417.8
22575	SINGLE CIRCULAR KNIT OUTERWEAR FINISHED FABRICS	564.6	1,532.3	1,494.7	1,612.5	1,766.6	367.5		
22577	DOUBLE CIRCULAR KNIT OUTERWEAR FINISHED FABRICS	1,050.8					1,289.7		
22578	OTHER CIRCULAR KNIT FINISHED FABRICS	364.5	(NA)	(NA)	(NA)	(NA)	156.1		
22579	COMM. KNITTING &/OR DYEING OF CIR. KNIT FABRICS	286.1	361.0	362.0	340.9	433.3	394.0	99.6	46.7
22570	CIRCULAR KNIT FABRICS, N.S.K.	159.9	(39.6)	(63.4)	(140.1)	100.9	126.3		
2258-	WARP KNIT FABRICS	1,568.4	1,332.3	1,255.7	1,175.0	1,049.8	928.6	614.9	354.3
22581	WARP KNIT GRAY FABRICS, EXCEPT HOSIERY	363.3	269.9	217.4	210.8	196.0	151.9		
22582	WARP KNIT UNDERWEAR & NIGHTWEAR FINISHED FABRICS	405.2	322.1	312.9	329.0	312.8	276.0	537.8	318.7
22583	WARP KNIT OUTERWEAR FINISHED FABRICS	328.2	293.2	301.3	290.1	285.9	212.5		
22584	OTHER WARP KNIT FINISHED FABRICS	302.9	310.0	290.1	223.8	160.3	186.8		
22589	COMM. KNITTING &/OR DYEING OF WARP KNIT FABRICS	138.7	131.1	115.3	101.6	90.1	95.5	77.1	35.6
22580	WARP KNIT FABRICS, N.S.K.	30.1	(S)	(18.7)	(19.7)	4.7	5.9		
22590	KNITTING MILL PRODUCTS, N.E.C.	112.9	(144.9)	(157.4)	(139.5)	92.4	87.1	35.7	39.9
2261-	FINISHED COTTON BROAD WOVEN FABRICS, INCLUDING								
22117	COMMISSION FINISHING	1,513.7	1,631.5	1,296.9	1,260.7	1,225.4	1,151.3	1,087.0	1,113.2
22117	MADE IN WEAVING MILLS	762.0	899.9	657.7	621.5	490.0	445.4	375.7	1,113.2
2261-	NOT MADE IN WEAVING MILLS	751.7	731.6	639.2	639.2	735.4	705.9	711.3	
22117	FINISHED COTTON BROAD WOVEN FABRICS, EXCLUDING								
22617	COMMISSION FINISHING	1,026.2	1,167.6	894.0	883.1	801.0	708.8	685.3	724.1
22117	MADE IN WEAVING MILLS	762.0	899.9	657.7	621.5	490.0	445.4	375.7	724.1
22617	NOT MADE IN WEAVING MILLS	264.2	267.7	236.3	261.6	311.0	263.4	309.6	
22619	COMMISSION FINISHING OF COTTON BROAD WOVEN FABRICS	477.9	453.0	399.3	375.5	415.1	422.6	397.0	371.8
22610	FINISHED COTTON BROAD WOVEN FABRICS, N.S.K.	9.6	(S)	(3.6)	(2.1)	(9.3)	19.9	4.7	17.3
2262-	FINISHED MANMADE FIBER AND SILK BROAD WOVEN								
22218	FABRICS, INCLUDING COMMISSION FINISHING	3,264.7	2,803.4	2,241.7	2,241.6	1,971.7	1,790.7	1,022.7	617.1
22218	MADE IN WEAVING MILLS	1,127.0	923.9	652.3	682.0	643.8	555.6	413.1	617.1
2262-	NOT MADE IN WEAVING MILLS	2,137.7	1,879.5	1,589.4	1,559.6	1,327.9	1,235.1	609.6	
22218	FINISHED MANMADE FIBER AND SILK BROAD WOVEN								
22628	FABRICS, EXCLUDING COMMSISSION FINISHING	2,430.5	2,024.2	1,560.3	1,563.6	1,303.1	1,150.1	591.1	336.9
22218	MADE IN WEAVING MILLS	1,127.0	923.9	652.3	682.0	643.8	555.6	413.1	336.9
22628	NOT MADE IN WEAVING MILLS	1,303.5	1,100.3	908.0	881.6	659.3	594.5	178.0	
22629	COMMISSION FINISHED MANMADE FIBER AND SILK BROAD WOVEN FABRICS	830.5	759.3	668.4	662.0	664.5	632.4	417.2	276.9
22620	FINISHED MANMADE FIBER AND SILK BROAD WOVEN FABRICS N.S.K.	3.7	(19.9)	(13.0)	(16.0)	4.1	8.2	14.4	3.3
22690	FINISHING PLANTS, N.E.C.	r 16764.9	722.0	561.1	587.7	559.7	[17]522.8	[18]211.7	[19]160.6
22710	WOVEN CARPETS AND RUGS	167.9	182.7	163.8	202.1	203.0	202.5	223.4	250.8
22720	TUFTED CARPETS AND RUGS	4,172.2	3,269.1	2,801.2	2,951.0	3,080.7	2,634.1	1,332.4	779.1
22790	CARPETS, RUGS, AND MATS, N.E.C.	93.0	94.0	93.1	103.9	111.3	105.8	95.5	51.8
2281-	YARN, EXCEPT WOOL	4,156.4	3,625.3	2,637.3	3,063.8	2,782.6	2,336.5	1,574.6	1,183.7
22811	CARDED COTTON YARNS	905.6	749.4	526.4	657.5	569.9	523.7	404.6	377.1
22812	COMBED COTTON YARNS	520.6	422.3	291.4	387.9	305.1	297.9	304.1	310.5
22813	RAYON AND/OR ACETATE SPUN YARNS	199.4	212.7	167.0	236.1	255.1	225.3	190.9	153.4
22814	SPUN NONCELLULOSIC FIBER AND SILK YARNS	2,485.9	2,215.3	1,628.9	1,732.4	1,623.5	1,240.9	642.5	326.5
22810	YARN, EXCEPT WOOL, N.S.K.	44.9	(25.6)	(23.6)	(49.9)	29.0	48.7	32.5	16.2
2282-	TEXTURED, THROWN, AND REWOUND YARNS	1,558.3	2,074.8	2,123.1	2,245.7	2,156.1	1,748.8	583.2	331.4
22822	REWOUND, PLIED, ETC., YARNS, EXCEPT WOOL	109.3	112.7	93.4	110.9	120.7	100.7	71.6	69.0
22823	THROWN FILAMENT YARNS, EXCEPT TEXTURED	136.1	90.1	87.5	131.8	80.4	119.1	81.4	75.9
22825	TEXTURED FILAMENT YARNS, INCLUDING STRETCH YARNS	1,220.7	1,804.5	1,885.2	1,938.5	1,877.9	1,465.6	365.8	158.1
22829	COMMISSION THROWING, PLYING, ETC. OF YARNS	61.5	53.5	48.8	56.1	68.7	54.5	44.9	28.4
22820	TEXTURED, THROWN, AND REWOUND YARNS, N.S.K.	30.8	14.0	8.2	8.4	8.4	8.9	19.5	-
2283-	WOOL YARN	234.4	211.2	154.8	157.2	200.5	222.7	335.5	411.8
22831	WOOL YARNS, EXCEPT CARPET	177.6	158.9	116.7	110.3	126.2	133.0	239.1	271.1
22832	WOOL YARNS, CARPET	37.4	53.1	38.9	46.9	57.7	73.0	78.7	140.7
22830	WOOL YARNS, N.S.K.	19.4	(9)	(9)	(Z)	16.6	16.7	17.7	-
2284-	THREAD	551.1	461.8	392.4	429.9	389.3	340.3	248.1	194.3
22841	FINISHED THREAD FOR USE IN THE HOME	(D)	(46.6)	54.7	47.5	43.6	39.7	28.3	27.5
22842	FINISHED THREAD FOR INDUSTRIAL USE	408.7	342.9	280.0	317.4	276.1	239.0	175.9	131.5
22843	UNFINISHED THREAD SHIPPED FOR FINISHING	(D)	72.5	57.9	65.0	63.8	56.4	40.8	32.5
22840	THREAD, N.S.K.	7.4	(9)	(9)	0.0	5.8	5.2	3.1	2.8
22910	PRESSED, PUNCHED, OR NEEDLED FELTS	186.2	161.8	140.6	145.7	148.4	130.8	131.0	119.6
22920	LACE AND NET GOODS	39.8	(25.0)	(19.5)	22.2	40.5	39.8	55.8	49.4
22930	PADDINGS AND UPHOLSTERY FILLING	260.6	187.1	155.7	160.1	174.2	154.3	164.5	150.3
22940	PROCESSED MILL WASTE AND RELATED PRODUCTS	164.2	(142.5)	(118.2)	(202.1)	145.1	124.2	82.0	83.3
2295-	COATED FABRICS, NOT RUBBERIZED	987.1	1,065.4	913.6	989.4	938.3	808.6	571.3	427.3
22951	PYROXYLIN COATED FABRICS	37.6	32.5	28.0	34.5	27.2	26.3	38.6	39.3
22952	VINYL COATED FABRICS	680.5	817.4	681.5	728.7	693.7	601.9	345.2	233.4
22953	OTHER COATED FABRICS, NOT RUBBERIZED	220.7	213.8	202.7	212.6	188.0	154.1	164.5	137.4
22950	COATED FABRICS, NOT RUBBERIZED, N.S.K.	48.3	(S)	(S)	(13.6)	29.4	26.3	23.0	17.2
22960	TIRE CORD AND TIRE FABRICS	919.8	731.4	652.1	689.9	643.5	620.8	404.6	349.2
2297-	NONWOVEN FABRICS	1,095.2	923.9	771.1	766.3	594.7	517.6	(NA)	(NA)
22971	NONWOVEN FABRICS	782.5	664.0	595.9	562.6	424.5	376.1	164.3	110.6
22972	FABRICATED NONWOVEN PRODUCTS	260.8	242.6	167.0	192.8	164.1	120.8	(NA)	(NA)
22970	NONWOVEN FABRICS, N.S.K.	51.9	17.3	8.2	10.9	(6.1)	20.7	(NA)	(NA)
2298-	CORDAGE AND TWINE	291.7	277.9	285.0	276.6	209.1	174.7	174.9	145.0
22981	HARD FIBER CORDAGE AND TWINE	42.5	87.9	117.9	101.2	54.9	42.3	36.3	42.5
22982	SOFT FIBER CORDAGE AND TWINE, EXCEPT COTTON	183.8	133.3	128.7	122.4	102.3	86.2	83.3	59.8
22983	COTTON CORDAGE AND TWINE	47.7	(47.5)	(48.9)	53.0	35.8	30.7	43.4	38.2
22980	CORDAGE AND TWINE, N.S.K.	17.7	(S)	(9)	(S)	16.1	15.5	11.9	4.8
2299-	TEXTILE GOODS, N.E.C.	280.8	(156.6)	124.0	163.2	252.0	214.4	(NA)	(NA)
22992	JUTE & LINEN GOODS, EXCEPT FELTS, CORD, & TWINE	37.5	(53.6)	(44.2)	(59.0)	33.7	21.0	29.9	42.9
22993	SCOURING & COMBING MILL PRODUCTS	96.8	72.6	51.4	(66.9)	87.3	60.0	89.9	111.1
22990	TEXTILE GOODS, N.E.C., N.S.K.	146.5	(30.4)	(28.4)	(37.3)	131.0	133.4	37.1	10.4

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2311-	MEN'S AND BOYS' SUITS AND COATS	2,719.2	2,479.3	2,346.7	2,251.2	2,305.7	2,230.8	1,779.7	1,438.7
23111	MEN'S SUITS	1,273.4	1,168.9	1,168.4	953.5	914.6	898.5	789.1	727.1
23112	MEN'S OVERCOATS AND TOPCOATS	179.8	136.2	127.5	125.9	122.2	97.0	130.5	121.8
23113	MEN'S TAILORED DRESS AND SPORT COATS AND JACKETS	623.0	567.7	489.6	595.9	621.2	626.5	379.5	214.6
23114	BOYS' SUITS, COATS, AND TAILORED JACKETS	149.7	116.9	103.6	87.0	110.2	100.0	111.7	102.6
23119	COMMISSION WORK ON MEN'S & BOYS' SUITS & COATS	371.5	420.4	418.8	415.5	484.4	445.5	304.3	243.3
23110	MEN'S AND BOYS' SUITS AND COATS, N.S.K.	121.8	(69.2)	(38.8)	(73.4)	(53.1)	63.3	64.6	29.3
2321-	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR	2,836.5	2,840.8	2,387.7	2,347.1	2,088.6	1,962.9	1,347.7	1,177.4
23212	MEN'S AND BOYS' KNIT OUTERWEAR SPORT SHIRTS	[2]809.0	769.8	625.1	592.1	447.3	[2]382.7	[2]129.2	[2]83.3
23214	MEN'S AND BOYS' DRESS AND SPORT SHIRTS	1,344.6	1,316.6	1,118.1	1,060.8	1,082.1	1,069.5	862.0	794.4
23215	MEN'S AND BOYS' NIGHTWEAR	[2]152.8	144.6	145.0	140.9	103.6	[2]105.3	[2]91.7	[2]88.7
23219	CONTRACT WORK ON MEN'S & BOYS' SHIRTS & NIGHTWEAR	372.6	433.6	379.1	414.1	390.1	340.5	217.1	192.9
23210	MEN'S AND BOYS' SHIRTS AND NIGHTWEAR, N.S.K.	157.5	(176.2)	(120.4)	(139.2)	65.5	55.5	47.7	18.1
2322-	MEN'S AND BOYS' UNDERWEAR	350.0	359.5	288.8	239.6	257.6	232.3	192.4	136.0
23221	MEN'S AND BOYS' KNIT AND WOVEN UNDERWEAR	341.4	357.7	298.1	239.6	255.6	230.5	190.9	132.4
23220	MEN'S AND BOYS' UNDERWEAR, N.S.K.	8.6	1.8	(D)	-	2.0	1.8	1.5	4.2
23230	MEN'S AND BOYS' NECKWEAR	211.3	(173.5)	(154.6)	186.0	262.5	279.3	128.4	105.6
2327-	MEN'S AND BOYS' SEPARATE TROUSERS	1,631.4	1,839.3	1,734.5	1,942.3	1,932.1	1,775.9	1,195.2	860.7
23271	MEN'S AND BOYS' SEPARATE DRESS AND SPORT TROUSERS	1,308.3	1,305.1	1,271.5	1,470.6	1,511.4	1,388.1	931.3	676.4
23279	CONTRACT WORK ON MEN'S & BOYS' SEPARATE TROUSERS	264.5	464.3	420.4	408.4	393.4	335.0	226.7	168.0
23270	MEN'S AND BOYS' SEPARATE TROUSERS, N.S.K.	58.6	(69.9)	(42.6)	(63.3)	27.3	52.8	37.2	16.3
2328-	MEN'S AND BOYS' WORK CLOTHING	3,394.3	2,533.8	2,179.6	2,141.3	1,604.6	1,624.8	1,023.1	715.9
23281	MEN'S AND BOYS' WORK SHIRTS	191.6	166.4	146.4	150.9	152.0	141.7	121.7	87.3
23283	MEN'S AND BOYS' JEANS AND JEAN-CUT CASUAL SLACKS	1,962.8	2,071.0	1,785.7	1,762.2	1,213.1	737.6	722.2	540.3
23284	MEN'S AND BOYS' WORK CLOTHING	729.7					534.8	(NA)	(NA)
23289	CONTRACT WORK ON MEN'S AND BOYS' WORK CLOTHING	411.2	274.8	222.3	200.7	220.1	188.4	138.6	80.7
23280	MEN'S AND BOYS' WORK CLOTHING, N.S.K.	99.0	(21.6)	(25.2)	(27.5)	19.4	22.3	40.6	7.6
2329-	MEN'S AND BOYS' CLOTHING, N.E.C.	925.5	932.7	795.3	824.9	719.1	746.5	605.5	457.7
23291	MEN'S AND BOYS' HEAVY OUTERWEAR COATS AND JACKET	397.3	380.5	313.5	351.1	351.5	311.8	290.4	258.7
23292	MEN'S AND BOYS' OUTERWEAR, N.E.C.	[2]423.3	526.3	466.5	447.5	332.9	[2]300.4	[2]219.8	[2]35.1
23299	COMMISSION WORK ON MEN'S & BOYS' CLOTHING, N.E.C.	(NA)	(NA)	(NA)	(NA)	(NA)	94.7	60.2	54.1
23290	MEN'S AND BOYS' CLOTHING, N.E.C., N.S.K.	105.0	(25.8)	(15.2)	(26.3)	34.7	39.6	35.1	9.1
2331-	WOMEN'S AND MISSES' BLOUSES AND WAISTS	2,543.9	1,926.4	1,766.0	1,602.2	1,664.0	1,278.8	754.6	703.7
23312	WOMEN'S, MISSES', & JR. KNIT OUTRWR. SPORT SHIRTS	499.1	277.0	289.9	289.3	229.0	189.1	101.1	58.4
23317	WOMEN'S, MISSES', & JR. BLOUSES, WAISTS, & SHIRTS	1,421.7	1,217.8	1,063.4	842.4	1,007.7	713.6	426.2	446.6
23319	CONTRACT WORK, WOMEN'S, MISSES', & JRS' BLOUSES	487.7	(351.5)	334.5	351.5	356.5	268.5	152.8	153.9
23310	WOMEN'S AND MISSES' BLOUSES AND WAISTS, N.S.K.	135.4	(S)	(78.2)	(119.0)	70.8	107.6	74.5	44.8
2335-	WOMEN'S AND MISSES' DRESSES	4,132.8	3,575.9	3,406.4	3,572.6	4,048.2	3,536.2	3,068.0	2,385.2
23351	WOMEN'S, MISSES', & JUNIORS' UNIT-PRICED DRESSES	1,997.7	2,067.5	1,977.8	1,801.9	1,990.1	1,827.7	1,733.9	1,378.2
23352	WOMEN'S, MISSES', & JR. DOZEN-PRICED DRESSES	399.1	367.5	357.0	343.8	482.6	378.2	384.8	349.8
23359	CONTRACT WORK ON WOMEN'S, MISSES', & JR. DRESSES	694.5	790.8	722.1	559.5	853.3	729.7	538.0	423.3
23350	WOMEN'S AND MISSES' DRESSES, N.S.K.	1,041.5	350.1	349.5	867.4	722.2	600.6	411.3	233.9
2337-	WOMEN'S AND MISSES' SUITS AND COAT	2,725.6	2,287.6	2,126.8	1,965.7	2,086.0	1,725.4	1,648.0	1,444.7
23371	WOMEN'S, MISSES', AND JUNIORS' COATS AND CAPES	612.1	577.9	559.2	472.6	588.2	570.1	606.6	542.9
23372	WOMEN'S, MISSES', AND JUNIORS' SUITS	665.3	541.8	521.1	434.9	405.5	313.2	189.2	211.5
23374	WOMEN'S, MISSES', & JR. SEPARATE SKIRTS & JACK	738.3	669.9	576.0	550.9	519.8	443.5	469.9	374.4
23379	CONTRACT WORK ON WOMEN'S SUITS, COATS, & SKIRTS	423.9	359.3	306.8	232.4	375.1	282.7	222.8	188.3
23370	WOMEN'S AND MISSES' SUITS AND COATS, N.S.K.	285.9	(138.7)	(163.7)	(274.9)	197.4	115.9	159.5	127.6
2339-	WOMEN'S AND MISSES' OUTERWEAR, N.E.C.	3,166.9	2,589.3	2,302.4	2,192.6	1,884.8	1,648.1	857.2	763.3
23392	WOMEN'S, MISSES', & JR. WASHABLE SERVICE APPAREL	193.2	301.1	257.2	162.7	104.5	105.2	121.2	98.9
23394	WOMEN'S, MISSES', AND JUNIORS' BATHING SUITS	163.8							
23395	WOMEN'S, MISSES', AND JUNIORS' SLACKS	1,460.1	1,762.0	1,567.2	1,389.1	1,315.7	1,139.4	522.1	487.9
23397	WOMEN'S, MISSES', AND JUNIORS' OUTERWEAR, N.E.C.	458.1							
23399	CON. WORK ON WOMEN'S, MISSES', & JR. OUTERWEAR	501.1	367.1	327.3	283.1	368.2	304.8	124.6	100.7
23390	WOMEN'S AND MISSES' OUTERWEAR, N.E.C., N.S.K.	390.6	159.1	150.7	357.7	96.4	98.7	89.3	75.3
2341-	WOMEN'S AND CHILDREN'S UNDERWEAR[20]	1,750.0	1,509.7	1,390.8	1,334.7	1,420.5	1,288.7	1,071.8	941.4
23412	WOMEN'S, MISSES', CHILDREN'S, & INFANTS' UNDRWR.[20]	585.8	485.5	433.3	422.7	483.9	416.7	487.1	462.3
23413	WOMEN'S, MISSES', CHILDREN'S & INFANTS NIGHTWEAR[20]	852.2	687.7	657.2	633.1	653.5	597.5	380.2	350.0
23419	CONTRACT WORK, WOMEN'S, ETC. UNDER- & NIGHTWEAR	247.1	293.5	[r]266.9	235.3	206.0	186.4	126.6	107.2
23410	WOMEN'S & CHILDREN'S UNDRWR. & NIGHTWR., N.S.K.	64.9	(43.0)	[r](33.4)	(43.6)	77.1	88.1	77.9	22.0
2342-	BRASSIERES AND ALLIED GARMENTS	546.6	556.4	483.0	508.2	637.3	679.5	600.5	565.9
23421	BRASSIERES, BRA-LETTES, AND BANDEAUX	346.1	328.1	263.5	270.8	357.4	385.1	261.3	285.8
23422	CORSETS, GIRDLES, COMBINATIONS AND ACCESSORIES	153.3	177.8	165.8	184.4	222.2	236.7	279.5	238.4
23429	CON. WORK ON BRASSIERES, CORSETS, & ALLIED GAR.	23.6	(44.4)	[r](38.7)	41.2	37.6	38.5	38.1	33.9
23420	CORSETS AND ALLIED GARMENTS, N.S.K.	23.6	(NA)	[r](15.0)	(11.8)	20.1	19.2	21.6	7.9
23510	MILLINERY, ALL TYPES	74.2	(77.3)	[r](66.8)	40.1	63.7	58.7	111.1	159.5
2352-	HATS AND CAPS, EXCEPT MILLINERY	270.4	(217.7)	[r]214.1	208.6	153.5	147.5	180.0	160.7
23521	HATS AND HAT BODIES, EXCEPT CLOTH AND MILLINERY	66.4	(75.5)	(69.5)	76.6	51.3	44.4	66.9	80.9
23522	CLOTH HATS AND CAPS	176.6	(157.8)	(153.9)	(123.3)	82.5	83.9	98.7	71.9
23520	HATS AND CAPS, EXCEPT MILLINERY, N.S.K.	27.4	(D)	(D)	(8.7)	19.7	19.2	14.4	7.9
2361-	CHILDREN'S DRESSES AND BLOUSES[20]	839.1	624.5	[r]567.7	592.5	678.8	654.7	522.0	450.2
23610	CHILDREN'S DRESSES AND BLOUSES, N.S.K.	528.5	(395.1)	[r](345.7)	411.5	436.3	434.9	386.3	345.8
23612	CHILDREN'S KNIT SPORT SHIRTS[20]	176.1	151.6	[r]136.6	134.1	136.8	115.3	55.1	43.0
23619	CONTRACT WORK ON CHILDREN'S DRESSES AND SHIRTS	134.5	(77.8)	[r](85.4)	(46.9)	105.7	104.5	80.6	61.4
2363-	CHILDREN'S COATS AND SUITS	191.5	234.3	[r]227.5	230.4	167.4	199.8	190.6	172.4
23630	CHILDREN'S COATS, JACKETS, SUITS, AND SNOWSUITS	173.6	(207.5)	(196.9)	(195.1)	139.8	172.5	168.6	148.7
23639	CONTRACT WORK ON CHILDREN'S COATS AND SUITS	17.9	26.8	[r](30.6)	(35.3)	(27.6)	27.3	22.0	23.7
2369-	CHILDREN'S OUTERWEAR, N.E.C.[20]	765.9	713.0	679.7	612.9	630.7	623.1	450.8	402.8
23690	GIRLS', CHILDREN'S, & INFANTS' OUTERWEAR, N.E.C.[20]	685.9	622.9	598.3	528.6	537.3	545.5	393.7	356.8
23699	CONTRACT WORK ON CHILDREN'S OUTERWEAR, N.E.C.	80.0	(90.1)	(81.4)	84.3	93.4	77.6	57.1	46.0
23710	FUR GOODS	358.5	281.0	271.8	236.2	208.5	213.6	322.6	321.4
2381-	FABRIC DRESS AND WORK GLOVES	[2]278.3	234.7	206.8	252.1	188.5	171.7	138.3	130.9
23811	FABRIC DRESS GLOVES AND MITTENS	[2]16.1	(12.0)	(10.7)	(10.1)	15.5	10.6	22.2	37.2
23812	WORK GLOVES AND MITTENS	[2]246.2	213.2	184.7	233.5	162.1	148.6	110.5	88.3
23810	FABRIC DRESS AND WORK GLOVES, N.S.K.	16.0	(S)	(11.4)	(8.5)	10.9	12.5	5.6	5.5
23840	ROBES AND DRESSING GOWNS, EXCEPT CHILDREN'S	243.3	236.5	240.9	220.8	189.3	169.6	178.4	160.1
2385-	WATERPROOF OUTER GARMENTS	338.9	294.0	269.2	312.4	317.3	321.6	365.4	226.7
23859	COMMISSION WORK ON WATERPROOF OUTER GARMENTS	25.8	(D)	(D)	-	-	35.2	37.6	23.9
23850	RAINCOATS AND OTHER WATERPROOF OUTER GARMENT	313.1	309.2	284.0	312.4	317.3	286.4	327.8	202.8

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
23860	LEATHER AND SHEEPLINED CLOTHING	210.6	(246.2)	(258.9)	(240.0)	190.4	173.5	102.1	58.4
2387-	APPAREL BELTS	244.3	192.1	191.2	186.8	215.3	234.1	109.1	92.4
23871	LEATHER BELTS	155.5	131.6	130.5	129.3	145.3	157.9	64.3	47.1
23872	BELTS, OTHER THAN LEATHER	58.2	(53.1)	51.8	34.5	41.0	47.0	26.6	32.5
23870	APPAREL BELTS, N.S.K.	30.6	(S)	(8.8)	(23.0)	29.0	29.2	18.2	12.8
23890	APPAREL AND ACCESSORIES, N.E.C.	175.7	189.6	157.2	(147.6)	125.7	123.2	121.2	103.1
23910	CURTAINS AND DRAPERIES, EXCEPT LACE	936.7	655.6	636.3	580.0	650.0	626.2	374.9	278.3
2392-2211 PT.	HOUSEFURNISHINGS, N.E.C	[21]2,202.3	[21]1,886.5	[21]1,652.7	[21]1,582.1	[21]1,617.5	[21]1,442.3	[21]941.4	[21]1,116.2
	BEDSPREADS AND BEDSETS (NOT MADE IN WEAVING MILLS).	300.4	326.1	285.7	300.2	287.0	266.6	173.8	111.9
	SHEETS AND PILLOWCASES:								
22118	MADE IN WEAVING MILLS, COTTON	-	-	-	4.1	62.9	77.8	268.4	328.8
22219	MADE IN WEAVING MILLS, MANMADE	426.8	500.0	433.3	385.6	347.3	238.5	-	
23928	NOT MADE IN WEAVING MILLS	479.5	471.0	416.5	403.1	356.0	318.5	170.1	
	TOWELS AND WASHCLOTHS:								
22119	MADE IN WEAVING MILLS	416.4	462.2	395.8	401.5	350.5	319.0	270.9	226.4
23929	NOT MADE IN WEAVING MILLS	276.6	232.0	172.0	115.7	92.0	84.0	30.1	
23920	OTHER HOUSEFURNISHINGS	1,145.8	857.4	778.5	763.1	882.5	773.2	567.4	449.1
23930	TEXTILE BAGS, EXCEPT LAUNDRY, WARDROBE, AND SHOE	277.8	269.3	260.2	305.7	262.2	231.5	277.9	181.9
23940	CANVAS AND RELATED PRODUCTS	465.6	303.2	277.5	288.5	303.4	272.1	253.4	153.5
2395-	PLEATING AND STITCHING	572.9	(318.5)	(320.9)	270.1	278.8	261.8	123.6	132.2
23951	EMBROID., STAMPED ART GOODS, & ART NEEDLEWORK	390.3	(244.2)	(208.4)	148.2	147.0	132.8	37.9	46.0
23959	COMMISSION EMBROIDERING, TUCKING, PLEATING, ETC.	56.4	(77.2)	(78.5)	(78.5)	60.8	60.8	46.0	54.6
23950	PLEATING AND STITCHING, N.S.K.	126.2	(*)	(34.0)	(43.4)	71.0	68.2	39.7	31.6
2396-	AUTOMOTIVE AND APPAREL TRIMMINGS	2,191.1	1,634.8	1,242.3	1,202.5	1,287.8	1,146.2	797.0	556.3
23961	MEN'S AND BOYS' SUIT AND COAT FINDINGS	104.4	92.7	(79.8)	79.9	(81.9)	94.2	55.8	45.0
23962	AUTOMOBILE TRIMMINGS	1,737.7	1,343.7	984.2	905.9	998.5	822.3	513.4	360.2
23963	OTHER TRIMMINGS AND FINDINGS, INCLUDING FURNITURE	187.4	(191.8)	(172.6)	(178.5)	130.7	147.4	192.5	127.4
23960	AUTOMOTIVE AND APPAREL TRIMMINGS, N.S.K.	161.6	(S)	(5.7)	(38.2)	76.7	82.3	35.3	23.5
23970	SCHIFFLI MACHINE EMBROIDERIES	146.3	144.3	130.1	114.7	110.4	99.1	83.5	73.0
23990	FABRICATED TEXTILE PRODUCTS, N.E.C.	1,158.9	1,083.2	1,005.1	961.2	830.7	733.9	529.3	353.8
2411-	LOGGING PRODUCTS AND CONTRACT LOGGING	5,757.5	4,263.8	3,566.3	3,742.3	3,440.4	2,601.4	1,515.2	1,185.6
24111	SOFTWOOD LOGS, BOLTS, AND TIMBER	2,580.7							
24112	HARDWOOD LOGS, BOLTS, AND TIMBER	241.8	[22]3,386.4	[22]2,809.5	[22]2,991.2	[22]2,909.9	1,090.9	566.6	488.9
24113	PULPWOOD	383.2					126.4	103.0	139.8
24114	OTHER ROUNDWOOD PRODUCTS	71.3					32.0	31.0	36.1
24119	RECEIPTS FOR CONTRACT LOGGING	757.5	877.4	756.7	751.1	530.5	404.2	270.4	336.3
24110	LOGGING PRODUCTS AND CONTRACT LOGGING, N.S.K.	1,722.9	([22])	([22])	([22])	([22])	947.9	544.0	184.5
2421-	SAWMILL AND PLANING MILL PRODUCTS	10,465.7	8,477.3	6,352.9	7,650.1	7,452.2	6,047.6	3,287.8	2,794.6
24211	HARDWOOD LUMBER, ROUGH AND DRESSED, EXCEPT SIDING	972.9	[23]1,186.7	[23]970.9	[23]1,018.8	[23]816.4	[23] r491.9	2,404.7	2,398.1
24212	SOFTWOOD LUMBER, ROUGH AND DRESSED, EXCEPT SIDING	6,899.7	[23]5,426.3	[23]3,772.2	[23](S)	[23]4,848.3	[23]3,907.8		
24215	WOOD CHIPS	1,079.5	1,102.7	978.7	819.2	570.0	505.4	188.1	([24])
24217	SOFTWOOD CUT STOCK	229.5	252.9	163.2	161.2	156.4	155.9	84.9	87.9
24218	SOFTWOOD FLOORING, SIDING, & OTHER MILL PRODUCTS	125.2	[23](196.7)	[23](143.1)	[23](123.4)	[23]167.7	[23] r157.2	[23]54.5	[23]57.4
24219	CONTRACT/CUSTOM SAWING OF LOGS OWNED BY OTHERS	90.7	57.3	(37.5)	39.6	62.7	40.9	31.3	51.7
24210	SAWMILL AND PLANING MILL PRODUCTS, N.S.K.	1,068.2	(254.7)	r(287.1)	563.2	830.7	804.1	524.3	199.5
2426-	HARDWOOD DIMENSION AND FLOORING	807.5	725.1	570.5	619.5	676.9	571.5	422.6	(NA)
24261	HARDWOOD FLOORING	159.6	127.6	(117.1)	128.3	138.6	118.6	129.2	154.2
24262	HARDWOOD DIMENSION, FURN. PARTS, & VEH. STOCK	451.1	408.0	304.4	331.4	349.6	304.6	216.7	169.8
24266	WOOD FRAMES FOR HOUSEHOLD FURNITURE	104.1	(134.1)	(105.2)	105.8	120.1	76.6	52.4	53.4
24260	HARDWOOD DIMENSION AND FLOORING, N.S.K.	92.6	(55.4)	(43.8)	(54.0)	68.6	71.7	24.3	10.2
24290	SHINGLES, SHAKES, COOPERAGE STOCK, AND EXCELSIOR	258.7	(256.1)	(218.3)	227.0	201.8	175.7	115.8	[24]177.3
2431-	MILLWORK	3,693.3	2,860.2	2,231.2	2,204.3	2,566.8	2,229.7	1,195.9	(NA)
24311	WOOD WINDOW UNITS	609.3	591.8	418.5	361.3	316.6	279.4	149.6	119.1
24312	WOOD WINDOW SASH	95.4	79.8	r59.4	49.9	59.8	60.7	39.8	40.4
24313	WOOD WINDOW AND DOOR FRAMES	264.6	195.6	126.8	134.0	(183.4)	147.0	56.6	68.5
24314	WOOD DOORS, INTERIOR AND EXTERIOR	707.5	677.1	563.2	559.4	661.1	527.6	287.5	254.9
24315	OTHER WOOD DOORS, INCLUDING GARAGE, SCREEN, ETC.	479.1	245.5	206.7	189.8	233.6	193.2	117.4	127.9
24316	UNFINISHED WOOD MOLDINGS	569.1	510.5	358.4	383.0	435.7	406.8	(NA)	(NA)
24317	PREFIN. WOOD MOLDINGS (MADE FROM PUR. MOLDINGS)	75.0	(62.1)	(47.7)	59.0	(81.5)	74.1	(NA)	(NA)
24318	OTHER MILLWORK	288.3	365.2	312.3	297.0	198.4	161.6	108.3	89.4
24310	MILLWORK PRODUCTS, N.S.K.	605.1	(132.7)	r(138.3)	170.0	396.7	379.3	241.0	125.4
2434-	WOOD KITCHEN CABINETS	1,563.2	1,200.4	1,054.1	1,062.6	1,019.2	864.5	(NA)	(NA)
24341	WOOD KITCHEN CABINETS, STOCK LINE	689.2	565.4	493.7	528.9	530.6	436.0	250.8	250.1
24342	WOOD KITCHEN CABINETS, CUSTOM	433.2	388.4	356.3	334.7	276.6	[25]234.9	[25]141.2	[25]149.6
24343	VANITIES AND OTHER CABINETWORK	146.4	181.7	155.2	151.7	123.7	71.6	(NA)	(NA)
24340	WOOD KITCHEN CABINETS, N.S.K.	294.5	64.8	48.8	47.3	88.3	122.0	(NA)	(NA)
2435-	HARDWOOD VENEER AND PLYWOOD	1,160.0	937.2	782.3	889.7	964.1	875.3	607.1	(NA)
24351	HARDWOOD PLYWOOD	455.8	404.1	337.0	404.6	397.9	368.9	333.0	292.8
24352	PREFIN. HRDWD. PLYWOOD (MADE FROM PUR. MOLDINGS)	383.8	296.9	235.1	246.0	288.6	286.7	105.1	(NA)
24353	HARDWOOD PLYWOOD PRODUCTS	60.8	(33.2)	(30.4)	31.3	33.6	31.1	33.0	(NA)
24354	HARDWOOD VENEER, NOT REINFORCED OR BACKED	213.7	208.1	183.6	206.1	197.2	161.3	126.0	122.2
24350	HARDWOOD VENEER AND PLYWOOD, N.S.K.	46.0	([9])	([9])	(S)	46.8	27.3	[26]25.2	[26]9.5
2436-	SOFTWOOD VENEER AND PLYWOOD	3,582.3	2,832.6	2,103.7	1,982.6	2,270.3	1,939.6	(NA)	(NA)
24361	SOFTWOOD PLYWOOD, INTERIOR TYPE [27]	1,828.0	594.3	465.9	463.4	551.4	527.0	382.6	415.3
24362	SOFTWOOD PLYWOOD, EXTERIOR TYPE [27]	1,226.7	1,820.0	1,295.3	1,174.7	1,322.7	1,066.4	401.1	225.2
24363	SOFTWOOD PLYWOOD PRODUCTS	102.6	69.7	r54.7	56.9	58.8	39.6	24.2	(NA)
24364	SOFTWOOD VENEER, NOT REINFORCED OR BACKED	404.5	342.4	283.0	285.6	335.1	304.3	135.3	129.2
24360	SOFTWOOD VENEER AND PLYWOOD, N.S.K.	20.6	(6.2)	(4.9)	(2.0)	2.3	2.3	([26])	([26])
24390	FABRICATED STRUCTURAL WOOD PRODUCTS	781.7	567.6	453.4	477.0	545.8	455.5	(NA)	(NA)
2441-	NAILED WOOD BOXES AND SHOOK	265.3	245.2	228.0	284.3	210.3	232.8	255.3	189.4
24411	NAILED OR LOCK-CORNER WOODEN BOXES	93.8	(142.1)	139.6	(173.7)	81.9	86.5	111.9	83.8
24412	WOODEN BOX AND CRATE SHOOK	127.0	(90.5)	(76.9)	97.7	87.7	100.0	109.1	90.2
24410	NAILED WOOD BOXES AND SHOOK, N.S.K.	44.5	(S)	(S)	(12.9)	40.7	46.3	34.3	15.4
24480	WOOD PALLETS AND SKIDS	642.9	580.5	551.5	622.9	(465.1)	287.4	187.0	98.7
2449-	WOOD CONTAINERS, N.E.C.	235.3	272.5	265.0	273.0	253.9	218.7	236.6	186.3
24491	WIREBOUND BOXES	129.1	159.1	(158.9)	170.7	156.6	129.9	131.2	107.6
24493	VENEER AND PLYWOOD CONTAINERS, EXCEPT BOXES	27.3	(53.9)	(43.5)	35.1	22.6	20.7	27.5	29.2
24495	SLACK AND TIGHT COOPERAGE	58.1	(55.4)	56.4	65.2	64.0	65.5	77.9	49.5
24490	WOOD CONTAINERS, N.E.C., N.S.K.	20.8	(4.2)	6.0	(5.3)	10.7	2.6	-	-

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2451-	MOBILE HOMES	3,175.4	2,580.2	2,163.2	2,556.6	3,331.2	3,190.9	941.4	596.5
24511	MOBILE HOMES (35 FEET OR MORE IN LENGTH)	2,895.7	2,451.9	2,060.3	2,461.1	3,264.1	3,126.6	(NA)	(NA)
24512	MOBILE BUILDINGS (35 FEET OR MORE IN LENGTH)	83.3	(111.2)	(84.2)	(78.6)	48.3	44.5	(NA)	(NA)
24510	MOBILE HOMES, N.S.K.	196.4	(17.1)	(18.3)	16.9	(18.8)	10.5	(NA)	(NA)
2452-	PREFABRICATED WOOD BUILDINGS	1,863.8	1,177.1	947.9	1,078.1	1,188.1	989.3	306.3	(NA)
24521	COMPONENTS FOR WOOD BLDG. (NOT COMPLETE UNITS)	232.2	(263.4)	(199.8)	(195.8)	(175.7)	119.7	14.0	(NA)
24522	PRECUT PACKAGES FOR WOOD BLDGS. (COMPLETE UNITS)	362.9	227.1	185.9	246.9	221.3	157.7		
24523	WOOD BLDGS. (COMPLETE UNITS, SHIPPED PANEL FORM)	652.7	426.5	308.0	375.3	487.7	455.7	291.2	257.4
24524	WOOD BLDGS. (SHIPPED IN 3-DIMENSIONAL ASSEMBLIES)	365.1	232.6	225.1	211.6	231.9	241.2		
24520	PREFABRICATED WOOD BUILDINGS, N.S.K.	250.9	(27.6)	(29.1)	(48.5)	(71.5)	15.0	1.1	(NA)
2491-	WOOD PRESERVING	892.2	659.1	610.0	711.2	549.4	461.4	327.5	240.3
24912	TREATED WOOD POLES, PILES, AND POSTS	305.5	602.3	505.5	615.0	482.6	394.3	284.5	209.1
24913	OTHER TREATED WOOD PRODUCTS	418.3							
24919	CONTRACT WOOD PRESERVING (WOOD OWNED BY OTHERS)	68.6	(61.2)	56.5	52.8	30.4	29.1	28.7	25.9
24910	WOOD PRESERVING, N.S.K.	99.8	(9)	(48.0)	(43.4)	36.4	38.0	14.3	5.3
2492-	PARTICLEBOARD	476.5	352.9	276.4	381.9	406.5	286.2	89.1	54.9
24921	PARTICLEBOARD, PLATEN TYPE, MAT FORMED	466.0	352.9	276.4	381.9	406.5	286.2	89.1	54.9
24922	PARTICLEBOARD, EXTRUDED TYPE	(D)							
24920	PARTICLEBOARD, N.S.K.	(D)							
2499-	WOOD PRODUCTS, N.E.C.	2,488.7	2,130.7	1,764.1	1,821.5	1,697.7	1,479.1	905.3	644.0
24991	MIRROR AND PICTURE FRAMES	314.6	289.2	236.3	209.0	194.5	173.0	115.7	82.2
24994	CORK PRODUCTS	32.8	(24.4)	(23.1)	(26.3)	24.0	18.1	20.5	25.6
24996	HARDBOARD PRODUCTS, MADE FROM OWN HARDBOARD	508.0	582.0	438.5	430.6	328.2	258.5	159.1	131.4
24997	MEDIUM DENSITY FIBERBOARD (MDF)	84.2							
24998	HARDBOARD PRODUCTS, MADE FROM PURCHASED HARDBOARD	171.3							
24999	MISCELLANEOUS WOOD PRODUCTS, N.E.C.	1,005.9	1,096.4	940.6	958.9	837.6	701.6	464.8	340.8
24990	WOOD PRODUCTS, N.E.C., N.S.K.	372.0	(138.7)	(125.7)	(196.7)	313.4	327.9	145.2	64.0
2511-	WOOD HOUSEHOLD FURNITURE	3,890.7	3,270.2	2,746.0	3,072.8	3,071.0	2,716.8	1,791.5	1,350.8
25112	WOOD LIVING ROOM, FAMILY ROOM, AND DEN FURNITURE	859.8	788.1	635.9	702.5	736.9	614.4	[28]395.4	[28]315.4
25113	WOOD DINING ROOM & KITCHEN FURN., EX. CABINETS	962.3	873.0	739.4	796.4	731.8	603.6	375.7	272.3
25115	WOOD BEDROOM FURNITURE	1,290.3	1,182.5	958.0	1,084.5	1,114.8	1,029.2	694.7	578.2
25116	INFANTS' AND CHILDREN'S WOOD FURNITURE	118.8	129.0	115.3	104.1	97.5	82.5	44.5	43.5
25117	WOOD OUTDOOR AND UNPAINTED, UNASSEMBLED FURNITURE	185.8	139.5	111.8	124.8	100.7	107.9	63.8	51.2
25110	WOOD HOUSEHOLD FURNITURE, N.S.K.	473.7	(158.1)	(185.6)	260.5	(289.3)	279.2	217.4	90.2
25120	UPHOLSTERED WOOD HOUSEHOLD FURNITURE	2,735.7	2,473.4	2,126.3	2,237.3	2,217.1	1,990.5	[29]1,163.1	[29]905.6
2514-	METAL HOUSEHOLD FURNITURE	1,231.2	991.6	895.3	934.0	970.7	859.3	587.8	507.8
25141	METAL HOUSEHOLD DINING AND DINETTE FURNITURE	319.1	271.5	260.1	270.4	285.5	245.6	163.1	141.2
25142	METAL KITCHEN FURNITURE	73.4	(75.8)	(66.4)	(68.3)	88.2	71.4	56.5	62.8
25143	METAL PORCH, LAWN, OUTDOOR, AND CASUAL FURNITURE	275.9	268.2	220.5	230.4	197.2	177.1	109.7	101.3
25144	OTHER METAL HOUSEHOLD FURNITURE	445.5	355.6	330.5	330.0	342.4	311.4	208.0	184.0
25140	METAL HOUSEHOLD FURNITURE, N.S.K.	117.3	(20.5)	(17.8)	(34.9)	57.4	53.8	50.5	18.5
2515-	MATTRESSES AND BEDSPRINGS	1,418.5	1,254.7	1,120.7	1,161.0	1,202.1	1,079.6	709.6	608.7
25151	INNERSPRING MATTRESSES, EXCEPT CRIB SIZE	492.6	515.6	457.7	443.9	410.8	336.6	240.2	234.1
25152	OTHER MATTRESSES, INCLUDING CRIB MATTRESSES	108.3	82.5	77.0	94.0	92.6	78.4	57.6	50.2
25153	BEDSPRINGS, EXCEPT INNERSPRING UNITS	360.6	344.6	321.5	302.8	328.8	277.8	177.9	157.3
25154	CONVERTIBLE SOFAS	302.6	222.9	191.0	203.7	217.6	208.6	103.1	82.3
25157	OTHER DUAL PURPOSE SLEEP FURNITURE	31.8	(S)	(S)	(S)	60.2	56.4	49.9	56.4
25150	MATTRESSES AND BEDSPRINGS, N.S.K.	185.6	(58.1)	(46.1)	(81.6)	92.1	121.8	80.9	28.4
25170	WOOD TV, RADIO, STEREO, & SEWING MACH. CABINET	312.8	314.6	260.7	312.1	275.4	293.0	(NA)	(NA)
25190	HOUSEHOLD FURNITURE, N.E.C.	281.8	236.2	212.7	239.6	249.8	190.3	79.0	46.9
25210	WOOD OFFICE FURNITURE	562.2	385.3	332.7	358.5	283.1	259.1	158.1	100.4
2522-	METAL OFFICE FURNITURE	1,353.0	1,073.1	948.3	1,001.8	927.1	781.3	585.8	359.1
25221	METAL OFFICE SEATING, INCLUDING UPHOLSTERED	388.1	266.5	233.7	261.0	239.9	192.8	133.6	73.6
25222	METAL OFFICE DESKS	230.7	169.3	154.4	188.0	178.0	153.7	150.6	88.3
25223	METAL OFFICE FILING CABINETS AND CASES	467.0	387.3	361.4	380.0	365.5	297.9	200.2	143.2
25224	OTHER METAL OFFICE FURNITURE	233.7	219.4	179.9	150.1	108.5	107.8	86.6	50.3
25220	METAL OFFICE FURNITURE, N.S.K.	33.5	30.6	(18.9)	(22.7)	35.2	29.1	14.8	3.7
2531-	PUBLIC BUILDING AND RELATED FURNITURE	724.7	716.0	638.9	592.1	555.0	485.2	389.5	263.3
25311	SCHOOL FURNITURE, EXCEPT STONE AND CONCRETE	185.4	242.6	232.9	227.3	202.8	181.2	158.5	118.0
25312	PUBLIC BUILDING & RELATED FURN., EXCEPT SCHOOL	479.5	458.8	390.8	344.5	310.4	268.4	209.5	134.2
25310	PUBLIC BUILDING AND RELATED FURNITURE, N.S.K.	59.8	(14.6)	(15.2)	(20.3)	41.8	35.6	21.5	11.1
2541-	WOOD PARTITIONS AND FIXTURES	1,070.8	910.7	784.3	854.6	889.7	772.1	484.5	384.5
25411	WOOD PARTITIONS, SHELVING, AND LOCKERS	135.6	(206.1)	183.8	193.0	125.6	77.0		
25412	PLASTICS LAMINATED FIXTURE TOPS	204.2	233.8	(202.5)	213.4	181.1	141.8	484.5	384.5
25413	WOOD FIXTURES FOR STORES, BANKS, OFFICES, ETC.	561.1	393.0	317.7	347.2	425.1	354.0		
25410	WOOD PARTITIONS AND FIXTURES, N.S.K.	169.9	(77.8)	(80.3)	(101.0)	157.9	199.3		
2542-	METAL PARTITIONS AND FIXTURES	1,215.8	875.7	812.6	850.0	771.8	713.2	512.2	367.8
25421	METAL PARTITIONS	96.7	(73.0)	109.9	104.8	79.6	79.4		
25422	METAL SHELVING AND LOCKERS	349.4	302.7	266.6	263.7	264.7	236.2		
25423	METAL STORAGE RACKS AND ACCESSORIES	275.6	191.2	155.2	187.2	109.5	95.2	512.2	367.8
25424	METAL FIXTURES FOR STORES, BANKS, OFFICES, ETC.	391.0	248.2	215.4	223.4	268.3	217.3		
25420	METAL PARTITIONS AND FIXTURES, N.S.K.	103.1	(60.6)	(65.5)	70.9	(49.7)	85.1		
2591-	DRAPERY HARDWARE AND BLINDS AND SHADES	615.3	446.8	353.2	332.7	349.8	311.3	207.0	170.8
25913	WINDOW SHADES AND ACCESSORIES	140.3					[30]80.9		
25914	VENETIAN BLINDS	89.6	446.8	353.2	332.7	307.0	[30]29.1	176.4	159.3
25915	OTHER SHADES & BLINDS, N.E.C., & DRAPERY HRDWR.	329.7					[30]160.4		
25910	DRAPERY HARDWARE AND BLINDS AND SHADES, N.S.K.	55.7				42.8	40.9	30.6	11.5
25990	FURNITURE AND FIXTURES, N.E.C.	687.4	462.2	431.2	417.9	407.2	379.9	193.8	101.9
2611-	PULP	2,466.4	2,521.4	2,309.6	2,386.9	1,393.7	1,132.4	904.8	726.0
26111	SPECIAL ALPHA AND DISSOLVING WOOD PULP	570.5	562.2	491.3	535.3	326.8	304.7	227.2	210.0
26112	OTHER PULP INCL. PULPMILL BYPROD., EXC. TALL OIL	1,894.8	1,957.6	1,816.8	1,850.8	1,066.6	826.0	673.8	515.8
26110	PULP, N.S.K.	1.1	1.6	1.6	.8	.3	1.7	3.8	.1
2621-	PAPER MILL PRODUCTS, EXCEPT BUILDING PAPER	12,438.2	11,361.1	9,368.4	9,574.7	7,341.1	6,182.2	4,739.5	3,724.0
26211	NEWSPRINT	989.3	898.5	828.2	669.9	533.6	506.0	321.8	270.8
26212	UNCOATED GROUNDWOOD PAPER	539.0	480.4	402.5	361.5	256.9	232.7	192.6	165.6
26213	CLAY COATED PRINTING AND CONVERTING PAPER	2,260.9	1,953.2	1,473.0	1,611.1	1,261.2	1,024.8	818.1	498.6
26214	UNCOATED FREE SHEET	3,352.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
26215	BLEACHED BRISTOLS, EX. COT. FIBER INDEX & BOGUS	474.3	415.4	355.0	384.1	299.7	244.4	210.6	
26216	COTTON FIBER PAPER AND THIN PAPER	496.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	[31]3,566.4
26217	UNBLEACHED KRAFT PKG. & INDUSTRIAL CONV. PAPER	1,098.7	1,040.5	873.2	951.6	703.4	602.9	503.1	
26218	PKG., IND. CONVERT. PAPER, EXC. UNBLEACHED KRAFT	560.6	519.4	438.8	499.5	392.6	379.3	283.8	
26219	SPECIAL INDUSTRIAL PAPER	550.7	464.3	387.7	433.7	331.0	272.1	193.2	
26210	TISSUE PAPER, AND PAPER MILL PRODUCTS, N.S.K.	2,115.9	2,014.1	1,765.2	1,408.7	1,104.0	959.1	698.0	550.1

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2631-	PAPERBOARD MILL PRODUCTS	6,434.7	6,207.5	5,251.7	5,503.6	4,284.5	3,657.4	2,673.1	2,184.7
26311	UNBLEACHED KRAFT PKG. & INDUS. CON. PAPERBOARD	2,697.2	2,635.1	2,238.7	2,311.4	1,806.4	1,562.2	974.8	
26312	BLEACHED PKG. & INDUSTRIAL CONVERTING PAPERBOARD	1,364.6	1,330.9	1,092.6	1,020.4	813.5	696.3	522.6	[3]12,145.9
26313	SEMICHEMICAL PAPERBOARD	748.9	751.9	654.0	627.0	497.8	415.3	294.9	
26314	RECYCLED PAPERBOARD	1,562.7	1,379.3	1,186.6	1,455.8	1,096.0	929.5	810.4	
26318	WET MACHINE BOARD	59.3	77.6	69.0	71.5	54.4	46.6	36.4	37.3
26310	PAPERBOARD MILL PRODUCTS, N.S.K.	2.0	32.7	(10.7)	(17.5)	16.4	7.5	34.0	1.5
2641-	COATED AND GLAZED PAPER	3,037.3	2,653.0	2,198.4	2,349.6	1,968.2	1,650.5	1,354.6	1,170.7
26411	PRTG. PAPER, COATED AT ESTAB. NOT MAKING PAPER	172.0	174.7	145.3	144.7	133.9	111.8	125.3	147.9
26412	OILED, WAXED, & WAX-LAM. PAPER (PLAIN OR PRNTD.)	256.3	242.8	216.3	199.1	156.9	153.2	189.4	213.3
26413	GUMMED PRODUCTS	187.6	167.5	163.5	185.7	151.8	139.2	125.6	98.2
26414	PRESSURE SENSITIVE TAPE	1,177.7	889.7	732.6	794.4	735.3	574.5	438.3	311.7
26417	LAMINATED, COATED ROLLS, SHEETS, FOR PKG. USES	697.1	601.5	481.3	507.7	392.2	356.9	448.3	392.2
26418	OTHER COATED PROCESSED PAPER, EX. PKG. & WAXED	421.1	(S)	(S)	(S)	355.5	263.6		
26410	COATED AND GLAZED PAPER, N.S.K.	131.3	(S)	(S)	(24.5)	42.6	51.3	27.7	7.6
26420	ENVELOPES, EXCEPT STATIONERY	980.6	842.8	805.5	(812.8)	658.1	587.9	443.4	330.7
2643-	BAGS, EXCEPT TEXTILE BAGS	3,304.1	3,248.1	2,915.3	2,837.9	2,103.1	1,829.4	1,292.7	976.9
26431	GROCERS' & VARIETY PAPER BAGS, & SHOPPING BAGS	801.6	814.7	773.3	765.3	586.5	493.1	362.8	254.1
26432	SPECIALTY BAGS AND LINERS	1,615.7	1,602.5	1,419.5	1,222.6	919.8	819.5	571.4	416.1
26433	SHIPPING SACKS AND MULTIWALL BAGS	672.6	663.2	569.6	668.0	495.8	428.5	316.4	288.6
26430	BAGS, EXCEPT TEXTILE, N.S.K.	214.3	(167.8)	(152.9)	(182.0)	101.0	88.3	42.1	18.1
2645-	DIE-CUT PAPER AND BOARD	1,034.3	983.2	882.2	884.3	691.0	645.9	547.6	380.1
26451	DIE-CUT OFFICE SUPPLIES & MISCELLANEOUS PRODUCTS	484.9	513.2	469.3	474.9	374.7	342.9	346.6	297.8
26452	PASTED, LINED, LAMINATED, OR COATED PAPERBOARD	438.4	446.6	402.1	399.5	297.2	271.3	167.7	73.1
26450	DIE-CUT PAPER AND BOARD, N.S.K.	111.0	(23.4)	(S)	(9.9)	(19.1)	31.7	33.3	9.2
2646-	PRESSED AND MOLDED PULP GOODS	239.6	218.9	203.3	202.2	184.6	161.6	142.7	112.0
26461	BITUMINOUS FIBER PIPE	(NA)	(NA)	13.9	19.4	17.3	21.3	22.6	23.0
26462	OTHER MOLDED PULP GOODS	225.9	208.4	188.2	181.6	162.4	136.3	118.3	89.1
26460	PRESSED AND MOLDED PULP GOODS, N.S.K.	(S)	(S)	(S)	(S)	4.9	4.0	1.8	(NA)
2647-	SANITARY PAPER PRODUCTS	4,562.6	4,186.7	3,647.1	3,040.7	2,201.4	1,981.9	1,234.4	925.4
26471	SANITARY NAPKINS AND TAMPONS	588.7	445.6	384.0	331.2	292.3	281.1	182.1	142.0
26472	SANITARY TISSUE HEALTH PRODUCTS	3,948.3	3,720.3	3,257.9	2,692.7	1,897.1	1,692.7	1,040.6	783.4
26470	SANITARY PAPER PRODUCTS, N.S.K.	25.6	20.8	5.1	16.8	12.0	8.1	11.7	(NA)
2648-	STATIONERY PRODUCTS	630.5	509.9	483.1	486.2	460.1	421.5	310.3	231.2
26481	STATIONERY	141.2	129.9	128.9	119.9	124.6	118.1		
26482	TABLETS AND RELATED PRODUCTS	425.5	371.8	344.6	351.4	278.2	219.6	310.3	231.2
26480	STATIONERY PRODUCTS, N.S.K.	63.8	(S)	(S)	(S)	57.3	83.8		
2649-	CONVERTED PAPER PRODUCTS, N.E.C.	1,748.8	1,267.4	1,107.4	1,073.3	938.2	661.8	493.0	421.0
26492	WRAPPING PRODUCTS (GIFT WRAP, ETC)	251.5	(271.2)	(217.5)	(241.3)	(294.5)	181.2	109.4	88.2
26493	WALLCOVERINGS	306.5	(207.2)	(187.0)	181.4	112.7	83.0	46.2	33.6
26495	OTHER CONVERTED PAPER AND BOARD PRODUCTS	948.1	783.2	700.4	653.8	527.0	391.0	283.8	270.1
26490	CONVERTED PAPER PRODUCTS, N.E.C., N.S.K.	242.7	(S)	(S)	(S)	4.0	6.6	[3]53.6	[3]29.1
26510	BENDING PAPERBOARD PKG. & PACKAGING COMPONENTS	2,393.4	2,162.3	1,874.7	1,806.6	1,597.4	1,372.1	1,116.2	1,026.0
26520	SETUP PAPERBOARD BOXES	377.7	405.7	343.7	400.1	337.8	342.6	291.8	232.3
26530	CORRUGATED & SOLID FIBER BOXES (INCL. PALLETS)	7,182.8	6,530.2	5,733.4	5,867.4	5,133.5	4,196.9	2,893.2	2,136.2
2654-	SANITARY FOOD CONTAINERS	1,964.9	1,743.9	1,616.0	1,506.3	1,359.1	1,381.3	1,105.8	854.7
26541	MILK AND OTHER BEVERAGE PAPERBOARD CARTONS	480.0	472.6	468.0	383.6	302.7	316.4	278.9	284.8
26542	CUPS AND LIQUID-TIGHT PAPERBOARD CONTAINERS	594.1	601.6	535.1	506.5	439.4	458.8	384.5	300.0
26543	OTHER SANITARY FOOD CONTAINERS, BOARDS, AND TRAYS	842.2	662.0	609.5	612.5	608.0	587.8	430.8	268.3
26540	SANITARY FOOD PAPERBOARD CONTAINERS, N.S.K.	48.6	(S)	(S)	(3.6)	9.0	21.3	11.6	1.6
2655-	FIBER CANS, DRUMS, AND SIMILAR PRODUCTS	1,040.4	1,000.1	907.9	908.8	743.0	620.0	425.4	302.1
26551	FIBER DRUMS	223.8	212.6	191.5	207.9	156.7	136.9	93.4	62.0
26552	FIBER CANS, TUBES, AND SIMILAR PRODUCTS	782.6	760.9	700.0	681.4	571.8	465.7	322.0	236.9
26550	FIBER CANS, DRUMS, AND SIMILAR PRODUCTS, N.S.K.	34.0	26.6	16.4	(19.5)	14.5	17.4	10.1	3.2
2661-	BUILDING PAPER AND BOARD	514.3	479.4	404.1	468.1	444.1	401.9	317.9	299.5
26611	INSULATING BOARD	222.2	205.2	170.3	205.5	227.9	219.7	177.3	171.3
26612	CONSTRUCTION PAPER	291.8	262.6	225.6	256.5	209.1	175.6	135.3	126.7
26610	BUILDING PAPER AND BOARD, N.S.K.	.3	(S)	8.3	6.1	7.1	6.6	5.3	1.5
2711-	NEWSPAPERS	12,468.1	11,242.0	10,022.9	9,186.6	8,495.7	7,901.1	5,549.8	4,254.7
27111	DAILY & SUNDAY NEWSPAPERS (SUB. AND SALES)	2,561.1	2,463.3	2,290.7	2,031.9	1,807.6	1,746.8	1,309.1	1,064.4
27112	DAILY AND SUNDAY NEWSPAPERS (ADVERTISING)	8,140.5	7,393.2	6,542.9	6,086.8	5,680.8	5,213.8	3,652.5	2,727.5
27113	WEEKLY & OTHER NEWSPAPERS (SUB. & SALES)	240.6	195.5	175.3	172.5	132.4	106.9	78.2	82.9
27114	WEEKLY AND OTHER NEWSPAPERS (ADVERTISING)	734.5	837.3	773.4	667.5	492.4	386.5	243.2	296.0
27110	NEWSPAPERS, N.S.K.	791.4	352.7	(240.7)	(227.9)	382.5	447.1	266.8	83.9
2721-	PERIODICALS	5,528.8	3,187.0	3,773.5	3,573.6	3,412.1	4,444.0	2,668.2	2,037.3
27211	FARM PERIODICALS (SUBSCRIP., SALES, & ADVER.)	107.5	(105.0)	(92.1)	(81.3)	82.5	75.9	57.0	54.1
27213	BUS. & PROFESS. PERIODICALS (SUBSCRIP. & SALES)	464.2	407.2	339.6	309.4	293.1	262.2	149.6	122.7
27214	BUSINESS & PROFESSIONAL PERIODICALS (ADVER.)	850.2	946.9	773.3	795.5	771.6	647.9	524.9	412.7
27215	GENERAL & CONSUMER PERIODICALS (SUB. & SALES)	1,685.7	1,363.5	1,165.7	987.6	929.9	832.8	593.5	458.6
27216	GENERAL AND CONSUMER PERIODICALS (ADVERTISING)	1,595.5	1,121.4	953.7	941.1	978.3	895.7	879.5	710.6
27217	OTHER PERIODICALS (SUB., SALES, & ADVERTISING)	250.7	311.5	281.1	285.1	289.9	282.1	284.2	230.2
27210	PERIODICALS, N.S.K.	575.0	(188.5)	(168.0)	(173.6)	66.8	190.4	179.5	48.5
2731-	BOOK PUBLISHING	5,007.7	4,179.7	3,789.3	3,407.7	3,160.2	2,915.4	2,255.3	1,547.8
27311	TEXTBOOKS (INCLUDING TEACHERS' EDITIONS)	1,408.7	1,309.4	1,212.0	969.0	871.5	809.6	733.6	471.1
27313	TECHNICAL, SCIENTIFIC, AND PROFESSIONAL BOOKS	684.1	639.7	575.1	527.4	473.7	403.0	240.2	156.3
27314	RELIGIOUS BOOKS	236.3	189.3	185.7	159.3	167.9	131.2	110.4	81.1
27315	GENERAL BOOKS (TRADE, ETC.)	1,895.6	1,495.0	1,282.6	1,256.7	1,091.7	1,006.7	657.7	458.2
27317	GENERAL REFERENCE BOOKS	305.4	279.1	246.0	243.5	243.7	235.3	[3]216.3	[3]207.3
27318	OTHER BOOKS, EXCEPT PAMPHLETS	110.4	123.0	122.2	127.5	137.3	125.4	200.1	154.8
27319	PAMPHLETS (5 TO 48 PAGES)	49.1	(35.5)	(36.5)	(38.4)	56.4	48.7		
27310	BOOK PUBLISHING, N.S.K.	318.1	(108.8)	(129.1)	(85.9)	118.0	155.5	97.0	18.9
2732-	BOOK PRINTING	1,830.6	1,332.8	1,219.8	1,155.4	1,162.1	1,049.9	900.3	607.0
27321	BOOKS, PRINTING ONLY, LITHOGRAPHIC	173.0	182.9	174.0	184.0	224.1	108.9	855.3	585.9
27322	BOOKS, PRINTING AND BINDING, LITHOGRAPHIC	980.0	756.6	677.7	604.9	506.5	489.5		
27328	BOOKS, PRINTING & BINDING, OTHER THAN LITHO.	158.5	(148.0)	(128.6)	(131.3)	(138.8)	135.8		
27329	PAMPH., WORKBOOKS, & TESTS (PRINTING & BINDING)	358.6	(S)	(S)	148.5	226.7	223.5		
27320	BOOK PRINTING, N.S.K.	160.5	(44.9)	(59.4)	(86.7)	66.0	92.2	45.0	21.1
2741-	MISCELLANEOUS PUBLISHING	1,935.1	1,384.1	1,259.0	1,163.2	1,164.7	1,058.3	608.6	413.4
27411	CATALOGS AND DIRECTORIES, PUBLISHING	456.9	420.1	341.3	338.3	269.6	244.1	184.6	133.0
27412	BUSINESS SERVICE PUBLISHING	416.7	374.9	331.4	277.7	254.6	241.9	123.0	101.6
27413	OTHER MISCELLANEOUS PUBLISHING	727.0	595.6	560.3	523.5	477.8	401.1	231.8	158.2
27410	MISCELLANEOUS PUBLISHING, N.S.K.	334.5	(9)	(S)	(23.7)	162.7	171.2	69.2	20.6

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes — Value Shipped by All Producers: 1963, 1967, and 1972 to 1977** – Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2751-	COMMERCIAL PRINTING, LETTERPRESS	4,620.6	3,922.8	3,483.6	3,408.6	3,223.1	r3,380.9	2,834.6	2,406.6
27511	MAGAZINE AND PERIODICAL PRINTING, LETTERPRESS	499.7	581.3	537.3	515.2	452.8	424.3	512.7	574.0
27512	LABELS AND WRAPPERS PRINTING, LETTERPRESS	746.9	643.4	533.9	497.1	540.7	501.9	390.2	296.9
27513	CATALOG AND DIRECTORY PRINTING, LETTERPRESS	197.7	228.8	211.4	203.6	133.6	134.3	171.3	148.7
27514	FINANCIAL AND LEGAL PRINTING, LETTERPRESS	208.4	271.4	262.1	226.9	176.6	190.1	152.9	111.3
27515	ADVERTISING PRINTING, LETTERPRESS	299.8	670.7	532.2	466.6	303.7	268.7	345.7	276.4
27516	OTHER GENERAL JOB PRINTING, LETTERPRESS	721.4	715.2	628.5	616.6	611.4	r481.6	527.7	717.0
27519	SCREEN PROCESS PRINTING, EXCEPT TEXTILES	314.7	307.1	264.1	213.4	187.7	172.1	93.3	69.2
27510	COMMERCIAL PRINTING, LETTERPRESS, N.S.K.	1,594.4	(505.0)	(514.2)	669.2	816.6	1,207.9	640.8	213.1
2752-	COMMERCIAL PRINTING, LITHOGRAPHIC	8,980.2	7,848.8	6,889.4	6,301.4	5,513.0	4,919.6	2,981.7	1,895.7
27521	MAGAZINE AND PERIODICAL PRINTING, LITHOGRAPHIC	1,287.5	1,313.2	1,131.5	941.5	750.6	631.6	296.1	138.6
27522	LABELS AND WRAPPERS PRINTING, LITHOGRAPHIC	391.3	637.1	551.3	447.4	292.0	280.3	186.9	147.3
27523	CATALOG AND DIRECTORY PRINTING, LITHOGRAPHIC	838.3	890.0	787.2	671.3	545.2	464.1	267.7	165.3
27524	FINANCIAL AND LEGAL PRINTING, LITHOGRAPHIC	471.6	446.9	407.2	353.5	293.3	271.1	137.7	108.9
27525	ADVERTISING PRINTING, LITHOGRAPHIC	2,407.7	2,418.2	2,018.8	1,808.9	1,748.1	1,553.9	967.6	721.6
27526	OTHER GENERAL JOB PRINTING, LITHOGRAPHIC	2,178.1	1,719.4	1,568.0	1,291.1	1,183.6	967.7	705.6	517.7
27520	COMMERCIAL PRINTING, LITHOGRAPHIC, N.S.K.	1,405.7	(424.1)	(425.6)	(787.7)	(700.2)	750.9	420.1	96.3
27530	ENGRAVING & PLATE PRINTING, EX. PHOTOENGRAVING	288.7	353.3	319.9	303.8	230.1	r205.0	151.3	111.2
2754-	COMMERCIAL PRINTING, GRAVURE	1,166.3	1,109.0	973.4	959.8	805.2	759.1	(NA)	(NA)
27541	MAGAZINE AND PERIODICAL PRINTING, GRAVURE	275.5	(NA)	(NA)	(NA)	(NA)	(NA)		
27542	LABELS AND WRAPPERS PRINTING, GRAVURE	276.2	345.6	299.6	270.1	209.5	189.9		
27543	CATALOG AND DIRECTORY PRINTING, GRAVURE	233.5	(NA)	(NA)	(NA)	(NA)	(NA)		
27544	FINANCIAL AND LEGAL PRINTING, GRAVURE	(34)	(34)	(34)	(34)	(34)	(34)	430.4	304.8
27545	ADVERTISING PRINTING, GRAVURE	143.2	89.7	109.4	123.2	123.2	100.9		
27546	OTHER GENERAL JOB PRINTING, GRAVURE	34471.7	34(97.8)	34485.1	34474.8	34448.6	34446.8		
27547	GRAVURE PLATES AND CYLINDERS	58.0	(77.4)	(55.4)	(45.0)	(45.3)	33.7		
27540	COMMERCIAL PRINTING, GRAVURE, N.S.K.	88.4	16.8	(7.3)	8.5	7.9	32.1		
2761-	MANIFOLD BUSINESS FORMS	2,702.6	2,226.1	2,106.2	2,139.2	1,648.7	1,381.9	895.8	598.4
27612	UNIT SET FORMS	885.3	780.5	738.4	736.9	577.3	514.2	347.4	258.0
27613	MANIFOLD BOOKS (INCLUDING SALES)	129.5	78.1	71.7	74.9	57.9	51.5	44.2	39.6
27615	CUSTOM CONTINUOUS FORMS	896.0	973.7	912.2	917.2	684.4	553.6	480.2	291.1
27617	STOCK CONTINUOUS FORMS	622.2	396.1	380.3	410.3	262.8	204.9		
27610	MANIFOLD BUSINESS FORMS, N.S.K.	169.7	(9)	(S)	(S)	66.3	57.7	24.0	9.8
2771-	GREETING CARD PUBLISHING	765.2	684.6	661.7	715.3	639.7	583.5	441.4	310.2
27711	GREETING CARDS, PUBLISHERS' SALES	694.3	643.0	602.7	647.7	560.4	510.8	381.4	262.8
27712	GREETING CARDS, PRINTED FOR PUBLICATION BY OTHERS	39.6	(27.1)	(41.7)	54.3	59.9	48.8	44.0	39.9
27710	GREETING CARD PUBLISHING, N.S.K.	31.3	(14.5)	(17.3)	(13.3)	19.4	23.9	16.0	7.5
2782-	BLANKBOOKS AND LOOSELEAF BINDERS	1,039.5	824.7	729.3	681.1	619.3	571.3	362.3	252.0
27821	BLANKBOOK MAKING	605.7	477.6	436.0	380.6	338.6	320.1	186.8	124.3
27822	LOOSELEAF BINDERS AND DEVICES	346.3	315.0	267.4	269.1	261.4	209.9	153.8	119.6
27820	BLANKBOOKS AND LOOSELEAF BINDERS, N.S.K.	87.5	(32.0)	(25.9)	(31.4)	19.3	41.3	21.7	8.1
2789-	BOOKBINDING AND RELATED WORK	508.0	437.9	424.0	432.6	393.4	369.2	337.5	243.2
27891	EDITION, LIBRARY, & OTHER HARD COVER BOOKBINDING	172.3	(188.1)	186.7	181.2	148.1	147.6	167.4	109.3
27892	OTHER BOOK, PAMPHLET, AND RELATED BINDING WORK	253.3	(208.9)	201.7	217.9	195.4	164.8	135.4	117.6
27890	BOOKBINDING AND RELATED WORK, N.S.K.	82.4	(41.0)	(35.6)	(33.5)	49.9	56.9	34.7	16.3
27910	TYPESETTING	781.5	543.5	494.4	515.5	542.1	508.7	362.1	249.6
27930	PHOTOENGRAVING PLATES MADE FOR OTHERS	223.5	(306.1)	263.0	232.6	236.0	221.3	237.1	214.7
27940	ELECTROTYPING AND STEREOTYPING DUPLICATE PLATES	15.6	(25.9)	(24.6)	(21.8)	33.8	35.5	61.4	71.9
2795-	LITHOGRAPHIC PLATEMAKING SERVICE	630.7	462.7	402.1	391.1	308.3	263.0	151.2	129.5
27951	LITHOGRAPHIC PLATES	183.6	(S)	(S)	(S)	150.1	112.3	(NA)	(NA)
27952	LITHOGRAPHIC PLATEMAKING SERVICES	403.3	(S)	(S)	(S)	158.2	131.6	(NA)	(NA)
27950	LITHOGRAPHIC PLATEMAKING SERVICES, N.S.K.	43.8	(9)	(9)	(9)	-	19.1	(NA)	(NA)
2812-	ALKALIES AND CHLORINE	1,786.7	1,865.7	1,673.1	1,232.1	875.6	805.7	623.1	526.5
28121	CHLORINE, COMPRESSED OR LIQUEFIED	520.0	564.7	495.6	347.2	245.2	210.2	190.8	164.0
28122	SODIUM CARBONATE (SODA ASH)	189.1	204.4	180.4	172.4	139.5	147.6	140.9	123.6
28123	SODIUM HYDROXIDE (CAUSTIC SODA)	997.0	993.7	909.7	666.4	450.0	410.9	254.9	209.7
28124	OTHER ALKALIES	73.9	103.2	84.9	44.4	40.9	33.7	35.2	27.6
28120	ALKALIES AND CHLORINE, N.S.K.	6.7	(9)	2.6	1.7	-	3.3	1.3	1.5
2813-	INDUSTRIAL GASES	1,199.1	1,049.3	906.7	793.4	721.1	659.1	543.4	389.6
28132	ACETYLENE	127.9	132.1	122.8	93.9	73.9	96.0	83.2	93.5
28133	CARBON DIOXIDE	103.0	71.8	62.6	56.9	49.9	45.7	48.0	49.9
28135	NITROGEN (INCLUDING LOWER PURITY)	278.7							
28136	OXYGEN (INCLUDING LOWER PURITY)	375.1	820.1	699.6	622.3	556.9	487.2	390.8	244.6
28137	OTHER ELEMENTAL COMPRESSED AND LIQUEFIED GASES	268.0							
28130	INDUSTRIAL GASES, N.S.K.	46.4	25.3	21.8	20.3	(40.4)	30.2	21.4	1.7
2816-	INORGANIC PIGMENTS	1,339.2	1,266.9	964.3	1,195.7	893.3	756.2	560.8	480.4
28161	TITANIUM PIGMENTS, COMPOSITE AND PURE	627.1	617.9	443.0	534.2	423.7	355.6	298.4	277.3
28162	OTHER WHITE OPAQUE PIGMENTS	204.8	196.8	183.1	227.7	127.3	99.9	65.4	50.4
28163	CHROME COLORS AND OTHER INORGANIC PIGMENTS	485.0	446.1	331.6	393.3	321.6	283.2	189.3	151.8
28160	INORGANIC PIGMENTS, N.S.K.	22.3	(S)	(S)	(40.5)	20.7	17.5	7.6	0.9
2819-	INDUSTRIAL INORGANIC CHEMICALS, N.E.C.	6,920.3	5,750.8	4,674.7	4,609.4	3,513.7	r3,008.8	(NA)	(NA)
28193	SULFURIC ACID	427.1	364.8	367.0	315.2	236.0	245.4	250.6	193.9
28194	INORGANIC ACIDS, EX. NITRIC, SULFURIC, & PHOS.	364.4	281.1	205.9	218.9	196.0	160.4	(NA)	(NA)
28195	ALUMINUM OXIDE, EXCEPT NATURAL ALUMINA	827.3	718.4	594.8	622.1	460.9	388.6	402.4	318.5
28196	OTHER ALUMINUM COMPOUNDS	312.3	320.1	244.9	234.5	195.9	175.5	127.2	103.8
28197	OTHER POTASSIUM AND SODIUM COMPOUNDS	398.4	1,074.4	909.5	899.5	582.8	503.1	455.7	513.3
28198	INORGANIC CHEMICAL CATALYTIC PREPARATION	398.4	391.8	277.6	256.7	205.3	172.8	123.1	75.2
28199	OTHER INORGANIC CHEMICALS, N.E.C.	3,375.3	2,561.4	2,050.5	2,050.0	1,622.0	1,334.6	1,035.5	825.8
28190	INDUSTRIAL INORGANIC CHEMICALS, N.E.C., N.S.K.	112.8	(38.7)	24.5	12.5	14.8	r28.4	38.9	11.1
2821-	PLASTICS MATERIALS AND RESINS	12,181.1	10,455.0	7,747.5	8,443.8	5,686.9	4,486.4	2,784.9	(NA)
28213	THERMOPLASTIC RESINS AND PLASTICS MATERIALS	9,897.7	8,436.0	6,112.0	6,687.9	4,543.1	3,576.8	2,756.2	2,003.7
28214	THERMOSETTING RESINS AND PLASTICS MATERIALS	2,226.7	2,007.9	1,613.2	1,746.6	1,127.3	904.9		
28210	PLASTICS MATERIALS AND RESINS, N.S.K.	56.7	(10.8)	22.1	9.3	(16.5)	4.7	28.7	(NA)
28220	SYNTHETIC RUBBER (VULCANIZABLE ELASTOMERS)	2,354.1	2,204.4	1,820.0	1,861.6	1,397.1	1,288.6	1,004.9	862.3
28233	RAYON AND ACETATE FIBER	851.1	35812.7	35780.2	35897.9	35744.0	35684.6	35681.1	35648.9
2824-	ORGANIC FIBERS, NONCELLULOSIC	5,471.5	354,414.1	354,035.5	353,866.9	353,953.9	352,949.1	351,974.1	1,368.3
28241	NYLON FIBERS, EXCEPT PRODUCER TEXTURED	1,962.9	1,614.2	1,469.7	1,567.4	1,526.9	1,251.8	1,068.4	896.1
28243	ACRYLIC & MODACRYLIC FIB., EX. PRODUCER TEXTURED	495.8					331.9		
28244	POLYESTER FIBERS, EXCEPT PRODUCER TEXTURED	1,938.6	2,791.3	2,562.1	2,298.9	2,422.7	1,229.4	905.3	472.2
28245	OTHER NONCELL. MANMADE FIB., EX. PROD. TEXTURED	178.2					132.7		
28246	PRODUCER TEXTURED MANMADE FIBERS, GROUP FILAMENTS	890.6	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
28240	ORGANIC FIBERS, NONCELLULOSIC, N.S.K.	5.4	(8.5)	(3.7)	(.6)	4.3	3.3	(.4)	-

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977** - Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
2831-	BIOLOGICAL PRODUCTS	1,067.5	874.1	788.2	684.4	559.2	495.2	220.6	167.3
28311	BLOOD AND BLOOD DERIVATIVES, FOR HUMAN USE	243.1	180.0	164.5	164.8	153.3	125.9	35.9	(NA)
28312	VACCINES, TOXOIDS, AND ANTIGENS, FOR HUMAN USE	99.4	91.1	76.2	79.6	83.0	70.5	36.6	(NA)
28313	ANTITOXINS, ANTIVENINS, & SIM. DERIV., HUMAN USE	26.6	(19.5)	(19.2)	21.9	(NA)	18.3	12.7	(NA)
28314	DIAGNOSTIC SUB., OTH. BIOLOGICS, EXC. INDUS.	[3]448.9	477.8	427.2	315.8	201.9	192.5	81.9	(NA)
28315	BIOLOGICAL PRODUCTS FOR VETERINARY USE	[3]121.1	92.3	73.2	64.5	86.9	74.1	47.9	40.7
28316	BIOLOGICAL PRODUCTS FOR INDUSTRIAL AND OTHER USE	[3]46.6	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
28310	BIOLOGICAL PRODUCTS, N.S.K.	81.8	(13.3)	(28.0)	37.8	16.8	13.8	5.7	1.3
2833-	MEDICINALS AND BOTANICALS	2,205.9	1,774.4	1,489.7	1,466.9	985.5	793.5	593.8	434.0
28331	SYNTHETIC ORGANIC MEDICINAL CHEMICALS, IN BULK	1,787.8	1,545.3	1,297.1	1,248.1	814.9	635.6	503.7	367.8
28332	OTHER MED. CHEM. & BOTANICAL PRODUCTS, IN BULK	313.7	225.6	186.4	(205.4)	157.1	144.0	80.1	64.7
28330	MEDICINALS AND BOTANICALS, N.S.K.	104.4	(S)	(S)	(13.4)	13.5	14.0	10.0	1.5
2834-	PHARMACEUTICAL PREPARATION AND USE	9,639.5	9,217.3	8,247.2	7,463.2	6,841.0	6,295.4	4,139.7	3,000.2
28341	PHARM. PREP.--NEOPLASM, ENDOCR., METABOL., HUMAN	905.3	873.1	832.4	759.7	639.6	615.4	420.2	259.1
28342	PHARM. PREP.--NERVOUS SYS., SENSE ORGANS, HUMAN	2,254.4	2,227.5	2,086.3	1,860.6	1,717.6	1,638.1	1,137.1	755.8
28343	PHARM. PREP.--CARDIOVASCULAR SYSTEM, HUMAN	748.4	755.3	642.3	524.7	439.7	383.1	207.5	143.6
28344	PHARM. PREP.--RESPIRATORY SYSTEM, HUMAN	871.4	877.8	764.9	665.0	619.1	579.9	361.4	283.1
28345	PHARM. PREP.--DIGESTIVE, URINARY SYS., HUMAN	1,080.3	1,052.5	932.9	829.3	755.4	764.0	552.1	402.8
28346	PHARM. PREP.--ACTING ON THE SKIN, HUMAN	613.1	562.3	499.2	467.0	386.7	348.5	229.1	160.3
28347	VITAMIN, NUT., & HEMATINIC PREP., FOR HUMAN	1,315.4	1,114.6	999.4	913.6	865.7	690.5	378.4	340.8
28348	PHARM. PREP.--PARASITIC, INFECT. DISEASES, HUMAN	1,292.6	1,292.1	1,110.4	1,104.9	1,054.1	949.0	664.5	520.1
28349	PHARMACEUTICAL PREPARATIONS FOR VETERINARY	353.3	369.0	297.0	269.3	265.8	240.3	135.4	110.4
28340	PHARMACEUTICAL PREPARATIONS, N.S.K.	205.3	(93.1)	(82.3)	(69.1)	97.3	86.6	54.1	24.3
2841-	SOAP AND OTHER DETERGENT	4,999.6	4,492.9	3,965.8	3,500.3	3,033.1	2,851.8	2,200.8	1,780.7
28411	NONHOUSEHOLD SOAP AND DETERGENTS	1,005.8	991.8	874.2	797.7	681.2	652.5	417.9	(NA)
28412	HOUSEHOLD DETERGENTS	2,817.2	2,655.3	2,368.5	2,050.1	1,776.0	1,633.9	1,329.7	(NA)
28413	SOAPS, EXCEPT SPECIALTY CLEANERS AND HOUSEHOLD	707.0	646.5	584.0	530.2	446.7	412.0	332.0	296.3
28414	GLYCERIN	101.0	104.7	84.5	79.2	58.9	50.4	46.1	38.5
28410	SOAP AND DETERGENTS, N.S.K.	(368.6)	(94.6)	(54.6)	(43.1)	(70.3)	103.0	73.2	17.6
2842-	POLISHES AND SANITATION GOODS	2,668.5	2,431.5	2,196.9	1,980.4	1,844.3	[r]1,724.2	1,116.9	747.8
28422	HOUSEHOLD BLEACHES	353.8	464.9	400.0	315.3	273.5	235.5	169.5	110.8
28423	SPECIALTY CLEANING AND SANITATION PRODUCTS	1,478.2	1,316.3	1,197.2	1,071.2	936.7	[r]887.3	528.0	331.7
28424	POLISHING PREPARATIONS AND RELATED PRODUCTS	505.7	509.9	476.0	443.9	433.2	391.8	324.5	278.8
28420	POLISHES AND SANITATION GOODS, N.S.K.	330.8	140.4	123.7	150.0	200.9	209.6	94.9	26.5
28430	SURFACE ACTIVE AGENTS, FINISHES, AND ASSISTANT	1,341.0	1,178.8	968.9	983.5	681.5	580.7	403.2	283.6
2844-	TOILET PREPARATIONS	6,393.5	5,882.6	5,178.9	4,796.7	4,573.4	4,247.1	2,794.2	1,858.6
28441	SHAVING PREPARATIONS	268.2	267.6	212.7	249.2	317.9	250.7	178.7	111.1
28442	PERFUMES, TOILET WATERS, AND COLOGNE	1,096.8	1,007.0	918.9	754.9	715.9	677.0	394.9	208.6
28443	HAIR PREPARATIONS (INCLUDING SHAMPOOS)	1,474.9	1,408.0	1,306.3	1,129.2	1,099.7	1,065.1	771.6	592.7
28444	DENTIFRICES, MOUTHWASHES, GARGLES, AND RINSES	659.6	627.8	536.5	534.6	(S)	484.6	323.1	228.4
28445	OTHER COSMETICS AND TOILET PREPARATIONS	2,597.4	2,445.6	2,145.0	1,970.3	1,895.0	1,673.6	1,045.7	698.2
28440	TOILET PREPARATIONS, N.S.K.	296.6	126.7	59.5	158.5	80.4	96.0	80.2	19.6
2851-	PAINTS AND ALLIED PRODUCTS	6,123.0	5,414.6	4,671.8	4,578.1	3,914.4	3,520.2	2,703.8	2,298.3
28511	ARCHITECTURAL COATINGS (INCLUDING LACQUERS)	2,234.0	4,493.5	3,866.3	3,684.9	3,013.4	1,306.6	2,129.3	1,999.0
28512	PROD. FIN. FOR ORIG. EQP. MFRS., INCL. LACQUER.	1,957.2					1,052.7		
28513	SPEC. PURPOSE COAT., INCL. TRANS., AFTER-MARKET	727.8					340.2		
28518	PUTTY AND ALLIED PRODUCTS	140.4	138.8	125.1	125.6	143.4	138.0	(37)	(37)
28519	MISCELLANEOUS PAINT PRODUCTS	532.5	569.0	468.2	497.9	408.4	350.6	235.6	190.2
28510	PAINTS AND ALLIED PRODUCTS, N.S.K.	531.1	(213.3)	(212.2)	269.7	349.2	332.1	338.9	109.1
2861-	GUM AND WOOD CHEMICALS	436.1	336.8	325.8	427.7	331.3	300.8	205.1	197.0
28611	SOFTWOOD DISTILLATION PRODUCTS	123.0	95.9	93.8	109.8	101.2	94.1	81.4	82.4
28612	OTHER GUM AND WOOD CHEMICALS	289.0	268.6	255.7	313.4	219.5	197.0	111.6	111.4
28610	GUM AND WOOD CHEMICALS, N.S.K.	24.1	(9)	(9)	4.5	10.6	9.7	12.2	3.2
2865-	CYCLIC CRUDES AND INTERMEDIATES	5,514.3	5,230.7	4,202.6	4,141.2	2,763.9	[r]2,337.5	1,654.2	1,195.2
28651	CYCLIC INTERMEDIATES	4,084.4	3,935.8	3,160.9	3,010.9	1,874.1	1,538.0	1,066.1	758.6
28652	SYNTHETIC ORGANIC DYES	722.1	661.0	506.2	572.6	510.1	473.6	325.6	243.1
28653	SYNTHETIC ORGANIC PIGMENTS, LAKES, AND TONERS	414.5	400.8	304.0	332.6	273.1	224.7	162.2	111.7
28655	CYCLIC (COAL TAR) CRUDES	250.9	(223.0)	225.0	215.8	85.9	80.9	87.6	79.3
28650	CYCLIC CRUDES AND INTERMEDIATES, N.S.K.	42.4	(10.1)	(6.5)	9.3	(20.7)	[r]20.3	12.7	2.5
2869-	INDUSTRIAL ORGANIC CHEMICALS, N.E.C.	19,377.6	16,794.5	14,099.0	12,742.8	8,548.3	[r]7,510.1	[3]5,539.4	[3]4,183.8
28693	SYNTHETIC ORGANIC CHEMICALS, N.E.C.	1,600.5	1,528.7	1,166.1	1,234.1	879.8	723.0	585.6	426.8
28694	PESTICIDES & OTHER ORGANIC AGRI. CHEMICALS	1,474.0	1,208.1	1,135.1	978.4	617.0	489.3	308.2	223.4
28695	ETHYL ALCO. & OTHER INDUS. ORGANIC CHEM., N.E.C.	645.9	962.8	798.5	613.9	364.7	280.3	239.4	192.3
28696	MISC. END-USE CHEMS. & CHEM. PRODS. EXC. UREA	2,070.5	12,977.2	10,900.5	9,828.1	6,581.7	5,900.2	4,367.2	3,329.6
28697	MISC. CYCLIC & ACYCLIC CHEMICALS & CHEM. PRODS.	13,424.7							
28690	INDUSTRIAL ORGANIC CHEMICALS, N.E.C., N.S.K.	162.1	(117.7)	(98.8)	(88.3)	105.1	117.3	38.7	11.6
2873-	NITROGENOUS FERTILIZERS	2,811.5	2,552.5	2,817.6	2,067.3	1,088.6	937.3	(NA)	(NA)
28731	SYNTHETIC AMMONIA, NIT. ACID, & AMMONIUM COMP.	2,300.8	2,131.1	2,448.1	1,789.8	891.5	766.2	827.3	587.8
28732	UREA	447.6	399.3	354.5	268.1	186.0	160.4	(NA)	(NA)
28733	FERTILIZER MATERIALS OF ORGANIC ORIGIN	29.5	(20.6)	(14.8)	(9.4)	9.9	(S)	10.0	11.8
28730	NITROGENOUS FERTILIZERS, N.S.K.	33.6	1.5	.3	-	1.2	(D)	(NA)	(NA)
2874-	PHOSPHATIC FERTILIZERS	2,552.6	2,249.0	2,465.2	2,009.0	1,161.2	1,052.5	(NA)	(NA)
28741	PHOSPHORIC ACID	510.2	497.9	416.0	295.4	206.3	177.5	(NA)	(NA)
28742	SUPERPHOSPHATE & OTHER PHOS. FERTILIZER MAT.	1,609.1	988.5	1,209.3	913.3	443.0	420.7	542.0	321.5
28744	MIXED FERTILIZERS, MADE FROM PRODUCED MATERIALS	429.3	764.7	844.4	789.4	503.5	443.0	426.0	394.6
28740	PHOSPHATIC FERTILIZERS, N.S.K.	3.9	(9)	(9)	(10.9)	8.4	11.3	4.9	-
28754	MIXED FERTILIZERS, MADE FROM PURCHASED MATERIALS	1,480.9	1,224.3	1,305.3	1,127.0	782.5	651.9	588.2	492.7
2879-	AGRICULTURAL CHEMICALS, N.E.C.	2,704.0	2,559.5	2,298.2	1,842.5	1,326.6	1,196.2	964.2	599.5
28795	INSECT. PREPS., AGRIC., GARDEN, & HEALTH USE	828.2	685.9	669.0	601.0	449.8	387.6	(NA)	(NA)
28796	HERBICIDAL PREPS., AGRIC., GARDEN, & HEALTH USE	1,177.1	1,303.4	1,184.5	866.0	520.6	432.0	(NA)	(NA)
28797	FUNGICIDAL PREPS., AGRIC., GARDEN, & HEALTH USE	196.9	(269.3)	194.4	126.6	113.8	85.6	(NA)	(NA)
28798	PEST. PREPS., AGRIC., GARDEN, HEALTH USE, N.E.C.	119.9							
28799	HOUSEHOLD PESTICIDAL PREPARATIONS	227.8	271.4	242.2	(210.0)	183.3	184.2	129.9	85.9
28790	AGRICULTURAL CHEMICALS, N.E.C., N.S.K.	154.1	(29.3)	(S)	38.9	59.1	106.8	(NA)	(NA)
2891-	ADHESIVES AND SEALANTS	1,873.1	1,655.4	1,463.6	1,403.9	1,151.8	954.3	547.7	(NA)
28913	NATURAL BASE GLUES AND ADHESIVES	166.4	209.3	190.7	202.7	144.8	119.5	98.4	[3]325.1
28914	SYNTHETIC RESIN AND RUBBER ADHESIVES	1,221.8	1,134.1	1,016.0	958.0	800.7	671.8	356.6	
28915	CAULKING COMPOUNDS AND SEALANT	364.4	309.1	261.5	231.9	163.4	121.2	68.3	(NA)
28910	ADHESIVES AND SEALANTS, N.S.K.	120.5	(S)	(9)	(11.3)	42.9	41.7	24.4	(NA)
2892-	EXPLOSIVES	435.5	425.7	450.6	358.8	247.2	237.6	248.5	181.0
28921	EXPLOSIVES, EXCEPT THOSE SHIPPED BY GOCO PLANTS	426.1	428.5	453.5	358.8	233.7	232.8	248.5	181.0
28920	EXPLOSIVES, N.S.K.	9.4	(9)	(9)	-	(13.5)	4.7		
2893-	PRINTING INK	904.0	764.7	698.9	622.9	528.4	498.0	342.6	258.2
28931	LETTERPRESS INKS, BLACK AND COLOR	105.9	(101.0)	(89.4)	91.9	100.1	109.8		
28932	LITHOGRAPHIC AND OFFSET INKS, BLACK AND COLOR	303.2	224.0	213.4	192.6	164.8	151.8		
28933	GRAVURE INKS	190.7	144.7	131.8	119.9	92.6	82.5	342.6	258.2
28934	FLEXOGRAPHIC INKS	157.1	133.1	116.6	116.4	86.7	73.4		
28935	PRINTING INKS, N.E.C.	60.6	(65.5)	(54.9)	44.9	36.9	35.2		
28930	PRINTING INK, N.S.K.	86.5	(96.3)	(92.8)	(57.2)	47.3	45.4		

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes — Value Shipped by All Producers: 1963, 1967, and 1972 to 1977** – Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
28950	CARBON BLACK, CHANNEL AND FURNACE PROCESS ONLY. .	466.2	377.1	306.7	331.1	239.4	227.1	167.8	149.4
2899-	CHEMICAL PREPARATIONS, N.E.C.	4,243.8	3,472.2	2,962.6	2,952.3	2,431.3	2,228.3	[40] 1,559.6	[40 41] 1,124.1
28991	SALT.	246.2	207.8	183.9	160.4	151.3	133.9	111.6	98.4
28992	FATTY ACIDS	353.2	277.4	232.9	338.7	229.4	155.3	111.1	88.1
28994	GELATIN, EXCEPT READY-TO-EAT DESSERTS	175.3	147.3	144.3	148.8	75.5	68.2	66.2	55.4
28995	ESSENTIAL OILS, FIREWORKS, SIZES, ETC., N.E.C.. .	3,109.0	2,760.2	2,339.2	2,132.6	1,758.5	1,641.0	[40] 1,146.1	[40 41] 841.0
28990	CHEMICAL PREPARATIONS, N.E.C., N.S.K.	360.1	(78.0)	(61.8)	(171.8)	216.6	229.8	124.6	41.2
2911-	PETROLEUM REFINING PRODUCTS	88,589.5	74,348.0	62,481.4	52,224.8	30,471.7	24,772.8	19,248.7	15,558.3
29111	GASOLINE.	41,840.4	36,840.5	31,502.0	24,946.2	15,728.7	13,029.6	9,844.2	7,978.1
29112	JET FUEL.	5,358.9	4,228.8	3,701.8	2,935.3	1,637.8	1,371.6	1,100.4	632.5
29113	KEROSENE.	892.9	828.1	791.1	735.6	456.2	372.4	430.5	374.7
29114	LIGHT FUEL OIL.	17,705.4	13,554.4	11,297.6	9,760.8	5,476.4	4,407.7	3,305.7	2,896.3
29115	HEAVY FUEL OIL.	6,793.9	5,242.8	4,626.4	3,643.2	1,660.2	1,107.2	566.1	621.8
29116	LIQUEFIED REFINERY GASES (INCL. OTHER ALIPHATICS)	4,500.8	3,604.2	2,909.7	3,026.4	1,430.1	1,152.9	1,135.7	702.9
29117	LUBRICATING OILS AND GREASES, MADE IN REFINERIES.	1,718.9	1,638.6	1,443.4	1,501.6	1,060.6	894.8	883.7	784.5
29118	UNFINISHED OILS AND LUBRICATING OIL BASE STOCK. .	2,887.8	2,194.8	1,612.5	1,419.8	890.7	733.7	613.2	526.2
29119	ASPHALT	2,216.7	1,564.1	1,540.8	1,488.5	807.6	671.5	424.2	360.5
29110	PETROLEUM REFINERY PRODUCTS, N.S.K.	4,869.8	4,651.7	3,056.0	2,767.4	1,323.4	1,031.4	944.9	680.7
29510	PAVING MIXTURES AND BLOCKS.	1,518.6	1,229.1	1,203.4	1,167.2	962.2	893.4	529.6	402.9
2952-	ASPHALT FELTS AND COATINGS.	1,828.6	1,699.7	1,462.8	1,357.0	1,058.5	902.2	519.4	408.1
29521	ASPHALT & TAR SATURATED FELTS & BOARDS, NONBLDG..	99.5	(51.0)	(37.2)	29.4	40.6	34.2	27.5	21.1
29522	ROOFING ASPHALTS, PITCHES, COATINGS, AND CEMENTS.	263.4	289.1	268.1	258.8	182.6	155.3	101.4	94.4
29523	PREPARED ASPHALT & TAR ROOFING & SIDING PRODUCTS.	1,405.3	1,327.9	1,139.6	1,052.0	828.4	690.6	375.2	338.6
29520	ASPHALT FELTS AND COATINGS, N.S.K..	60.5	(31.7)	(18.0)	(17.8)	(6.9)	22.1	15.3	5.4
29920	LUBRICATING OILS & GREASES, NOT MADE IN REFINERY.	1,514.4	1,216.5	1,059.0	1,005.3	718.3	642.0	443.4	425.6
29990	PETROLEUM AND COAL PRODUCTS, N.E.C.	494.6	350.6	253.4	204.1	156.7	139.2	79.6	69.3
3011-	TIRES AND INNER TUBES	8,127.6	6,527.7	6,106.8	6,142.4	5,506.3	4,898.4	3,133.5	2,419.8
30111	PASSENGER CAR PNEUMATIC TIRES (CASINGS)	4,571.1	3,631.4	3,391.7	3,233.1	3,121.8	2,860.0	1,713.6	1,285.9
30112	TRUCK AND BUS PNEUMATIC TIRES	2,276.6	1,754.0	1,709.4	1,928.0	1,546.5	1,282.1	829.4	659.5
30113	OTHER PNEUMATIC TIRES AND ALL SOLID TIRES	660.5	571.2	501.7	498.4	419.5	381.1	274.5	186.8
30114	INNER TUBES	230.5	221.1	195.0	212.6	164.2	146.7	112.9	95.1
30115	TREAD RUBBER, TIRE SUNDRIES AND REPAIR MATERIALS.	368.7	337.6	298.2	263.1	242.2	217.0	198.3	192.5
30110	TIRES AND INNER TUBES, N.S.K.	20.2	(12.4)	(10.8)	7.2	(12.1)	11.5	4.9	-
30210	RUBBER AND PLASTICS FOOTWEAR.	404.8	475.4	500.7	512.8	469.7	493.9	402.0	362.5
30310	RECLAIMED RUBBER.	61.5	(31.4)	37.2	48.9	46.5	52.0	47.3	55.2
3041-	RUBBER AND PLASTICS HOSE AND BELTING.	1,541.2	1,357.2	1,215.2	1,229.0	947.9	886.0	672.1	497.5
30411	RUBBER AND PLASTICS BELTS AND BELTING, FLA. . . .	260.9	248.3	268.9	222.3	160.5	157.6	101.5	(NA)
30412	OTHER RUBBER AND PLASTICS BELTS AND BELTING . . .	348.2	295.8	238.1	269.0	223.6	204.0	149.1	(NA)
30413	RUBBER HOSE, MANDREL MADE AND ALL HYDRAULIC . . .	253.4	255.4	203.0	219.8	174.8	143.5	114.6	(NA)
30414	RUBBER HOSE, LONG LENGTH NONHYDRAULIC	164.9	140.8	135.0	142.6	84.2	84.8	52.3	(NA)
30415	RUBBER AND PLASTICS GARDEN HOSE	113.3	(64.4)	(60.8)	64.6	53.3	56.3	41.1	(NA)
30416	OTHER RUBBER AND PLASTICS HOSE, N.E.C..	387.4	339.9	304.3	310.7	237.6	237.0	213.4	(NA)
30410	RUBBER AND PLASTICS HOSE AND BELTING, N.S.K.. . .	13.1	(12.6)	5.1	-	(13.9)	2.8	(NA)	(NA)
3069-	FABRICATED RUBBER PRODUCTS, N.E.C..	4,223.2	3,669.7	3,210.4	3,322.4	2,961.5	2,538.7	(NA)	(NA)
30693	SPONGE AND FOAM RUBBER GOODS.	584.3	464.6	385.5	447.3	387.7	350.1	276.7	226.4
30694	RUBBER FLOOR AND WALL COVERINGS	170.6	159.6	121.4	114.7	88.2	98.4	70.7	93.2
30696	RUBBER SHOE PRODUCTS, ELASTOMER RESIN	225.1	197.6	177.1	197.8	170.9	154.5	126.1	136.2
30697	RUBBER DRUGGIST AND MEDICAL SUNDRIES.	232.0	208.7	181.2	154.4	126.4	116.8	84.1	79.2
30699	RUBBER COMPOUNDS OR MIXTURES.	246.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3069A	MOLDED RUBBER MECHANICAL GOODS.	1,305.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3069B	EXTRUDED LATHE CUT RUBBER MECHANICAL GOODS. . . .	259.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3069C	OTHER INDUSTRIAL RUBBER PRODUCTS.	262.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3069D	RUBBER COATED FABRICS AND RUBBER CLOTHING	178.6	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3069E	OTHER RUBBER GOODS.	455.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
30690	FABRICATED RUBBER PRODUCTS, N.E.C., N.S.K.. . . .	302.9	(137.9)	(125.5)	(119.4)	137.3	140.7	102.1	42.4
3079-	MISCELLANEOUS PLASTICS PRODUCTS	23,878.7	18,897.4	15,378.1	15,979.4	13,374.2	11,094.5	(NA)	(NA)
30791	UNSUPPORTED PLASTICS FILM, SHEETS, RODS, & TUBES.	3,978.0	3,303.1	2,617.1	2,958.0	2,221.6	2,064.8	1,225.4	688.1
30793	LAMINATED PLASTICS SHEETS, RODS, AND TUBES. . . .	1,112.0	927.1	770.0	843.7	681.6	568.1	352.8	244.1
30796	PLASTICS BUILDING AND CONSTRUCTION PRODUCTS . . .	2,695.9	1,666.4	1,284.7	1,494.2	1,362.4	1,114.8	426.7	283.8
30798	REGENERATED CELLULOSIC PRODUCTS, EXCEPT RAYON . .	389.2	451.9	450.4	677.1	506.3	429.3	326.9	327.6
30799	CUSTOM COMPOUNDED PURCHASED RESIN	699.6	441.8	370.7	378.3	320.5	227.2	236.0	184.6
3079A	OTHER PLASTICS AND RESIN MATERIALS, N.E.C.. . . .	424.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079B	PLASTICS FURNITURE COMPONENTS AND FURNISHINGS . .	1,032.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079C	PLASTICS PACKAGING PRODUCTS	2,729.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079D	PLASTICS TRANSPORTATION PRODUCTS.	2,384.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079E	PLASTICS ELECTRICAL AND ELECTRONIC PRODUCTS . . .	1,305.3	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079F	PLASTICS INDUSTRIAL MACHINERY PRODUCTS.	620.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079G	PLASTICS DINNERWARE, TABLEWARE, AND KITCHENWARE .	608.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3079H	OTHER PLASTICS PRODUCTS, N.E.C.	2,941.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
30790	MISCELLANEOUS PLASTICS PRODUCTS, N.S.K.	2,957.5	4,883.7	3,932.6	3,775.9	3,021.6	2,343.8	(NA)	(NA)
3111-	LEATHER TANNING AND FINISHING	1,380.1	1,237.3	1,028.6	1,013.3	1,041.9	1,026.4	846.2	734.9
31111	FINISHED CATTLE HIDE AND KIP SIDE LEATHERS. . . .	1,005.4	876.8	655.8	646.7	691.0	684.1	495.7	397.4
31112	FINISHED CALF AND WHOLE KIP LEATHERS.	25.6	(14.1)	33.4	35.0	34.0	35.1	35.6	51.9
31113	FINISHED SHEEP AND LAMB LEATHERS.	88.1	(73.2)	(74.5)	(88.0)	56.7	54.7	60.9	69.7
31114	OTHER FINISHED LEATHERS	35.9	(57.7)	(48.7)	(37.2)	47.7	47.9	75.3	69.4
31115	ROUGH, RUSSET, AND CRUST LEATHER.	47.7	(97.6)	(88.6)	(103.7)	53.4	51.8	30.5	23.4
31119	CONTRACT RECEIPTS FOR TANNING & FINISHING LEATHER	109.4	(94.5)	(83.4)	(58.9)	5.5	87.0	113.1	99.1
31110	LEATHER, TANNING AND FINISHING, N.S.K..	68.0	(23.5)	(44.2)	(43.8)	73.6	65.8	35.1	23.9
31310	FOOTWEAR CUT STOCK AND FINDING.	255.1	255.5	219.1	217.8	216.6	196.1	254.3	216.0
31420	HOUSE SLIPPERS.	190.2	163.0	166.9	187.7	166.8	159.4	162.3	127.6
3143-	MEN'S FOOTWEAR, EXCEPT ATHLETIC	1,592.1	1,483.3	1,332.7	1,327.7	1,288.8	1,181.3	984.4	705.9
31433	MEN'S WORK SHOES AND BOOTS.	421.7	366.9	336.3	369.0	331.5	309.5	315.0	174.9
31434	MEN'S DRESS AND CASUAL BOOTS, EXCEPT WORK	271.0	283.0	260.3	220.4	182.7	154.1		
31435	MEN'S DRESS AND CASUAL SHOES, EXCEPT ATHLETIC . .	872.5	823.2	725.0	716.4	767.3	714.0	669.4	531.0
31430	MEN'S FOOTWEAR, EXCEPT ATHLETIC, N.S.K.	26.9	(10.1)	(11.2)	(21.9)	7.3	3.7		
3144-	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC	1,386.8	1,306.5	1,211.3	1,233.1	1,274.4	1,348.3	1,249.0	1,065.5
31445	WOMEN'S BOOTS, ANKLE HEIGHT AND HIGHER.	232.2	91.5	74.5	52.8	78.9	102.6		
31446	WOMEN'S SANDALS	102.8							
31447	WOMEN'S CASUAL SHOES, EXCEPT SANDALS.	524.6	(1,189.4)	(1,072.1)	(1,072.4)	1,111.3	1,197.3	1,249.0	1,065.5
31448	WOMEN'S DRESS SHOES	480.6							
31440	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC, N.S.K.	46.6	(25.6)	(64.7)	(107.9)	84.2	48.4		
3149-	FOOTWEAR, EXCEPT RUBBER, N.E.C.	568.0	580.4	522.9	544.2	(NA)	475.7	(NA)	(NA)
31491	YOUTHS' & BOYS' SHOES (EX. RUBBER), EX. ATHLETIC.	98.3	132.2	119.6	121.3	101.8	103.8	100.1	82.2
31493	INFANTS' AND BABIES' SHOES, EXCEPT RUBBER	80.9	87.6	91.1	71.2	71.6	78.8	69.6	73.1

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
31495	MISSES' & PRETEENS' SHOES (EX. RUBBER), EX. ATHL.	90.9	198.2	205.8	208.9	206.9	199.3	186.7	189.9
31496	CHILDREN'S SHOES (EXCEPT RUBBER), EXCEPT ATHLETIC	114.0							
31497	OTHER FOOTWEAR (INCL. ATHLETIC), EXCEPT RUBBER. .	151.3	144.2	115.4	119.3	(S)	86.7	40.4	54.4
31490	FOOTWEAR, EXCEPT RUBBER, N.S.K.	32.6	(18.1)	(1.0)	(23.5)	(NA)	7.1	(NA)	(NA)
31510	LEATHER DRESS AND WORK GLOVES AND MITTENS	121.9	(104.6)	92.2	115.9	100.8	79.9	73.3	61.9
31610	SUITCASES, BRIEFCASES, BAGS, AND CASES.	585.3	471.0	430.6	424.8	385.8	321.9	320.1	204.8
31710	WOMEN'S AND CHILDREN'S HANDBAGS AND PURSES. . . .	436.2	448.8	403.5	361.8	351.5	344.4	312.1	266.1
31720	PERSONAL LEATHER GOODS, EXCEPT HANDBAGS	369.2	381.4	340.0	301.6	252.0	231.8	178.9	154.3
31990	OTHER LEATHER PRODUCTS, N.E.C..	237.4	(223.7)	194.2	150.6	169.2	[42]146.1	109.0	83.9
3211-32313	FLAT GLASS[43].	1,817.6	1,629.4	1,286.3	1,302.3	1,409.5	1,247.1	810.9	733.1
32113-32313	LAMINATED GLASS[43]	707.2	713.9	574.4	527.0	593.2	534.4	316.7	317.3
32114	OTHER FLAT GLASS.	360.6	304.1	255.8	250.7	250.9	193.6	130.2	(NA)
32115	SHEET, PLATE, AND FLOAT GLASS	742.8	609.9	453.8	522.6	563.0	519.1	316.5	(NA)
32110	FLAT GLASS, N.S.K..	7.0	1.5	(2.3)	(2.0)	2.4	-	2.6	-
32210	GLASS CONTAINERS.	3,618.0	3,278.6	3,000.1	2,494.3	2,251.0	2,085.2	1,331.0	982.4
3229-	PRESSED AND BLOWN GLASS, N.E.C.	2,100.7	1,846.3	1,529.0	1,444.0	1,422.6	1,262.4	880.4	615.1
32291	TABLE, KITCHEN, ART, AND NOVELTY GLASSWARE. . . .	743.0	693.8	610.4	517.1	460.2	432.9	266.9	220.3
32292	LIGHTING AND ELECTRONIC GLASSWARE	526.8	470.3	367.9	380.2	443.6	394.6	328.9	210.3
32293	GLASS FIBER, TEXTILE TYPE	514.0	418.4	323.2	312.3	308.8	253.5	138.1	91.6
32294	OTHER PRESSED AND BLOWN GLASSWARE	266.9	244.8	213.5	220.3	189.6	166.6	137.5	92.5
32290	PRESSED AND BLOWN GLASS, N.E.C., N.S.K.	50.0	(19.0)	(14.0)	(14.1)	(20.4)	14.8	9.0	(.4)
3231-	PRODUCTS OF PURCHASED GLASS[44]	1,643.3	1,332.3	1,032.4	1,101.3	1,120.3	977.1	567.7	412.0
32313	LAMINATED GLASS	(44)	(44)	(44)	(44)	(44)	(44)	(44)	(44)
32315	MIRRORS	409.4	(390.9)	(305.1)	276.4	259.4	254.5	160.0	123.4
32317	PRESSED AND BLOWN GLASSWARE	298.1	866.5	678.8	783.2	751.7	625.8	352.1	275.2
32318	OTHER GLASS PRODUCTS, MADE OF PURCHASED GLASS . .	758.1							
32310	PRODUCTS OF PURCHASED GLASS, N.S.K.	177.6	(S)	(48.5)	(41.7)	109.2	96.8	55.3	13.4
32410	CEMENT, HYDRAULIC	2,971.0	2,555.6	2,294.8	2,211.4	1,963.9	1,770.0	1,221.7	1,630.0
3251-	BRICK AND STRUCTURAL CLAY TILE.	715.3	538.3	449.2	397.1	483.2	471.3	343.9	308.1
32511	BRICK, EXCEPT CERAMIC GLAZED AND REFRACTORY . . .	671.8	490.7	402.4	376.9	450.2	431.4	298.1	263.6
32512	GLAZED BRICK, STRUCTURAL HOLLOW AND FACING TILE .	11.8	31.3	(38.5)	(16.1)	15.4	18.5	29.3	35.9
32510	BRICK AND STRUCTURAL CLAY TILE, N.S.K..	31.7	(16.3)	8.3	(4.1)	17.6	21.4	16.5	8.7
32530	CLAY FLOOR AND WALL TILE (INCLUDING QUARRY TILE).	222.4	214.7	191.5	186.8	170.2	157.9	134.8	143.4
32550	CLAY REFRACTORIES	540.1	498.0	472.1	456.4	364.1	302.2	235.3	180.7
3259-	STRUCTURAL CLAY PRODUCTS, N.E.C..	204.3	174.3	169.8	183.5	185.1	169.3	137.1	141.4
32591	VITRIFIED CLAY SEWER PIPE AND FITTINGS.	133.6	118.9	119.1	128.9	131.7	134.7	93.0	98.2
32592	OTHER STRUCTURAL CLAY PRODUCTS, N.E.C..	63.0	(66.3)	(65.0)	(54.6)	(48.4)	28.8	39.7	39.9
32590	STRUCTURAL CLAY PRODUCTS, N.E.C., N.S.K..	7.7	(9)	(9)	-	(5.0)	5.8.	4.4	3.3
32610	VITREOUS PLUMBING FIXTURES AND ACCESSORIES. . . .	367.8	287.6	243.9	287.1	261.9	248.3	148.9	143.8
32620	VITREOUS CHINA FOOD UTENSILS.	140.9	107.0	102.2	102.1	101.1	82.0	69.6	51.9
32630	EARTHENWARE TABLE AND KITCHEN ARTICLES.	90.8	74.9	81.0	74.8	62.3	58.1	46.7	58.2
32640	PORCELAIN AND CERAMIC ELECTRICAL SUPPLIES	378.9	333.2	326.3	369.7	360.5	259.0	188.6	121.5
32690	POTTERY PRODUCTS, N.E.C..	240.8	(258.7)	210.9	167.8	191.9	146.9	96.0	81.4
32710	CONCRETE BLOCK AND BRICK.	1,005.1	845.7	830.8	820.6	892.4	795.7	502.1	472.4
3272-	CONCRETE PRODUCTS, N.E.C.	2,596.1	2,199.2	2,227.1	2,156.0	2,097.6	1,864.7	1,047.5	861.9
32721	CONCRETE PIPE	843.8	781.8	809.2	713.0	599.4	565.3	400.5	369.3
32722	PRECAST CONCRETE PRODUCTS	772.6	783.8	823.3	774.1	678.6	536.8	341.5	297.3
32723	PRESTRESSED CONCRETE PRODUCTS	423.6	489.7	537.6	553.3	510.4	414.1	217.7	140.9
32720	CONCRETE PRODUCTS, N.E.C., N.S.K.	556.1	(143.9)	57.0	(115.6)	309.2	348.5	187.8	54.4
32730	READY-MIXED CONCRETE.	5,679.9	4,715.6	4,298.4	(4,167.2)	3,783.7	3,578.8	2,330.5	1,970.7
32740	LIME.	473.5	400.4	362.5	317.1	236.9	231.4	163.5	136.9
3275-	GYPSUM PRODUCTS	932.1	681.9	543.5	643.1	654.2	583.1	362.4	405.1
32751	GYPSUM BUILDING MATERIALS	864.9	616.7	486.7	582.7	610.3	538.4	339.1	
32752	OTHER GYPSUM PRODUCTS	54.0	62.0	53.5	60.4	37.7	40.4	19.4	405.1
32750	GYPSUM PRODUCTS, N.S.K.	13.3	(3.2)	(3.3)	-	(6.2)	4.3	3.9	
3281-	CUT STONE AND STONE PRODUCTS.	385.5	430.5	386.4	320.1	306.1	286.8	211.4	190.9
32811	CUT GRANITE AND GRANITE PRODUCTS.	164.4	(255.9)	(223.4)	185.2	134.4	123.3	75.9	87.8
32812	CUT LIMESTONE AND LIMESTONE PRODUCTS.	53.3	(87.1)	(75.9)	45.1	30.0	27.9	27.3	29.1
32813	CUT MARBLE AND OTHER CUT STONE PRODUCTS	83.6	56.1	59.9	59.3	59.3	44.2	53.8	63.6
32810	CUT STONE AND STONE PRODUCTS, N.S.K..	84.2	(31.4)	(27.2)	30.5	82.4	91.4	54.4	10.4
3291-	ABRASIVE PRODUCTS	1,721.8	1,430.8	1,230.5	1,245.6	1,064.5	892.3	734.2	572.2
32911	NONMETALLIC SIZED GRAINS, POWDERS, AND ABRASIVES.	350.1	260.6	220.0	235.7	154.1	140.3	101.5	74.3
32912	NONMETALLIC BONDED ABRASIVE PRODUCTS.	447.8	477.3	454.8	450.5	379.4	309.3	308.8	247.3
32913	NONMETALLIC COATED ABRASIVE PRODUCTS.	627.8	539.6	409.1	416.8	369.0	293.9	225.4	176.3
32914	METAL ABRASIVES, INCLUDING SCOURING PADS.	176.8	165.7	152.0	142.6	121.8	107.1	75.0	63.2
32910	ABRASIVE PRODUCTS, N.S.K.	119.2	(9)	(9)	-	40.2	41.4	23.5	11.1
3292-	ASBESTOS PRODUCTS	960.1	945.1	824.4	911.2	798.6	742.6	(NA)	(NA)
32922	ASBESTOS FRICTION MATERIALS	271.7	315.5	271.7	274.7	229.9	209.5	144.4	117.7
32928	ASPHALT AND VINYL ASBESTOS FLOOR TILE	232.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32929	ASBESTOS TEX., INSUL., & ASBESTOS-CEMENT PROD..	429.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32920	ASBESTOS PRODUCTS, N.S.K.	27.0	6.1	8.8	11.1	11.9	5.3	3.6	1.1
3293-	GASKETS, PACKING, AND SEALING DEVICES	1,254.8	972.2	787.0	813.4	761.1	714.7	(NA)	(NA)
32932	GASKETS AND GASKETING MATERIALS	501.0	426.9	338.0	353.7	287.5	264.6	248.7	199.7
32933	PACKING AND SEALING DEVICES	695.1	532.6	422.4	434.8	429.4	403.2	(NA)	(NA)
32930	GASKETS, PACKING, AND SEALING DEVICES, N.S.K. . .	58.7	(12.7)	(26.6)	(24.9)	44.2	46.7	28.6	11.3
32950	MINERALS AND EARTHS, GROUND OR OTHERWISE TREATED.	911.0	883.2	678.6	623.4	480.9	391.5	270.7	203.1
3296-	MINERAL WOOL.	1,684.0	1,334.8	1,110.6	1,014.1	849.5	738.7	425.0	356.0
32963	MINERAL WOOL STRUC. INSUL. MADE FROM PROD. FIBER.	907.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32964	MINERAL WOOL INDUS. INSUL. MADE FROM PROD. FIBER.	457.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32965	MINERAL WOOL STRUC. INSUL. MADE FROM PUR. FIBER .	191.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32966	MINERAL WOOL INDUS. INSUL. MADE FROM PUR. FIBER .	111.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
32960	MINERAL WOOL, N.S.K..	16.0	(21.3)	(1.8)	(1.2)	8.3	8.2	12.9	7.5

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
32970	NONCLAY REFRACTORIES	734.0	663.6	559.5	601.6	483.3	372.1	302.6	256.8
32990	NONMETALLIC MINERAL PRODUCTS, N.E.C.	391.1	329.2	283.4	228.4	185.1	169.7	87.5	883.0
3312-	BLAST FURNACE AND STEEL MILL PRODUCTS	39,368.0	36,831.5	32,523.9	38,200.1	28,033.9	22,210.5	18,102.3	15,668.7
33121	COKE OVEN PRODUCTS AND BLAST FURNACE PRODUCTS	3,032.2	3,128.4	3,267.1	2,963.5	1,835.3	1,497.3	1,257.4	1,484.9
33122	STEEL INGOT AND SEMIFINISHED SHAPES AND FORMS	4,039.3	4,046.3	3,278.5	4,197.6	3,003.8	2,502.9	2,526.5	2,034.7
33123	HOT ROLLED SHEET AND STRIP TIN MILL PRODUCTS	11,057.8	10,767.5	8,248.7	10,832.8	8,549.8	6,740.1	4,533.3	3,969.8
33124	HOT ROLLED BARS, PLATES, AND STRUCTURAL SHAPES	9,140.9	8,162.3	8,305.4	10,072.5	7,117.5	5,612.8	4,456.4	3,667.7
33125	STEEL WIRE	606.3	549.9	451.1	716.7	538.9	397.6	377.6	364.0
33126	STEEL PIPE AND TUBE	3,004.4	2,431.2	3,347.5	2,636.1	1,746.2	1,501.0	1,554.1	1,137.5
33127	COLD ROLLED STEEL SHEET AND STRIP	6,953.9	6,033.4	4,051.2	5,297.7	4,172.5	3,134.1	2,607.0	2,464.4
33128	COLD FINISHED STEEL BARS AND BAR SHAPES	421.9	322.2	296.5	455.8	361.4	268.7	256.6	199.4
3312A	SEAMLESS ROLLED RING FORGINGS, FERROUS	93.6	428.5	393.3	370.1	308.2	266.1	208.6	120.7
3312B	OPEN DIE OR SMITH FORGINGS, HAMMER OR PRESS	288.9							
3312C	OTHER STEEL MILL PRODUCTS, EXCEPT WIRE PRODUCTS	561.1							
33120	BLAST FURNACE AND STEEL MILL PRODUCTS, N.S.K.	171.7	961.8	884.6	657.3	400.3	289.9	324.8	225.8
3313-	ELECTROMETALLURGICAL PRODUCTS	944.1	825.2	814.2	922.7	634.8	552.3	403.4	411.6
33131	FERROMANGANESE	159.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)
33132	FERROCHROMIUM	163.5	157.5	182.3	236.4	148.8	116.6	104.5	85.3
33133	FERROSILICON	327.4	296.4	251.0	269.2	192.9	180.8	102.9	78.1
33134	OTHER FERROALLOYS PRODUCED IN ELECTRIC FURNACES	290.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
33130	ELECTROMETALLURGICAL PRODUCTS, N.S.K.	3.9	1.7	-	(5.6)	(1.0)	2.5	1.9	1.8
3315-	STEEL WIRE AND RELATED PRODUCTS	2,608.4	2,400.2	2,139.7	2,322.0	1,751.4	1,512.6	1,062.3	796.5
33151	NONINSULATED FERROUS WIRE ROPE, CABLE, AND STRAND	439.1	454.7	463.8	378.6	295.1	270.2	164.2	100.9
33152	STEEL NAILS AND SPIKES	359.0	326.4	265.9	314.9	270.0	248.5	158.8	153.1
33155	STEEL WIRE	729.8	558.2	489.0	535.6	385.4	328.7	300.5	257.6
33156	FENCING AND FENCE GATES	280.3	238.0	217.5	200.2	182.3	172.1	75.8	58.3
33157	FERROUS WIRE CLOTH AND OTHER WOVEN WIRE PRODUCTS	84.5	135.4	101.8	76.1	65.7	53.6	35.4	24.3
33159	OTHER FABRICATED FERROUS WIRE PRODUCTS	639.5	657.6	582.2	790.8	516.4	390.0	294.4	181.6
33150	STEEL WIRE AND RELATED PRODUCTS, N.S.K.	76.2	(29.7)	(19.5)	(25.8)	36.5	49.5	33.2	20.7
3316-	COLD FINISHING OF STEEL SHAPES	2,562.8	2,178.0	1,629.5	2,245.0	1,883.6	1,487.1	945.8	681.9
33167	COLD ROLLED STEEL SHEET AND STRIP	1,628.5	1,324.4	937.9	1,335.7	1,178.6	903.8	554.9	408.5
33168	COLD FINISHED BARS AND BAR SHAPES	909.2	799.0	669.4	880.5	675.3	558.9	372.6	273.4
33160	COLD FINISHING OF STEEL SHAPES, N.S.K.	25.1	(54.6)	(22.2)	(28.8)	29.7	24.4	18.3	-
33176	STEEL PIPE AND TUBES	2,620.3	2,196.3	2,429.9	2,491.8	1,811.3	1,264.5	1,075.0	750.0
3321-	GRAY IRON CASTINGS	7,835.2	6,951.6	6,077.7	6,066.0	5,089.6	4,033.8	2,740.4	2,046.3
33216	MOLDS AND STOOLS FOR HEAVY STEEL INGOTS	551.4	390.7	333.7	518.3	374.4	312.0	(NA)	(NA)
33217	CAST IRON PRESSURE PIPE AND FITTINGS, GRAY IRON	177.7	173.9	210.9	320.5	323.7	245.4	(NA)	(NA)
33218	CAST IRON SOIL PIPE AND FITTINGS, GRAY IRON	200.3	179.7	220.9	218.5	269.8	220.2	156.0	152.1
33219	OTHER GRAY IRON CASTINGS, N.E.C.	5,081.9	4,725.8	3,970.0	3,932.3	3,163.0	2,546.2	(NA)	(NA)
3321A	CAST IRON PRESSURE PIPE AND FITTINGS, DUCTILE	497.6	1,454.2	1,230.1	981.0	808.8	605.4	(NA)	(NA)
3321B	OTHER DUCTILE IRON CASTINGS	1,125.6						(NA)	(NA)
33210	GRAY IRON CASTINGS, N.S.K.	200.8	(S)	(112.1)	(95.4)	149.9	104.6	117.5	43.0
3322-	MALLEABLE IRON CASTINGS	669.5	639.8	561.3	626.8	533.8	484.8	417.2	313.6
33221	STANDARD MALLEABLE IRON CASTINGS	453.0	433.4	397.1	458.6	377.3	345.8	(NA)	(NA)
33222	PEARLITIC MALLEABLE IRON CASTINGS	208.7	194.0	148.8	157.0	149.1	129.3	(NA)	(NA)
33220	MALLEABLE IRON CASTINGS, N.S.K.	7.8	12.4	15.4	11.2	7.4	9.7	(NA)	(NA)
33240	STEEL INVESTMENT CASTINGS	434.1	432.2	412.5	379.8	283.6	237.7	167.6	(NA)
3325-	STEEL CASTINGS, N.E.C.	2,205.8	2,048.0	2,073.9	1,685.8	1,220.9	1,050.3	1,042.1	(NA)
33252	CARBON STEEL CASTINGS, EXCEPT INVESTMENT	1,250.9	1,116.6	1,210.6	997.2	661.1	543.7	619.0	(NA)
33254	HIGH ALLOY STEEL CASTINGS, EXCEPT INVESTMENT	367.0	423.3	382.8	285.9	159.6	127.7	390.0	(NA)
33255	OTHER ALLOY STEEL CASTINGS, EXCEPT INVESTMENT	521.0	478.5	473.4	391.0	373.4	346.5		(NA)
33250	STEEL CASTINGS, N.E.C., N.S.K.	66.9	(29.6)	(7.1)	11.7	26.8	32.4	33.1	(NA)
3331-	PRIMARY COPPER	3,254.6	2,996.9	2,371.5	3,335.4	2,972.5	2,336.2	1,018.5	1,049.9
33311	COPPER SMELTER PRODUCTS	1,566.2	1,732.4	1,411.2	1,932.9	1,683.5	1,358.0	547.6	628.5
33312	REFINED PRIMARY COPPER	1,687.9	1,261.9	960.3	1,402.5	1,289.0	977.9	453.6	421.4
33310	PRIMARY COPPER, N.S.K.	.5	2.7	-	(NA)	(NA)	.3	17.3	-
3332-	PRIMARY LEAD	530.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)
33321	LEAD SMELTER PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
33323	REFINED PRIMARY LEAD	(D)	249.5	222.1	278.7	233.3	203.5	123.3	74.5
33320	PRIMARY LEAD, N.S.K.	-	-	(2.8)	(D)	(D)	-	-	-
3333-	PRIMARY ZINC	366.3	486.4	402.8	587.4	366.6	337.3	285.5	265.1
33331	ZINC RESIDUES AND OTHER ZINC SMELTER PRODUCTS	39.9	63.0	68.8	113.5	58.8	37.3	23.8	34.8
33334	REFINED PRIMARY ZINC AND ZINC-BASE ALLOYS	326.4	(423.4)	(334.0)	473.9	307.8	300.0	261.7	230.3
33330	PRIMARY ZINC, N.S.K.	-	-	-	(NA)	(NA)	-	-	-
3334-	PRIMARY ALUMINUM	4,291.4	3,805.7	2,759.8	2,814.0	2,245.3	1,754.5	1,535.5	1,069.6
33347	PRIMARY ALUMINUM INGOT, EXCEPT BILLET	3,721.5	3,305.7	2,484.3	2,377.2	1,889.3	1,513.8	1,324.1	946.8
33348	PRIMARY ALUMINUM EXTRUSION BILLET	570.0	500.0	275.5	436.8	356.0	240.7	211.4	112.8
33340	PRIMARY ALUMINUM, N.S.K.	-	23.9	(9)	(NA)	(NA)	-	-	-
3339-	PRIMARY NONFERROUS METALS, N.E.C.	1,431.9	1,469.9	1,459.9	1,524.1	1,033.5	662.7	(NA)	(NA)
33395	REFINED PRECIOUS METALS AND PRECIOUS ALLOYS	464.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
33397	OTHER PRIMARY NONFERROUS METAL	940.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
33390	PRIMARY NONFERROUS METALS, N.E.C., N.S.K.	27.1	(1)	(17.1)	(45.4)	20.9	13.2	(NA)	(NA)
3341-	SECONDARY NONFERROUS METAL	3,194.9	3,103.2	2,757.2	3,283.8	2,377.3	1,873.7	(NA)	(NA)
33412	SECONDARY COPPER AND COPPER-BASE ALLOYS	616.6	622.2	(539.9)	806.8	608.6	510.9	364.8	247.2
33413	SECONDARY LEAD AND LEAD-BASE AND TIN-BASE ALLOYS	680.3	461.7	438.0	472.1	323.9	257.6	235.6	191.4
33414	SECONDARY ZINC AND ZINC-BASE ALLOYS	144.7	163.1	(139.7)	195.3	166.5	109.6	53.6	43.5
33415	SECONDARY PRECIOUS METALS AND THEIR ALLOYS	315.6	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
33416	OTHER SECONDARY NONFERROUS METALS AND ALLOYS	96.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
33417	SECONDARY ALUMINUM INGOT, EXCEPT BILLET	978.3	616.4	466.7	646.7	474.9	341.0	(NA)	(NA)
33418	SECONDARY ALUMINUM EXTRUSION BILLET	112.4	(90.9)	(59.5)	48.3	(30.9)	28.0	(NA)	(NA)
33410	SECONDARY NONFERROUS METALS, N.S.K.	251.0	(116.2)	(90.4)	(138.6)	118.3	171.4	66.5	24.2
3351-	COPPER ROLLING AND DRAWING	3,536.1	3,096.6	2,328.7	4,227.8	3,701.6	2,825.0	2,216.8	1,544.5
33511	COPPER WIRE, BARE AND TINNED, NONELECTRICAL	170.7	195.8	139.1	202.4	193.3	157.9	95.6	73.2
33513	COPPER & COPPER-BASE ALLOY RODS, BARS, & SHAPES	1,491.3	1,294.7	946.5	1,773.7	1,509.4	1,170.9		
33514	COPPER & COPPER-BASE ALLOY SHEET, STRIP & PLATES	937.3	801.7	597.4	1,157.6	961.7	705.9	2,105.1	1,471.4
33515	COPPER AND COPPER-BASE ALLOY PIPE AND TUBE	895.5	776.2	630.6	1,088.1	1,028.0	761.8		
33510	COPPER ROLLING AND DRAWING, N.S.K.	41.3	28.2	15.1	6.0	9.2	28.5	16.1	-
3353-	ALUMINUM SHEET, PLATE, AND FOIL	5,358.8	4,449.7	3,073.4	3,666.6	2,813.7	2,238.0	(NA)	(NA)
33531	ALUMINUM PLATE	247.3	190.9	218.7	224.3	145.3	89.5	(NA)	(NA)
33532	ALUMINUM SHEET AND STRIP	4,569.6	3,794.3	2,511.7	3,026.2	2,323.9	1,897.4	(NA)	(NA)
33533	PLAIN ALUMINUM FOIL (UNDER .006 INCHES)	476.6	403.3	295.9	366.1	292.7	216.8	184.6	129.4
33534	ALUMINUM WELDED TUBE	61.6	61.2	47.1	50.0	48.7	34.3	(NA)	(NA)
33530	ALUMINUM SHEET, PLATES, AND FOIL, N.S.K.	3.7	-	-	-	3.1	-	-	-

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3354-33541	ALUMINUM EXTRUDED PRODUCTS	1,928.2	1,571.1	1,186.9	1,606.6	1,289.5	1,026.4	(NA)	(NA)
33541	EXTRUDED ALUMINUM RODS, BARS, AND OTHER SHAPES	1,541.9	1,142.5	879.0	1,175.9	1,015.2	781.5	565.7	397.3
33542	ALUMINUM EXTRUDED AND DRAWN TUBE	333.0	400.8	290.8	400.0	263.1	212.4	(NA)	(NA)
33540	ALUMINUM EXTRUDED PRODUCTS, N.S.K.	53.0	28.1	17.1	30.7	11.2	32.5	44.8	11.7
3355-33551	ALUMINUM ROLLING AND DRAWING, N.E.C.	1,367.5	654.9	586.2	809.0	611.5	531.1	(NA)	(NA)
33551	ALUMINUM AND ALUMINUM-BASE ALLOY WIRE	124.1	80.0	119.3	125.3	74.9	61.0	75.0	127.9
33552	ROLLED ALUMINUM RODS, BARS, AND STRUCTURAL SHAPES	530.0	511.3	416.6	542.4	393.5	303.0	257.6	145.2
33553	ROLLED ALUMINUM INGOT, EXCEPT EXTRUSION BILLETS	709.5	40.7	41.1	111.5	108.0	120.0	55.4	49.0
33554	ROLLED ALUMINUM EXTRUSION BILLETS		22.9	9.2	29.8	35.1	46.6	30.8	48.7
33550	ALUMINUM ROLLING AND DRAWING, N.E.C., N.S.K.	3.9	-	-	-	-	-	-	-
3356-33561	NONFERROUS ROLLING AND DRAWING, N.E.C.	2,616.5	1,897.9	1,742.8	1,772.7	1,435.7	1,075.6	1,012.0	630.5
33561	NICKEL AND NICKEL-BASE ALLOY MILL SHAPES	873.2	489.0	482.0	521.4	438.4	270.4		
33562	TITANIUM MILL SHAPES	250.7	224.0	287.1	268.8	161.8	111.1		
33563	PRECIOUS METAL MILL SHAPES	751.7	529.9	474.8	531.7	487.2	364.0	1,012.0	630.5
33569	ALL OTHER NONFERROUS METAL MILL SHAPES	662.1	623.4	470.0	402.3	301.5	285.1		
33560	NONFERROUS ROLLING AND DRAWING, N.E.C., N.S.K.	78.8	32.0	28.9	48.5	46.8	45.0		
3357-33571	NONFERROUS WIRE DRAWING AND INSULATING	6,460.3	5,499.5	4,927.3	6,614.2	5,240.0	4,223.9	3,650.9	2,185.0
33571	ALUMINUM AND ALUMINUM-BASE ALLOY WIRE AND CABLE	263.4	267.1	383.7	353.4	218.0	153.0	176.9	(NA)
33572	COPPER AND COPPER-BASE ALLOY WIRE	496.8	657.4	531.0	703.1	460.2	353.1	372.8	245.0
33573	OTHER BARE NONFERROUS METAL WIRE	117.9	117.2	75.0	104.9	75.0	59.5	40.5	(NA)
33575	NONFERROUS WIRE CLOTH AND OTHER WOVEN PRODUCTS	94.5	16.0	17.2	24.4	38.4	33.9	36.2	(NA)
33576	APPARATUS WIRE AND CORDAGE AND FLEXIBLE CORD SETS	447.8	336.1	285.4	374.8	316.0	262.9	184.2	(NA)
33577	MAGNET WIRE	754.4	617.4	467.2	721.6	663.4	548.8	449.6	258.3
33578	POWER WIRE AND CABLE	705.9	577.2	651.2	821.8	618.5	499.7	424.0	218.8
33574	ELECTRONIC WIRE AND CABLE	478.9	1,695.2	1,384.1	1,954.5	1,647.4	1,316.0	909.1	581.8
33578	TELEPHONE AND TELEGRAPH WIRE AND CABLE	1,600.2							
33570	CONTROL AND SIGNAL WIRE AND CABLE	128.3							
33570	BUILDING WIRE AND CABLE	890.2	1,180.6	1,081.3	1,528.3	1,147.0	956.5	745.9	454.1
33570	OTHER INSULATED WIRE AND CABLE (INCLUDING AUTO)	431.7							
33570	NONFERROUS WIRE DRAWING AND INSULATING, N.S.K.	50.3	35.3	51.2	27.4	56.1	40.5	50.4	15.4
3361-33611	ALUMINUM CASTINGS	2,294.2	1,963.0	1,535.7	1,745.4	1,397.7	1,172.3	885.4	607.0
33611	ALUMINUM AND ALUMINUM-BASE ALLOY DIE CASTINGS	1,086.8	1,064.9	787.3	889.2	629.2	532.6	(NA)	(NA)
33612	OTHER ALUMINUM AND ALUMINUM-BASE ALLOY CASTINGS	1,055.0	862.6	682.6	(757.8)	620.4	509.7	(NA)	(NA)
33610	ALUMINUM CASTINGS, N.S.K.	152.5	(NA)	(65.8)	(98.4)	148.1	130.0	(NA)	(NA)
33620	COPPER AND COPPER-BASE ALLOY CASTINGS	615.6	565.6	493.8	620.2	534.9	462.9	432.3	299.8
3369-33691	NONFERROUS CASTINGS, N.E.C.	878.1	648.8	541.8	621.8	706.1	603.5	551.3	306.1
33691	ZINC AND ZINC-BASE ALLOY CASTINGS	609.9	404.9	308.2	416.7	504.7	401.6	323.3	(NA)
33692	MAGNESIUM AND MAGNESIUM-BASE ALLOY CASTINGS	83.3	53.3	44.9	55.9	49.9	41.3	178.5	(NA)
33693	OTHER NONFERROUS CASTINGS	138.8	(176.7)	(183.6)	135.1	96.0	94.7		(NA)
33690	NONFERROUS CASTINGS, N.E.C., N.S.K.	46.1	(S)	(S)	(14.1)	(55.5)	65.9	49.5	(NA)
33980	METAL HEAT TREATING	704.1	585.2	496.0	507.6	481.9	454.1	274.9	140.3
3399-33991	PRIMARY METAL PRODUCTS, N.E.C.	967.5	755.9	591.6	681.8	565.9	416.5	(NA)	(NA)
33991	METAL POWDERS, PASTE, AND FLAKES	702.2	535.1	394.8	502.5	418.3	322.7	227.8	106.8
33992	PRIMARY METAL PRODUCTS, N.E.C.	144.7	182.0	171.6	154.7	147.6	93.8	43.1	11.2
33990	PRIMARY METAL PRODUCTS, N.E.C., N.S.K.	120.6	38.8	25.2	24.6	-	-	-	-
3411-34113	METAL CANS	7,414.7	6,843.0	6,349.2	5,595.8	4,660.8	4,224.4	2,585.7	2,002.2
34113	STEEL CANS, TINPLATE	4,852.6							
34114	ALUMINUM CANS	1,620.4	6,781.4	6,333.9	5,578.1	4,629.5	4,202.2	2,585.7	2,002.2
34115	METAL CAN LIDS, ENDS, & PARTS SHIPPED SEPARATELY	895.4							
34110	METAL CANS, N.S.K.	46.2	61.6	15.3	17.7	31.3	22.2		
3412-34121	METAL BARRELS, DRUMS, AND PAILS	948.2	783.4	688.6	773.2	593.0	509.4	378.2	317.9
34121	STEEL PAILS, 12-GALLON CAPACITY AND UNDER	272.9	205.0	184.8	201.6	167.4	153.0	111.6	87.2
34122	STEEL SHPG. BBL. & DRUMS, OVER 12-GALLON CAP.	548.4	467.8	412.5	500.4	353.5	292.1	212.6	191.5
34123	ALL OTHER METAL BARRELS	84.0	113.0	102.3	71.2	62.6	52.1	45.5	35.9
34120	METAL BARRELS, DRUMS, AND PAILS, N.S.K.	43.0	(9)	(9)	-	9.5	12.2	8.5	3.3
3421-34211	CUTLERY	666.9	615.0	541.8	499.4	436.3	403.9	308.9	254.3
34211	CUTLERY, SCISSORS, SHEARS, TRIMMERS, AND SNIPS	344.7	298.5	263.0	250.6	201.6	183.3	121.0	90.5
34212	RAZOR BLADES AND RAZORS, EXCEPT ELECTRIC	307.4	296.0	258.5	230.4	222.4	207.2	177.1	159.4
34210	CUTLERY, N.S.K.	14.8	(20.5)	(20.3)	(18.4)	12.3	13.4	10.8	4.4
3423-34231	HAND AND EDGE TOOLS, N.E.C.	2,066.1	1,698.5	1,432.9	1,369.7	1,230.0	1,114.0	775.1	536.1
34231	MECHANICS' HAND SERVICE TOOLS	1,070.2	1,001.1	816.9	752.9	687.1	601.2	319.5	252.4
34232	EDGE TOOLS, HAND OPERATED	327.6	204.7	201.2	210.9	179.0	160.1	127.8	106.3
34233	OTHER HAND TOOLS, N.E.C.	524.3	440.9	377.5	393.8	301.7	274.7	190.5	156.0
34230	HAND AND EDGE TOOLS, N.E.C., N.S.K.	144.0	(51.8)	(37.3)	(12.1)	62.2	78.0	65.3	21.4
34250	HAND SAWS, SAW BLADES, AND SAW ACCESSORIES	369.3	328.5	273.3	296.3	245.8	201.8	138.0	85.0
3429-34292	HARDWARE, N.E.C.	5,082.5	4,578.4	3,669.7	3,398.4	3,423.4	3,089.5	2,188.2	1,663.1
34292	FURNITURE HARDWARE, EXCEPT CABINET	279.9	307.2	265.1	273.4	235.9	205.0	120.9	95.3
34293	VACUUM AND INSULATED BOTTLES, JUGS, AND CHESTS	107.0	106.0	109.4	100.1	92.7	85.4	55.9	48.0
34294	BUILDERS' HARDWARE	1,418.9	1,299.7	1,086.0	1,081.8	962.4	934.0	593.4	465.8
34296	MOTOR VEHICLE HARDWARE	2,220.0	1,966.4	1,435.1	1,146.2	1,322.3	1,200.7	(NA)	(NA)
34297	OTHER TRANSPORTATION EQUIPMENT HARDWARE	155.4	311.7	274.3	227.6	207.5	133.7	(NA)	(NA)
34298	OTHER HARDWARE, N.E.C.	648.5	498.7	456.5	486.0	478.1	399.3	335.7	237.4
34290	HARDWARE, N.E.C., N.S.K.	252.9	(88.7)	(43.3)	(83.3)	124.5	131.4	120.9	38.1
34310	METAL PLUMBING FIXTURES	392.3	328.8	336.9	340.9	320.1	315.6	213.1	180.0
34320	PLUMBING FITTINGS AND BRASS GOODS	1,109.1	942.4	740.0	751.8	716.6	673.2	404.6	329.6
3433-34333	HEATING EQUIPMENT, EXCEPT ELECTRIC	1,396.7	1,082.3	904.2	998.4	1,015.1	924.0	738.9	688.8
34333	CAST IRON HEATING BOILERS, RADIATORS & CONVECTORS	187.8	163.4	134.2	134.2	157.2	152.5	133.3	138.9
34334	DOMESTIC HEATING STOVES, EXCEPT ELECTRIC & PARTS	174.7	99.3	79.6	53.3	61.7	70.0	50.1	79.1
34335	STEEL HEATING BOILERS, EXCEPT ELECTRIC AND PARTS	73.3	113.4	85.3	76.2	74.5	68.7	67.0	70.3
34337	OTHER HEATING EQUIPMENT & PARTS, EXCEPT ELECTRIC	790.4	671.2	575.1	690.2	659.5	565.5	414.9	359.3
34330	HEATING EQUIPMENT, EXCEPT ELECTRIC, N.S.K.	170.5	(35.0)	(30.0)	(44.5)	62.2	67.3	73.6	41.2
3441-34411	FABRICATED STRUCTURAL METAL	4,860.9	4,645.5	4,640.5	4,074.7	3,618.9	3,305.9	2,561.5	1,604.0
34411	FABRICATED STRUCTURAL METAL FOR BUILDINGS	2,578.5	2,452.1	2,687.3	2,530.4	2,263.2	1,935.0	1,430.3	984.0
34412	FABRICATED STRUCTURAL METAL FOR BRIDGES	280.2	422.0	357.0	322.9	324.7	391.2	312.2	224.9
34413	OTHER FABRICATED STRUCTURAL METAL	1,474.1	1,562.4	1,430.9	971.2	654.5	598.8	550.6	287.2
34410	FABRICATED STRUCTURAL METAL, N.S.K.	528.0	(209.0)	165.3	250.2	326.5	380.9	268.4	107.8
3442-34421	METAL DOORS, SASH, AND TRIM	2,974.1	2,284.8	1,980.6	2,120.9	2,119.4	1,902.9	1,301.5	1,106.7
34421	METAL DOORS AND FRAMES, EXCEPT STORM DOORS	1,089.3	1,026.4	876.8	898.0	868.7	686.7	345.7	289.6
34422	METAL WINDOW SASH AND FRAMES, EXCEPT STORM SASH	801.9	523.0	419.5	514.4	537.6	511.6	257.5	308.8
34423	METAL MOLDING AND TRIM AND STORE FRONTS	191.1	186.5	168.2	203.8	152.9	148.5	145.0	116.8
34424	METAL COMBINATION SCREEN AND STORM SASH AND DOORS	401.7	282.4	253.9	246.4	253.6	228.1	198.2	221.4
34425	METAL WINDOW AND DOOR SCREENS AND WEATHERSTRIP	152.4	(154.6)	131.1	136.4	101.0	95.5	61.5	56.7
34420	METAL DOORS, SASH, AND TRIM, N.S.K.	337.7	(111.9)	(131.1)	121.9	205.6	232.5	293.6	113.5

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3443-	FABRICATED PLATE WORK (BOILER SHOPS)	6,641.2	6,325.6	6,038.0	4,980.0	3,893.1	3,265.7	2,589.4	1,580.8
34431	HEAT EXCHANGERS AND STEAM CONDENSERS	900.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34432	FABRICATED STEEL PLATE, STACKS, AND WELDMENTS	1,095.5	1,334.3	1,368.6	1,092.3	771.6	617.3	517.9	374.2
34433	STEEL POWER BOILERS, PARTS, AND ATTACHMENTS	960.3	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34434	GAS CYLINDERS	173.3	203.5	188.9	133.9	116.2	93.5	72.2	46.3
34435	COMPLETE METAL TANKS, STANDARD, PRESSURE	298.5	470.6	425.1	334.6	232.0	174.7	120.2	104.4
34436	NUCLEAR REACTOR STEAM SUPPLY SYSTEMS	695.4	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34437	COMPLETE METAL TANKS, STANDARD, NONPRESSURE	486.2	345.0	363.2	362.6	315.8	255.1	177.3	145.6
34438	METAL TANKS AND VESSELS, CUSTOM MADE AT FACTORY	770.6	786.1	745.0	613.1	474.5	382.1	464.8	197.1
34439	METAL TANKS & VES., CUSTOM MADE, FIELD ERECTED	663.2	571.8	705.8	537.1	445.4	369.3	176.1	123.3
34430	FABRICATED PLATEWORK (BOILER SHOPS), N.S.K.	597.7	(173.0)	(95.7)	(167.8)	189.3	198.4	195.7	88.6
3444-	SHEET METAL WORK	4,607.5	4,141.7	3,515.8	3,645.8	3,054.9	2,650.7	1,687.1	1,324.7
34442	CULVERTS, FLUMES, AND IRRIGATION PIPES	371.2	401.2	383.6	388.6	295.6	242.0	169.9	137.5
34444	METAL ROOFING AND ROOF DRAINAGE EQUIPMENT	597.7	664.6	598.1	(671.4)	450.1	422.4	(NA)	(NA)
34445	METAL FLOORING AND SIDING	775.8	(660.4)	(561.2)	426.2	322.0	301.7	(NA)	(NA)
34446	OTHER SHEET METAL WORK	2,121.1	1,985.8	1,818.7	1,912.4	1,567.3	1,187.9	722.9	731.8
34440	SHEET METAL WORK, N.E.C.	741.4	(429.7)	(154.2)	(247.2)	419.9	496.7	385.7	149.2
34460	ARCHITECTURAL AND ORNAMENTAL METAL WORK	950.9	830.0	800.9	814.3	737.0	589.4	504.9	306.2
3448-	PREFABRICATED METAL BUILDINGS	1,656.0	1,093.5	908.4	1,055.2	888.3	578.8	(NA)	(NA)
34481	PREFABRICATED METAL INDUSTRIAL/COMMERCIAL BLDGS.	912.2	607.2	487.8	536.8	408.1	258.9	(NA)	(NA)
34482	PREFABRICATED PORTABLE BUILDINGS AND PARTS	630.2	475.7	413.2	516.4	459.6	311.4	(NA)	(NA)
34480	PREFABRICATED METAL BUILDINGS, N.S.K.	113.6	(S)	(S)	2.0	20.6	8.5	(.4)	(.4)
3449-	MISCELLANEOUS METAL WORK	1,332.9	1,449.6	1,491.4	1,734.0	1,253.7	994.6	(NA)	(NA)
34494	FABRICATED CONCRETE REINFORCING BARS AND JOISTS	900.1	849.5	978.3	1,156.6	740.0	583.3	(NA)	(NA)
34495	OTHER METAL BUILDING MATERIALS AND CURTAIN WALLS	359.2	578.9	484.4	518.5	421.7	273.6	(NA)	(NA)
34490	MISCELLANEOUS METAL WORK, N.S.K.	73.6	(S)	(28.7)	(58.9)	92.0	137.7	(NA)	(NA)
3451-	SCREW MACHINE PRODUCTS	1,771.4	1,569.2	1,480.8	1,656.9	1,517.1	1,083.1	1,036.1	599.4
34511	NONSTANDARD AUTOMOTIVE SCREW MACHINE PRODUCTS	598.4	524.1	421.1	494.1	349.3	245.7		
34512	OTHER NONSTANDARD SCREW MACHINE PRODUCTS	958.6	877.3	900.6	945.6	943.6	638.7	1,036.1	599.4
34510	SCREW MACHINE PRODUCTS, N.S.K.	214.4	(167.8)	(159.1)	217.2	224.2	198.7		
3452-	BOLTS, NUTS, RIVETS, AND WASHERS	3,130.3	2,836.9	2,462.0	2,878.9	2,331.6	1,988.4	1,613.1	1,175.7
34524	EXTERNALLY THREADED FASTENERS, EXCEPT AIRCRAFT	1,451.2	1,416.1	1,216.2	1,383.8	1,082.0	979.5		
34525	INTERNALLY THREADED FASTENERS, EXCEPT AIRCRAFT	412.6	380.5	295.6	358.8	293.1	248.5	1,345.4	1,084.5
34526	NONTHREADED FASTENERS, EXCEPT AIRCRAFT	517.2	439.3	362.8	478.9	371.8	353.2		
34527	AIRCRAFT AEROSPACE FASTENERS	237.9	216.9	243.5	249.6	187.1	157.8		
34528	OTHER FORMED PARTS, MADE ON FASTENER MACHINES	284.6	359.5	319.3	341.5	247.2	140.3	195.9	76.7
34520	BOLTS, NUTS, RIVETS, AND WASHERS, N.S.K.	226.8	(S)	(S)	(66.3)	150.4	109.1	71.8	14.5
3462-	IRON AND STEEL FORGINGS	2,966.7	2,693.2	2,425.0	2,362.0	1,894.3	1,838.7	1,342.1	954.9
34625	HOT IMPRESSION DIE IMPACT IRON AND STEEL FORGINGS	2,155.4							
34626	COLD IMPRESSION DIE IMPACT IRON & STEEL FORGINGS	215.7							
34627	SEAMLESS ROLLED RING FERROUS FORGING	113.8	2,693.2	2,425.0	2,362.0	1,894.3	1,838.7	1,342.1	954.9
34628	OPEN DIE OR SMITH FERROUS FORGINGS (PLANTS)	384.7							
34620	IRON AND STEEL FORGINGS, N.S.K.	97.1							
3463-	NONFERROUS FORGINGS	540.4	508.6	511.2	466.0	370.4	280.8	348.1	198.4
34635	HOT IMPRESSION DIE IMPACT NONFERROUS FORGINGS	468.1							
34636	COLD IMPRESSION DIE IMPACT NONFERROUS FORGINGS	8.5							
34637	SEAMLESS ROLLED RING NONFERROUS FORGINGS	15.9	508.6	511.2	466.0	370.4	280.8	348.1	198.4
34638	OPEN DIE OR SMITH NONFERROUS FORGINGS	36.8							
34630	NONFERROUS FORGINGS, N.S.K.	11.1							
34650	AUTOMOTIVE JOB STAMPINGS	9,599.8	8,004.7	5,923.7	6,199.3	6,025.7	5,155.8	3,178.2	2,548.0
3466-	CROWNS AND CLOSURES	581.0	530.0	509.3	432.9	368.9	339.4	290.0	229.9
34661	METAL COMMERCIAL CLOSURES	470.7	435.7	415.7	356.2	301.2	274.6	204.6	147.9
34662	METAL CROWNS FOR GLASS AND METAL CONTAINERS	104.8	94.3	93.6	76.7	67.7	64.8	85.4	82.0
34660	CROWNS AND CLOSURES, N.S.K.	5.6	-	-	-	-	-	-	-
3469-	METAL STAMPINGS, N.E.C.	4,554.5	4,112.0	3,336.5	3,627.5	2,982.0	2,614.9	2,057.0	1,405.6
34692	JOB STAMPINGS, EXCEPT AUTOMOTIVE	2,199.3	2,349.7	1,918.0	2,127.8	1,580.4	1,283.1	1,076.9	756.7
34694	STAMPED AND SPUN ALUMINUM COOKING UTENSILS	330.1	310.3	267.6	270.8	219.0	205.0	148.2	95.7
34695	STAMPED & SPUN COOKING UTENSILS, EXCEPT ALUMINUM	385.4	300.1	240.9	232.3	208.8	184.4	141.6	134.3
34699	OTHER STAMPED AND PRESSED METAL END PRODUCTS	1,073.0	994.1	761.9	764.0	641.9	588.4	444.2	320.8
34690	METAL STAMPINGS, N.E.C., N.S.K.	566.7	(157.8)	(148.1)	(232.6)	331.9	354.0	246.1	98.1
34710	ELECTROPLATING, PLATING, AND POLISHING	1,775.1	1,484.0	1,227.6	1,234.6	1,241.7	993.4	756.1	501.9
34790	COATING, ENGRAVING, AND ALLIED SERVICES, N.E.C.	1,520.5	1,254.4	1,028.1	926.6	752.3	682.0	404.3	286.5
34820	SMALL ARMS AMMUNITION, 30MM. AND UNDER	403.9	429.7	473.6	437.2	432.5	306.4	572.8	192.4
3483-	AMMUNITION, EXCEPT FOR SMALL ARMS, N.E.C.	629.3	686.4	947.1	1,127.2	1,412.4	991.2	2,462.0	(NA)
34831	ARTILLERY AMMUNITION, OVER 30MM.								
34832	RECEIPTS FOR AMMUNITION LOADING AND ASSEMBLY	338.3	(NA)	(NA)	(NA)	(NA)	481.2	(NA)	(NA)
34833	AMMUNITION, EXCEPT FOR SMALL ARMS, N.E.C.	282.9	258.1	320.1	397.7	623.4	506.1	(NA)	(NA)
34830	AMMUNITION, EXCEPT SMALL ARMS, N.E.C., N.S.K.	8.1	(S)	5.1	.2	(9.6)	3.9	(NA)	(NA)
3484-	SMALL ARMS	662.6	730.2	554.3	453.3	366.8	334.1	361.7	148.5
34841	MACHINE GUNS, 30MM. AND UNDER								
34842	SMALL ARMS, 30MM. AND UNDER	647.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34840	SMALL ARMS, N.S.K.	15.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3489-	ORDNANCE AND ACCESSORIES, N.E.C.	483.3	529.3	542.8	511.5	517.2	333.8	857.6	255.9
34891	GUNS, HOWITZERS, MORTARS, ETC., OVER 30MM.	57.0	43.9	47.0	54.8	49.4	44.3	51.9	12.4
34892	ORDNANCE AND ACCESSORIES, N.E.C.	414.0	478.1	488.8	427.4	460.3	281.3	805.7	243.5
34890	ORDNANCE AND ACCESSORIES, N.E.C., N.S.K.	12.3	7.3	7.0	(29.3)	7.5	8.2	(NA)	(NA)
3493-	STEEL SPRINGS, EXCEPT WIRE	571.0	487.9	390.8	456.9	433.7	361.8	264.0	205.2
34931	HOT FORMED SPRINGS	454.2	382.5	303.4	-	334.5	279.1	(NA)	(NA)
34932	COLD FORMED FLAT SPR. MADE OF SHEET & STRIP STOCK	94.3	114.9	98.3	456.9	81.4	56.9	(NA)	(NA)
34930	STEEL SPRINGS, EXCEPT WIRE	22.2	(9)	(9)	-	17.8	25.8	(NA)	(NA)
3494-	VALVES AND PIPE FITTINGS	5,403.0	4,817.9	4,584.6	4,162.4	3,350.5	2,891.6	2,091.9	1,525.4
34942	PNEUMATIC AND HYDRAULIC VALVES FOR POWER TRANSFER	535.3	607.9	481.8	486.8	372.5	306.8	229.5	(NA)
34943	OTHER METAL VALVES FOR PIPING SYSTEMS & EQUIP.	2,113.4	1,761.3	1,669.5	1,483.3	1,134.7	1,036.9	793.6	(NA)
34944	PLUMBING AND HEATING VALVES AND SPECIALTIES	206.6	278.4	240.2	234.0	172.1	139.3	101.2	(NA)
34945	METAL FIT., FLANGES, & UNIONS FOR PIPING SYSTEMS	1,018.8	936.0	1,007.6	877.6	718.3	602.2	484.7	(NA)
34946	FITTINGS AND ASSEMBLIES FOR TUBING AND HOSE	482.3	324.4	388.6	380.4	248.1	193.3	55.1	(NA)
34947	AUTOMATIC REGULATING AND CONTROL VALVES	696.1	848.9	766.6	644.5	615.6	513.3	327.9	(NA)
34948	SOLENOID VALVES	114.8							(NA)
34940	VALVES AND PIPE FITTINGS, N.S.K.	235.7	(61.0)	(30.3)	55.8	89.2	99.8	99.9	26.5
3495-	WIRE SPRINGS	933.0	761.3	650.2	693.5	615.0	566.1	465.1	389.5
34952	PRECISION MECHANICAL SPRINGS	392.0	374.5	305.0	326.9	306.8	250.5	211.0	150.0
34953	OTHER WIRE SPRINGS	500.1	381.1	301.9	320.8	302.2	312.0	254.1	239.5
34950	WIRE SPRINGS, N.S.K.	40.9	(S)	(43.3)	(45.8)	6.0	3.6	(NA)	(NA)

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes — Value Shipped by All Producers: 1963, 1967, and 1972 to 1977** – Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3496-	MISCELLANEOUS FABRICATED WIRE PRODUCTS	1,440.0	1,241.7	1,131.8	1,205.2	1,064.5	942.4	763.0	(NA)
34961	NONINSULATED FERROUS WIRE, ROPE, CABLE, & STRAND	171.4	(145.9)	(146.9)	(138.2)	87.5	96.4	81.8	89.0
34964	FERROUS WIRE CLOTH AND WOVEN WIRE PRODUCTS	137.7	(89.3)	(81.1)	93.8	94.7	75.3	53.9	48.0
34965	NONFERROUS WIRE CLOTH AND WOVEN WIRE PRODUCTS	66.1	(83.3)	(80.9)	84.0	52.7	49.8	53.8	(NA)
34966	FENCE AND FENCE GATES (NOT MADE BY WIREDRAWERS)	131.3	93.9	87.2	135.0	83.9	73.5	55.1	57.1
34967	STEEL NAILS AND SPIKES (NOT MADE BY WIREDRAWERS)	88.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34968	OTHER FABRICATED WIRE PRODUCTS	626.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
34960	MISCELLANEOUS FABRICATED WIRE PRODUCTS, N.S.K.	219.5	(99.4)	(95.1)	(80.6)	177.5	190.2	143.9	60.0
3497-	METAL FOIL AND LEAF	1,070.3	776.1	625.6	694.1	558.7	511.8	385.6	329.9
34971	CONVERTED ALUMINUM FOIL PACKAGING PRODUCTS	386.7	310.9	260.5	233.2	176.0	197.3	(NA)	(NA)
34972	LAMINATED ALUMINUM FOIL FLEXIBLE PACKAGING	496.9	326.6	264.6	324.4	266.9	229.3	(NA)	(NA)
34973	CONVERTED FOIL FOR NONPACKAGING APPLICATIONS	165.1	131.4	93.1	125.6	99.1	67.7	(NA)	(NA)
34970	METAL FOIL AND LEAF, N.S.K.	21.6	(7.2)	(7.4)	10.9	16.7	17.5	(NA)	(NA)
34980	FABRICATED PIPE AND FITTINGS	1,698.1	1,700.6	1,405.6	1,140.6	790.8	670.5	486.3	286.5
3499-	FABRICATED METAL PRODUCTS, N.E.C.	3,390.3	2,457.9	2,339.7	2,344.8	2,288.1	2,131.8	1,303.3	856.9
34991	SAFES AND VAULTS	181.6	187.5	214.6	199.5	188.4	146.2	79.5	59.3
34992	COLLAPSIBLE TUBES	106.5	64.7	64.0	76.9	53.1	49.1	50.9	44.2
34993	FLAT METAL STRAPPING	272.6	225.7	189.6	175.9	204.2	167.8		
34994	OTHER FABRICATED METAL PRODUCTS, N.E.C.	2,300.0	1,916.6	1,725.3	1,646.3	1,467.1	1,390.5	1,172.9	753.4
34990	FABRICATED METAL PRODUCTS, N.E.C., N.S.K.	529.7	(S)	(146.2)	(246.2)	(375.3)	378.2		
3511-	TURBINES AND TURBINE GENERATOR SETS	2,813.1	2,803.6	2,585.3	2,482.3	2,285.0	2,079.7	1,059.3	589.1
35111	STEAM, GAS, AND HYDRAULIC TURBINE GENERATOR SETS	1,369.2	1,803.2	1,586.9	1,765.0	1,688.1	1,521.6	714.5	589.1
35112	STEAM, GAS, AND HYDRAULIC TURBINES AND PARTS	1,415.4	996.7	994.2	711.1	574.7	541.5	344.7	
35110	TURBINES AND TURBINE GENERATOR SETS, N.S.K.	28.5	(S)	(S)	(6.2)	22.2	16.6	-	-
3519-	INTERNAL COMBUSTION ENGINES, N.E.C.	7,548.0	6,138.3	5,190.7	5,095.1	4,105.9	3,353.4	2,187.6	1,423.9
35191	GASOLINE ENGINES, UNDER 11 HORSEPOWER	892.9	721.1	649.1	767.6	593.6	490.8	215.5	270.1
35192	GASOLINE ENGINES, 11 HORSEPOWER AND OVER							171.4	
35193	DIESEL, SEMIDIESEL, & DUAL FUEL ENGINE, EX. AUTO.	1,587.4	1,258.2	1,295.8	1,055.5	774.5	604.0	447.9	
35194	DIESEL, SEMIDIESEL, & DUAL FUEL ENGINES (AUTO)	1,322.2	926.6	605.8	878.6	752.0	634.6	233.2	464.4
35195	OUTBOARD ENGINES	(45)	(45)	(45)	(45)	(45)	(45)	(45)	(45)
35196	GAS ENGINES, EXCEPT TURBINES	31.9	54.1	61.0	37.6	51.7	35.2	22.6	22.1
35197	TANK AND CONVERTED INTERNAL COMBUSTION ENGINES	[45]813.7	[45]871.1	[45]659.4	[45]549.2	[45]549.9	[45]425.9	[45]267.1	[45]183.8
35199	PARTS FOR INTERNAL COMBUSTION ENGINES	2,846.9	2,302.4	1,914.5	1,791.9	1,365.3	1,144.9	816.0	480.6
35190	INTERNAL COMBUSTION ENGINES, N.S.K.	52.9	(4.8)	(S)	(14.7)	18.9	18.0	13.9	2.9
3523-	FARM MACHINERY AND EQUIPMENT	9,548.9	8,420.6	7,689.7	6,545.7	5,137.4	4,143.5	(NA)	(NA)
35231	WHEEL TRACTORS AND ATTACHMENTS	2,637.0	2,514.1	2,373.7	1,753.0	1,413.9	1,215.2	1,040.2	808.4
35232	DAIRY EQUIPMENT, SPRAYERS, ELEVATORS, AND BLOWERS	306.4	318.2	262.2	285.4	213.9	[46]157.8	(NA)	(NA)
35233	PLANTING, SEEDING, AND FERTILIZING MACHINERY	466.5	440.3	394.3	289.2	210.1	172.0	183.0	115.7
35234	HARROWS, ROLLERS, PULVERIZERS, AND STALK CUTTERS	392.2	450.5	430.6	384.9	247.0	191.8	(47)	(47)
35235	HARVESTING MACHINERY, EXCEPT HAY AND STRAW	1,463.3	1,341.8	1,122.8	965.4	766.1	580.4	580.7	395.3
35236	HAYING MACHINERY	414.9	439.9	461.9	384.7	252.2	184.1	148.8	133.8
35237	PLOWS	199.0	209.1	196.6	151.8	111.5	85.4	[47]281.1	[47]192.8
35238	FARM MACHINERY AND EQUIPMENT, N.E.C.	1,228.0	1,215.2	1,080.8	1,104.7	856.0	[48]610.8	458.0	(NA)
35239	PARTS FOR FARM MACHINERY AND EQUIPMENT	1,609.5	1,412.8	1,247.7	1,084.8	849.3	741.4	565.0	(49)
3523A	COMMERCIAL TURF AND GROUNDS MOWING EQUIPMENT	107.4	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3523B	OTHER COMMERCIAL TURF & GROUNDS MOWING EQUIPMENT	172.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
35230	FARM MACHINERY AND EQUIPMENT, N.S.K.	551.8	(78.6)	(119.2)	141.8	217.4	[50]204.6	156.6	71.5
3524-	LAWN AND GARDEN EQUIPMENT[51]	1,747.2	1,675.8	1,558.0	1,712.8	1,249.3	1,143.4	(NA)	(NA)
35241	CONSUMER NONRIDING LAWN AND GARDEN EQUIPMENT	841.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
35243	PARTS FOR CONSUMER NONRIDING LAWN & GARDEN EQUIP.	103.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
35244	CONSUMER RIDING LAWN AND GARDEN EQUIPMENT	577.4	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
35245	PARTS FOR CONSUMER RIDING LAWN & GARDEN EQUIP.	199.3	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
35240	LAWN AND GARDEN EQUIPMENT, N.S.K.	26.1	1.8	1.8	(1.7)	-	2.5	(NA)	(NA)
3531-	CONSTRUCTION MACHINERY	11,569.9	9,727.4	9,686.1	8,570.9	6,893.7	5,653.6	3,766.6	2,624.2
35311	CONTRACTORS' OFF-HIGHWAY WHEEL TRACTORS	453.6	299.8	380.7	372.8	328.2	251.5	132.3	102.7
35312	TRACKLAYING TRACTORS	1,164.6	1,060.8	1,128.1	897.3	712.6	564.0	389.9	317.4
35313	PARTS FOR TRACTORS AND TRACTOR SHOVEL LOADERS	1,818.0	1,686.0	1,827.6	1,553.0	1,113.6	865.7	604.2	302.7
35314	POWER CRANES, DRAGLINES, SHOVELS, AND EXCAVATORS	2,260.5	2,248.6	1,722.0	1,447.2	1,183.1	914.2	656.5	464.8
35316	MIXERS, PAVERS, AND RELATED EQUIPMENT	304.8	233.1	208.8	263.1	287.9	252.0	162.3	132.0
35317	TRACTOR SHOVEL LOADERS	1,537.2	1,141.1	1,279.6	1,228.5	943.9	810.7	411.6	388.0
35318	SCRAPERS, GRADERS, ROLLERS, & OFF-HIGHWAY TRUCKS	1,723.8	1,419.8	1,554.9	1,341.0	1,139.1	964.8	711.4	480.0
35319	CONSTRUCTION MACHINERY AND EQUIPMENT, N.E.C.[52]	2,002.2	1,624.0	1,560.9	1,434.0	1,068.8	913.0	613.9	403.5
35310	CONSTRUCTION MACHINERY, N.S.K.	305.1	(S)	(23.5)	(34.0)	116.5	117.7	84.5	33.2
3532-	MINING MACHINERY	1,785.6	1,835.0	1,657.0	1,147.7	841.1	729.8	521.5	336.2
35325	UNDERGROUND MINING MACHINERY	432.1	496.2	409.2	(215.5)	164.1	168.5	101.4	73.6
35326	MINERAL BENEFICIATION MACHINERY	100.9							
35327	CRUSHING, PULVERIZING, AND SCREENING MACHINERY	181.9	219.8	192.2	132.1	123.2	101.3	78.5	58.0
35328	MINING MACHINERY AND EQUIPMENT, N.E.C.	120.5	(190.1)	254.4	188.4	122.8	93.5	50.1	39.3
35329	PARTS AND ATTACHMENTS FOR MINING MACHINERY	841.4	911.6	771.0	580.2	392.6	331.1	257.2	158.0
35320	MINING MACHINERY, N.S.K.	108.6	(17.2)	(30.2)	(31.5)	(38.4)	35.4	34.3	7.3
3533-	OIL FIELD MACHINERY	3,219.4	2,636.3	2,412.0	1,713.9	1,210.5	980.0	660.7	572.7
35331	ROTARY OIL AND GAS FIELD DRILLING MACHINERY	1,221.4	1,092.4	953.8	635.2	460.9	348.2	243.5	217.2
35332	OIL & GAS FIELD DRILLING MACHINERY, EX. ROTARY	208.3	225.4	232.8	162.1	127.5	87.0	43.5	38.8
35333	OIL AND GAS FIELD PRODUCTION MACHINERY	1,110.5	970.3	912.6	661.7	441.8	376.5	260.5	261.5
35334	OTHER OIL AND GAS FIELD MACHINERY AND TOOLS, N.E.C.[52]	520.6	334.9	301.5	238.4	131.5	113.6	65.4	43.3
35330	OIL FIELD MACHINERY, N.S.K.	158.6	(13.3)	(S)	(16.5)	48.8	54.7	47.9	11.9
35340	ELEVATORS AND MOVING STAIRWAYS	435.1	396.2	387.6	461.6	446.8	412.2	295.9	248.2
3535-	CONVEYORS AND CONVEYING EQUIPMENT	1,684.6	1,384.9	1,332.9	1,284.7	1,003.5	825.6	655.4	414.9
35353	UNIT HANDLING CONVEYING SYSTEMS, EXCEPT HOISTS	586.5	(53)	(53)	(53)	(53)	(53)	(53)	(53)
35354	PARTS FOR UNIT HANDLING CONVEYORS	73.1	(54)	(54)	(54)	(54)	(54)	(54)	(54)
35355	BULK MATERIAL HANDLING CONVEYORS, EXCEPT HOISTS	640.2	[53]1,084.5	[53]1,027.4	[53]987.3	[53]802.3	[53]658.8	[53]478.9	[53]306.2
35356	PARTS FOR BULK MATERIAL HANDLING CONVEYORS	204.4	[54]280.1	[54]264.2	[54]236.1	[54]138.0	[54]107.1	[54]118.6	[54]88.0
35350	CONVEYORS AND CONVEYING EQUIPMENT, N.S.K.	180.4	(S)	(41.3)	(61.3)	63.2	59.7	57.9	20.7
3536-	HOISTS, CRANES, AND MONORAILS	901.3	809.2	755.8	603.2	531.1	446.0	385.3	224.2
35361	HOISTS (INCLUDING PARTS AND ATTACHMENTS)	404.1	368.5	356.3	308.2	247.0	167.4	144.9	105.0
35362	OVERHEAD TRAVELING CRANES AND MONORAIL SYSTEMS	426.8	424.7	389.6	285.4	253.4	[55 56]253.5	215.1	115.7
35360	HOISTS, CRANES, AND MONORAILS, N.S.K.	70.4	(16.0)	(S)	(9.6)	30.7	25.1	25.3	3.5
3537-	INDUSTRIAL TRUCKS AND TRACTORS	1,799.9	1,340.7	1,302.3	1,525.9	1,230.6	[56]1,004.8	780.7	458.7
35371	INDUSTRIAL TRUCKS, TRACTORS, & STRADDLE CARRIERS	1,233.8	955.0	948.8	1,150.6	891.0	729.5	(NA)	(NA)
35372	PARTS FOR INDUSTRIAL TRUCKS AND TRACTORS	378.2	372.3	308.3	330.7	244.9	171.4	(NA)	(NA)
35370	INDUSTRIAL TRUCKS AND TRACTORS, N.S.K.	187.9	(S)	(45.2)	(44.6)	94.7	103.9	(NA)	(NA)
3541-	MACHINE TOOLS, METAL CUTTING TYPES	2,560.5	2,146.4	2,405.8	2,136.1	1,718.6	1,258.5	1,907.8	925.3
35411	BORING MACHINES, METAL CUTTING	93.5	80.2	90.6	85.3	71.8	58.7	127.8	66.3
35412	DRILLING MACHINES, METAL CUTTING	108.9	(99.0)	97.9	81.1	100.5	73.7	128.5	55.3
35413	GEAR CUTTING AND FINISHING MACHINES	67.1	61.9	71.7	70.2	62.3	56.7	67.1	40.9
35414	GRINDING, HONING, LAPPING, AND POLISHING MACHINES	288.3	243.5	276.2	269.8	237.2	168.6	270.2	144.2
35415	LATHES, METALWORKING	455.9	449.8	474.0	396.1	292.4	197.6	360.5	163.4
35416	MILLING MACHINES, METALWORKING	167.8	146.8	141.9	143.3	112.1	86.6	258.2	112.7

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes — Value Shipped by All Producers: 1963, 1967, and 1972 to 1977** — Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
35417	OTHER METAL CUTTING MACHINE TOOLS	647.3							
35418	METALWORKING MACHINE TOOLS FOR WORKSHOPS	66.3	629.8	802.3	631.1	460.4	303.1	371.9	152.4
35419	PARTS FOR METAL CUTTING TYPE MACHINE TOOLS	502.1	400.7	382.8	396.5	308.5	242.1	241.0	165.5
35410	MACHINE TOOLS, METAL CUTTING TYPES, N.S.K.	163.3	(34.7)	(68.4)	(62.7)	73.4	71.4	82.5	24.4
3542-	MACHINE TOOLS, METAL FORMING TYPES	1,114.7	1,050.9	1,026.1	1,053.3	877.0	670.1	676.6	444.8
35421	PUNCHING, SHEARING, BENDING, AND FORMING MACHINES	280.1	271.3	242.3	211.4	185.2	153.4	130.9	92.5
35422	METALWORKING PRESSES	282.6	268.1	282.8	327.2	258.5	183.2	261.3	141.7
35423	OTHER METAL FORMING MACHINE TOOLS	171.7	157.0	162.3	192.4	197.8	149.0	122.9	71.7
35424	PARTS FOR METAL FORMING MACHINE TOOLS	295.5	344.3	322.8	304.0	212.7	161.5	125.7	118.2
35420	METAL FORMING MACHINE TOOLS, N.S.K.	85.0	(10.2)	(15.9)	(18.3)	22.8	23.0	35.6	20.7
3544-	SPECIAL DIES, TOOLS, JIGS, AND FIXTURES	4,450.2	3,620.3	3,067.7	3,548.8	3,169.4	2,713.5	2,520.2	1,608.1
35441	SPECIAL DIES, TOOLS, DIE SETS, JIGS, AND FIXTURES	2,578.0	2,471.8	1,991.2	2,343.1	1,919.4	1,520.1	[57]1,719.8	1,161.2
35442	INDUSTRIAL MOLDS (INCLUDING MOLD BASES)	1,040.0	912.3	817.2	860.0	756.2	640.3	[57]446.2	311.1
35440	SPECIAL DIES, TOOLS, JIGS, AND FIXTURES, N.S.K.	832.2	(236.2)	(259.3)	(345.7)	493.8	553.1	354.2	135.9
3545-	MACHINE TOOL ACCESSORIES	2,238.9	1,851.9	1,750.9	1,727.3	1,485.0	1,151.4	1,222.4	731.7
35451	SMALL CUTTING TOOLS FOR MACHINE TOOLS	1,376.4	1,277.4	1,184.5	1,129.4	928.4	738.0	770.9	464.4
35452	PRECISION MEASURING TOOLS	208.2	188.5	178.9	179.9	161.3	94.7	130.8	88.0
35453	OTHER MACHINE TOOL ATTACHMENTS AND ACCESSORIES	430.9	332.1	327.6	326.9	300.3	218.8	239.5	152.6
35450	MACHINE TOOL ACCESSORIES, N.S.K.	223.5	(53.9)	(59.9)	(91.1)	95.0	99.9	81.2	26.7
3546-	POWER DRIVEN HAND TOOLS[58]	1,496.5	877.6	771.9	849.1	801.2	725.0	(NA)	(NA)
35461	ELECTRIC HAND TOOLS	748.7	569.6	493.9	570.4	514.0	386.9		
35462	PNEUMATIC, HYD., & POWDER ACTUATED HAND TOOLS[59]	371.1					320.0	436.0	319.9
35463	INTERNAL COMBUSTION ENGINE DRIVEN HAND TOOLS[59]	347.1	297.7	267.8	263.8	273.8			
35460	POWER DRIVEN HAND TOOLS, N.S.K.	29.6	(10.3)	(10.6)	(14.9)	13.4	18.1	(60)	(60)
3547-	ROLLING MILL MACHINERY	361.0	469.6	433.2	320.7	266.5	247.9	(NA)	(NA)
35471	HOT ROLLING MILL MACHINERY, EXCEPT TUBE ROLLING	147.0	181.4	175.2	145.2	137.3	134.7		
35472	COLD ROLLING MILL MACHINERY	74.9	177.9	158.6	103.6	60.9	52.4	330.3	222.2
35473	OTHER ROLLING MILL MACHINERY	120.8	(109.0)	(98.2)	65.9	65.0	55.6		
35470	ROLLING MILL MACHINERY, N.S.K.	18.3	1.2	1.2	6.0	3.3	5.2	(60)	(60)
3549-	METALWORKING MACHINERY, N.E.C.	908.9	540.9	517.2	531.1	490.0	411.3	(NA)	(NA)
35492	ASSEMBLY MACHINES	128.4	(61)	(61)	(61)	(61)	(61)	(61)	(61)
35493	WELDING AND CUTTING APPARATUS, EXCEPT ELECTRIC	213.7	137.6	132.1	137.3	108.6	93.7	69.6	54.7
35494	AUTOMOTIVE MAINTENANCE EQUIPMENT	188.0	144.0	126.0	138.7	134.9	111.1	58.1	47.7
35495	OTHER METALWORKING MACHINERY	294.9	[61]240.0	[61]239.3	[61]215.0	[61]186.1	[61]154.5	[61]86.2	[61]36.6
35490	METALWORKING MACHINERY, N.E.C., N.S.K.	84.0	(19.4)	(19.9)	(40.1)	60.4	52.0	[60]47.8	[60]20.9
3551-	FOOD PRODUCTS MACHINERY	1,576.2	1,394.3	1,410.6	1,313.2	1,112.4	867.2	689.9	517.3
35511	DAIRY AND MILK PRODUCTS PLANT MACHINERY	128.5	102.7	81.9	80.3	62.2	57.4		
35512	COMMERCIAL FOOD PRODUCTS MACHINERY	357.2	342.0	294.7	283.1	229.4	185.0	615.3	489.7
35513	INDUSTRIAL FOOD PRODUCTS MACHINERY	452.0	523.8	557.1	506.8	438.7	296.2		
35514	PACKING, PACKAGING, AND BOTTLING MACHINERY	491.0	390.7	383.2	340.4	286.2	232.1		
35510	FOOD PRODUCTS MACHINERY, N.S.K.	147.5	(35.1)	(93.7)	(102.6)	95.9	96.5	74.7	27.6
3552-	TEXTILE MACHINERY	857.1	917.6	861.2	987.1	820.8	738.1	652.6	499.1
35521	TEXTILE MACHINERY, EXCEPT PARTS AND ATTACHMENTS	361.6	441.8	405.8	496.0	392.8	373.8	348.8	252.6
35522	TEXTILE MACHINERY PARTS AND ATTACHMENTS	405.2	450.3	427.4	464.0	376.2	305.7	267.4	232.1
35520	TEXTILE MACHINERY, N.S.K.	90.3	(25.5)	(28.0)	(27.1)	51.8	58.6	36.4	14.4
3553-	WOODWORKING MACHINERY	547.3	(62)	(62)	(62)	(62)	339.5	210.6	174.8
35531	WOODWORKING MACHINERY, EXCEPT HOME WORKSHOP	334.6	(62)	(62)	(62)	(62)	270.4	167.4	140.0
35532	WOODWORKING MACHINERY FOR HOME WORKSHOPS	143.6	117.0	81.6	86.0	68.8	51.5	29.1	29.0
35530	WOODWORKING MACHINERY, N.S.K.	69.2	(11.5)	(S)	22.6	18.9	17.6	14.1	5.8
35540	PAPER INDUSTRIES MACHINERY	698.3	772.5	760.6	684.6	458.3	381.4	515.1	347.5
3555-	PRINTING TRADES MACHINERY	1,287.3	1,006.1	939.6	913.2	842.1	736.6	656.0	403.2
35551	PRINTING PRESSES, LITHOGRAPHIC	290.9	282.1	242.8	207.6	176.7	156.0	263.6	137.6
35552	PRINTING PRESSES, OTHER THAN LITHOGRAPHIC	121.3	85.5	87.8	111.3	124.2	90.2		
35553	TYPESETTING MACHINERY AND EQUIPMENT	252.8	190.3	170.2	161.1	123.9	104.1		
35554	BINDERY MACHINERY AND EQUIPMENT	36.8	39.4	39.8	42.8	36.6	33.5	354.3	243.8
35555	OTHER PRINTING TRADES MACHINERY	494.8	364.8	340.7	332.2	329.6	303.5		
35550	PRINTING TRADES MACHINERY, N.S.K.	90.7	(44.0)	(58.3)	(58.2)	51.1	49.3	38.1	21.8
3559-	SPECIAL INDUSTRY MACHINERY, N.E.C.	3,465.2	3,855.1	3,653.4	3,418.2	2,956.6	2,295.9	1,670.3	988.4
35591	CHEMICAL MANUFACTURING INDUSTRIES MACHINERY	436.7	535.5	476.2	395.7	257.9	212.5	284.5	152.4
35592	FOUNDRY MACHINERY AND EQUIPMENT	319.2	241.7	266.6	214.4	163.1	132.3	143.9	89.6
35593	PLASTICS WORKING MACHINERY AND EQUIPMENT	669.6	554.4	443.8	527.7	585.4	434.1	247.6	137.1
35594	RUBBER WORKING MACHINERY AND EQUIPMENT	158.1	173.1	162.6	215.8	208.9	137.3	116.6	76.8
35595	OTHER SPECIAL INDUSTRY MACHINERY AND EQUIPMENT	1,565.3	2,293.3	2,218.6	1,956.8	1,585.2	1,210.2	778.6	500.2
35590	SPECIAL INDUSTRY MACHINES, N.E.C., N.S.K.	316.3	(57.1)	(85.6)	(107.8)	156.1	169.5	99.0	32.3
3561-	PUMPS AND PUMPING EQUIPMENT	3,522.8	2,924.7	2,623.0	2,297.4	2,012.7	1,632.9	1,375.0	900.9
35611	INDUSTRIAL PUMPS, EXCEPT FLUID POWER PUMPS	1,386.7	1,259.2	1,048.9	859.5	770.6	611.9	436.9	321.9
35612	HYDRAULIC FLUID POWER PUMPS AND MOTORS	488.9	405.0	394.7	439.4	344.2	[63]261.6	[63]218.6	134.9
35613	DOMESTIC WATER SYSTEMS AND PUMPS	223.8	185.8	203.6	165.9	167.6	151.1	140.3	83.7
35615	OTHER PUMPS AND PUMPING EQUIPMENT	395.7	345.1	288.5	233.1	224.4	[63]186.4	[63]126.2	91.9
35616	PARTS AND ATTACHMENTS FOR PUMPS	861.6	720.0	660.8	547.7	427.0	[64]346.5	[64]383.6	250.1
35610	PUMPS AND COMPRESSORS, N.S.K.	166.1	(9.6)	(26.5)	(51.8)	78.9	75.4	69.4	18.4
3562-	BALL AND ROLLER BEARINGS	2,444.5	2,195.2	2,046.3	1,949.9	1,695.7	1,418.7	1,292.0	961.0
35621	NONMOUNTED BALL BEARING, COMPLETE	749.9	654.6	645.9	624.3	533.0	474.2	472.7	384.1
35622	TAPER ROLLER BEARINGS (INCLUDING CUPS AND CONES)	748.6	684.3	625.7	582.9	516.4	420.0	367.7	446.3
35623	ROLLER BEARINGS, EXCEPT TAPER, COMPLETE	472.9	426.7	375.0	362.6	337.8	280.9	225.0	
35624	MOUNTED BEARINGS, EXCEPT PLAIN	213.1	200.3	186.1	175.3	136.9	100.9	96.0	62.3
35629	BALL AND ROLLER BEARING PARTS AND COMPONENTS	243.1	212.4	207.7	200.1	166.9	138.2	118.7	65.0
35620	BALL AND ROLLER BEARINGS, N.S.K.	16.8	16.9	3.9	4.7	4.7	4.5	12.1	3.3
3563-	AIR AND GAS COMPRESSORS	1,923.4	1,607.7	1,443.5	1,198.4	904.2	722.7	(NA)	(NA)
35631	AIR AND GAS COMPRESSORS AND VACUUM PUMPS	1,290.3	1,085.2	974.9	739.4	588.6	480.8	501.0	292.3
35632	PARTS FOR AIR & GAS COMPRESSORS & VACUUM PUMPS	384.1	408.9	356.8	352.6	204.6	148.4	(64)	(64)
35635	INDUSTRIAL SPRAYING EQUIPMENT	221.6	113.6	99.6	103.6	104.8	93.5	71.3	56.1
35630	AIR AND GAS COMPRESSORS, N.S.K.	27.4	-	12.2	(2.8)	6.2	-	(65)	(65)
3564-	BLOWERS AND FANS	1,422.3	1,399.6	1,247.6	1,034.4	905.4	682.0	499.1	299.4
35643	CENTRIFUGAL BLOWERS AND FANS	354.1	381.7	321.5	270.4	248.2	181.0	294.9	191.2
35644	PROPELLER & AXIAL FANS & POWER ROOF VENTILATORS	303.3	243.9	214.3	183.0	171.4	159.9		
35645	AIR PURIFICATION EQUIP. FOR ENVIRON. SYSTEMS	260.7	287.9	292.3	245.6	178.0	121.3	182.5	95.0
35646	AIR PURIFICATION EQUIPMENT FOR INDUSTRIAL GASES	381.7	459.7	389.4	303.7	267.3	198.0		
35640	BLOWERS AND FANS, N.S.K.	122.5	(26.4)	(30.1)	31.7	40.5	21.8	21.7	13.2
35650	INDUSTRIAL PATTERNS, EXCEPT SHOE PATTERNS	411.9	283.3	306.5	318.0	262.0	234.4	233.7	159.9
35660	SPEED CHANGERS, DRIVES, AND GEARS	1,199.7	1,127.8	1,073.4	936.0	806.1	593.0	569.3	345.9
3567-	INDUSTRIAL FURNACES AND OVENS	707.1	584.9	532.0	514.8	450.0	341.1	415.9	237.7
35671	ELECTRICAL INDUSTRIAL FURNACES AND OVENS	140.3	164.2	162.5	139.2	105.4	67.5	90.8	44.7

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
35672	FUEL-FIRED INDUSTRIAL FURNACES AND OVENS	144.4	182.1	161.3	147.2	133.6	97.2	155.7	76.6
35674	INDUCTION AND DIELECTRIC HEATING EQUIPMENT	133.4	233.6	199.3	210.7	180.2	147.0	149.1	109.9
35675	INDUSTRIAL ELECTRICAL HEATING EQUIPMENT, N.E.C.	204.1							
35670	INDUSTRIAL FURNACES AND OVENS, N.S.K.	84.9	(5.0)	(8.9)	(17.7)	30.8	29.4	20.3	6.5
3568-	POWER TRANSMISSION EQUIPMENT, N.E.C.	1,710.9	1,409.0	1,442.5	1,390.7	1,178.1	975.0	604.5	449.5
35681	PLAIN BEARINGS AND BUSHINGS	275.1	195.0	200.8	201.3	143.0	121.0		
35683	POWER TRANSMISSION EQUIPMENT, N.E.C.	1,419.1	1,212.5	1,240.9	1,186.2	1,034.7	854.0	604.5	449.5
35680	POWER TRANSMISSION EQUIPMENT, N.S.K.	16.6	1.5	(S)	3.2	.4	-		
3569-	GENERAL INDUSTRIAL MACHINERY, N.E.C.	2,689.4	1,894.0	1,710.4	1,507.5	1,324.3	1,132.8	899.8	664.3
35691	PACKING AND PACKAGING MACHINERY, EXCEPT FOR FOOD	440.5	375.0	334.5	320.4	210.6	177.4		
35692	INDUSTRIAL FILTERS AND STRAINERS	630.0	574.7	559.4	439.8	349.9	275.4	899.8	664.3
35699	OTHER GENERAL INDUSTRIAL MACHINERY	1,311.6	916.6	796.1	696.1	606.1	535.5		
35690	GENERAL-INDUSTRIAL MACHINERY, N.E.C., N.S.K.	307.3	(27.7)	(S)	(51.2)	157.7	144.5		
3573-	ELECTRONIC COMPUTING EQUIPMENT	12,673.2	10,136.2	8,442.7	8,668.2	7,084.5	6,108.0	4,048.8	(NA)
35731	ELECTRONIC COMPUTERS	3,546.9	2,603.3	2,308.8	2,227.6	1,881.0	1,884.3	3,123.9	(NA)
35732	PERIPHERAL EQUIPMENT FOR ELECTRONIC COMPUTERS	6,087.9	5,191.0	3,967.7	3,977.8	3,289.0	2,745.3		
35734	PARTS PRODUCED BY COMPLETE MACHINE MANUFACTURERS	2,414.2	2,217.1	2,116.2	2,345.3	1,868.7	1,403.2	906.4	(NA)
35735	PARTS PROD. BY OTHER THAN COMP. MACH. MANU.	419.6							
35730	ELECTRONIC COMPUTING EQUIPMENT, N.S.K.	204.6	(124.8)	(50.0)	(117.5)	45.8	75.2	18.5	(NA)
3574-	CALCULATING AND ACCOUNTING MACHINES	836.2	790.0	837.0	1,207.0	990.1	694.2	630.8	(NA)
35741	ADDING MACHINES & CALCULATORS, EXCEPT ELECTRONIC	(D)	(D)	(D)	(D)	(D)	(D)		
35742	ELECTRONIC CALCULATORS AND PERIPHERAL DEVICES	369.5	334.4	451.7	648.3	425.7	225.8	464.3	(NA)
35743	ACCOUNTING MACHINES AND CASH REGISTERS	(D)	(D)	(D)	(D)	(D)	(D)		
35745	PARTS FOR CALCULATING AND ACCOUNTING MACHINES	59.0	(D)	(D)	(D)	(D)	(D)	131.7	(NA)
35740	CALCULATING AND ACCOUNTING MACHINES, N.S.K.	4.8	(S)	(S)	(7.1)	(13.1)	11.0	34.8	(NA)
35760	SCALES AND BALANCES, EXCEPT LABORATORY	328.9	299.4	267.6	234.5	200.4	182.1	131.4	90.0
3579-35792	OFFICE MACHINES, N.E.C. AND TYPEWRITERS	2,020.3	1,565.2	1,336.5	1,440.7	1,171.9	1,064.9	925.8	541.3
35793	DUPLICATING MACHINES	199.7	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
35794	DICTATING, TRANSCRIBING, AND RECORDING MACHINES	(D)	311.4	267.6	286.3	264.9	254.7	(NA)	(NA)
35795	MAILING, LETTER HANDLING, AND ADDRESSING MACHINES	235.3	196.4	196.4	199.4	148.8	128.6	(NA)	(NA)
35796	OTHER OFFICE MACHINES	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
35797	TYPEWRITERS (INCLUDING CODED MEDIA)	1,101.9	909.1	796.1	850.6	638.9	580.0	508.1	(NA)
35798	PARTS AND ATTACHMENTS FOR OFFICE MACHINES, N.E.C.	143.3						65.8	(NA)
35790	OFFICE MACHINES, N.E.C., N.S.K.	38.0	(S)	-	(9.4)	32.8	18.0	18.8	(NA)
3581-	AUTOMATIC MERCHANDISING MACHINES	396.2	305.8	224.7	328.8	309.0	306.3	261.3	206.6
35811	AUTOMATIC MERCHANDISING MACHINES	294.9	215.3	149.8	246.5	250.7	231.5	198.3	164.3
35812	PARTS FOR AUTOMATIC MERCHANDISING MACHINES	84.3	88.9	72.3	80.4	48.5	61.1	45.5	32.8
35810	AUTOMATIC MERCHANDISING MACHINES, N.S.K.	17.0	(S)	(S)	(1.9)	(9.8)	13.7	17.4	9.5
35820	COMMERCIAL LAUNDRY AND DRY CLEANING EQUIPMENT	233.6	202.2	183.7	202.8	226.8	185.3	(NA)	(NA)
3585-	REFRIGERATION AND HEATING EQUIPMENT	8,501.7	7,562.5	6,150.9	6,870.8	6,916.7	6,232.1	3,695.4	2,326.7
35851	HEAT TRANSFER EQUIPMENT	2,251.2	2,178.8	1,858.5	1,929.1	1,827.2	1,680.5	903.2	(NA)
35852	UNITARY AIR CONDITIONERS (INCLUDING HEAT PUMPS)	1,673.0	1,426.0	1,025.2	1,322.7	1,289.4	1,070.6	530.1	(NA)
35853	COMMERCIAL REFRIGERATION EQUIPMENT	759.4	777.2	679.8	600.4	567.7	482.3	341.5	253.7
35854	COMPRESSORS AND COMPRESSOR UNITS	1,580.3	1,420.9	1,103.6	1,233.3	1,290.8	1,065.4	494.5	269.4
35855	CONDENSING UNITS, ALL REFRIGERANTS	175.6	160.9	121.7	193.8	179.6	146.8	73.3	73.5
35856	ROOM AIR CONDITIONERS AND DEHUMIDIFIERS	720.4	625.9	559.0	731.0	720.5	679.6	553.3	(NA)
35857	OTHER REFRIG. & AIR CONDITIONING EQUIP., N.E.C.	712.2	649.7	524.5	443.4	501.1	570.3	484.9	302.5
35858	WARM AIR FURNACES AND PARTS, NONELECTRIC	378.4	309.3	269.5	308.5	403.8	384.2	226.4	222.1
35850	REFRIGERATION AND HEATING EQUIPMENT, N.S.K.	251.3	(S)	(S)	(108.6)	136.6	152.4	88.2	46.7
35860	MEASURING, DISPENSING, AND LUBRICATING PUMPS	265.6	261.8	247.3	221.4	167.6	183.4	139.3	121.0
3589-	SERVICE INDUSTRY MACHINERY, N.E.C.	1,687.6	1,157.8	932.2	959.2	960.0	864.4	539.8	341.5
35891	COMMERCIAL COOKING AND FOOD WARMING EQUIPMENT	386.0	377.1	303.5	290.8	247.9	217.0	158.2	107.0
35892	SERVICE INDUSTRY MACHINES AND PARTS	1,059.2	646.8	530.4	599.2	555.4	496.5	305.3	196.7
35893	COMMERCIAL AND INDUSTRIAL VACUUM CLEANERS	109.4	(133.4)	(98.3)	67.7	62.6	62.7	26.0	19.0
35890	SERVICE INDUSTRY MACHINERY, N.E.C., N.S.K.	132.9	(S)	(S)	(1.5)	94.1	88.2	50.3	18.9
3592-	CARBURETORS, PISTONS, RINGS, AND VALVES	1,298.5	1,120.1	897.6	890.0	922.1	793.9	512.7	(NA)
35921	CARBURETORS, NEW AND REBUILT	642.0	545.2	419.3	402.1	431.4	355.3	189.9	[6]121.4
35922	PISTONS AND PISTON RINGS, ENGINES	372.2	355.3	301.8	303.7	274.3	229.3	199.2	178.6
35923	VALVES, INTAKE AND EXHAUST, ENGINES	257.5	212.5	170.3	174.5	206.4	196.6	107.8	86.1
35920	CARBURETORS, PISTONS, RINGS, AND VALVES, N.S.K.	26.9	(S)	(S)	(9.7)	10.0	12.7	15.8	([7])
3599-	MACHINERY, EXCEPT ELECTRICAL, N.E.C.	6,441.0	5,103.4	4,961.1	4,871.7	4,171.6	3,363.3	2,753.0	1,283.6
35992	PNEUMATIC AND HYDRAULIC CYLINDER	456.1	467.5	485.7	446.4	278.4	189.2	127.5	86.8
35994	MISCELLANEOUS MACHINERY PRODUCTS, N.E.C.	676.9	761.0	725.7	653.5	560.9	442.5	702.3	
35995	RECEIPTS FOR MACHINE SHOP JOBWORK	3,338.1	3,436.8	3,193.4	3,027.3	1,932.0	1,425.8	1,080.0	[6]782.8
35990	MACHINERY, EXCEPT ELECTRICAL, N.E.C., N.S.K.	1,969.9	(438.1)	556.3	744.5	1,400.3	1,305.8	843.2	[7]414.0
3612-	TRANSFORMERS	2,117.8	1,820.5	1,768.6	2,000.7	1,674.5	1,436.1	1,161.0	692.2
36122	POWER AND DISTRIBUTION TRANSFORMERS, EXCEPT PARTS	1,320.9	1,150.8	1,168.2	1,302.1	1,096.5	913.9	790.3	434.5
36124	FLUORESCENT LAMP BALLASTS	210.7	194.8	164.5	218.4	173.6	160.6	118.8	93.3
36125	SPECIALTY TRANSFORMERS, EXCEPT LAMP BALLASTS	342.8	284.3	245.3	270.6	225.5	225.3	116.4	69.7
36127	OTHER TRANSFORMERS AND PARTS FOR ALL TRANSFORMERS	168.1	191.8	197.1	192.6	151.4	111.4	120.6	90.3
36120	TRANSFORMERS, N.S.K.	75.3	(S)	(S)	(17.0)	(27.5)	24.9	14.9	4.4
3613-	SWITCHGEAR AND SWITCHBOARD APPARATUS	3,298.4	2,622.5	2,508.8	2,520.1	2,349.7	2,058.8	1,598.5	1,088.5
36131	SWITCHGEAR, EXCEPT DUCTS AND CONTROL RELAYS	841.4	740.2	748.0	661.3	645.4	597.1	455.7	437.2
36132	POWER CIRCUIT BREAKERS, ALL VOLTAGES	261.2	230.0	256.4	252.2	217.7	182.7	209.8	208.8
36133	LOW VOLTAGE PANELBOARDS AND DISTRIBUTION BOARDS	878.2	738.4	678.4	694.3	630.7	539.0	378.0	304.2
36134	FUSES AND FUSE EQUIPMENT UNDER 2,300 VOLTS	201.6	151.0	136.5	142.8	127.7	99.7	69.2	41.9
36135	MOLDED CASE CIRCUIT BREAKERS, 750 VOLTS & UNDER	492.0	387.8	329.0	346.7	320.8	283.0	170.2	(NA)
36136	DUCTS (INCL. PLUG-IN UNITS) 750 VOLTS & UNDER	88.5	79.6	78.3	109.9	85.3	65.7	62.8	(NA)
36137	CONTROL CIRCUIT RELAYS	356.3	276.3	251.9	274.5	266.6	223.4	193.7	(NA)
36130	SWITCHGEAR AND SWITCHBOARD APPARATUS, N.S.K.	179.3	(19.2)	(30.3)	(38.4)	55.5	68.2	59.3	16.3
3621-	MOTORS AND GENERATOR	4,976.2	4,128.9	3,676.8	3,627.8	3,136.6	2,635.7	2,319.0	1,578.2
36211	FRACTIONAL HORSEPOWER ELECTRIC MOTORS	1,956.3	1,651.8	1,327.0	1,440.0	1,406.3	1,137.7	842.5	620.3
36212	INTEGRAL HORSEPOWER MOTORS AND GENERATORS	1,163.0	1,092.0	970.7	839.3	681.5	567.7	569.5	380.2
36213	LAND TRANSPORTATION MOTORS AND GENERATORS	205.7	114.2	179.9	150.7	113.8	106.3	133.4	89.8
36214	PRIME MOVER GENERATOR SETS	643.9	560.3	488.3	361.1	271.1	247.3	232.7	104.6
36217	FRACTIONAL HORSEPOWER MOTOR-GENERATOR SETS	274.5	210.5	180.5	254.7	251.8	228.8	(NA)	(NA)
36218	INTEGRAL HORSEPOWER MOTOR-GENERATOR SETS	288.1	212.4	168.4	204.8	163.7	122.9	(NA)	(NA)
36219	PARTS FOR MOTORS, GEN., & MOTOR GENERATOR SETS	354.0	373.3	362.6	358.0	232.1	188.6	158.6	127.6
36210	MOTORS AND GENERATORS, N.S.K.	90.7	(S)	(S)	(19.2)	(16.3)	36.4	36.6	9.4
36220	GENERAL INDUSTRY POWER CIRCUIT DEVICES	2,429.1	2,013.4	1,874.0	1,870.0	1,542.0	1,245.6	1,071.4	633.3
3623-	WELDING APPARATUS, ELECTRIC	1,035.0	870.0	907.7	896.7	663.2	570.0	432.9	324.9
36231	ARC WELDING MACHINES, COMPONENTS, AND ACCESSORIES	407.8	353.7	339.9	391.5	273.9	218.5	140.1	104.5
36232	ARC WELDING ELECTRODES, METAL	447.6	374.3	412.8	359.5	246.3	215.5	166.3	148.2
36233	RESISTANCE WELDERS, COMPONENTS, AND ACCESSORIES	136.9	(147.8)	(152.9)	145.1	117.1	115.1	88.0	68.3
36230	WELDING APPARATUS, ELECTRIC, N.S.K.	42.7	(S)	(S)	(.6)	25.9	20.9	37.9	3.8

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3624-	CARBON AND GRAPHITE PRODUCTS	663.0	604.0	568.1	544.7	353.2	335.9	295.8	217.8
36241	CARBON AND GRAPHITE ELECTRODES	362.0	331.0	311.2	286.5	117.4	136.9	147.6	103.6
36249	CARBON AND GRAPHITE PRODUCTS, EXCEPT ELECTRODES	293.1	268.6	252.2	252.9	230.3	193.8	140.7	113.0
36240	CARBON AND GRAPHITE PRODUCTS, N.S.K.	7.9	4.4	4.7	5.3	5.5	5.2	7.5	1.2
3629-	ELECTRICAL INDUSTRIAL APPARATUS, N.E.C.	699.6	718.7	637.9	688.8	670.3	442.9	398.5	250.5
36291	CAPACITORS FOR ELECTRICAL APPLICATIONS	154.8	149.0	119.3	157.3	143.1	112.4	112.5	51.4
36292	RECTIFYING APPARATUS, EXCEPT ELECTRONIC	310.2	(293.3)	(278.0)	241.4	(249.0)	152.6	131.6	86.9
36293	ELECTRICAL EQUIPMENT FOR INDUSTRIAL USE, N.E.C.	182.2	274.5	242.0	278.9	251.8	145.9	135.1	103.7
36290	ELECTRICAL INDUSTRIAL APPARATUS, N.E.C., N.S.K.	51.9	(S)	(S)	(11.2)	26.4	32.0	19.4	8.5
3631-	HOUSEHOLD COOKING EQUIPMENT	1,818.8	1,513.7	1,101.4	1,211.0	1,200.6	1,027.0	632.1	536.7
36311	ELECTRIC RANGES, OVENS, AND SURFACE COOKING UNITS	1,232.5	1,062.3	745.2	776.0	706.1	582.8	340.8	282.1
36313	GAS RANGES, OVENS, AND SURFACE COOKING UNITS	349.1	463.2	363.5	435.0	486.0	440.5	289.2	281.0
36314	OUTDR. COOKING EQ. & HSEHLD. COOKING EQ., N.E.C.	215.8							
36310	HOUSEHOLD COOKING EQUIPMENT, N.S.K.	21.4	(9)	(9)	(Z)	8.5	3.7	2.1	1.1
3632-	HOUSEHOLD REFRIGERATORS AND FREEZERS	2,005.6	1,578.5	1,610.8	1,749.6	1,633.6	1,419.4	987.4	831.8
36321	HOUSEHOLD REFRIGERATORS	1,644.4	1,309.6	1,142.0	1,281.7	1,319.5	1,207.8	841.0	687.9
36322	HOUSEHOLD FOOD FREEZERS	296.0	266.7	466.7	467.9	312.2	199.8	142.8	143.1
36323	PARTS FOR HOUSEHOLD REFRIGERATORS AND FREEZERS	61.8	(68)	(68)	(68)	(68)	(68)	(68)	(68)
36320	HOUSEHOLD REFRIGERATORS AND FREEZERS, N.S.K.	3.4	(2.2)	(2.1)	(NA)	1.9	11.8	3.6	.8
3633-	HOUSEHOLD LAUNDRY EQUIPMENT	1,697.3	1,444.8	1,254.5	1,316.8	1,369.9	1,289.9	990.6	766.1
36331	HOUSEHOLD WASHERS AND DRYERS	1,460.3	1,247.8	1,109.2	1,188.9	1,233.9	1,138.5	843.2	698.8
36333	OTHER HOUSEHOLD LAUNDRY EQUIPMENT	235.9	196.9	145.2	127.9	133.4	148.7	142.7	66.8
36330	HOUSEHOLD LAUNDRY EQUIPMENT, N.S.K.	1.1	(.1)	(.1)	(Z)	2.6	2.7	4.7	.5
3634-	ELECTRIC HOUSEWARES AND FANS	2,304.0	1,978.6	1,686.9	1,642.8	1,704.1	1,448.0	1,071.3	810.0
36341	ELECTRIC FANS, EXCEPT INDUSTRIAL	257.0	207.3	165.5	153.3	168.2	127.7	123.6	102.1
36345	SMALL HOUSEHOLD ELECTRIC APPLIANCES, EXCEPT FANS	1,846.2	1,654.9	1,366.3	1,358.1	1,411.2	1,185.9	865.9	626.5
36349	PARTS FOR SMALL HOUSEHOLD ELECTRIC APPLIANCES	148.4	168.7	149.7	123.8	93.3	79.0	60.3	81.5
36340	ELECTRIC HOUSEWARES AND FANS, N.S.K.	52.4	(9)	(S)	(7.6)	31.4	55.4	21.5	10.4
36350	HOUSEHOLD VACUUM CLEANERS	710.4	654.4	543.8	516.5	500.9	439.2	254.5	183.1
3636-	SEWING MACHINES	260.4	258.0	204.2	202.6	182.3	152.1	116.8	104.7
36361	HOUSEHOLD SEWING MACHINES								
36362	INDUSTRIAL SEWING MACHINERY	237.5	258.0	204.2	202.6	182.3	152.1	116.8	104.7
36360	SEWING MACHINES, N.S.K.	22.9	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3639-	HOUSEHOLD APPLIANCES, N.E.C.	1,383.0	1,103.0	920.3	987.3	967.3	816.5	510.3	415.7
36391	ELECTRIC HOUSEHOLD WATER HEATERS	222.5	167.2	143.1	155.4	136.1	119.9	63.4	61.4
36392	HOUSEHOLD WATER HEATERS, EXCEPT ELECTRIC	281.6	237.1	208.2	168.6	174.9	179.5	130.1	142.2
36394	DISHWASHERS, DISPOSALS, COMPACTORS, AND POLISHERS	721.8	710.7	581.3	662.8	641.8	504.3	298.6	209.2
36399	OTHER MAJOR HOUSEHOLD APPLIANCES & PARTS, N.E.C.	139.8							
36390	HOUSEHOLD APPLIANCES, N.E.C., N.S.K.	17.3	(9)	(9)	(.5)	14.5	12.8	18.2	2.9
36410	LAMP BULBS	1,630.2	1,477.4	1,224.6	1,199.3	1,165.9	1,069.1	756.4	545.9
36430	CURRENT-CARRYING WIRING DEVICES	1,824.9	1,589.0	1,240.2	1,524.0	1,417.1	1,206.8	789.8	561.8
3644-	NONCURRENT-CARRYING WIRING DEVICES	1,315.5	1,171.1	1,074.2	1,252.2	1,018.7	832.7	548.6	439.3
36441	ELECTRICAL TRANSMISSION LINE AND POLE HARDWARE	276.2	297.7	295.5	307.3	252.7	222.3	130.2	97.9
36442	ELECTRICAL CONDUIT AND CONDUIT FITTINGS	634.4	557.8	522.0	663.7	489.7	393.7	306.9	242.2
36443	OTHER NONCURRENT-CARRYING WIRING DEVICES	342.7	307.7	243.1	273.9	256.0	195.9	98.6	92.8
36440	NONCURRENT-CARRYING WIRING DEVICES, N.S.K.	62.2	(7.9)	(13.6)	7.3	20.3	20.8	12.8	6.4
3645-	RESIDENTIAL LIGHTING FIXTURES	974.6	782.4	640.3	686.3	799.7	746.1	457.8	363.9
36451	RESIDENTIAL LIGHTING FIXTURES, EXCEPT PORTABLE	461.0	388.1	289.0	318.8	337.4	291.9	190.5	158.8
36457	PORTABLE RESIDENTIAL LIGHTING FIXTURES	389.6	357.6	328.0	324.8	358.2	320.9	176.3	160.2
36450	RESIDENTIAL LIGHTING FIXTURES, N.S.K.	124.0	(36.7)	(23.3)	(42.7)	104.1	133.3	91.0	44.9
3646-	COMMERCIAL LIGHTING FIXTURES	935.0	858.8	772.7	872.7	765.7	701.8	(69)	(69)
36462	COMMERCIAL AND INSTITUTIONAL LIGHTING FIXTURES	653.6	625.1	576.8	562.4	571.9	527.2	385.4	299.2
36463	INDUSTRIAL LIGHTING FIXTURES	243.0	225.9	209.0	203.6	178.7	162.6	120.6	76.1
36460	COMMERCIAL LIGHTING FIXTURES, N.S.K.	38.4	(7.8)	(10.0)	(6.7)	15.1	12.0	(69)	(69)
36470	VEHICULAR LIGHTING EQUIPMENT	646.1	547.1	414.6	403.4	409.7	358.1	226.1	157.4
3648-	LIGHTING EQUIPMENT, N.E.C.	674.7	557.6	515.5	551.2	558.4	488.0	(69)	(69)
36485	OUTDOOR LIGHTING EQUIPMENT AND PARTS	392.0	313.4	345.6	352.3	352.0	316.5	199.2	134.8
36489	OTHER LIGHTING EQUIPMENT, N.E.C.	222.4	203.4	178.6	198.7	200.6	164.7	122.6	84.7
36480	LIGHTING EQUIPMENT, N.E.C., N.S.K.	60.3	(9)	(9)	(NA)	5.8	6.8	(69)	(69)
3651-	RADIO AND TV RECEIVING SETS	4,730.8	4,143.3	3,545.0	3,891.8	4,158.4	3,609.7	3,568.2	2,073.9
36511	HOME, PORTABLE, AND AUTOMOTIVE RADIO	811.6	823.9	675.7	735.7	907.6	754.5	697.4	531.3
36512	TELEVISION RECEIVERS	2,450.9	2,224.5	1,923.9	2,228.9	2,432.4	2,148.7	2,259.7	1,092.3
36514	HIGH FIDELITY COMPONENTS	558.3	365.3	364.8	365.8	388.8	373.4	396.1	320.0
36515	SPEAKERS (INCLUDING LOUDSPEAKER SYSTEMS)	753.9	719.9	548.9	481.4	372.6	249.2	184.8	114.2
36510	RADIO AND TV RECEIVING SETS, N.S.K.	156.1	(S)	(31.7)	(80.0)	57.0	83.9	30.2	16.1
36520	RECORDS, RECORD BLANKS, AND PRERECORDED TAPE	1,138.7	741.8	649.2	568.6	561.3	537.3	271.0	178.7
3661-	TELEPHONE AND TELEGRAPH APPARATUS	7,118.7	5,132.1	4,733.9	4,882.7	4,427.4	3,973.9	2,248.2	1,538.0
36611	TELEPHONE SWITCHING AND SWITCHBOARD EQUIPMENT	2,827.1	2,050.8	1,860.9	2,019.5	1,816.0	1,568.1	840.4	491.3
36612	OTHER TELEPHONE AND TELEGRAPH EQUIPMENT	4,174.5	3,064.9	2,850.9	2,839.8	2,592.8	2,376.6	1,399.0	1,045.2
36610	TELEPHONE AND TELEGRAPH APPARATUS, N.S.K.	117.2	(16.4)	(22.1)	(23.4)	18.6	29.2	8.8	1.5
3662-	RADIO AND TV COMMUNICATION EQUIPMENT	14,051.0	11,957.0	10,755.1	9,548.7	9,252.6	8,376.6	7,482.2	6,064.8
36621	COMMUNICATION EQUIPMENT, EXCEPT BROADCAST	3,344.4	3,007.9	2,856.1	2,338.6	(NA)	(NA)	(NA)	(NA)
36622	BROADCAST, STUDIO, & RELATED COMMUNI. EQUIPMENT	568.4	559.5	469.3	471.6	(NA)	(NA)	(NA)	(NA)
36623	INTERCOMMUNICATION EQUIPMENT	851.9	605.9	563.2	527.5	445.3	336.2	231.0	165.8
36625	SEARCH, DETEC., NAVIGATION, & GUIDANCE SYSTEMS	7,428.1	6,446.4	5,895.7	5,186.9	(NA)	(NA)	(NA)	(NA)
36627	OTHER ELECTRONIC COMMUNI. SYSTEMS & EQUIPMENT	1,348.6	1,165.3	873.8	800.4	(NA)	(NA)	(NA)	(NA)
36620	COMMUNICATION EQUIPMENT, N.S.K.	509.7	(172.0)	(97.0)	(223.7)	181.9	(NA)	196.9	32.0
3671-	ELECTRON TUBES, ALL TYPE	1,257.4	1,163.5	1,060.6	1,165.2	1,302.0	1,189.4	1,380.3	823.1
36711	RECEIVING TUBES	104.0	112.9	129.6	150.4	177.1	189.6	253.1	287.9
36712	CATHODE RAY PICTURE TUBES	603.5	604.9	514.0	599.8	697.0	633.6	765.6	248.5
36713	TRANSMITTING AND SPECIAL PURPOSE TUBES	544.6	445.7	417.0	415.0	427.9	366.2	361.6	286.7
36710	ELECTRON TUBES, N.S.K.	5.3	-	-	-	-	-	-	-
3674-	SEMICONDUCTORS AND RELATED DEVICES	4,532.3	4,291.8	3,038.5	3,575.3	3,178.3	2,360.8	1,162.0	(NA)
36741	INTEGRATED MICROCIRCUITS (SEMICONDUCTOR NETWORKS)	2,697.1	2,597.9	1,717.8	2,055.5	1,708.7	1,267.8	247.5	(NA)
36742	TRANSISTORS	462.6	428.6	413.9	541.7	572.2	413.6	447.0	(NA)
36743	DIODES AND RECTIFIERS, EXCEPT LIGHT EMITTING	414.9	435.4	404.7	499.1	344.2	300.8	287.5	(NA)
36749	SEMICONDUCTOR DEVICES AND PARTS FOR ALL DEVICES	835.8	825.1	474.2	460.6	512.8	337.2	176.0	(NA)
36740	SEMICONDUCTORS AND RELATED DEVICES, N.S.K.	122.0	(S)	(27.9)	(18.4)	40.4	41.4	4.0	(NA)
36750	CAPACITORS FOR ELECTRONIC APPLICATIONS	736.1	654.7	535.1	685.9	618.9	454.4	430.7	318.8

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
36760	RESISTORS FOR ELECTRONIC APPLICATIONS	583,0	481.0	466,3	518.2	557.4	438.1	442.4	312.6
36770	COILS, TRANSFORMERS, REACTORS, AND CHOKES	605,8	538.7	488,5	527.6	460.9	385.3	446.5	274.4
36780	CONNECTORS FOR ELECTRONIC APPLICATIONS	986,0	838.3	839,2	793.4	658.0	523.6	(NA)	(NA)
36790	ELECTRONIC COMPONENTS, N.E.C.	5,574,1	4,261.6	3,445,2	3,569.4	3,724.5	3,209.8	(NA)	(NA)
3691-	STORAGE BATTERIES	1,911,0	1,503.6	1,290.9	1,222.2	1,059.2	952.7	579.4	504.5
36913	LEAD ACID STORAGE BATTERIES, 1.5 CU. FT. & UNDER.	1,458.1							
36914	LEAD ACID STORAGE BATTERIES, OVER 1.5 CU. FT.	233,8	1,466.1	1,272.4	1,212.8	1,038.6	929.1	559.5	500.0
36915	STOR. BAT., EX. LEAD ACID, & PARTS FOR ALL TYPES.	164,3							
36910	STORAGE BATTERIES, N.S.K.	54,8	(37.5)	(18.5)	9,4	20,6	23,6	19,9	4,5
36920	PRIMARY BATTERIES, DRY AND WET.	623,9	605,8	455,5	393,5	346,1	316,7	327,9	191,6
3693-	X-RAY, ELECTROMED., AND ELECTROTHERA. APPARAT	1,837,8	820,3	740,2	592,7	423,3	383,0	179,8	108,6
36931	IRRADIATION IONIZING RADIATION EQUIPMENT.	664,6							
36932	ELECTROMEDICAL EQUIP., EXCEPT IONIZING RADIATION.	1,107.8	820.3	740.2	592.7	423.3	383.0	179.8	108.6
36930	X-RAY AND ELECTROMEDICAL APPARATUS, N.S.K.	65.5							
3694-	ENGINE ELECTRICAL EQUIPMENT	3,049,3	2,649,3	2,050,1	2,049,0	2,052,0	1,781.0	1,220.2	873.9
36941	IGNITION HARNESS AND CABLE SETS	252,8	229,1	163,4	129,3	112,4	112,8	76,5	58,9
36942	ALTERNATORS, GENERATORS, AND REGULATOR.	631,7	528,5	404,5	409,0	356,9	382,1	288,3	199,3
36943	CRANKING MOTORS (STARTERS).	464,3	405,3	337,3	355,1	434,4	313,7	221,2	134,7
36944	SPARK PLUGS, ENGINE IGNITION.	419,6	422,7	328,6	319,7	332,9	290,3	186,4	143,8
36945	OTHER ENGINE ELECTRICAL EQUIPMENT	895,2	738,7	531,9	520,0	481,8	411,8	267,6	217,1
36946	COMPONENTS & PARTS FOR ENGINE ELECTRICAL EQUIP.	310,0	300,8	261,9	301,4	286,4	225,5	150,6	114,7
36940	ENGINE ELECTRICAL EQUIPMENT, N.S.K.	75,6	(24,2)	(22,5)	(14,5)	47,2	44,8	29,6	5,4
3699-	ELECTRICAL EQUIPMENT AND SUPPLIES, N.E.C.	878,8	618,9	480,2	550,0	612,5	582,6	327,3	233,8
36993	ELECTRIC COMFORT HEATING EQUIPMENT.	67,3							
36994	OTHER ELECTRICAL PRODUCTS	476,7	401.6	320.3	361.2	326.1	326.6	192.4	156.9
36996	APPLIANCE WIRE, CORD, & FLEXIBLE CORD SETS (MFPM)	132,3	(148.6)	(131,3)	(171,9)	161,6	111,5	97,8	66,0
36990	ELECTRICAL EQUIPMENT, N.E.C., N.S.K.	182,5	(68,7)	(s)	(16,9)	124,8	144,5	37,1	10,9
3711-	MOTOR VEHICLES AND CAR BODIES	72,979,1	59,752,9	43,394,3	41,949,6	48,009,0	41,045,9	25,921,6	(NA)
37111	PASSENGER CARS AND CAR CHASSIS.	47,798,9	39,745,5	28,833,4	27,154,1	33,357,7	29,246,2	19,277,4	16,768,3
37112	TRUCKS, TRUCK TRACTORS, AND TRUCK CHASSIS	21,543,5	16,596,6	11,872,0	12,846,2	12,166,6	9,566,1	4,263,7	3,376,2
37113	BUSES						240,9	179,8	182,5
37114	MILITARY VEHICLES (TACTICAL).	3,636,7	3,384,8	2,681,6	1,944,8	2,455,6	1,965,7	2,160,1	(70)
37115	PASSENGER CAR BODIES.								(71)
37110	MOTOR VEHICLES, N.S.K.		(s)	(7,3)	(4,5)	29,1	27,0	40,7	(70)
3713-	TRUCK AND BUS BODIES.	1,880,9	(72)	(72)	(72)	(72)	72934,4	(72)	(72)
37131	TRUCK, BUS, AND OTHER VEHICLE BODIES.	1,326,5	1,012,6	869,2	836,8	753,0	624,2	404,3	300,4
37132	MOTOR VEHICLES (COMPLETE) PURCHASED CHASSIS	316,7	(72)	(72)	(72)	(72)	72193,9	(72)	(72)
37130	TRUCK AND BUS BODIES, N.S.K.	237,7	12,8	(39,4)	(28,9)	121,3	116,3	67,8	27,6
3714-	MOTOR VEHICLE PARTS AND ACCESSORIES	37,841,8	30,384,7	23,023,5	22,669,7	22,855,7	19,417,0	11,735,1	70 71 13,386,1
37141	NEW MOTOR VEHICLE PARTS AND ACCESSORIES	36,735,4	29,600,0	22,349,8	22,092,8	22,221,7	18,766,8	11,326,9	71 12,975,8
37143	REBUILT MOTOR VEHICLE PARTS AND ACCESSORIES	592,9	644,6	530,6	417,1	350,6	365,6	197,5	188,3
37140	MOTOR VEHICLE PARTS AND ACCESSORIES, N.S.K.	513,5	(140,1)	(143,1)	(159,8)	283,4	284,6	210,7	70 222,0
3715-	TRUCK TRAILERS.	1,807,0	1,249,9	878,2	1,595,1	1,298,5	1,079,0	702,2	484,7
37151	TRK. TRLRS. WITH AXLE RATGS. OF 10,000 LB OR MORE	1,680,9	1,144,7	780,9	1,471,0	1,130,4	964,4	643,5	461,4
37152	TRK. TRLRS. W/AXLE RTGS. OF LESS THAN 10,000 LB	41,3	(90,2)	(81,1)	107,6	(123,0)	67,5	25,7	10,5
37150	TRUCK TRAILERS, N.S.K.	84,8	(NA)	(16,2)	16,5	(45,1)	47,1	33,1	12,8
3716-	MOTOR HOMES PRODUCED ON PURCHASED CHASSIS								
37161	MOTOR HOMES BUILT ON PURCHASED CHASSIS.	1,494.6	(72)	(72)	(72)	(72)	72509,6	(72)	(72)
37160	MOTOR HOMES, N.S.K.								
3721-	AIRCRAFT.	12,052,8	11,723,0	10,880,6	10,363,6	9,486,1	7,538,2	9,172,2	4,330,5
37211	COMPLETE AIRCRAFT FOR U.S. MILITARY CUSTOMERS	4,579,6	4,670,5	4,016,6	3,186,4	2,883,5	2,802,9	4,408,0	2,470,3
37212	COMPLETE PERSONAL AND UTILITY AIRCRAFT.	2,034,1	1,203,5	1,002,7	811,0	870,3	474,2	3,504,9	157,8
37213	COMPLETE AIRCRAFT, EXCEPT PERSONAL AND UTILITY.	2,672,0	3,355,2	3,652,8	4,206,9	3,873,0	2,787,3		561,1
37214	AIRCRAFT MODIFICATIONS, CONVERSIONS, AND OVERHAUL	747,2	754,9	516,5	495,0	410,4	373,9	596,8	465,5
37216	OTHER AERONAUTICAL SERVICES ON COMPLETE AIRCRAFT.	1,988,2	1,728,8	1,689,2	1,650,2	1,424,7	1,067,1	635,2	668,4
37210	AIRCRAFT, N.S.K.	31,7	(s)	(s)	14,1	24,2	32,8	27,3	7,5
3724-	AIRCRAFT ENGINES AND ENGINE PARTS	4,994,6	4,927,7	4,488,0	4,026,1	3,686,7	3,069,7	3,759,8	2,120,5
37241	AIRCRAFT ENGINES FOR U.S. MILITARY CUSTOMERS.	1,047,9	1,128,2	801,3	540,8	553,4	437,1	1,087,6	644,4
37242	AIRCRAFT ENGINES FOR OTHER THAN U.S. MILITARY	937,0	873,9	991,9	1,002,5	847,6	609,2	690,7	150,0
37243	AERONAUTICAL SERVICES ON AIRCRAFT ENGINE.	660,8	716,4	642,6	683,1	752,1	692,1	526,5	385,3
37244	AIRCRAFT ENGINE PARTS AND ACCESSORIES	2,308,5	2,186,3	2,032,8	1,778,7	1,516,3	1,306,7	1,422,9	932,1
37240	AIRCRAFT ENGINES AND ENGINE PARTS, N.S.K.	40,4	(S)	(S)	(21,0)	17,3	24,6	31,8	8,7
3728-	AIRCRAFT EQUIPMENT, N.E.C.	5,761,5	5,101,7	4,842,4	4,457,5	4,074,2	3,436,9	4,465,0	2,471,3
37281	AIRCRAFT PARTS AND ACCESSORIES, N.E.C.	5,328,2	4,852,1	4,598,3	4,252,0	3,788,0	3,169,1	4,085,4	2,215,3
37283	RESEARCH AND DEVELOPMENT ON AIRCRAFT PARTS.	161,4	142,6	141,4	98,3	115,6	99,4	85,7	74,3
37285	AIRCRAFT PROPELLERS, EXCEPT HELICOPTER ROTORS	108,7	87,4	90,3	79,2	72,2	58,3	119,5	109,0
37280	AIRCRAFT EQUIPMENT, N.E.C., N.S.K.	163,2	(S)	(S)	(28,0)	98,4	110,1	174,4	72,5
3731-	SHIP BUILDING AND REPAIRING	6,270,3	5,833,2	5,513,2	4,712,3	3,888,4	3,200,7	2,537,9	1,518,0
37311	NEW NONPROPELLED SHIPS.	491,1	645,0	643,2	459,8	385,6	361,9	149,0	82,2
37312	NEW SELF-PROPELLED SHIPS, U.S. MILITARY	2,211,7	1,956,7	1,768,2	1,713,8	1,333,3	1,100,0	973,8	681,8
37313	NEW SELF-PROPELLED SHIPS, NONMILITARY	1,917,3	1,825,1	1,805,8	1,290,3	1,201,8	816,1	361,8	242,8
37314	SHIP REPAIR AND CONVERSION, U.S. MILITARY SHIP.	718,0	644,3	554,6	533,0	392,9	386,5	423,0	221,9
37316	SHIP REPAIR AND CONVERSION, NONMILITARY SHIP.	789,1	715,0	687,7	713,4	523,3	484,2	407,2	277,4
37310	SHIP BUILDING AND REPAIRING, N.S.K.	143,2	(47,1)	(S)	(2,0)	51,5	52,1	43,2	11,9
3732-	BOAT BUILDING AND REPAIRING	1,822,1	1,578,9	1,298,6	1,120,5	1,158,8	1,031,1	570,8	338,1
37322	OUTBOARD MOTORBOATS (INCLUDING PREFAB. KITS).	297,7	318,5	250,1	224,5	200,0	233,9	70,2	79,6
37325	INBOARD MOTORBOATS.	359,6	219,6	228,8	217,7	312,8	285,0	259,0	125,9
37326	INBOARD-OUTDRIVE BOATS, EXCEPT HOUSEBOAT.	361,8	(420,2)	(279,7)	(200,3)	(162,1)	95,9		
37327	OTHER BOATS	282,1	(359,5)	(279,7)	(250,6)	209,8	130,4	45,6	36,5
37328	BOAT REPAIR, MILITARY AND NONMILITARY	173,2	(171,9)	(184,0)	(156,5)	(81,2)	74,3	82,2	42,6
37320	BOAT BUILDING AND REPAIRING, N.S.K.	347,8	(89,2)	(76,3)	(70,9)	192,9	211,6	114,0	53,5
3743-	RAILROAD EQUIPMENT.	4,001,9	3,336,1	3,884,7	3,308,3	2,512,3	2,284,2	1,943,5	1,249,1
37431	NEW AND REBUILT LOCOMOTIVES AND PARTS	(D)	2,620,4	3,256,8	2,564,5	2,034,1	1,759,4	569,1	378,1
37432	NEW PASSENGER TRAIN AND FREIGHT TRAIN CARS.							1,026,5	559,5
37433	STREET, SUBWAY, TROLLEY, AND RAPID TRANSIT CARS	899,1	705,2	618,4	739,9	476,5	501,2	340,4	310,2
37430	RAILROAD EQUIPMENT, N.S.K.	47,0	(s)	(s)	(3,9)	1,7	23,6	7,6	1,3
3751-	MOTORCYCLES, BICYCLES, AND PARTS[73]	847,3	688,3	704,4	879,9	721,1	540,6	226,3	151,2
37511	BICYCLES, ADULT TRICYCLES, UNICYCLES, AND PARTS	490,4	405,7	389,2	623,0	530,1	396,8	176,6	119,6
37512	MOTORCYCLES, MOTORBIKES, MOPEDS, & MOTOR SCOOTERS	286,1	272,8	301,9	249,7	170,1	112,3	45,5	28,8
37510	MOTORCYCLES, BICYCLES, AND PARTS, N.S.K.	70,7	(s)	(s)	7,2	20,9	31,5	4,3	2,8

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3761-	GUIDED MISSILES AND SPACE VEHICLES.	4,848.2	4,464.4	4,553.6	4,312.3	4,076.2	3,705.3	4,367.3	4,032.8
37611	COMPLETE GUIDED MISSILES.	1,685.5	1,505.9	1,538.1	1,535.2	1,450.2	1,246.3	815.7	1,719.8
37612	COMPLETE SPACE VEHICLES AND BOOSTER STAGES.	822.1	860.3	966.6	812.2	886.3	754.9	1,203.2	
37613	RESEARCH AND DEVELOPMENT ON COMPLETE MISSILE.	871.5	760.0	727.3	766.1	674.4	660.8	867.3	1,628.2
37614	RESEARCH & DEVELOPMENT ON COMPLETE SPACE VEHICLES	918.1	819.2	757.7	744.9	597.1	599.7	743.6	
37615	MISSILE, SPACE VEHICLE SVCS., EX. RSCH. & DEVEL.	549.9	518.6	563.0	449.0	466.5	440.1	734.7	684.7
37610	GUIDED MISSILE AND SPACE VEHICLES, N.S.K.	1.1	.4	.9	4.9	1.7	3.5	2.9	-
3764-	SPACE PROPULSION UNITS AND PARTS.	930.1	880.7	907.2	893.1	870.0	740.3	1,054.0	1,488.9
37645	MISSILE AND SPACE VEHICLE PROPULSION UNITS.	370.6	451.9	517.5	579.2	583.6	434.6	451.7	582.6
37646	RESEARCH AND DEVELOPMENT ON PROPULSION UNITS.	345.8	287.1	257.7	204.5	174.1	143.4	389.1	696.8
37647	PROPULSION UNIT SERVICES, EX. RESEARCH & DEVEL.	105.0	92.9	84.8	69.7	71.2	115.0	88.4	61.7
37648	PARTS FOR MISSILE & SPACE VEH. PROPULSION UNITS	105.6	48.7	46.8	39.7	38.9	47.1	93.9	147.8
37640	SPACE PROPULSION UNITS AND PARTS, N.S.K.	3.1	.1	.4	-	2.2	.2	30.9	(NA)
3769-	SPACE VEHICLE EQUIPMENT, N.E.C.	882.4	1,212.7	1,162.7	876.9	770.0	825.4	1,077.2	1,429.7
37692	MISSILE AND SPACE VEHICLE PARTS, N.E.C.	420.0	620.5	542.9	435.0	380.0	418.7	674.0	1,009.3
37694	RESEARCH AND DEVELOPMENT ON PARTS, N.E.C.	455.2	591.5	619.1	441.9	390.0	406.7	403.7	420.4
37690	SPACE VEHICLE EQUIPMENT, N.E.C., N.S.K.	7.2	.7	.7	-	(Z)	-	(NA)	(NA)
3792-	TRAVEL TRAILERS AND CAMPERS[74]	1,477.6	1,355.6	1,082.9	780.8	1,133.8	1,276.5	400.8	(NA)
37921	TRAVEL TRAILERS[75]	882.2	1,043.1	775.9	444.0	597.3	619.9	186.6	64.9
37922	CAMPING TRAILERS, TRUCK CAMPERS, & PICKUP COVERS[76]	426.2	(299.1)	(247.9)	241.1	285.1	273.3	115.6	(NA)
37920	TRAVEL TRAILERS AND CAMPERS, N.S.K.[77]	169.2	(S)	(59.1)	(95.7)	251.4	383.3	98.6	(NA)
37950	TANKS AND OTHER SELF-PROPELLED WEAPONS AND PARTS.	1,015.1	751.9	524.2	362.7	374.4	285.1	409.3	454.4
3799-	TRANSPORTATION EQUIPMENT, N.E.C.	700.3	784.1	724.8	676.8	743.2	753.4	257.6	(NA)
37993	GOLF CARTS AND SIMILAR VEHICLES[73]	108.2	111.6	89.2	84.1	71.4	54.1	36.3	12.1
37994	SNOWMOBILES AND PARTS[78]	157.1	(156.7)	133.8	78.7	129.0	203.1	36.3	(NA)
37999	OTHER TRANSPORTATION EQUIPMENT AND PARTS, N.E.C.	353.6	(500.6)	490.8	499.0	476.8	436.7	151.3	(NA)
37990	TRANSPORTATION EQUIPMENT, N.E.C., N.S.K.	81.4	(S)	(S)	(15.0)	66.0	59.5	33.7	(NA)
3811-	ENGINEERING AND SCIENTIFIC INSTRUMENTS.	1,849.5	1,598.5	1,526.2	1,580.0	1,317.2	1,106.0	1,049.0	688.5
38111	AERONAUTICAL, NAUTICAL, & NAVIGA. INSTRUMENTS	804.6	812.0	837.1	788.2	689.4	573.7	585.5	410.6
38112	LABORATORY AND SCIENTIFIC APPARATUS	696.6	589.6	491.3	584.2	420.6	335.9	259.7	161.6
38113	SURVEYING AND DRAFTING INSTRUMENTS.	168.9	191.6	183.5	183.2	149.0	126.2	139.4	104.1
38110	ENGINEERING AND SCIENTIFIC INSTRUMENTS, N.S.K.	179.4	(S)	(S)	(24.4)	58.2	70.2	64.4	12.3
38220	HEATING, AIR CONDITIONING, AND APPLIANCE CONTROL.	1,106.4	996.0	735.3	832.4	846.4	658.1	523.6	431.6
38230	INDUSTRIAL PROCESS INSTRUMENTS.	2,061.1	1,594.4	1,406.3	1,217.6	923.8	794.7	(NA)	(NA)
3824-	FLUID METERS AND COUNTING DEVICES	634.3	508.9	443.9	460.4	383.5	327.4	(NA)	(NA)
38242	NONELECTRICAL TOTALIZING FLUID AND GAS METERS	344.0	271.4	252.2	285.4	209.0	207.7	189.2	163.7
38243	COUNTING DEVICES.	147.0	98.0	93.4	72.8	64.9	48.8	(NA)	(NA)
38244	MOTOR VEHICLE INSTRUMENTS, EXCEPT ELECTRIC.	123.2	139.3	97.0	102.1	100.8	70.1	71.4	69.8
38240	FLUID METERS AND COUNTING DEVICES, N.S.K.	20.1	(S)	1.3	(.1)	8.8	.8	(NA)	(NA)
3825-	INSTRUMENTS TO MEASURE ELECTRICITY.	2,566.2	2,078.3	1,955.2	1,944.9	1,639.6	1,329.7	1,137.1	736.2
38251	ELECTRICAL INTEGRATING INSTRUMENTS.	223.5	203.7	216.2	230.9	188.8	169.5	101.6	93.2
38252	TEST EQUIPMENT FOR TESTING ELECTRICAL CIRCUITS.	1,784.9	1,432.3	1,313.5	1,307.4	1,086.2	869.0	700.4	443.4
38253	OTHER INSTRUMENTS TO MEASURE ELECTRICITY.	429.9	438.6	423.4	387.2	303.3	223.4	279.2	185.3
38250	INSTRUMENTS TO MEASURE ELECTRICITY, N.S.K.	127.8	(S)	(S)	(19.4)	61.3	67.8	56.5	14.3
3829-	MEASURING AND CONTROLLING DEVICES, N.E.C.	1,073.1	804.8	778.6	714.4	601.0	585.9	(NA)	(NA)
38291	AIRCRAFT ENGINE INSTRUMENTS, EXCEPT FLIGHT.	120.1	91.1	96.2	88.9	77.4	74.5	120.0	66.4
38292	PHYSICAL PROPERTIES TESTING & INSPEC. EQUIPMENT	276.6	(203.9)	(188.8)	166.4	124.1	106.3	(NA)	(NA)
38293	GENERAL PURPOSE INSTRUMENTS	226.8	195.5	(173.7)	159.4	124.2	94.5	(NA)	(NA)
38294	NUCLEAR RADIA. DETECTION & MONITORING INSTRU.	344.2	308.3	312.4	278.3	209.7	198.2	(NA)	(NA)
38290	MEASURING AND CONTROLLING DEVICES, N.E.C., N.S.K.	105.5	(S)	7.5	(21.4)	(65.6)	112.4	(NA)	(NA)
3832-	OPTICAL INSTRUMENTS AND LENSES.	1,299.7	1,122.3	1,030.0	877.0	650.4	584.7	559.1	376.5
38324	SIGHTING, TRACKING AND FIRE CONTROL EQUIPMENT	227.3	185.3	145.3	116.6	92.4	83.1	176.7	158.0
38325	OPTICAL INSTRUMENTS AND LENSES, EXCEPT OPHTHALMIC	390.0	932.8	869.5	742.4	526.5	444.4	353.8	212.8
38326	ANALYTICAL AND SCIENTIFIC INSTRUMENT.	604.5							
38320	OPTICAL INSTRUMENTS AND LENSES, N.S.K.	177.9	(S)	(S)	(18.0)	31.5	57.2	28.6	5.7
3841-	SURGICAL AND MEDICAL INSTRUMENTS.	1,891.3							
38411	SURGICAL AND MEDICAL INSTRUMENTS AND APPARATUS.	1,506.7	1,849.3	1,539.2	1,348.4	1,200.3	984.2	542.9	290.6
38412	HOSPITAL FURNITURE, EXCEPT BEDS AND CHAIRS.	206.7							
38410	SURGICAL AND MEDICAL INSTRUMENTS, N.S.K.	177.9							
3842-	SURGICAL APPLIANCES AND SUPPLIES.	2,413.0	1,936.6	1,763.3	1,592.1	1,303.5	1,142.1	691.3	461.8
38421	SURGICAL APPLIANCES AND SUPPLIES.	1,773.0	1,574.3	1,470.0	1,269.1	900.8	782.0	475.0	318.2
38423	PERSONAL INDUSTRIAL SAFETY DEVICES.	403.1	(312.9)	240.5	261.0	272.5	226.0	144.4	97.4
38424	HEARING AIDS, ELECTRONIC.	58.1	47.8	51.0	55.9	51.3	50.0	40.9	35.3
38420	SURGICAL APPLIANCES AND SUPPLIES, N.S.K.	178.8	(S)	(1.8)	(6.1)	78.9	84.1	31.1	11.0
38430	DENTAL INSTRUMENTS, EQUIPMENT, AND SUPPLIES	660.7	599.6	548.9	528.7	402.4	352.3	201.8	139.5
3851-	OPHTHALMIC GOODS.	844.3	752.4	647.0	616.2	557.3	483.5	377.5	244.1
38511	OPHTHALMIC FRONTS AND TEMPLES	154.2	208.4	160.8	168.7	124.9	111.5	84.2	(NA)
38513	OTHER OPHTHALMIC GOODS.	259.3	226.4	216.6	214.3	197.2	194.8	124.3	(NA)
38514	GLASS OPHTHALMIC FOCUS LENSES	132.6							
38515	PLASTIC OPHTHALMIC FOCUS LENSES	73.8	292.9	240.5	217.4	193.0	134.5	134.2	(NA)
38516	CONTACT LENSES.	117.7							
38510	OPHTHALMIC GOODS, N.S.K.	106.7	(24.7)	(29.1)	15.8	42.2	42.7	34.8	(NA)
3861-	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES	9,217.5	8,241.7	7,318.2	7,034.7	6,182.4	5,255.4	3,138.0	1,631.4
38611	STILL PICTURE EQUIPMENT	925.8	846.6	774.5	840.9	790.8	616.5	484.8	223.6
38612	PHOTOCOPYING EQUIPMENT.	(D)	(D)	(D)	(D)	(D)	1,455.1	602.2	173.6
38613	MOTION PICTURE EQUIPMENT.	178.2	249.6	225.5	267.4	232.4	191.6	194.3	127.9
38614	MICROFILMING, BLUEPRTG., & WHITEPRINTING EQUIP.	240.2	251.3	216.3	207.3	172.8	137.5	53.6	29.3
38615	SENSITIZED FILM AND PLATES, SILVER HALIDE TYPE.	2,587.3	2,276.5	1,966.2	1,824.8	1,585.5	1,427.6	(D)	(D)
38616	SENSITIZED PAPER AND CLOTH, SILVER HALIDE TYPE.	(D)	(D)	(D)	(D)	(D)	376.4	238.7	191.3
38617	OTHER SENSITIZED FILM, PAPER, AND CLOTH	443.1	371.7	307.4	395.8	368.8	306.2	193.5	128.1
38618	PREPARED PHOTOGRAPHIC CHEMICALS	634.3	404.7	394.2	274.6	231.8	286.2	148.3	74.3
38619	X-RAY FILM.	515.3	518.5	467.1	417.5	314.3	297.6	(D)	(D)
38610	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES, N.S.K.	(D)	(D)	(D)	(D)	(D)	160.7	119.9	78.4
3873-	WATCHES, CLOCKS, AND WATCHCASES[79]	1,332.0	1,335.1	1,045.4	1,019.9	955.6	880.8	708.3	435.6
38731	CLOCKS, TIMING MECHANISMS, AND CLOCK MOVEMENTS.	433.0	449.8	364.9	399.5	340.4	329.7	276.1	173.8
38734	WATCHES WITH IMPORTED MOVEMENTS OR MODULES.	300.7	253.9	191.9	215.3	223.0	192.1	190.6	112.8
38735	WATCHES WITH DOMESTIC MOVEMENTS OR MODULES.	471.3	551.1	435.3	350.5	319.2	285.4	165.0	102.2
38737	WATCHCASES AND PARTS FOR WATCHCASES	67.2	61.2	49.9	46.5	58.6	52.9	44.8	29.4
38730	WATCHES, CLOCKS, AND WATCHCASES, N.S.K.	59.8	(19.1)	3.4	(8.1)	14.4	20.7	31.8	17.3
3911-	JEWELRY, PRECIOUS METAL	1,907.7	1,527.6	1,318.1	1,227.9	1,174.7	981.8	633.2	400.4
39111	JEWELRY MADE OF PLATINUM METALS AND KARAT GOLD.	1,251.5	1,047.1	898.8	814.1	808.0	656.7	426.2	286.3
39112	OTHER JEWELRY MADE OF PRECIOUS METAL.	353.0	301.3	281.1	254.9	208.1	178.5	125.8	93.7
39110	JEWELRY, PRECIOUS METAL, N.S.K.	303.2	(179.2)	(138.2)	158.9	158.6	146.6	81.2	20.4

See footnotes at end of table.

Table 1. **Historical Statistics for Product Classes—Value Shipped by All Producers: 1963, 1967, and 1972 to 1977**—Con.

1977 product code	Product class	1977	1976[1]	1975[1]	1974[1]	1973[1]	1972	1967	1963
3914-	SILVERWARE AND PLATED WARE	403,2	353.2	332.5	338.9	344.8	317.5	305.4	211.9
39141	SILVERWARE, PLATED WARE, AND STAINLESS STEEL WARE	175,2	179.5	173.4	158.1	186.0	154.3	126.3	93.9
39142	FLATWARE	193.2	178.1	143.9	154.7	143.0	153.3	166.8	113.2
39140	SILVERWARE AND PLATED WARE, N.S.K.	34.7	(9)	(15.2)	(26.1)	(15.8)	9.9	12.3	4.8
3915-	JEWELERS' MATERIALS AND LAPIDARY WORK	726,0	561.0	412.5	418.4	376.6	336.2	213.2	138.2
39151	JEWELERS' FINDINGS AND MATERIALS	305.5	308.4	250.7	215.2	183.4	142.5	115.6	70.5
39152	LAPIDARY WORK AND DIAMOND CUTTING AND POLISHING	305.6	222.4	150.1	183.5	188.1	132.8	97.6	67.7
39150	JEWELERS' MATERIALS AND LAPIDARY WORK, N.S.K.	114.9	(30.2)	(11.7)	(19.7)	(5.1)	60.8	(NA)	(NA)
3931-	MUSICAL INSTRUMENTS	878.9	841.4	707.8	747.1	597.6	525.5	401.2	319.4
39311	PIANOS	180.6	173.3	150.7	151.8	125.4	107.4	91.2	87.7
39312	ORGANS	295.8	299.4	240.1	252.5	206.8	188.3	126.2	107.3
39313	PIANO AND ORGAN PARTS	86.2	78.9	69.1	93.6	79.3	54.6	46.0	42.3
39314	OTHER MUSICAL INSTRUMENTS AND PARTS	255.5	261.4	231.4	236.2	170.3	156.0	123.4	77.7
39310	MUSICAL INSTRUMENTS, N.S.K.	60.8	(28.4)	(16.5)	(13.0)	(15.8)	19.2	14.4	4.4
39420	DOLLS AND STUFFED TOY ANIMALS	508.2	366.9	321.1	331.7	359.3	277.9	217.0	190.4
3944-	GAMES, TOYS, AND CHILDREN'S VEHICLES	2,333.2	1,847.4	1,670.3	1,657.4	1,596.8	1,500.7	1,048.7	846.6
39441	GAMES, EXCEPT TOYS AND HOBBIES	612.0	408.5	366.6	313.1	343.5	280.6	(NA)	(NA)
39443	BABY CARRIAGES & CHILDREN'S VEH., EX. BICYCLES	211.2	159.1	160.8	112.8	143.1	126.1	99.6	82.7
39444	TOYS, EXCEPT GAMES AND HOBBIES	1,036.0	1,247.7	1,092.9	1,083.9	1,038.2	934.0	(NA)	(NA)
39445	HOBBIES & MODELS (CRAFT & STRUC. KITS AND SETS)	309.3						(NA)	(NA)
39440	GAMES, TOYS, AND CHILDREN'S VEHICLES, N.S.K.	164.6	(32.1)	(50.0)	(147.6)	72.0	160.0	(NA)	(NA)
3949-	SPORTING AND ATHLETIC GOODS, N.E.C.	2,216.9	2,132.5	1,797.9	1,725.5	1,488.6	1,538.8	836.4	655.5
39491	FISHING TACKLE AND EQUIPMENT	270.1	238.2	215.0	219.8	182.1	167.7	111.1	96.9
39492	GOLF EQUIPMENT (BALLS, CLUBS, BAGS, ETC)	385.1	338.9	319.9	326.7	339.8	276.7	158.6	525.4
39494	PLAYGROUND, GYMNASIUM, AND EXERCISE EQUIPMENT	257.8	(265.6)	218.8	180.2	129.1	107.4	470.3	
39495	OTHER SPORTING AND ATHLETIC GOODS, N.E.C.	1,060.8	1,169.0	972.8	906.8	654.4	811.6		
39490	SPORTING AND ATHLETIC GOODS, N.E.C., N.S.K.	243.4	(120.8)	(71.4)	92.0	183.2	175.4	96.4	33.2
39510	PENS, MECHANICAL PENCILS, AND PEN POINTS	562.9	413.6	369.9	360.0	358.9	311.7	210.8	177.7
3952-	LEAD PENCILS AND ART GOODS	268.1	248.0	230.3	221.9	180.0	174.3	133.2	107.5
39521	WOOD-CASED PENCILS, CRAYONS, AND CHALK	90.6	133.2	103.4	102.6	83.1	63.1	73.6	65.3
39522	ARTISTS' EQUIPMENT	163.9	111.7	114.2	(111.7)	(89.5)	101.4	53.8	40.3
39520	LEAD PENCILS AND OFFICE AND ART GOODS, N.S.K.	13.6	(S)	(12.7)	7.6	7.4	9.8	5.8	1.9
39530	HAND STAMPS, STENCILS, AND OTHER MARKING DEVICES	215.9	252.8	234.2	223.5	185.2	163.4	(NA)	(NA)
3955-	CARBON PAPER AND INKED RIBBONS	488.9	451.6	419.3	415.2	355.4	317.5	221.5	161.3
39551	INKED RIBBONS (ALL TYPES)	246.9	209.5	193.3	162.4	145.5	150.0	(NA)	(NA)
39552	CARBON PAPER, STENCIL PAPER, ETC	220.2	246.0	227.0	243.3	194.9	153.8	(NA)	(NA)
39550	CARBON PAPER AND INKED RIBBONS, N.S.K.	21.8	(9)	(9)	(9.5)	(15.0)	13.7	(NA)	(NA)
39610	COSTUME JEWELRY AND COSTUME NOVELTIES	781.5	710.6	653.8	602.1	474.1	441.7	338.2	256.7
39620	FEATHERS, PLUMES, AND ARTIFICIAL FLOWERS	160.1	106.6	102.5	101.5	135.4	101.8	86.3	59.3
39630	BUTTONS AND PARTS	106.2	107.9	112.1	114.9	120.1	103.1	83.8	81.9
3964-	NEEDLES, PINS, AND FASTENERS	633.6	545.3	456.7	471.9	510.2	553.6	381.4	315.2
39641	ZIPPERS AND SLIDE FASTENERS	295.0	285.9	235.9	220.0	225.8	254.5	201.5	143.2
39642	NEEDLES, PINS, FASTENERS, AND SIMILAR NOTIONS	278.1	241.1	212.6	227.4	265.5	265.7	153.8	155.7
39640	NEEDLES, PINS, AND FASTENERS, N.S.K.	60.6	(18.3)	(8.2)	(24.5)	(18.9)	33.4	26.1	16.3
3991-	BROOMS AND BRUSHES	620.8	521.0	456.7	468.7	440.9	391.8	295.1	247.7
39911	BROOMS	83.0	(108.8)	(113.4)	98.6	74.6	60.5	37.5	38.0
39912	PAINT AND VARNISH BRUSHES AND ROLLERS	184.5	158.3	142.2	140.7	127.5	112.6	88.6	73.6
39913	OTHER BRUSHES	309.5	221.3	185.2	176.4	187.1	186.4	142.3	126.0
39910	BROOMS AND BRUSHES, N.S.K.	43.8	(32.6)	(15.9)	53.0	51.7	32.3	26.8	10.1
3993-	SIGNS AND ADVERTISING DISPLAYS	1,606.9	1,183.0	1,082.8	1,096.0	1,132.6	1,089.2	800.6	583.8
39931	TUBING & FLUORESCENT & INCANDESCENT BULB SIGNS	349.8	384.7	349.8	350.1	258.9	198.7	176.5	144.5
39932	NONELECTRIC SIGNS AND ADVERTISING DISPLAYS	615.6	432.0	394.8	378.1	448.2	445.9	349.3	302.3
39933	ADVERTISING SPECILTIES	262.5	244.7	222.1	196.9	161.7	155.7	115.0	83.7
39930	SIGNS AND ADVERTISING DISPLAYS, N.S.K.	379.0	(121.6)	(116.1)	170.9	263.8	288.9	159.8	53.3
3995-	BURIAL CASKETS	494.8	442.6	439.4	431.9	404.8	387.9	288.0	267.4
39951	LINED & TRIMMED METAL CASKETS & COFFINS (ADULT)	298.1	279.7	279.2	276.6	226.4	211.2	133.7	123.6
39952	LINED & TRIMMED WOOD CASKETS & COFFINS (ADULT)	85.6	(62.2)	(63.9)	65.2	71.3	68.7	59.8	67.3
39953	OTHER CASKETS, COFFINS, AND METAL VAULTS	79.2	80.0	83.9	69.7	66.4	67.8	(NA)	(NA)
39950	BURIAL CASKETS, N.S.K.	31.9	(20.7)	(S)	(20.4)	(40.7)	40.2	25.8	12.4
39960	FLOOR AND WALL COVERINGS	561.3	438.0	363.5	327.2	316.1	300.3	191.6	168.1
3999-	MANUFACTURING INDUSTRIES, N.E.C.	2,589.0	2,047.1	1,748.5	1,661.8	1,458.6	1,455.3	922.4	694.0
39991	CHEMICAL FIRE EXTINGUISHING EQUIPMENT AND PARTS	204.9	177.6	154.6	157.9	135.4	125.7	94.6	52.3
39992	COIN-OPERATED AMUSEMENT MACHINES	242.2	147.3	123.6	111.6	90.9	91.1	47.7	30.0
39993	MATCHES	105.5	95.5	87.9	94.3	89.9	81.6	66.2	64.8
39994	CANDLES	160.3	129.2	107.2	122.7	114.2	100.8	55.1	43.7
39995	LAMP SHADES	51.4	(37.8)	(41.5)	43.3	42.8	36.9	27.4	35.9
39996	DRESSED AND DYED FURS	76.2	(52.8)	(52.5)	29.5	43.1	42.3	39.8	43.6
39997	UMBRELLAS, PARASOLS, AND CANES	36.0	(19.3)	(25.6)	26.0	39.6	37.8	40.3	34.1
39999	OTHER MISCELLANEOUS FABRICATED PRODUCTS, N.E.C.	1,086.3	1,237.7	1,036.5	929.9	607.8	621.6	390.5	327.6
39990	MANUFACTURING INDUSTRY PRODUCTS, N.E.C., N.S.K.	614.2	(149.9)	(119.1)	146.6	(294.9)	317.5	160.9	62.0

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. N.E.C. Not elsewhere classified. N.S.K. Not specified by kind. [r]Revised. (S) Withheld because estimate did not meet publication standards. (Z) Less than 50 thousand dollars or hours; under 50 employees. GOCO Government-owned contractor operated.

[1]Figures are estimates derived from a representative sample of manufacturing establishments canvassed in annual survey of manufactures and, therefore, may differ from results that would be obtained from a complete canvass of all manufacturing establishments. Standard errors associated with estimates are published in annual survey of manufactures volumes for this period. Figures in parentheses either have associated standard errors exceeding 15 percent or are not consistent with other census series and related data. Thus, at individual product class level, estimates may be of limited reliability; however, they may be combined with other product class totals into broader aggregates which are of acceptable reliability.

[2]For years 1972 to 1976, all data were collected and published under Industry 2016, Poultry Dressing Plants, product codes only. However, industry 2016 products are defined to include only products processed at slaughtering plants. Industry 2017, Poultry and Egg Processing, is defined to include same products but processed from purchased carcasses. For 1977, comparable product classes were created for collecting products primary to both industries 2016 and 2017.

[3]For years 1972 to 1976, all data were collected and published under Industry 2017, Poultry and Egg Processing, product codes only. However, industry 2017 products are defined to include only products processed from purchased carcasses. Industry 2016, Poultry Dressing Plants, is defined to include same products but processed at slaughtering plants. For 1977, comparable product classes were created for collecting products primary to both industries 2017 and 2016.

[4]The individual product codes included in this class of product for 1972 differ from the 1967 definition. Products shifting into or out of this class of product represent approximately 10 percent of the total 1967 shipment at the U.S. level.

[5]Figures relate to shipments rather than production.

[6]Data for Product Class 20370, Frozen Fruits and Vegetables, n.s.k., are included with Product Class 20380, Frozen Specialties, n.s.k. As a result, total for industry 2037 is understated by approximately 5 percent.

[7]For 1972 and later years, individual product codes included in this product class differed significantly from prior years. Products shifting into or out of this product class represented more than 15 percent of total shipments at U.S. level.

[8]For 1972, product class 20512 was new. In prior years, figures were included in product class 20511.

Footnotes continued on next page.

[9]Withheld because estimated figure is negative. This is consequence of using difference method of estimation (see Estimating Procedures in appendix B) and of improved establishment reporting that resulted in changing classification of shipments from n.s.k. code for 1972 Census to specified 5-digit product classes for this year. Four-digit total is best estimate, even though smaller than sum of 5-digit values.

[10]Data in value of shipments column represent value of production rather than value of shipments. Consequently, formula for computing value added by manufacture was modified to exclude any change in finished products inventories between beginning and end of year.

[11]Data for 1977 are not directly comparable to prior years data. See "Description of Industries" in text for explanation.

[12]Value of shipments for this 4-digit group contains extensive duplication. Such duplication arises where products of some establishments are used as materials by other establishments classified in the same industry.

[13]1977 data for product class 22219 not comparable with data for prior years due to exclusion of bed and camp blankets, motor robes, etc.

[14]Included with data for Industry 2211, Cotton Sheets and Pillowcases.

[15]For purposes of comparability with prior years' annual survey of manufactures data, value of shipments of cut and sew shops (major group 23) has been excluded. (See tables 5c and 6a, volume II, 1977 Census of Manufactures).

[16]Excludes shipments of $473.7 million from Industry 2281, Yarn Mills, Except Wool.

[17]Excludes shipments of $279.0 million from Industry 2281, Yarn Mills, Except Wool.

[18]Excludes shipments of $138.7 million from Industry 2281, Yarn Mills, Except Wool.

[19]Excludes shipments of $56.0 million from Industry 2281, Yarn Mills, Except Wool.

[20]For purposes of comparability with prior years' annual survey of manufactures data, the value of shipments of the knitting mills (SIC group 225) has been excluded. (See table 6a, volume II, 1977 Census of Manufactures.)

[21]Excludes shipments made in weaving mills.

[22]For 1973 through 1976, data for product class 24110 included with combined total for product classes 24111, 24112, 24113, and 24114.

[23]1977 data for product classes 24211, 24212, and 24218 are not completely comparable to prior years because of 1977 revision to product class structure for industry 2421. For 1977, railway crossties and mine ties were switched from 24211 to 24218 and woodsiding from 24211 and 24212 to 24218. 1972 data for 24211 and 24218 have been revised to reflect switch of railway crossties and mine ties which represented approximately 5 percent for 24211 and 18 percent for 24218 of original figures. 1972 data were not revised to reflect switch of woodsiding. For 1972, data for woodsiding are not known.

[24]Prior to 1967, data for wood chips, product class 24215, were included in product class 24290.

[25]For 1972, individual product codes included in product class differ from 1967 and 1963. Products shifting into or out of this product class represent approximately 7 percent of total 1967 shipments.

[26]For 1967 and prior years, product class 24350 included data for product class 24360.

[27]Data for prior years are not comparable to 1977 due to misclassification in reporting between interior plywood using exterior glue and exterior plywood. 1977 data reflect corrections for these categories. Revised data for years prior to 1977 not available.

[28]Individual product codes included in this product class for 1967 and 1963 differ from posterior years definition. Products shifting into or out of this product class represent approximately 11 percent of total 1967 shipments at U.S. levels.

[29]This product class for 1967 and 1963 differs from posterior years definition. Products shifting into or out of this product class represent approximately 4 percent of total 1967 shipments at U.S. levels.

[30]For 1977 and 1972, total for product classes 25913, 25914, and 25915 are not completely comparable because of 1977 revision to product class structure for industry 2891. For 1972, product classes 25913 and 25914 include unknown amounts of product code 25915 00 which should be included in product class 25915.

[31]In 1967, the detailed grades of paper and paperboard collected were changed. Therefore, many of the product classes do not have comparable data for 1963.

[32]1967 and 1963 data for product class 26490 are not completely comparable to later years because of 1972 SIC revisions to industry 2649.

[33]Individual product codes included in product class for years prior to 1972 differ from product codes for 1972. Products shifting into or out of product class represent approximately 14 percent of total 1972 receipts.

[34]Product class 27544 included with product class 27546.

[35]For 1976 and earlier, value of shipments for industries 2823 and 2824 excluded shipments of producer textured manmade fibers. Data for those years were included in industry 2282, product class 22824.

[36]1977 totals for product classes 28314, 28315, and 28316 are not completely comparable to prior years because of 1977 revision to product class structure for industry 2831. For 1977, product class 28316 was formed from parts of product classes 28314 and 28315. Amount of product class 28316 included in totals for 28314 and 28315 is not known for prior years.

[37]For 1967 and 1963, individual product codes included in this class differ significantly from posterior years. Products shifting into or out of this product class represent more than 15 percent of total value at 1972 U.S. levels.

[38]Prior to 1972, industry 2869 includes values for urea. Due to revisions to Standard Industrial Classification product classes, urea became product code 28732 15 in 1972.

[39]Product group revised in 1972. 1967 data revised to agree with change; 1963 not revised. For 1967, products shifting into or out of product class represent approximately 14 percent of total shipments at U.S. level.

[40]For 1967 and 1963, total shipments did not include values for Product Code 28995 83, Embalming Chemicals, which was part of product code 39943 98.

[41]For 1963, totals excluded values for sizes, product codes 28995 63 and 28995 65.

[42]New SIC basis.

[43]Includes laminated glass made by primary producers (3211) as well as laminated glass made from purchased glass (3231). Separate totals are withheld to avoid disclosing operations of individual companies.

[44]Data for 32313 have been combined with 32113, shown as part of 3211, and excluded from 3231. Separate totals are withheld to avoid disclosing operations of individual companies.

[45]Product class 35195 is combined with product class 35197 to avoid disclosing operations of individual companies.

[46]Individual product codes included in product class for 1972 differ significantly from codes for prior year. Products shifting into or out of product class represent more than 15 percent of total U.S. value shipped.

[47]For 1967 and 1963, product class 35234 was combined with product class 35237 to avoid disclosing operations of individual companies.

[48]Individual product codes included in product class for 1972 differ from the codes for 1967. Products shifting into or out of this product class represent approximately 12 percent of total 1967 shipments.

[49]For 1963 and earlier, parts were included with applicable product classes.

[50]For 1972, product class 35230 includes data not specified by kind for industry 3524.

[51]Product class structure of industry changed significantly between 1976 and 1977; 1977 data are not comparable with data for prior years. Industry 3524 was created for 1972 (being formerly a part of industry 3522); thus, no comparable data prior to 1972 exist.

[52]For 1976 and prior years, data for portable water well and blast hole drilling rigs were contained in either product class 35319 or 35334. For 1977, data for these rigs were contained in product class 35334 only.

[53]For 1976 and prior years, data for product classes 35353 and 35355 were combined.

[54]For 1976 and prior years, data for product classes 35354 and 35356 were combined.

[55]Individual product codes included in this product class for 1972 differ from 1967 definition. Products shifting into or out of this product class represent approximately 10 percent of total 1967 shipments at U.S. level.

[56]For 1972 and later years, data for automatic stacking machines and parts and attachments for automatic stacking machines were included in product class 35362. Prior to 1972, data for these products were included in industry 3537 and were not available separately.

[57]For 1967 and later years, diecasting dies (molds) were included in product class 35442. Prior to 1967, these molds were included in product class 35441.

[58]For 1977, chain saws and parts were classified in industry 3546. Prior to 1977, chain saws and parts were classified in industry 3553.

[59]Prior to 1977, hydraulic and internal combustion engine driven hand tools and parts (excluding chain saws and parts) were classified in industry 3546, but not collected separately.

[60]Prior to 1972, product class 35490 included product classes 35460 and 35470.

[61]Prior to 1977, data for product class 35492 were combined with product class 35495.

[62]Prior to 1977, chain saws, hand held, were included in product class 35531. Data for 1972, 1967, and 1963 have been adjusted to exclude value of chain saws. Data are not available on a comparable basis for 1973, 1974, 1975, and 1976.

[63]Data for 1972 and later are not strictly comparable to prior years.

[64]Prior to 1972, parts for air and gas compressors were included with parts for pumps.

[65]Prior to 1972, values for 35610 includes values for 35630.

[66]For 1963 and earlier years, rebuilt carburetors were included with product class 35994.

[67]For 1963 and earlier years, parts were included with product class 35990.

[68]Prior to 1977, parts were included with data for complete units.

[69]Prior to 1972, value of products not specified by kind (n.s.k.) for industries 3646 and 3648 were included in industry 3645.

[70]Prior to 1967, figures for Product Class 37114, Combat Vehicles, and Product Class 37110, Motor Vehicles, n.s.k., were included with Product Class 37140, Motor Vehicle Parts and Accessories, N.S.K.

[71]Prior to 1967, figures for Product Class 37115, Passenger Car Bodies, were included with Product Class 37141, Motor Vehicle Parts and Accessories.

[72]Prior to 1977, Industry 3716, Motor Homes Produced on Purchased Chassis, were included in Product Class 37132, Motor Vehicles Built on Purchased Chassis. Data for 1972 have been revised to exclude motor homes.

[73]For 1967 and 1963, golf carts, self-propelled, were included in industry 3751.

[74]For 1977 and 1972, industry 3792 products were equivalent to sum of 1967 product codes 37910 31 through 37910 41 and 37991 21.

[75]For 1977, product class 37921 products were equivalent to sum of 1967 product codes 37910 31, 37910 33, 37910 35, and part of 37991 21, where travel trailers less than 11 feet in length were reported. For 1972, they were equivalent to sum of 1972 product class 37921 and part of product code 37922 41, where travel trailers less than 11 feet in length were reported.

[76]For 1977, product class 37922 products are equivalent to sum of 1967 product code 37910 41 and part of 37991 21, where collapsible camping trailers were reported. For 1972, they were equivalent to 1972 product class 37922 less part of product code 37922 41, where travel trailers less than 11 feet in length were reported.

[77]For 1972 and prior years, includes n.s.k. for industry 2451.

[78]For 1977 and 1972, product class 37994 was equivalent to 1967 product code 37922 93.

[79]Prior to 1972, this industry was published as two separate industries: 3871, Watches and Clocks; and 3872, Watchcases.

General Summary—Geographic Area Statistics

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Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**

State and standard metropolitan statistical area	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Alabama	5,863	1,855	341.0	3,773.2	273.0	525.2	2,697.6	8,405.9	12,814.7	21,010.1	1,318.9	322.6	5,064.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Anniston, Ala.	155	63	10.8	104.2	8.4	15.5	73.4	250.3	220.8	474.5	29.2	11.9	141.8
Birmingham, Ala.	1,084	421	64.5	874.1	48.2	92.4	590.9	1,595.7	2,627.1	4,196.7	295.9	68.9	1,123.8
Columbus, Ga.-Ala.	222	91	20.6	206.0	16.2	32.9	140.2	530.6	649.1	1,170.5	34.5	19.7	339.5
Portion in Alabama	55	19	2.9	29.6	2.5	5.1	23.1	108.8	152.0	258.1	7.1	2.0	44.9
Portion in Georgia	167	72	17.8	176.3	13.7	27.8	117.1	421.8	497.1	912.4	27.4	17.7	294.3
Florence, Ala.	175	65	14.0	199.4	11.4	22.8	152.8	409.6	1,001.1	1,345.4	39.7	11.9	209.2
Gadsden, Ala.	100	41	11.8	171.6	9.4	18.2	129.9	389.4	456.9	836.6	37.7	11.3	268.1
Huntsville, Ala.	392	142	31.5	338.1	25.0	48.2	234.5	738.2	1,016.9	1,737.5	92.0	27.8	468.2
Mobile, Ala.	561	153	28.6	374.0	21.7	42.6	254.3	903.5	1,402.9	2,290.0	232.3	23.5	480.6
Montgomery, Ala.	314	98	14.1	141.1	10.7	21.2	93.4	346.2	456.1	793.2	34.1	11.5	167.3
Tuscaloosa, Ala.	135	50	10.1	126.7	8.0	14.9	90.8	310.5	459.8	764.4	35.9	10.9	179.6
Alaska	429	128	11.4	166.0	9.3	16.9	122.7	504.2	767.2	1,250.3	178.1	7.5	170.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Anchorage, Alaska	141	25	2.0	28.2	1.3	2.4	15.6	61.6	78.0	138.6	8.7	1.3	25.5
Arizona	2,892	677	110.9	1,462.9	69.8	135.0	780.7	3,332.9	3,773.4	7,022.4	213.7	93.9	1,879.6
STANDARD METROPOLITAN STATISTICAL AREAS													
Phoenix Ariz.	1,976	488	84.6	1,135.2	51.1	99.4	577.2	2,558.6	2,092.8	4,586.6	156.5	71.9	1,379.0
Tucson, Ariz.	406	77	11.1	143.6	6.8	12.8	72.2	332.7	333.6	694.9	17.8	9.1	155.7
Arkansas	3,595	1,101	197.1	1,932.4	160.6	310.4	1,400.7	4,881.6	7,554.1	12,276.1	470.1	180.9	2,799.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Fayetteville-Springdale, Ark.	269	91	16.5	146.9	13.4	25.8	105.0	412.6	637.3	1,036.0	36.3	16.2	240.3
Fort Smith, Ark.-Okla.	338	119	23.3	230.4	19.2	37.8	171.2	553.8	846.4	1,383.3	34.0	18.8	281.4
Portion in Arkansas	271	106	21.9	217.8	18.1	35.9	162.1	514.8	815.5	1,313.0	30.2	17.7	265.1
Portion in Oklahoma	67	13	1.4	12.6	1.1	1.9	9.1	38.9	30.9	70.3	3.8	1.1	16.4
Little Rock-North Little Rock, Ark.	514	161	29.6	329.8	22.2	42.9	220.5	827.4	1,090.7	1,882.3	56.0	27.9	423.2
Memphis, Tenn.-Ark.-Miss.	1,156	458	64.1	780.1	45.4	90.3	484.9	2,159.7	3,442.9	5,608.3	161.0	64.2	1,352.4
Portion in Arkansas	53	22	1.6	16.3	1.2	2.4	11.2	38.6	75.8	114.5	4.4	2.1	38.0
Portion in Mississippi	62	25	3.4	36.7	2.5	4.9	22.5	66.4	112.7	176.2	8.5	2.4	37.3
Portion in Tennessee	1,041	411	59.2	727.1	41.7	83.1	451.2	2,054.8	3,254.4	5,317.5	148.1	59.6	1,277.1
Pine Bluff, Ark.	93	41	6.2	75.6	5.0	10.2	53.4	195.1	378.3	566.8	15.7	6.1	147.1
Texarkana, Tex.-Texarkana, Ark.	135	40	7.7	87.5	6.0	10.6	55.6	228.9	246.6	481.7	16.2	9.0	106.1
Portion in Arkansas	60	14	4.1	50.5	3.2	6.0	36.2	143.8	176.8	323.8	13.5	3.0	71.0
Portion in Texas	75	26	3.6	37.0	2.8	4.6	19.3	85.1	69.8	157.9	2.7	6.0	35.1
California	45,289	12,883	1,751.5	24,671.5	1,142.6	2,224.2	13,150.5	54,862.4	66,881.2	120,895.8	3,385.4	1,545.1	31,175.2
STANDARD CONSOLIDATED STATISTICAL AREAS													
Los Angeles-Long Beach-Anaheim, Calif.	28,032	8,368	1,081.6	14,773.3	720.4	1,404.2	7,969.1	32,364.2	35,976.1	67,927.6	1,774.7	982.1	19,274.9
San Francisco-Oakland-San Jose, Calif.	8,726	2,379	383.6	6,123.9	214.6	419.3	2,800.7	13,362.3	17,301.3	30,395.0	915.0	322.5	6,879.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Anaheim-Santa Ana-Garden Grove, Calif.	4,703	1,225	177.5	2,479.2	113.0	222.6	1,258.6	5,280.9	4,342.8	9,537.3	312.9	131.0	2,734.4
Bakersfield, Calif.	334	78	9.1	132.2	5.4	10.8	78.4	352.3	1,359.1	1,734.6	36.3	6.6	146.3
Fresno, Calif.	669	198	21.8	265.1	16.3	31.3	174.3	681.8	1,191.6	1,866.6	92.3	18.6	408.3
Los Angeles-Long Beach, Calif.	21,119	6,543	825.5	11,257.9	550.3	1,074.0	6,058.2	24,701.8	29,053.8	53,467.8	1,162.4	778.9	15,234.9
Modesto, Calif.	303	105	18.8	242.1	14.6	27.4	167.6	626.4	1,257.7	1,865.9	55.3	15.6	318.8
Oxnard-Simi Valley-Ventura, Calif.	529	139	18.9	251.9	12.2	24.1	134.0	534.7	488.0	1,003.7	41.7	14.8	288.5
Riverside-San Bernardino-Ontario, Calif.	1,681	461	59.6	784.3	44.8	83.5	518.3	1,846.8	2,091.5	3,918.7	257.8	56.3	996.7
Sacramento, Calif.	876	210	25.6	352.6	18.2	35.7	216.9	978.3	1,376.7	2,331.1	54.5	21.9	546.2
Salinas-Seaside-Monterey, Calif.	234	57	8.9	108.1	6.9	13.2	76.3	315.2	360.2	671.9	26.7	7.5	217.8
San Diego, Calif.	2,013	464	79.1	1,101.8	51.2	97.5	563.3	2,173.9	1,986.1	4,122.6	119.4	64.9	1,185.2
San Francisco-Oakland, Calif.	5,780	1,538	193.3	3,046.2	119.2	231.9	1,611.3	6,817.2	11,077.2	17,761.3	377.2	184.8	3,807.9
San Jose, Calif.	2,671	762	181.4	2,954.5	89.0	175.1	1,110.0	6,205.7	5,261.6	11,339.0	509.4	134.4	2,873.1
Santa Barbara-Santa Maria-Lompoc, Calif.	444	99	15.5	206.0	8.6	16.3	82.9	355.1	306.2	640.1	23.5	10.1	169.7
Santa Cruz, Calif.	291	60	8.0	87.4	6.7	11.9	63.9	275.2	266.6	539.4	12.0	6.9	122.9
Santa Rosa, Calif.	458	104	11.0	137.9	7.5	14.1	78.0	338.6	349.0	670.9	21.9	7.9	136.7
Stockton, Calif.	414	139	20.9	279.9	16.6	31.8	208.5	747.2	1,249.7	1,982.3	61.0	18.2	498.6
Vallejo-Fairfield-Napa, Calif.	275	79	9.0	123.2	6.4	12.4	79.4	339.4	962.5	1,294.7	28.4	6.2	165.7
Colorado	3,948	961	152.5	2,124.8	97.7	190.1	1,141.3	4,471.8	5,594.2	10,018.0	443.1	132.6	2,504.3
STANDARD METROPOLITAN STATISTICAL AREAS													
Colorado Springs, Colo.	274	65	10.0	111.8	6.8	13.1	68.3	240.4	212.6	442.9	23.3	8.5	117.1
Denver-Boulder, Colo.	2,541	672	106.4	1,534.8	64.7	125.5	764.2	3,068.5	3,581.5	6,599.7	282.4	95.5	1,849.8
Fort Collins, Colo.	215	55	9.8	121.5	6.3	11.8	60.2	324.5	216.3	531.9	25.2	5.5	105.6
Greeley, Colo.	126	25	7.0	104.0	4.8	9.9	64.3	304.1	697.6	1,008.3	(D)	5.2	116.9
Pueblo, Colo.	101	24	8.2	140.3	6.4	13.2	106.1	287.4	357.5	641.7	(D)	9.0	161.3
Connecticut	6,485	2,366	412.1	5,852.3	255.3	509.0	2,901.8	10,933.9	9,084.4	19,842.2	566.0	399.3	6,828.3
STANDARD CONSOLIDATED STATISTICAL AREAS													
New York-Newark-Jersey City, N.Y.-N.J.-Conn.	41,325	13,366	1,502.0	20,379.2	919.2	1,747.6	9,319.5	40,638.1	44,236.4	84,486.0	1,949.6	1,694.5	29,668.0
Portion in New York	28,079	8,404	843.4	10,892.4	526.8	980.4	4,906.3	21,404.8	21,192.0	42,411.4	856.6	991.4	15,715.6
Portion in New Jersey	12,395	4,649	609.2	8,626.2	372.8	729.4	4,206.0	18,046.3	22,244.9	40,093.0	1,036.2	658.0	13,133.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Bridgeport, Conn.	973	354	60.0	884.7	38.1	76.5	450.6	1,714.2	1,415.5	3,102.0	110.2	63.7	1,137.6
Bristol, Conn.	166	57	10.2	147.4	8.1	15.9	105.8	259.2	170.0	420.3	9.5	9.3	160.3
Danbury, Conn.	327	126	17.8	230.6	11.2	22.6	122.6	566.7	352.1	1,016.8	25.5	14.6	344.2
Hartford, Conn.	1,291	457	87.0	1,304.0	49.7	101.6	603.4	2,317.0	1,936.4	4,228.3	112.9	86.4	1,399.5

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Connecticut--Con.													
STANDARD METROPOLITAN STATISTICAL AREAS--Con.													
Meriden, Conn.	118	47	5.8	72.3	4.0	7.7	41.2	141.7	118.0	256.9	8.8	6.6	74.1
New Britain, Conn.	441	153	27.3	366.0	20.2	40.6	244.1	779.0	541.1	1,297.8	41.2	28.1	501.7
New Haven-West Haven, Conn.	901	327	44.3	565.9	30.2	59.3	232.9	1,181.1	1,058.0	2,230.8	65.4	45.5	800.7
New London-Norwich, Conn.-R.I.	286	108	41.8	575.8	26.6	51.3	305.5	1,081.4	780.7	1,847.4	49.3	29.2	457.4
Portion in Connecticut	241	91	40.0	557.5	25.2	48.7	292.8	1,042.5	744.2	1,773.9	47.0	27.0	434.6
Portion in Rhode Island	45	17	1.8	18.4	1.3	2.6	12.6	38.9	36.5	73.5	2.3	2.3	22.8
Norwalk, Conn.	335	119	15.8	233.9	8.7	16.8	82.8	387.3	280.5	660.5	19.1	17.7	333.7
Springfield-Chicopee-Holyoke, Mass.-Conn.	1,034	400	63.2	779.5	45.5	88.6	480.5	1,735.5	1,572.5	3,290.8	109.1	62.1	1,157.7
Portion in Connecticut	13	3	.2	1.8	.1	.3	1.2	5.3	2.1	7.0	.3	.1	1.4
Portion in Massachusetts	1,021	397	63.0	777.7	45.4	88.3	479.3	1,730.3	1,570.4	3,283.8	108.9	62.0	1,156.3
Stamford, Conn.	516	194	33.6	626.6	10.9	21.0	124.5	799.7	518.9	1,321.1	37.6	27.5	485.9
Waterbury, Conn.	542	209	32.9	419.2	21.7	43.8	226.9	821.5	957.1	1,743.9	41.4	36.4	570.6
Delaware	619	231	66.5	1,140.6	32.3	63.0	409.9	1,595.7	3,635.3	5,208.7	148.2	69.1	1,291.9
STANDARD CONSOLIDATED STATISTICAL AREAS													
Philadelphia-Wilmington-Trenton, Pa.-Del.-N.J.-Md.	8,964	3,306	550.5	8,072.4	343.8	667.7	4,192.6	15,796.6	22,402.4	38,008.3	921.5	597.8	11,008.5
Portion in New Jersey	2,103	730	112.7	1,619.3	73.8	142.9	903.0	3,159.9	4,732.5	7,864.4	222.0	115.7	2,167.2
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	247.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	428.8	7,985.9
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161.8	4.2	3.7	52.3
STANDARD METROPOLITAN STATISTICAL AREAS													
Wilmington, Del.-N.J.-Md.	530	212	62.8	1,169.3	29.7	57.5	419.3	1,481.6	3,435.7	4,874.6	158.4	64.1	1,161.3
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161.8	(D)	3.7	51.6
Portion in New Jersey	59	27	9.5	173.9	7.1	13.2	107.5	382.3	540.2	920.5	(D)	10.8	306.6
District of Columbia	555	130	18.6	297.6	7.5	13.3	102.3	610.2	377.7	984.4	18.1	19.4	389.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Washington, D.C.-Md.-Va.	2,054	510	60.5	930.9	29.8	56.1	354.5	1,820.7	1,435.2	3,233.5	(D)	54.9	1,068.2
Portion in District of Columbia	555	130	18.6	297.6	7.5	13.3	102.3	610.2	377.7	984.4	18.1	19.4	389.0
Portion in Maryland	884	229	25.8	383.7	14.0	26.7	159.6	625.5	696.4	1,330.8	(D)	22.1	404.0
Portion in Virginia	615	151	16.2	249.5	8.3	16.1	92.6	585.0	361.1	918.3	26.5	13.4	275.2
Florida	12,399	2,915	358.0	4,133.1	249.6	485.2	2,335.5	9,255.1	11,898.4	20,980.6	737.3	342.9	5,786.8
STANDARD CONSOLIDATED STATISTICAL AREAS													
Miami-Fort Lauderdale, Fla.	4,890	1,162	114.8	1,163.1	86.2	164.6	702.0	2,625.7	2,325.2	4,889.6	166.4	110.9	1,606.9
STANDARD METROPOLITAN STATISTICAL AREAS													
Bradenton, Fla.	135	26	4.1	49.4	3.0	6.4	31.8	187.3	233.9	417.7	8.1	4.6	84.2
Daytona Beach, Fla.	254	50	6.5	69.5	4.2	8.2	35.0	164.9	120.7	284.8	10.1	5.7	75.1
Fort Lauderdale-Hollywood, Fla.	1,480	274	29.7	350.3	20.3	40.6	192.8	828.3	541.2	1,343.6	54.1	25.0	387.1
Fort Myers, Fla.	193	36	3.0	29.4	2.1	3.8	16.7	69.0	63.3	130.7	(D)	2.3	31.9
Gainesville, Fla.	120	29	4.1	41.3	3.0	5.7	24.6	96.7	101.1	197.6	7.8	3.8	53.4
Jacksonville, Fla.	814	243	29.9	373.9	21.7	42.9	248.7	913.6	1,938.6	2,838.0	87.0	28.4	615.5
Lakeland-Winter Haven, Fla.	344	133	16.7	199.5	12.7	26.7	135.3	519.1	1,341.2	1,832.6	68.3	14.9	333.8
Melbourne-Titusville-Cocoa, Fla.	296	63	14.4	196.0	7.6	15.1	71.9	359.3	189.0	571.3	26.5	13.6	243.0
Miami, Fla.	3,410	888	85.1	812.8	65.8	124.1	509.2	1,797.5	1,784.0	3,546.0	112.3	86.0	1,219.0
Orlando, Fla.	822	190	24.8	323.2	14.6	28.8	139.2	777.8	794.6	1,565.8	46.6	25.4	497.7
Panama City, Fla.	95	19	2.6	34.6	2.0	3.8	23.6	97.0	114.1	210.2	(D)	(NA)	(NA)
Pensacola, Fla.	208	47	12.7	179.0	8.7	16.8	109.2	402.0	495.3	893.0	64.8	14.0	298.2
Sarasota, Fla.	277	51	5.2	59.8	3.6	6.8	31.9	128.5	98.1	222.1	7.7	4.6	62.2
Tallahassee, Fla.	122	18	2.1	22.3	1.4	2.6	12.7	51.5	55.9	106.7	5.0	2.2	30.4
Tampa-St. Petersburg, Fla.	1,753	440	59.7	686.6	40.6	77.6	382.5	1,558.2	1,980.0	3,491.4	96.0	59.8	951.5
West Palm Beach-Boca Raton, Fla.	566	113	21.1	330.8	9.6	19.5	106.4	399.1	590.7	971.3	48.8	18.0	296.8
Georgia	8,623	2,906	484.7	5,124.5	376.2	740.6	3,404.4	12,548.7	20,343.6	32,834.5	1,143.4	467.5	7,385.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Albany, Ga.	99	35	8.9	102.9	7.0	14.1	73.5	478.8	517.7	986.7	67.0	8.9	180.9
Atlanta, Ga.	2,758	932	128.7	1,742.7	86.1	171.7	993.6	4,222.8	6,701.0	10,951.6	247.8	132.4	2,472.3
Augusta, Ga.-S.C.	302	131	34.7	428.0	24.9	50.6	257.7	1,090.5	1,102.3	2,174.7	177.5	30.4	578.2
Portion in Georgia	207	84	15.5	177.8	11.4	23.4	111.5	479.5	755.7	1,223.9	162.5	14.2	257.3
Portion in South Carolina	95	47	19.2	250.2	13.4	27.2	146.3	611.0	346.6	950.9	15.0	16.2	320.9
Chattanooga, Tenn.-Ga.	671	287	53.9	612.9	41.3	80.3	409.9	1,290.0	2,032.3	3,305.2	89.0	56.8	927.7
Portion in Georgia	118	53	9.9	89.7	8.2	16.6	66.0	199.8	396.3	594.2	11.3	10.5	144.6
Portion in Tennessee	553	234	43.9	523.2	33.0	63.7	344.0	1,090.2	1,636.0	2,711.0	77.7	46.3	783.1
Columbus, Ga.-Ala.	222	91	20.6	206.0	16.2	32.9	140.2	530.6	649.1	1,170.5	34.5	19.7	339.5
Portion in Alabama	55	19	2.9	29.6	2.5	5.1	23.1	108.8	152.0	258.1	7.1	2.0	44.9
Portion in Georgia	167	72	17.8	176.3	13.7	27.8	117.1	421.8	497.1	912.4	27.4	17.7	294.3
Macon, Ga.	252	94	15.3	175.0	11.5	22.8	117.8	436.7	601.3	1,049.0	61.8	13.2	235.0
Savannah, Ga.	276	83	16.1	215.0	11.4	22.9	136.3	560.7	1,054.3	1,612.7	83.2	14.7	366.1
Hawaii	949	231	25.0	276.8	17.4	31.3	160.5	785.5	1,176.1	1,974.0	44.4	24.8	410.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Honolulu, Hawaii	759	191	19.6	215.2	13.2	23.1	117.2	585.8	984.4	1,581.5	24.5	19.6	321.2
Idaho	1,495	379	51.6	625.2	39.8	76.5	431.9	1,430.0	2,233.6	3,657.7	158.7	43.0	820.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Boise City, Idaho	280	76	6.8	94.1	4.1	7.7	39.5	139.0	226.3	365.2	18.4	5.2	71.2

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Illinois	19,517	7,441	1,286.2	18,740.8	857.8	1,676.7	10,756.5	40,279.1	53,342.1	93,081.3	2,661.5	1,306.1	25,848.9
STANDARD CONSOLIDATED STATISTICAL AREAS													
Chicago-Gary, Ill.-Ind.	15,026	5,794	982.5	14,803.8	643.5	1,265.7	8,389.8	31,059.7	39,305.7	69,937.3	1,979.4	1,009.0	19,732.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Bloomington-Normal, Ill.	106	41	8.1	88.9	4.4	8.0	45.1	202.4	304.0	496.5	16.4	6.6	143.5
Champaign-Urbana-Rantoul, Ill.	143	42	7.3	83.3	5.1	9.1	55.1	192.5	882.2	1,076.2	14.9	4.4	79.1
Chicago, Ill.	14,547	5,604	884.3	12,953.9	567.8	1,118.0	7,022.8	27,542.1	31,441.8	58,567.9	1,448.9	909.6	17,573.8
Davenport-Rock Island-Moline, Iowa-Ill.	460	174	47.7	823.3	33.5	63.3	523.8	1,615.4	2,719.5	4,286.8	167.1	41.7	852.2
Portion in Illinois	273	105	30.4	531.8	20.9	39.5	325.3	1,047.8	1,625.1	2,682.6	74.6	26.5	544.9
Portion in Iowa	187	69	17.3	291.6	12.6	23.7	198.5	567.6	1,094.4	1,604.3	92.5	15.2	307.3
Decatur, Ill.	139	52	19.1	305.9	13.9	25.7	204.0	695.6	1,608.0	2,336.9	64.3	19.7	409.0
Kankakee, Ill.	115	52	11.2	156.3	7.6	14.7	100.0	463.7	546.8	994.4	31.3	11.0	373.0
Peoria, Ill.	384	141	52.3	988.0	30.6	57.7	511.0	1,533.8	2,421.9	3,938.4	355.5	44.9	1,138.8
Rockford, Ill.	723	261	50.0	740.6	34.4	71.4	461.5	1,595.2	1,552.3	3,107.5	119.3	53.6	1,087.9
St. Louis, Mo.-Ill.	3,358	1,231	248.7	3,761.1	162.8	318.2	2,183.4	8,342.0	13,910.5	22,232.8	464.9	256.4	5,190.0
Portion in Illinois	454	171	40.9	638.9	31.5	61.3	451.9	1,565.7	4,090.9	5,639.3	163.1	42.8	945.4
Portion in Missouri	2,904	1,060	207.7	3,122.2	131.3	257.0	1,731.5	6,776.3	9,819.6	16,593.6	301.7	213.6	4,244.6
Springfield, Ill.	134	38	8.3	114.1	5.6	10.2	69.9	280.6	383.3	656.1	17.0	11.2	236.9
Indiana	8,061	3,229	705.9	10,438.9	521.9	1,024.8	7,046.5	22,717.6	29,829.1	52,172.2	2,078.0	703.9	14,111.6
STANDARD CONSOLIDATED STATISTICAL AREAS													
Chicago-Gary, Ill.-Ind.	15,026	5,794	982.5	14,803.8	643.5	1,265.7	8,398.8	31,059.7	39,305.7	69,937.3	1,979.4	1,009.0	19,732.8
Cincinnati-Hamilton, Ohio-Ky.-Ind.	2,373	958	189.6	2,944.3	117.7	238.4	1,618.9	6,608.2	7,196.2	13,769.5	357.1	185.5	4,145.4
Portion in Ohio	2,127	860	175.2	2,751.5	107.4	217.8	1,492.7	6,159.3	6,732.5	12,868.7	335.4	170.6	3,803.5
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	6.4	3.9	159.1
Portion in Kentucky	214	85	11.0	143.8	7.6	14.8	88.1	261.9	342.0	593.2	15.3	11.0	182.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Anderson, Ind.	146	53	25.6	472.4	20.4	41.2	357.7	1,008.1	685.1	1,675.5	59.0	26.5	603.1
Bloomington, Ind.	90	27	8.7	96.3	7.2	13.1	73.6	394.3	512.9	907.0	8.4	(NA)	(NA)
Cincinnati, Ohio-Ky.-Ind.	2,135	856	160.2	2,435.8	97.2	197.9	1,289.5	5,645.9	6,043.1	11,647.9	299.2	157.6	3,561.2
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	(D)	3.9	159.1
Protion in Kentucky	214	85	11.0	143.8	7.6	14.8	88.1	261.9	342.0	593.2	15.3	11.0	182.8
Portion in Ohio	1,889	758	145.8	2,243.0	86.9	177.3	1,163.3	5,197.0	5,579.4	10,747.1	277.5	142.7	3,219.3
Evansville, Ind.-Ky.	408	169	39.2	537.0	28.0	56.7	355.9	1,558.9	2,268.4	3,747.5	134.0	36.3	897.6
Portion in Indiana	347	139	34.9	487.0	24.5	50.2	320.5	1,331.8	1,969.7	3,251.6	124.7	33.4	861.5
Portion in Kentucky	61	30	4.3	50.0	3.5	6.6	35.4	227.1	298.7	495.9	9.3	2.9	36.1
Fort Wayne, Ind.	644	266	56.8	844.3	39.7	77.1	520.4	1,927.9	2,902.2	4,807.7	96.5	57.5	1,062.1
Gary-Hammond-East Chicago, Ind.	479	190	98.2	1,849.9	75.6	147.7	1,367.0	3,517.6	7,863.9	11,369.4	530.5	99.4	2,159.0
Indianapolis, Ind.	1,660	576	124.0	1,980.6	83.1	164.3	1,180.3	3,922.2	4,079.7	7,898.5	288.8	122.5	2,525.3
Kokomo, Ind.	110	44	24.7	445.8	19.0	38.8	325.2	801.4	609.5	1,399.3	(D)	24.1	551.3
Lafayette-West Lafayette, Ind.	102	49	10.9	163.2	7.9	15.5	106.2	504.6	552.5	1,032.5	147.5	11.1	258.0
Louisville, Ky.-Ind.	1,109	455	106.9	1,559.2	77.0	148.2	1,005.8	4,440.7	6,340.0	10,707.2	202.5	113.4	3,022.8
Portion in Indiana	164	69	11.4	142.3	8.8	16.7	96.2	409.1	420.7	828.2	32.7	15.7	305.7
Portion in Kentucky	945	386	95.6	1,417.0	68.2	131.5	909.6	4,031.6	5,919.3	9,879.0	169.9	97.7	2,717.1
Muncie, Ind.	179	66	14.2	230.8	10.5	21.4	163.0	422.9	495.5	914.7	131.7	17.1	275.1
South Bend, Ind.	550	224	33.1	461.4	23.8	46.2	295.5	997.9	1,191.9	2,200.9	58.2	30.8	560.4
Terre Haute, Ind.	205	80	16.1	199.9	11.6	22.8	133.5	607.4	691.0	1,287.4	46.6	14.9	308.6
Iowa	3,783	1,245	240.3	3,382.5	170.6	331.7	2,191.3	8,684.4	14,943.6	23,514.9	677.8	215.5	4,757.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Cedar Rapids, Iowa	225	80	28.1	404.5	16.7	32.7	220.8	933.2	1,456.0	2,399.3	62.6	22.2	471.4
Davenport-Rock Island-Moline, Iowa-Ill.	460	174	47.7	823.3	33.5	63.3	523.8	1,615.4	2,719.5	4,286.8	167.1	41.7	852.2
Portion in Illinois	273	105	30.4	531.8	20.9	39.5	325.3	1,047.8	1,625.1	2,682.6	74.6	26.5	544.9
Portion in Iowa	187	69	17.3	291.6	12.6	23.7	198.5	567.6	1,094.4	1,604.3	92.5	15.2	307.3
Des Moines, Iowa	465	135	25.4	385.4	16.1	31.2	221.2	887.1	1,447.6	2,346.6	54.7	26.9	569.8
Dubuque, Iowa	122	49	15.3	273.1	11.0	22.4	192.3	577.1	909.5	1,483.0	32.1	15.0	348.8
Omaha, Nebr.-Iowa	680	243	34.7	457.3	24.7	48.0	288.3	1,217.4	2,616.1	3,835.0	82.6	38.0	846.3
Portion in Iowa	82	24	3.8	40.2	2.9	5.7	27.4	87.9	490.9	575.2	6.7	3.3	75.4
Portion in Nebraska	598	219	30.9	417.1	21.7	42.3	260.9	1,129.5	2,125.2	3,259.8	75.9	34.7	770.9
Sioux City, Iowa-Nebr.	165	62	9.6	123.7	6.5	12.8	71.2	285.4	1,216.0	1,496.1	38.0	10.5	196.2
Portion in Iowa	144	54	7.9	97.8	5.9	11.4	64.4	260.0	915.5	1,164.1	36.2	(D)	(D)
Portion in Nebraska	21	8	1.6	25.9	.5	1.4	6.9	25.4	300.5	331.9	1.8	(D)	(D)
Waterloo-Cedar Falls, Iowa	177	58	20.6	342.0	15.5	29.9	245.1	929.2	952.4	1,870.1	(D)	19.5	436.7
Kansas	3,270	1,037	168.1	2,114.8	121.6	241.5	1,370.8	5,337.8	10,783.0	15,987.3	345.4	137.0	2,915.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Kansas City, Mo.-Kans.	2,054	702	117.8	1,734.0	77.6	154.1	1,027.4	4,119.9	7,618.8	11,765.4	328.0	118.8	2,902.4
Portion in Kansas	622	235	36.2	519.1	24.9	51.8	328.5	1,299.8	2,961.2	4,272.8	91.3	31.6	915.6
Portion in Missouri	1,432	467	81.5	1,214.9	52.6	102.3	698.8	2,820.1	4,657.6	7,492.6	236.7	87.2	1,986.8
Lawrence, Kans.	55	24	3.7	47.9	2.7	5.1	30.7	221.8	163.3	376.3	10.7	3.5	59.6
Topeka, Kans.	175	51	10.6	143.8	8.2	16.4	107.0	452.3	453.3	901.5	19.4	9.5	234.2
Wichita, Kans.	648	197	50.5	652.4	35.6	70.3	398.6	1,544.0	2,697.8	4,193.3	92.3	38.5	776.1
Kentucky	3,548	1,318	277.5	3,452.2	209.0	399.5	2,302.5	9,545.7	13,565.7	22,874.7	715.9	258.7	5,682.1
STANDARD CONSOLIDATED STATISTICAL AREAS													
Cincinnati-Hamilton, Ohio-Ky.-Ind.	2,373	958	189.6	2,944.3	117.7	238.4	1,618.9	6,608.2	7,196.2	13,769.5	357.1	185.5	4,145.4
Portion in Ohio	2,127	860	1,752	2,751.5	107.4	217.8	1,492.7	6,159.3	6,732.5	12,868.7	335.4	170.6	3,803.5
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	6.4	3.9	159.1
Portion in Kentucky	214	85	11.0	143.8	7.6	14.6	88.1	261.9	342.0	593.2	15.3	11.0	182.8

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical areas	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Kentucky--Con.													
STANDARD METROPOLITAN STATISTICAL AREAS													
Cincinnati, Ohio-Ky.-Ind.	2,135	856	160.2	2,435.8	97.2	197.9	1,289.5	5,645.9	6,043.1	11,647.9	(D)	157.6	3,561.2
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	(D)	3.9	159.1
Portion in Kentucky	214	85	11.0	143.8	7.6	14.8	88.1	261.9	342.0	593.2	15.3	11.0	182.8
Portion in Ohio	1,889	758	145.8	2,243.0	86.9	177.3	1,163.3	5,197.0	5,579.4	10,747.1	277.5	142.7	3,219.3
Clarksville-Hopkinsville, Tenn.-Ky.	117	44	9.4	89.3	7.1	13.7	58.3	233.3	279.8	513.8	(D)	10.0	134.7
Portion in Kentucky	57	21	3.7	34.6	3.1	6.1	25.0	89.3	124.6	211.5	(D)	3.8	56.8
Portion in Tennessee	60	23	5.6	54.7	4.0	7.5	33.3	144.0	155.2	302.3	8.1	6.2	77.9
Evansville, Ind.-Ky.	408	169	39.2	537.0	28.0	56.7	355.9	1,558.9	2,268.4	3,747.5	134.0	36.3	897.6
Portion in Indiana	347	139	34.9	487.0	24.5	50.2	320.5	1,331.8	1,969.7	3,251.6	124.7	33.4	861.5
Portion in Kentucky	61	30	4.3	50.0	3.5	6.6	35.4	227.1	298.7	495.9	9.3	2.9	36.1
Huntington-Ashland, W. Va.-Ky.-Ohio	339	125	29.6	438.8	20.9	40.9	288.1	754.3	1,982.8	2,728.9	233.7	25.7	530.1
Portion in Kentucky	88	38	11.7	198.8	7.3	13.9	118.4	289.6	1,162.5	1,439.2	170.2	8.5	224.0
Portion in Ohio	52	16	3.1	40.9	2.5	5.1	31.7	83.4	144.8	229.1	15.7	3.2	76.0
Portion in West Virginia	199	71	14.8	199.1	11.2	21.9	138.0	381.2	675.5	1,060.6	47.7	14.0	230.1
Lexington-Fayette, Ky.	314	132	29.4	380.9	20.2	38,5	219.3	1,123.6	1,252.1	2,337.3	88.6	25.5	604.6
Louisville, Ky.-Ind.	1,109	455	106.9	1,559.2	77.0	148.2	1,005.8	4,440.7	6,340.0	10,707.2	202.5	113.4	3,022.8
Portion in Indiana	164	69	11.4	142.3	8.8	16.7	96.2	409.1	420.7	828.2	32.7	15.7	305.7
Portion in Kentucky	945	386	95.6	1,417.0	68.2	131.5	909.6	4,031.6	5,919.3	9,879.0	169.9	97.7	2,717.1
Owensboro, Ky.	92	33	7.1	86.9	5.4	10.1	59.7	225.4	340.8	562.8	(D)	8.0	134.6
Louisiana	4,276	1,236	194.8	2,682.7	145.2	292.0	1,798.9	9,418.3	20,266.6	29,493.3	2,072.8	179.4	4,273.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Alexandria, La.	148	36	4.5	53.5	3.1	6.6	31.7	153.9	208.5	358.1	20.1	4.5	91.9
Baton Rouge, La.	407	127	24.1	418.9	15.5	32.2	245.1	2,075.5	4,544.9	6,557.2	704.0	22.1	776.4
Lafayette, La.	135	34	3.5	38.3	2.2	4.3	20.5	86.7	91.3	175.5	(D)	2.7	44.2
Lake Charles, La.	120	47	10.8	199.0	7.8	14.9	127.6	931.0	3,077.4	4,009.0	240.6	9.3	346.5
Monroe, La.	184	49	7.7	112.9	5.2	11.0	71.1	235.1	396.1	628.1	(D)	6.4	126.5
New Orleans, La.	1,031	298	46.8	645.8	34.4	70.2	437.1	1,577.4	2,798.5	4,389.3	165.8	54.6	988.6
Shreveport, La.	485	148	28.0	327.5	21.6	42.2	231.6	739.5	1,084.3	1,794.0	50.1	23.2	392.5
Maine	2,157	595	102.8	1,077.6	84.2	163.6	781.0	2,343.0	2,845.1	5,144.6	222.9	100.0	1,383.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Lewiston-Auburn, Maine	175	71	11.9	98.2	10.0	18.4	72.1	221.2	206.5	423.9	8.7	10.8	117.3
Portland, Maine	273	96	15.4	175.2	11.3	22.2	106.7	381.6	388.4	752.4	23.8	16.3	271.8
Maryland	3,937	1,351	243.2	3,419.5	162.9	311.6	1,976.0	7,115.6	8,908.4	15,930.4	513.8	255.6	4,706.9
STANDARD CONSOLIDATED STATISTICAL AREAS													
Philadelphia-Wilmington-Trenton, Pa.-Del.-N.J.-Md.	8,964	3,306	550.5	8,072.4	343.6	667.7	4,192.6	15,796.6	22,402.4	38,008.3	921.5	597.8	11,008.5
Portion in New Jersey	2,103	730	112.7	1,619.3	73.8	142.9	903.0	3,159.9	4,732.5	7,864.4	222.0	115.7	2,167.2
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	247.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	428.8	7,985.9
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161.8	4.2	3.7	52.3
STANDARD METROPOLITAN STATISTICAL AREAS													
Baltimore, Md.	2,175	798	165.9	2,441.5	109.5	210.0	1,413.4	5,169.5	6,304.6	11,388.0	395.5	179.7	3,468.7
Washington, D.C.-Md.-Va.	2,054	510	60.5	930.9	29.8	56.1	354.5	1,820.7	1,435.2	3,233.5	(D)	54.9	1,068.2
Portion in District of Columbia	555	130	18.6	297.6	7.5	13.3	102.3	610.2	377.7	984.4	18.1	19.4	389.0
Portion in Maryland	884	229	25.8	383.7	14.0	26.7	159.6	625.5	696.4	1,330.8	(D)	22.1	404.0
Portion in Virginia	615	151	16.2	249.5	8.3	16.1	92.6	585.0	361.1	918.3	26.5	13.4	275.2
Wilmington, Del.-N.J.-Md.	530	212	62.8	1,169.3	29.7	57.5	419.3	1,481.6	3,435.7	4,874.6	158.4	64.1	1,161.3
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161,8	(D)	3.7	52.3
Portion in New Jersey	59	27	9.5	173.9	7.1	13.2	107.5	382.3	540.2	920.5	(D)	10.8	306.6
Massachusetts	11,133	4,054	613.4	7,818.8	407.9	791.9	4,199.2	16,348.6	14,075.4	30,144.2	952.8	618.9	10,677.5
STANDARD CONSOLIDATED STATISTICAL AREAS													
Boston-Lawrence-Lowell, Mass.-N.H.	6,478	2,254	341.6	4,609.0	211.7	410.7	2,252.0	9,367.0	8,028.7	17,260.2	522.0	347.2	6,161.5
Portion in New Hampshire	80	20	1.6	16.3	1.1	2.0	8.8	32.4	27.9	60.6	3.5	(NA)	(NA)
Portion in Massachusetts	6,398	2,234	339.9	4,592.7	210.6	408.7	2,243.3	9,354.6	8,000.8	17,199.6	518.5	(NA)	(NA)
STANDARD METROPOLITAN STATISTICAL AREAS													
Boston, Mass.	5,217	1,749	267.7	3,739.4	159.4	311.2	1,748.7	7,469.1	6,358.5	13,717.5	412.8	266.5	4,918.9
Brockton, Mass.	317	133	12.6	125.4	9.3	16.9	78.3	286.6	261.1	540.7	12.1	12.4	156.9
Fall River, Mass.-R.I.	310	166	22.3	205.4	17.8	32.7	138.0	400.4	341.8	738.6	13.8	25.5	338.6
Portion in Massachusetts	286	158	19.6	165.3	16.5	30.0	123.2	324.6	288.0	608.3	11.5	22.7	283.5
Portion in Rhode Island	24	8	2.7	40.2	1.3	2.7	14.8	75.7	53.8	130.3	2.3	2.8	55.1
Fitchburg-Leominster, Mass.	305	131	18.4	232.7	12.7	26.9	137.9	757.7	473.3	1,172.1	63.9	16.1	267.6
Lawrence-Haverhill, Mass.-N.H.	580	218	38.1	466.6	27.9	53.7	280.1	1,100.7	916.4	1,994.6	68.1	39.3	739.5
Portion in Massachusetts	506	199	36.6	450.9	26.9	51.9	271.7	1,069.2	889.1	1,935.4	64.7	37.9	719.6
Portion in New Hampshire	74	19	1.5	15.8	1.0	1.9	8.4	31.5	27.3	59.1	3.4	1.5	20.0
Lowell, Mass.-N.H.	364	154	23.1	277.5	15.1	28.8	145.0	530.6	492.7	1,007.4	29.0	22.4	421.7
Portion in Massachusetts	358	153	23.0	277.0	15.0	28.7	144.6	529.7	492.2	1,006.0	28.9	22.3	421.3
Portion in New Hampshire	6	1	.1	.5	.1	.1	.4	.9	.5	1.5	.1	(Z)	(NA)
New Bedford, Mass.	325	157	24.3	242.5	19.4	36.8	167.8	497.6	470.2	966.5	25.8	24.1	333.8
Pittsfield, Mass.	122	47	15.3	232.2	8.2	15.8	97.6	397.0	248.3	652.8	26.9	16.2	273.5
Providence-Warwick-Pawtucket, R.I.-Mass.	3,320	1,026	140.0	1,494.4	107.3	202.2	947.1	3,040.4	3,161.2	6,158.6	173.3	131.9	1,959.9
Portion in Massachusetts	349	128	21.6	249.8	17.0	33.1	165.8	467.1	616.4	1,083.9	35.4	20.4	297.4
Portion in Rhode Island	2,971	898	118.4	1,244.6	90.3	169.1	781.3	2,573.4	2,544.8	5,074.7	137.9	111.5	1,662.5
Springfield-Chicopee-Holyoke, Mass.-Conn.	1,034	400	63.2	779.5	45.5	88.6	480.5	1,735.5	1,572.5	3,290.8	109.1	62.1	1,157.7
Portion in Connecticut	13	3	.2	1.8	.1	.3	1.2	5.3	2.1	7.0	.3	.1	1.4
Portion in Massachusetts	1,021	397	63.0	777.7	45.4	88.3	479.3	1,730.3	1,570.4	3,283.8	108.9	62.0	1,156.3
Worcester, Mass.	830	314	43.4	553.0	30.2	58.2	319.7	1,101.8	928.9	2,010.7	77.2	45.2	729.6

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Michigan	15,627	5,380	1,115.9	20,054.0	789.4	1,626.3	12,720.6	37,566.0	56,775.9	93,757.1	3,739.2	1,076.2	23,375.7
STANDARD CONSOLIDATED STATISTICAL AREAS													
Detroit-Ann Arbor, Mich.	8,258	2,850	606.0	11,735.9	400.3	830.3	6,814.1	19,642.3	32,390.1	51,663.5	1,912.8	591.0	12,699.2
STANDARD METROPOLITAN STATISTICAL AREAS													
Ann Arbor, Mich.	340	117	41.4	807.0	30.7	65.2	561.7	1,492.4	2,051.9	3,518.6	252.4	35.4	907.0
Battle Creek, Mich.	240	100	23.0	381.5	16.5	32.5	258.9	1,025.1	838.2	1,868.1	46.8	24.8	695.7
Bay City, Mich.	144	48	10.2	166.2	7.9	16.1	123.2	339.2	364.8	691.9	44.0	9.9	201.7
Detroit, Mich.	7,918	2,733	564.6	10,928.9	369.6	765.1	6,252.4	18,149.9	30,338.2	48,144.8	1,660.3	551.6	11,694.3
Flint, Mich.	402	111	83.9	1,794.0	69.4	151.5	1,432.0	3,808.7	6,969.6	10,725.8	(D)	(D)	(D)
Grand Rapids, Mich.	1,359	528	82.6	1,168.9	61.8	123.6	786.8	2,582.2	2,326.5	4,869.2	177.7	74.9	1,514.4
Jackson, Mich.	333	118	17.0	254.6	12.8	25.0	166.2	542.9	575.1	1,111.4	(D)	17.3	377.9
Kalamazoo-Portage, Mich.	488	183	34.6	551.7	23.0	46.5	334.8	1,178.0	1,307.6	2,465.7	75.5	32.1	753.6
Lansing-East Lansing, Mich.	462	153	41.7	782.3	33.6	72.5	599.0	1,435.5	3,854.1	5,269.2	(D)	42.1	981.4
Muskegon-Norton Shores-Muskegon Heights, Mich.	304	126	22.3	329.5	16.0	32.1	218.3	666.0	586.6	1,244.5	44.1	22.8	401.6
Saginaw, Mich.	236	88	34.1	708.7	27.3	59.2	548.5	1,471.5	1,648.3	3,115.7	87.3	33.8	921.1
Toledo, Ohio-Mich.	1,247	455	92.7	1,504.2	65.2	128.4	963.6	3,203.0	5,007.8	8,169.9	259.7	91.2	1,878.9
Portion in Michigan	140	53	9.4	169.0	6.8	15.0	116.1	331.8	356.5	687.0	78.9	8.4	189.3
Portion in Ohio	1,107	402	83.3	1,335.2	58.4	113.4	847.4	2,871.2	4,651.2	7,482.9	180.7	82.8	1,689.6
Minnesota	6,637	2,126	331.7	4,693.0	211.1	403.8	2,413.1	9,605.2	13,598.6	23,021.2	576.4	302.2	5,523.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Duluth-Superior, Minn.-Wis.	299	79	9.4	110.9	6.7	12.7	70.6	260.2	483.4	735.6	(D)	10.4	165.5
Portion in Minnesota	250	67	8.3	98.4	5.9	11.3	62.0	205.6	272.7	477.3	(D)	8.8	128.8
Portion in Wisconsin	49	12	1.0	12.5	.8	1.4	8.7	54.6	210.6	258.3	5.2	1.6	36.7
Fargo-Moorhead, N. Dak.-Minn.	143	45	5.1	63.9	3.5	6.9	39.6	125.8	278.9	404.5	25.8	3.5	61.3
Portion in Minnesota	39	8	1.3	17.0	.8	1.7	10.1	30.3	56.5	85.8	(D)	1.2	22.1
Portion in North Dakota	104	37	3.8	46.9	2.7	5.2	29.6	95.5	222.5	318.7	(D)	2.3	39.1
Grand Forks, N. Dak.-Minn.	93	24	2.5	31.4	1.8	3.8	21.6	88.6	156.1	235.0	7.9	2.5	38.1
Portion in Minnesota	46	10	1.3	17.3	1.1	2.4	13.6	43.5	95.0	130.5	(D)	1.1	18.9
Portion in North Dakota	47	14	1.2	14.0	.8	1.5	8.0	45.0	61.1	104.6	(D)	1.4	19.2
Minneapolis-St. Paul, Minn.-Wis.	3,861	1,349	216.9	3,331.3	127.4	245.6	1,562.4	6,408.0	7,407.6	13,645.1	353.3	199.0	3,734.8
Portion in Minnesota	3,798	1,326	214.8	3,306.4	125.9	242.6	1,547.0	6,340.4	7,330.8	13,502.6	350.3	197.2	3,696.6
Portion in Wisconsin	63	23	2.1	24.9	1.5	3.1	15.4	67.6	76.8	142.4	3.1	1.8	38.1
Rochester, Minn.	78	24	8.8	146.1	3.7	7.4	42.8	184.9	399.1	561.7	31.9	6.4	103.0
St. Cloud, Minn.	229	67	9.4	104.8	7.0	13.0	69.3	248.1	477.3	727.6	14.3	7.0	122.7
Mississippi	3,289	1,147	219.4	2,061.5	177.9	348.1	1,477.3	5,619.3	7,279.4	12,765.8	470.8	200.4	2,824.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Biloxi-Gulfport, Miss.	202	54	6.4	65.5	4.2	8.3	38.0	152.6	176.9	329.8	50.9	5.8	85.4
Jackson, Miss.	367	127	17.2	185.9	13.1	26.3	125.0	537.5	576.3	1,099.2	39.1	15.6	235.8
Memphis, Tenn.-Ark.-Miss.	1,156	458	64.1	780.1	45.4	90.3	484.9	2,159.7	3,442.9	5,608.3	161.0	64.2	1,352.4
Portion in Arkansas	53	22	1.6	16.3	1.2	2.4	11.2	38.6	75.8	114.5	4.4	2.1	38.0
Portion in Mississippi	62	25	3.4	36.7	2.5	4.9	22.5	66.4	112.7	176.2	8.5	2.4	37.3
Portion in Tennessee	1,041	411	59.2	727.1	41.7	83.1	451.2	2,054.8	3,254.4	5,317.5	148.1	59.6	1,277.1
Pascagoula-Moss Point, Miss.	86	32	30.1	375.0	22.3	48.5	249.2	1,417.9	1,677.8	3,064.2	52.6	22.8	357.7
Missouri	7,354	2,429	433.0	5,703.9	298.8	571.9	3,404.7	13,041.9	19,976.4	33,027.5	780.2	434.3	8,169.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Columbia, Mo.	71	21	3.1	35.4	1.9	3.6	17.7	77.2	66.2	142.4	4.2	2.1	40.5
Kansas City, Mo.-Kans.	2,054	702	117.8	1,734.0	77.6	154.1	1,027.4	4,119.9	7,618.8	11,765.4	328.0	118.8	2,902.4
Portion in Kansas	622	235	36.2	519.1	24.9	51.8	328.5	1,299.8	2,961.2	4,272.8	91.3	31.6	915.6
Portion in Missouri	1,432	467	81.5	1,214.9	52.6	102.3	698.8	2,820.1	4,657.6	7,492.6	236.7	87.2	1,986.8
St. Joseph, Mo.	115	53	9.3	109.9	7.0	13.5	74.9	327.6	697.0	1,015.6	27.4	9.4	178.5
St. Louis, Mo.-Ill.	3,358	1,231	248.7	3,761.1	162.8	318.2	2,183.4	8,342.0	13,910.5	22,232.8	464.9	256.4	5,190.0
Portion in Illinois	454	171	40.9	638.9	31.5	61.3	451.9	1,565.7	4,090.9	5,639.3	163.1	42.8	945.4
Portion in Missouri	2,904	1,060	207.7	3,122.2	131.3	257.0	1,731.5	6,776.3	9,819.6	16,593.6	301.7	213.6	4,244.6
Springfield, Mo.	328	90	18.9	205.6	14.2	26.4	141.3	503.0	1,007.2	1,504.3	25.1	17.7	247.9
Montana	1,169	203	23.8	317.0	18.7	36.4	239.8	847.3	1,994.7	2,683.4	119.8	21.4	462.5
STANDARD METROPOLITAN STATISTICAL AREAS													
Billings, Mont.	140	38	4.0	55.0	2.8	5.5	37.8	180.3	786.4	953.6	(D)	3.2	87.7
Great Falls, Mont.	65	18	1.8	24.7	1.3	2.3	15.7	42.6	259.0	308.7	(D)	2.5	58.0
Nebraska	1,965	626	87.7	1,075.4	62.8	124.0	680.9	2,867.1	5,864.0	8,713.4	175.1	84.9	1,733.4
STANDARD METROPOLITAN STATISTICAL AREA													
Lincoln, Nebr.	217	75	13.1	154.4	9.3	17.6	94.2	400.0	651.9	1,060.4	21.1	11.6	239.8
Omaha, Nebr.-Iowa	680	243	34.7	457.3	24.7	48.0	288.3	1,217.4	2,616.1	3,835.0	82.6	38.0	846.3
Portion in Iowa	82	24	3.8	40.2	2.9	5.7	27.4	87.9	490.9	575.2	6.7	3.3	75.4
Portion in Nebraska	598	219	30.9	417.1	21.7	42.3	260.9	1,129.5	2,125.2	3,259.8	75.9	34.7	770.9
Sioux City, Iowa-Nebr.	165	62	9.6	123.7	6.5	12.8	71.2	285.4	1,216.0	1,496.1	38.0	10.5	196.2
Portion in Iowa	144	54	7.9	97.8	5.9	11.4	64.4	260.0	915.5	1,164.1	36.2	(D)	(D)
Portion in Nebraska	21	8	1.6	25.9	.5	1.4	6.9	25.4	300.5	331.9	1.8	(D)	(D)
Nevada	729	147	15.0	191.6	10.0	19.3	113.4	495.2	461.0	942.0	46.4	10.0	207.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Las Vegas, Nev.	285	52	5.4	72.9	3.6	6.9	45.7	166.5	184.3	354.7	16.4	4.3	94.9
Reno, Nev.	303	73	6.8	85.8	4.4	8.7	47.3	238.0	192.0	418.6	22.7	3.5	71.0

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977											1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
New Hampshire	1,825	623	95.3	1,029.0	72.0	138.0	645.3	2,174.7	1,893.7	4,032.3	162.0	89.7	1,278.6
STANDARD CONSOLIDATED STATISTICAL AREAS													
Boston-Lawrence-Lowell, Mass.-N.H.	6,478	2,254	341.6	4,609.0	211.7	410.7	2,252.0	9,387.0	8,028.7	17,260.2	522.0	347.2	6,161.5
Portion in New Hampshire	80	20	1.6	16.3	1.1	2.0	8.8	32.4	27.9	60.6	3.5	(NA)	(NA)
Portion in Massachusetts	6,398	2,234	339.9	4,592.7	210.6	408.7	2,243.3	9,354.6	8,000.8	17,199.6	518.5	(NA)	(NA)
STANDARD METROPOLITAN STATISTICAL AREAS													
Lawrence-Haverhill, Mass.-N.H.	580	218	38.1	466.6	27.9	53.7	280.1	1,100.7	916.4	1,994.6	68.1	39.3	739.5
Portion in Massachusetts	506	199	36.6	450.9	26.9	51.9	271.7	1,069.2	889.1	1,935.4	64.7	37.8	719.6
Portion in New Hampshire	74	19	1.5	15.8	1.0	1.9	8.4	31.5	27.3	59.1	3.4	1.5	20.0
Lowell, Mass.-N.H.	364	154	23.1	277.5	15.1	28.8	145.0	530.6	492.7	1,007.4	29.0	22.4	421.7
Portion in Massachusetts	358	153	23.0	277.0	15.0	28.7	144.6	529.7	492.2	1,006.0	28.9	22.3	421.3
Portion in New Hampshire	6	1	.1	.5	.1	.1	.4	.9	.5	1.5	.1	(Z)	(NA)
Manchester, N.H.	271	104	17.8	173.4	13.8	26.0	104.2	350.9	312.6	655.2	13.8	18.4	244.1
Nashua, N.H.	265	117	19.7	258.9	12.6	25.1	142.4	528.2	503.5	1,036.7	44.8	18.4	322.6
New Jersey	15,696	5,775	778.3	10,924.2	489.6	955.8	5,561.7	22,852.8	28,633.9	51,279.4	1,376.3	836.1	16,408.9
STANDARD CONSOLIDATED STATISTICAL AREAS													
New York-Newark-Jersey City, N.Y.-N.J.-Conn.	41,325	13,366	1,502.0	20,379.2	919.2	1,747.6	9,319.5	40,638.1	44,236.4	84,486.0	1,949.6	1,694.5	29,668.0
Portion in New York	28,079	8,404	843.4	10,892.4	526.8	980.4	4,906.3	21,404.8	21,192.0	42,411.4	856.6	991.4	15,715.6
Portion in New Jersey	12,395	4,649	609.2	8,626.2	372.8	729.4	4,206.0	18,046.3	22,244.9	40,093.0	1,036.2	658.0	13,133.8
Philadelphia-Wilmington-Trenton, Pa.-Del.-N.J.-Md.	8,964	3,306	550.5	8,072.4	343.8	667.7	4,192.6	15,796.6	22,402.4	38,008.3	921.5	597.8	11,008.5
Portion in New Jersey	2,103	730	112.7	1,619.3	73.8	142.9	903.0	3,159.9	4,732.5	7,864.4	222.0	115.7	2,167.2
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	247.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	428.8	7,985.9
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161.8	4.2	3.7	52.3
STANDARD METROPOLITAN STATISTICAL AREAS													
Allentown-Bethlehem-Easton, Pa.-N.J.	1,183	621	106.8	1,430.8	75.8	140.9	853.3	2,731.8	3,105.1	5,828.2	172.8	110.4	1,805.6
Portion in New Jersey	154	76	12.6	172.9	8.6	17.1	102.5	422.9	523.6	974.2	39.4	14.5	349.2
Portion in Pennsylvania	1,029	545	94.2	1,257.9	67.2	123.8	750.8	2,308.9	2,581.5	4,853.9	133.4	95.9	1,456.4
Atlantic City, N.J.	211	66	8.7	88.7	7.0	13.1	64.7	284.4	147.7	430.4	(D)	10.4	225.5
Jersey City, N.J.	1,857	655	72.2	870.1	53.8	100.8	557.5	1,983.4	2,733.7	4,702.1	94.6	95.3	1,899.2
Long Branch-Asbury Park, N.J.	616	181	26.6	351.8	15.9	31.0	155.6	755.3	719.6	1,471.9	29.5	26.1	465.8
New Brunswick-Perth Amboy-Sayreville, N.J.	1,147	540	80.5	1,174.7	49.7	97.9	602.3	2,945.2	3,986.3	6,864.2	164.7	80.5	2,021.7
New York, N.Y.-N.J.	25,831	8,040	796.6	10,313.0	489.0	909.7	4,519.2	19,878.3	21,494.9	41,187.9	862.5	949.2	15,120.8
Portion in New York	23,252	7,136	687.5	8,793.4	425.2	783.6	3,806.7	17,034.5	17,811.4	34,681.7	660.0	839.0	13,162.4
Portion in New Jersey	2,579	904	109.1	1,519.7	63.8	126.1	712.5	2,843.8	3,683.6	6,506.1	202.6	110.2	1,958.4
Newark, N.J.	4,638	1,733	255.5	3,853.3	145.5	287.4	1,702.3	7,870.8	9,520.5	17,304.3	461.5	271.8	5,608.6
Paterson-Clifton-Passaic, N.J.	1,558	636	65.3	856.5	44.1	86.2	475.8	1,647.8	1,601.2	3,244.3	83.3	75.5	1,179.4
Philadelphia, Pa.-N.J.	7,946	2,909	451.8	6,364.7	293.5	669.0	3,510.6	13,429.6	18,223.2	31,507.5	723.4	495.7	9,189.9
Portion in New Jersey	1,556	518	67.2	907.0	46.0	88.5	532.9	1,892.3	3,448.8	5,317.8	135.6	69.3	1,255.8
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	247.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	426.3	7,934.1
Trenton, N.J.	488	185	35.9	538.4	20.7	41.1	262.7	885.4	743.4	1,626.2	39.7	35.6	608.0
Vineland-Millville-Bridgeton, N.J.	254	104	18.9	223.2	15.5	29.3	167.8	500.9	432.0	927.1	37.1	22.5	313.6
Wilmington, Del.-N.J.-Md.	530	212	62.8	1,169.3	29.7	57.5	419.3	1,481.6	3,435.7	4,874.6	158.4	64.1	1,161.3
Portion in New Jersey	59	27	9.6	174.0	7.1	13.3	107.5	382.2	540.2	920.4	(D)	10.8	306.6
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,702.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.9	3.7	17.0	64.0	97.1	161.8	(D)	3.7	51.6
New Mexico	1,323	258	29.0	296.9	20.9	39.5	183.8	733.5	1,289.4	2,009.2	75.0	23.6	358.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Albuquerque, N. Mex.	621	120	14.9	152.0	10.8	20.6	94.4	363.1	341.9	695.1	27.0	12.0	179.3
New York	36,578	11,425	1,509.9	20,876.1	958.1	1,827.5	10,418.8	44,289.8	42,441.9	86,216.4	2,530.2	1,679.3	30,403.5
STANDARD CONSOLIDATED STATISTICAL AREAS													
New York-Newark-Jersey City, N.Y.-N.J.-Conn.	41,325	13,366	1,502.0	20,379.2	919.2	1,747.6	9,319.5	40,638.1	44,236.4	84,486.0	1,949.6	1,694.5	29,668.0
Portion in New York	28,079	8,404	843.4	10,892.4	526.8	980.4	4,906.3	21,404.8	21,192.0	42,411.4	856.6	991.4	15,715.6
Portion in New Jersey	12,395	4,649	609.2	8,626.2	372.8	729.4	4,206.0	18,046.3	22,244.9	40,093.0	1,036.2	658.0	13,133.8
STANDARD METROPOLITAN STATISTICAL AREAS													
Albany-Schenectady-Troy, N.Y.	766	274	61.3	909.2	37.0	74.0	454.3	1,859.7	1,806.0	3,612.7	151.2	66.9	1,322.0
Binghamton, N.Y.-Pa.	389	146	39.6	578.1	22.3	42.9	236.3	1,081.2	1,244.8	2,273.4	(D)	36.4	673.5
Portion in New York	326	125	37.3	558.7	20.4	39.3	221.8	1,046.7	1,216.5	2,211.3	71.9	34.3	651.9
Portion in Pennsylvania	63	21	2.2	19.3	1.9	3.6	14.4	34.6	28.2	62.1	(D)	2.1	21.6
Buffalo, N.Y.	1,711	628	140.3	2,296.1	102.1	203.4	1,555.5	4,735.5	5,629.7	10,345.8	451.7	151.7	3,146.3
Elmira, N.Y.	119	55	12.8	166.3	9.0	17.8	105.9	331.5	313.3	636.1	(D)	13.9	216.7
Nassau-Suffolk, N.Y.-N.J.	4,827	1,268	155.9	2,099.0	101.6	196.8	1,099.6	4,370.3	3,380.6	7,729.7	196.7	150.2	2,523.2
New York, N.Y.-N.J.	25,831	8,040	796.6	10,313.0	489.0	909.7	4,519.2	19,878.3	21,494.9	41,187.9	862.5	949.2	15,120.8
Portion in New Jersey	2,579	904	109.1	1,519.7	63.8	126.1	712.5	2,843.8	3,683.6	6,506.1	202.6	110.2	1,958.4
Portion in New York	23,252	7,136	687.5	8,793.4	425.2	783.6	3,806.7	17,034.5	17,811.4	34,681.7	660.0	839.0	13,162.4
Poughkeepsie, N.Y.	229	85	27.4	498.9	10.9	21.3	124.8	896.0	1,149.2	1,970.3	(D)	22.2	448.5
Rochester, N.Y.	1,316	467	144.4	2,390.1	81.7	158.3	1,129.4	6,732.4	3,083.9	9,735.1	335.0	142.2	4,390.6
Syracuse, N.Y.	767	281	57.8	893.1	37.3	74.5	513.1	2,017.7	2,312.6	4,300.1	152.2	60.5	1,205.3
Utica-Rome, N.Y.	411	141	29.2	385.2	20.5	39.3	223.9	791.7	827.2	1,607.4	41.5	35.4	631.0
North Carolina	9,954	4,005	765.3	7,518.5	611.3	1,186.5	5,086.3	18,230.6	23,009.8	40,912.2	1,345.3	743.7	11,014.5
STANDARD METROPOLITAN STATISTICAL AREAS													
Asheville, N.C.	248	117	19.8	193.3	14.4	27.6	116.9	425.3	389.2	799.2	27.0	21.8	311.6
Burlington, N.C.	255	124	20.1	186.8	16.8	32.8	134.4	382.3	584.5	961.7	19.6	24.3	294.9
Charlotte-Gastonia, N.C.	1,401	548	87.1	894.7	64.2	126.2	547.8	1,885.1	2,592.6	4,460.9	108.5	88.4	1,239.3
Fayetteville, N.C.	141	53	9.9	103.3	7.8	15.5	73.9	250.9	541.9	795.1	33.1	10.5	195.1
Greensboro-Winston-Salem-High Point, N.C.	1,741	729	144.2	1,624.5	106.9	206.2	975.3	4,285.3	4,291.1	8,532.2	221.5	138.0	2,593.4
Norfolk-Virginia Beach-Portsmouth, Va.-N.C.	537	190	26.7	326.2	19.4	38.9	211.3	1,083.3	1,850.2	2,950.9	50.1	27.6	551.7
Portion in North Carolina	6	1	.1	.6	.1	.1	.4	4.0	9.5	13.7	(Z)	.1	1.6
Portion in Virginia	531	189	26.6	325.6	19.4	38.8	210.8	1,079.4	1,840.8	2,937.1	50.1	27.5	550.1
Raleigh-Durham, N.C.	550	179	36.7	474.3	22.4	43.8	217.1	1,109.4	1,495.3	2,531.1	75.7	32.2	567.6
Wilmington, N.C.	183	64	13.0	166.6	9.3	18.4	103.6	747.8	748.3	1,508.4	29.2	12.1	481.7

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977										1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
North Dakota	571	145	13.8	162.3	9.2	17.7	97.2	473.3	842.7	1,312.9	53.0	10.2	200.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Fargo-Moorhead, N. Dak.-Minn.	143	45	5.1	63.9	3.5	6.9	39.6	125.8	278.9	404.5	25.8	3.5	61.3
Portion in Minnesota	39	8	1.3	17.0	.8	1.7	10.1	30.3	56.5	85.8	(D)	1.2	22.1
Portion in North Dakota	104	37	3.8	46.9	2.7	5.2	29.6	95.5	222.5	318.7	(D)	2.3	39.1
Grand Forks, N. Dak.-Minn.	93	24	2.5	31.4	1.8	3.8	21.6	88.6	156.1	235.0	7.9	2.5	38.1
Portion in Minnesota	46	10	1.3	17.3	1.1	2.4	13.6	43.5	95.0	130.5	(D)	1.1	18.9
Portion in North Dakota	47	14	1.2	14.0	.8	1.5	8.0	45.0	61.1	104.6	(D)	1.4	19.2
Ohio	17,354	6,728	1,331.2	20,356.0	924.4	1,838.5	12,907.5	43,054.7	52,736.3	95,234.7	2,790.7	1,346.3	27,171.0
STANDARD CONSOLIDATED STATISTICAL AREAS													
Cincinnati-Hamilton, Ohio-Ky.-Ind.	2,373	958	169.6	2,944.3	117.7	238.4	1,618.9	6,608.2	7,196.2	13,769.5	357.1	185.5	4,145.4
Portion in Ohio	2,127	860	175.2	2,751.5	107.4	217.8	1,492.7	6,159.3	6,732.5	12,868.7	335.4	170.6	3,803.5
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	6.4	3.9	159.1
Portion in Kentucky	214	85	11.0	143.8	7.6	14.8	88.1	261.9	342.0	593.2	15.3	11.0	182.8
Cleveland-Akron-Lorain, Ohio	5,877	2,184	388.7	6,278.6	256.4	520.3	3,744.5	11,966.8	14,173.4	25,950.7	793.7	399.1	7,925.5
STANDARD METROPOLITAN STATISTICAL AREAS													
Akron, Ohio	1,061	406	83.5	1,305.4	50.1	99.4	699.4	2,014.2	2,205.8	4,158.1	156.8	94.4	1,686.2
Canton, Ohio	603	235	57.2	856.4	41.8	80.8	601.5	1,897.5	2,405.6	4,262.4	121.2	57.6	1,151.6
Cincinnati, Ohio-Ky.-Ind.	2,135	856	160.2	2,435.8	97.2	197.9	1,289.5	5,645.9	6,043.1	11,647.9	(D)	157.6	3,561.2
Portion in Indiana	32	13	3.4	49.0	2.8	5.8	38.2	187.0	121.7	307.6	(D)	3.9	159.1
Portion in Kentucky	214	85	11.0	143.8	7.6	14.8	88.1	261.9	342.0	593.2	15.3	11.0	182.8
Portion in Ohio	1,889	758	145.8	2,243.0	86.9	177.3	1,163.3	5,197.0	5,579.4	10,747.1	277.5	142.7	3,219.3
Cleveland, Ohio	4,475	1,654	265.4	4,262.8	175.9	357.3	2,524.1	8,105.9	8,600.4	16,599.6	543.1	268.9	5,220.9
Columbus, Ohio	1,315	500	96.2	1,384.3	63.1	122.8	814.7	2,969.4	2,830.7	5,772.3	165.4	102.4	1,989.2
Dayton, Ohio	1,302	506	106.5	1,748.3	72.9	150.4	1,120.4	3,261.0	2,975.8	6,159.8	266.8	118.8	2,152.9
Hamilton-Middletown, Ohio	238	102	29.4	508.5	20.5	40.5	329.4	962.3	1,153.1	2,121.6	57.9	28.5	585.5
Huntington-Ashland, W. Va.-Ky.-Ohio	339	125	29.6	438.8	20.9	40.9	288.1	754.3	1,982.8	2,728.9	233.7	25.7	530.1
Portion in Kentucky	86	38	11.7	198.8	7.3	13.9	118.4	289.6	1,162.5	1,439.2	170.2	8.5	224.0
Portion in Ohio	52	16	3.1	40.9	2.5	5.1	31.7	83.4	144.8	229.1	15.7	3.2	76.0
Portion in West Virginia	199	71	14.8	199.1	11.2	21.9	138.0	381.2	675.5	1,060.6	47.7	14.0	230.1
Lima, Ohio	330	138	30.6	451.6	23.4	47.2	322.9	1,216.0	2,487.4	3,644.9	76.4	28.2	668.0
Lorain-Elyria, Ohio	341	124	39.8	710.5	30.4	63.5	521.0	1,846.8	3,367.2	5,193.0	93.8	36.1	1,033.1
Mansfield, Ohio	207	89	20.9	311.7	15.3	31.1	219.9	617.3	839.3	1,453.4	61.3	22.6	478.4
Parkersburg-Marietta, W. Va.-Ohio	182	63	15.8	222.4	11.2	21.7	139.7	724.9	779.3	1,479.2	85.3	18.0	482.2
Portion in Ohio	83	28	6.2	84.3	4.3	8.2	52.9	228.0	375.0	587.5	43.4	5.9	139.1
Portion in West Virginia	99	35	9.6	138.1	6.9	13.5	86.8	496.9	404.3	891.7	41.9	12.1	343.1
Springfield, Ohio	262	100	18.3	245.0	13.0	24.7	169.2	550.9	676.0	1,193.5	32.6	20.1	390.5
Steubenville-Weirton, Ohio-W. Va.	138	67	26.7	497.6	21.2	41.0	382.6	955.0	1,643.9	2,601.6	67.9	29.0	705.7
Portion in Ohio	68	28	7.9	147.4	6.2	11.9	113.6	400.6	657.4	1,058.9	21.2	9.3	263.7
Portion in West Virginia	70	39	18.7	350.3	15.0	29.1	269.0	554.4	986.5	1,542.8	46.7	19.7	442.0
Toledo, Ohio-Mich.	1,247	455	92.7	1,504.2	65.2	128.4	963.6	3,203.0	5,007.8	8,169.9	259.7	91.2	1,878.9
Portion in Michigan	140	53	9.4	169.0	6.8	15.0	116.1	331.8	356.5	687.0	78.9	8.4	189.3
Portion in Ohio	1,107	402	83.3	1,335.2	58.4	113.4	847.4	2,871.2	4,651.2	7,482.9	180.7	82.8	1,689.6
Wheeling, W. Va.-Ohio	156	68	13.0	173.5	9.8	17.9	117.2	427.3	552.0	978.6	40.3	13.3	202.8
Portion in Ohio	64	22	4.1	53.1	3.2	5.8	39.3	140.5	226.6	368.2	5.4	5.2	69.3
Portion in West Virginia	92	46	9.0	120.4	6.6	12.1	77.8	286.9	325.3	610.4	34.9	8.1	133.5
Youngstown-Warren, Ohio	620	258	79.5	1,368.2	62.8	120.4	1,026.7	2,620.2	3,996.0	6,612.1	131.0	86.6	1,749.5
Oklahoma	3,818	1,067	164.4	2,050.9	110.4	214.3	1,164.3	4,662.3	8,048.4	12,564.5	485.8	142.7	2,270.1
STANDARD METROPOLITAN STATISTICAL AREAS													
Fort Smith, Ark.-Okla.	338	119	23.3	230.4	19.2	37.8	171.2	553.8	846.4	1,383.3	34.0	18.8	281.4
Portion in Arkansas	271	106	21.9	217.8	18.1	35.9	162.1	514.8	815.5	1,313.0	30.2	17.7	265.1
Portion in Oklahoma	67	13	1.4	12.6	1.1	1.9	9.1	38.9	30.9	70.3	3.8	1.1	16.4
Lawton, Okla.	65	14	1.5	13.1	1.0	1.9	7.1	25.4	35.3	60.6	3.4	1.5	20.7
Oklahoma City, Okla.	1,067	284	43.1	548.2	28.7	55.7	310.3	1,261.0	1,787.0	2,995.5	93.8	41.0	787.0
Tulsa, Okla.	1,272	391	58.9	774.3	37.0	72.9	427.9	1,701.5	2,141.8	3,809.8	152.5	44.9	704.3
Oregon	5,716	1,580	202.4	2,760.0	155.1	291.6	1,901.7	6,138.0	8,317.0	14,370.0	574.5	178.6	3,489.9
STANDARD METROPOLITAN STATISTICAL AREAS													
Eugene-Springfield, Oreg.	610	177	20.4	283.7	16.6	32.7	215.0	661.5	997.4	1,652.5	78.2	19.5	413.7
Portland, Oreg.-Wash.	2,440	724	99.4	1,392.1	67.9	126.4	815.4	2,951.6	3,623.4	6,544.8	236.4	86.4	1,596.9
Portion in Oregon	2,182	655	87.2	1,213.1	58.4	108.1	685.9	2,512.4	2,906.2	5,388.1	203.2	75.0	1,351.0
Portion in Washington	258	69	12.2	179.0	9.5	18.3	129.5	439.2	717.2	1,156.8	33.1	11.3	245.9
Salem, Oreg.	419	120	15.3	177.7	12.7	21.7	130.7	427.4	586.9	1,001.7	31.8	12.1	222.1
Pennsylvania	18,735	7,704	1,329.2	18,042.7	934.1	1,781.6	10,948.8	36,016.9	44,393.0	79,844.8	2,297.4	1,417.5	23,518.5
STANDARD CONSOLIDATED STATISTICAL AREAS													
Philadelphia-Wilmington-Trenton, Pa.-Del.-N.J.-Md.	8,964	3,306	550.5	8,072.4	343.8	667.7	4,192.6	15,796.6	22,402.4	38,008.3	921.5	597.8	11,008.5
Portion in New Jersey	2,103	730	112.7	1,619.3	73.8	142.9	903.0	3,159.9	4,732.5	7,864.4	222.0	115.7	2,167.2
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	24.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	428.8	7,985.9
Portion in Delaware	419	160	50.7	966.4	20.7	40.6	294.8	1,035.3	2,798.4	3,792.3	107.4	49.6	803.1
Portion in Maryland	52	25	2.6	29.0	1.8	3.7	17.0	64.0	97.1	161.8	4.2	3.7	52.3
STANDARD METROPOLITAN STATISTICAL AREAS													
Allentown-Bethlehem-Easton, Pa.-N.J.	1,183	621	106.8	1,430.8	75.8	140.9	853.3	2,731.8	3,105.1	5,828.2	172.8	110.4	1,805.6
Portion in New Jersey	154	76	12.6	172.9	8.6	17.1	102.5	422.9	523.6	974.2	39.4	14.5	349.2
Portion in Pennsylvania	1,029	545	94.2	1,257.9	67.2	123.8	750.8	2,308.9	2,581.5	4,853.9	133.4	95.9	1,456.4
Altoona, Pa.	147	63	12.1	134.6	9.6	17.9	96.3	340.8	315.9	848.0	23.5	15.6	234.9
Binghamton, N.Y.-Pa.	389	146	39.6	578.1	22.3	42.9	236.3	1,081.2	1,244.8	2,273.4	(D)	36.4	673.5
Portion in New York	326	125	37.3	558.7	20.4	39.3	221.8	1,046.7	1,216.5	2,211.3	71.9	34.3	651.9
Portion in Pennsylvania	63	21	2.2	19.3	1.9	3.6	14.4	34.6	28.2	62.1	(D)	2.1	21.6
Erie, Pa.	510	209	42.0	600.7	29.0	55.8	356.5	1,254.8	1,093.8	2,323.7	76.3	42.5	764.8
Harrisburg, Pa.	495	206	40.4	515.8	27.5	52.1	302.8	1,164.2	1,414.5	2,563.5	66.7	40.1	713.6
Johnstown, Pa.	293	101	20.8	290.9	16.7	29.0	214.2	463.5	593.1	1,092.3	27.3	23.1	336.9
Lancaster, Pa.	770	340	56.4	693.6	41.0	80.0	425.4	1,492.5	1,852.1	3,304.8	117.7	53.0	953.0
Northeast Pennsylvania	1,266	664	70.9	685.0	56.4	101.4	482.3	1,327.8	1,293.9	2,583.0	93.5	82.8	1,024.2
Philadelphia, Pa.-N.J.	7,946	2,909	451.8	6,364.7	293.5	569.0	3,510.6	13,429.6	18,223.2	31,507.5	723.4	495.7	9,189.9
Portion in New Jersey	1,556	518	67.2	907.0	46.0	88.5	532.9	1,892.3	3,448.8	5,317.8	135.6	69.3	1,255.8
Portion in Pennsylvania	6,390	2,391	384.5	5,457.7	247.5	480.5	2,977.7	11,537.3	14,774.4	26,189.7	587.8	426.3	7,934.1
Pittsburgh, Pa.	2,662	957	239.7	4,037.5	153.9	294.0	2,311.5	6,478.4	9,144.9	15,480.5	558.0	262.8	4,163.9
Reading, Pa.	667	309	50.1	623.6	37.7	73.7	416.5	1,378.8	1,542.4	2,894.9	85.1	51.8	865.4
Williamsport, Pa.	202	95	17.5	202.7	13.2	25.2	136.4	515.4	452.8	958.0	(D)	18.7	306.6
York, Pa.	734	342	59.0	716.0	45.3	88.2	471.5	1,517.5	1,579.0	3,041.0	86.7	56.6	865.7

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977										1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Rhode Island	3,107	945	125.0	1,326.5	94.7	177.5	825.2	2,736.6	2,673.5	5,364.6	145.6	118.1	1,764.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Fall River, Mass.-R.I.	310	166	22.3	205.4	17.8	32.7	138.0	400.4	341.8	738.6	13.8	25.5	338.6
Portion in Massachusetts	286	158	19.6	165.3	16.5	30.0	123.2	324.6	288.0	608.3	11.5	22.7	283.5
Portion in Rhode Island	24	8	2.7	40.2	1.3	2.7	14.8	75.7	53.8	130.3	2.3	2.8	55.1
New London-Norwich, Conn.-R.I.	286	108	41.8	575.8	26.6	51.3	305.5	1,081.4	780.7	1,847.4	49.3	29.2	457.4
Portion in Connecticut	241	91	40.0	557.5	25.2	48.7	292.8	1,042.5	744.2	1,773.9	47.0	27.0	434.6
Portion in Rhode Island	45	17	1.8	18.4	1.3	2.6	12.6	38.9	36.5	73.5	2.3	2.3	22.8
Providence-Warwick-Pawtucket, R.I.-Mass.	3,320	1,026	140.0	1,494.4	107.3	202.2	947.1	3,040.4	3,161.2	6,158.6	173.3	131.9	1,959.9
Portion in Massachusetts	349	128	21.6	249.8	17.0	33.1	165.8	467.1	616.4	1,083.9	35.4	20.4	297.4
Portion in Rhode Island	2,971	898	118.4	1,244.6	90.3	169.1	781.3	2,573.4	2,544.8	5,074.7	137.9	111.5	1,662.5
South Carolina	4,229	1,560	374.2	3,804.9	299.8	594.0	2,640.3	8,186.1	10,855.2	18,882.4	788.6	345.1	4,965.6
STANDARD METROPOLITAN STATISTICAL AREAS													
Augusta, Ga.-S.C.	302	131	34.7	428.0	24.9	50.6	257.7	1,090.5	1,102.3	2,174.7	177.5	30.4	578.2
Portion in Georgia	207	84	15.5	177.8	11.4	23.4	111.5	479.5	755.7	1,223.9	162.5	14.2	257.3
Portion in South Carolina	95	47	19.2	250.2	13.4	27.2	146.3	611.0	346.6	950.9	15.0	16.2	320.9
Charleston-North Charleston, S.C.	323	103	17.6	205.8	12.8	24.8	126.5	453.4	612.9	1,042.8	91.8	15.2	263.6
Columbia, S.C.	391	145	24.9	277.7	18.1	35.3	161.1	647.6	702.5	1,324.6	91.2	21.6	315.9
Greenville-Spartanburg, S.C.	983	428	104.8	1,071.9	81.2	161.6	715.1	2,129.7	3,003.8	5,086.0	212.0	98.2	1,458.1
South Dakota	740	195	22.5	251.4	16.7	32.0	169.1	611.6	1,184.7	1,793.7	36.7	17.4	284.5
STANDARD METROPOLITAN STATISTICAL AREAS													
Sioux Falls, S. Dak.	116	46	7.6	100.5	5.2	10.1	67.4	203.1	552.4	754.5	7.7	7.0	115.2
Tennessee	6,487	2,477	489.8	5,218.7	375.7	720.3	3,481.2	12,663.4	16,318.9	28,752.0	961.1	467.4	7,662.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Chattanooga, Tenn.-Ga.	671	287	53.9	612.9	41.3	80.3	409.9	1,290.0	2,032.3	3,305.2	89.0	56.8	927.7
Portion in Georgia	118	53	9.9	89.7	8.2	16.6	66.0	199.8	396.3	594.2	11.3	10.5	144.6
Portion in Tennessee	553	234	43.9	523.2	33.0	63.7	344.0	1,090.2	1,636.0	2,711.0	77.7	46.3	783.1
Clarksville-Hopkinsville, Tenn.-Ky.	117	44	9.4	89.3	7.1	13.7	58.3	233.3	279.8	513.8	12.9	(NA)	(NA)
Portion in Kentucky	57	21	3.7	34.6	3.1	6.1	25.0	89.3	124.6	211.5	4.8	(NA)	(NA)
Portion in Tennessee	60	23	5.6	54.7	4.0	7.5	33.3	144.0	155.2	302.3	8.1	(NA)	(NA)
Johnson City-Kingsport-Bristol, Tenn.-Va.	429	182	54.5	655.6	40.0	77.4	407.6	1,505.0	1,880.0	3,362.5	102.0	49.3	832.0
Portion in Tennessee	310	127	45.8	560.9	33.4	64.7	344.4	1,287.6	1,531.2	2,799.4	82.3	42.9	740.8
Portion in Virginia	119	55	8.7	94.6	6.6	12.8	63.2	217.4	348.7	563.1	19.8	6.4	91.2
Knoxville, Tenn.	546	192	39.6	475.8	29.9	57.8	319.8	1,174.8	1,487.8	2,609.6	88.1	40.9	722.3
Memphis, Tenn.-Ark.-Miss.	1,156	458	64.1	780.1	45.4	90.3	484.9	2,159.7	3,442.9	5,608.3	161.0	64.2	1,352.4
Portion in Arkansas	53	22	1.6	16.3	1.2	2.4	11.2	38.6	75.8	114.5	4.4	2.1	38.0
Portion in Mississippi	62	25	3.4	36.7	2.5	4.9	22.5	66.4	112.7	176.2	8.5	2.4	37.3
Portion in Tennessee	1,041	411	59.2	727.1	41.7	83.1	451.2	2,054.8	3,254.4	5,317.5	148.1	59.6	1,277.1
Nashville-Davidson, Tenn.	1,354	460	80.5	914.7	55.7	107.5	554.5	1,935.3	2,436.0	4,342.9	156.5	72.0	1,149.7
Texas	18,107	5,644	886.4	11,653.1	600.7	1,190.1	6,626.6	33,150.3	60,462.2	92,871.9	5,194.7	736.1	15,228.0
STANDARD CONSOLIDATED STATISTICAL AREAS													
Houston-Galveston, Tex.	4,211	1,386	221.3	3,568.8	134.5	273.9	1,860.9	11,305.1	22,553.3	33,565.6	2,576.7	170.6	4,867.0
STANDARD METROPOLITAN STATISTICAL AREAS													
Abilene, Tex.	141	43	5.8	51.4	4.1	8.2	33.5	106.9	510.1	620.3	8.1	5.2	62.5
Amarillo, Tex.	211	60	7.7	94.0	5.5	11.2	59.7	474.8	1,534.0	2,008.3	16.1	5.4	68.8
Austin, Tex.	527	135	20.7	259.0	11.4	21.6	100.1	553.6	479.6	1,001.6	75.5	14.0	250.3
Beaumont-Port Arthur-Orange, Tex.	344	121	38.3	683.3	27.6	55.1	455.8	2,626.3	8,401.6	10,959.0	556.0	37.6	1,034.0
Brownsville-Harlingen-San Benito, Tex.	151	56	9.0	74.3	6.9	13.6	47.7	201.3	286.9	484.8	19.2	6.9	101.0
Bryan-College Station, Tex.	63	22	2.1	22.2	1.6	3.3	15.4	55.5	72.2	127.3	4.9	2.0	27.8
Corpus Christi, Tex.	248	73	12.1	178.6	8.2	16.6	109.5	734.7	3,183.1	3,875.2	398.1	10.9	282.0
Dallas-Fort Worth, Tex.	5,505	1,750	269.9	3,508.9	171.7	339.8	1,814.4	7,869.1	8,460.5	16,116.9	500.8	230.0	4,075.7
El Paso, Tex.	407	138	29.1	251.5	23.2	42.6	169.7	771.7	1,543.1	2,313.9	65.6	26.0	345.7
Galveston-Texas City, Tex.	130	44	11.3	206.1	8.0	16.5	142.2	1,460.7	4,306.3	5,677.6	125.2	10.9	687.5
Houston, Tex.	4,081	1,342	210.1	3,362.7	126.5	257.4	1,718.7	9,844.4	18,247.0	27,888.0	2,451.5	162.7	4,179.4
Killeen-Temple, Tex.	116	47	5.8	55.3	4.4	9.1	37.8	159.6	169.3	332.0	(D)	5.1	82.1
Laredo, Tex.	60	17	1.5	11.9	1.1	2.1	7.4	26.8	55.4	85.1	.9	1.2	10.5
Longview, Tex.	247	96	15.9	206.3	12.0	23.9	139.2	641.2	761.9	1,387.4	52.4	13.9	295.9
Lubbock, Tex.	290	68	12.9	137.8	9.3	18.1	76.5	349.1	487.1	813.3	37.5	7.1	114.9
McCallen-Pharr-Edinburg, Tex.	169	45	5.5	41.1	4.4	8.6	29.1	115.2	158.4	271.8	9.9	3.1	54.1
Midland, Tex.	94	24	2.0	23.4	1.3	2.4	11.1	53.8	47.3	99.9	7.6	1.4	23.0
Odessa, Tex.	220	67	5.9	86.7	4.0	8.4	51.4	232.9	508.0	734.6	(D)	4.0	91.8
San Angelo, Tex.	100	27	4.8	42.6	3.4	6.1	25.0	126.3	158.9	291.3	6.2	3.5	78.1
San Antonio, Tex.	944	286	40.1	399.2	28.7	55.7	231.8	905.3	1,130.8	2,017.7	92.5	34.9	482.0
Sherman-Denison, Tex.	123	57	10.5	120.1	7.8	15.5	76.9	307.0	500.3	792.7	33.2	8.3	179.2
Texarkana, Tex-Texarkana, Ark.	135	40	7.7	87.5	6.0	10.6	55.6	228.9	246.6	481.7	16.2	9.0	106.1
Portion in Arkansas	60	14	4.1	50.5	3.2	6.0	36.2	143.8	176.8	323.8	13.5	3.0	71.0
Portion in Texas	75	26	3.6	37.0	2.8	4.6	19.3	85.1	69.8	157.9	2.7	6.0	35.1
Tyler, Tex.	171	51	12.1	144.6	9.6	18.4	104.1	379.7	484.6	857.1	18.2	12.0	226.7
Waco, Tex.	261	112	14.8	154.7	10.9	21.1	99.7	392.6	470.7	858.0	39.1	12.5	193.0
Wichita Falls, Tex.	177	54	7.9	84.5	6.3	11.9	57.2	213.2	205.6	416.6	38.8	5.0	68.0
Utah	1,748	494	70.2	867.2	48.8	92.3	522.3	1,974.0	3,172.9	5,092.8	393.6	56.6	1,068.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Provo-Orem, Utah	198	49	10.2	161.4	8.1	15.4	121.4	308.5	423.6	724.1	27.4	8.6	225.7
Salt Lake City-Ogden, Utah	1,213	368	49.1	580.9	32.7	61.7	324.6	1,391.5	2,298.5	3,650.8	342.3	39.2	684.9
Vermont	1,030	298	41.5	498.0	28.7	55.9	270.1	1,050.1	1,175.9	2,189.3	93.0	36.9	576.0

See footnotes at end of table.

Table 1. **Selected Statistics for All Manufacturing Establishments by State and Standard Metropolitan Statistical Area: 1977 and 1972**—Con.

State and standard metropolitan statistical area	1977										1972	
	All establishments[1]		All employees[1]		Production workers			Value added by manufacture (million dollars)	Cost of materials[2] (million dollars)	Value of shipments[2] (million dollars)	New capital expenditures (million dollars)	All employees[1] (1,000)	Value added by manufacture (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
Virginia	5,519	1,879	395.2	4,442.4	302.0	581.8	2,916.8	10,882.0	13,233.5	23,988.6	953.0	375.4	6,177.5
STANDARD METROPOLITAN STATISTICAL AREAS													
Johnson City-Kingsport-Bristol, Tenn.-Va.	429	182	54.5	655.6	40.0	77.4	407.6	1,505.0	1,880.0	3,362.5	102.0	49.3	832.0
Portion in Tennessee	310	127	45.8	560.9	33.4	64.7	344.4	1,287.6	1,531.2	2,799.4	82.3	42.9	740.8
Portion in Virginia	119	55	8.7	94.6	6.6	12.8	63.2	217.4	348.7	563.1	19.8	6.4	91.2
Lynchburg, Va	264	103	27.3	317.7	18.8	37.0	186.4	708.8	533.3	1,242.4	40.9	24.4	391.6
Newport News-Hampton, Va	218	73	34.3	447.3	28.5	55.9	362.8	667.1	963.4	1,631.2	54.4	35.6	461.4
Norfolk-Virginia Beach-Portsmouth, Va.-N.C.	537	190	26.7	326.2	19.4	38.9	211.3	1,083.3	1,850.2	2,950.9	50.1	27.6	551.7
Portion in North Carolina	6	1	.1	.6	.1	.1	.4	4.0	9.5	13.7	(Z)	.1	1.6
Portion in Virginia	531	189	26.6	325.6	19.4	38.8	210.8	1,079.4	1,840.8	2,937.1	50.1	27.5	550.1
Petersburg-Colonial Heights-Hopewell, Va.	108	45	11.5	155.2	9.0	16.2	114.1	660.6	577.5	1,227.2	96.0	12.1	369.7
Richmond, Va	775	292	53.4	732.8	34.5	64.8	397.0	1,992.6	2,394.6	4,359.1	126.5	50.2	1,095.5
Roanoke, Va	251	109	20.4	225.2	14.8	28.3	138.0	511.0	476.3	983.0	35.1	20.9	344.7
Washington, D.C.-Md.-Va	2,054	510	60.5	930.9	29.8	56.1	354.5	1,820.7	1,435.2	3,233.5	(D)	54.9	1,068.2
Portion in District of Columbia	555	130	18.6	297.6	7.5	13.3	102.3	610.2	377.7	984.4	18.1	19.4	389.0
Portion in Maryland	884	229	25.8	383.7	14.0	26.7	159.6	625.5	696.4	1,330.8	(D)	22.1	404.0
Portion in Virginia	615	151	16.2	249.5	8.3	16.1	92.6	585.0	361.1	918.3	26.5	13.4	275.2
Washington	6,723	1,712	265.0	4,054.3	180.7	338.2	2,385.0	8,955.0	12,921.4	21,746.9	850.0	226.0	4,721.4
STANDARD CONSOLIDATED STATISTICAL AREAS													
Seattle-Tacoma, Wash	3,332	905	153.2	2,431.4	93.0	170.4	1,208.6	4,919.3	5,887.4	10,716.6	267.6	129.1	2,598.1
STANDARD METROPOLITAN STATISTICAL AREAS													
Portland, Oreg.-Wash	2,440	724	99.4	1,392.1	67.9	126.4	815.4	2,951.6	3,623.4	6,544.8	236.4	86.4	1,596.9
Portion in Oregon	2,182	655	87.2	1,213.1	58.4	108.1	685.9	2,512.4	2,906.2	5,388.1	203.2	75.0	1,351.0
Portion in Washington	258	69	12.2	179.0	9.5	18.3	129.5	439.2	717.2	1,156.8	33.1	11.3	245.9
Richland-Kennewick, Wash	107	31	8.5	129.3	5.5	11.0	69.5	342.6	256.5	596.2	63.9	5.9	147.0
Seattle-Everett, Wash	2,717	733	131.9	2,111.6	78.6	143.0	1,017.8	4,161.0	4,940.0	9,015.4	213.4	108.6	2,234.7
Spokane, Wash	447	132	16.0	226.6	11.6	21.9	151.2	551.4	744.0	1,281.0	50.0	12.2	237.4
Tacoma, Wash	615	172	21.3	319.8	14.5	27.5	190.8	758.3	947.4	1,701.2	54.1	20.4	362.5
Yakima, Wash	234	85	8.0	101.5	6.5	12.9	76.0	245.9	453.4	690.1	19.0	6.6	142.6
West Virginia	1,857	583	117.0	1,620.5	89.2	170.9	1,124.3	3,880.2	4,881.5	8,705.9	402.3	120.8	2,646.7
STANDARD METROPOLITAN STATISTICAL AREAS													
Charleston, W. Va	205	66	15.7	245.4	10.9	21.6	156.7	725.7	932.4	1,647.8	125.8	16.2	603.9
Huntington-Ashland, W. Va.-Ky.-Ohio	339	125	29.6	438.8	20.9	40.9	288.1	754.3	1,982.8	2,728.9	233.7	25.7	530.1
Portion in Kentucky	88	38	11.7	198.8	7.3	13.9	118.4	289.6	1,162,5	1,439.2	170.2	8.5	224.0
Portion in Ohio	52	16	3.1	40.9	2.5	5.1	31.7	83.4	144.8	229.1	15.7	3.2	76.0
Portion in West Virginia	199	71	14.8	199.1	11.2	21.9	138.0	381.2	675.5	1,060.6	47.7	14.0	230.1
Parkersburg-Marietta, W. Va.-Ohio	182	63	15.8	222.4	11.2	21.7	139.7	724.9	779.3	1,479.2	85.3	18.0	482.2
Portion in Ohio	83	28	6.2	84.3	4.3	8.2	52.9	228.0	375.0	587.5	43.4	5.9	139.1
Portion in West Virginia	99	35	9.6	138.1	6.9	13.5	86.8	496.9	404.3	891.7	41.9	12.1	343.1
Steubenville-Weirton, Ohio-W. Va	138	67	26.7	497.6	21.2	41.0	382.6	955.0	1,643.9	2,601.6	67.9	29.0	705.7
Portion in Ohio	68	28	7.9	147.4	6.2	11.9	113.6	400.6	657.4	1,058.9	21.2	9.3	263.7
Portion in West Virginia	70	39	18.7	350.3	15.0	29.1	269.0	554.4	986.5	1,542.8	46.7	19.7	442.0
Wheeling, W. Va.-Ohio	156	68	13.0	173.5	9.8	17.9	117.2	427.3	552.0	978.6	40.3	13.3	202.8
Portion in Ohio	64	22	4.1	53.1	3.2	5.8	39.3	140.5	226.6	368.2	5.4	5.2	69.3
Portion in West Virginia	92	46	9.0	120.4	6.6	12.1	77.8	286.9	325.3	610.4	34.9	8.1	133.5
Wisconsin	8,678	3,163	535.0	7,317.8	381.0	745.4	4,697.1	16,606.0	22,362.9	38,725.3	1,184.4	500.5	9,443.3
STANDARD CONSOLIDATED STATISTICAL AREAS													
Milwaukee-Racine, Wisc	3,264	1,288	231.3	3,428.3	156.2	302.8	2,094.8	7,399.5	7,034.5	14,297.3	444.7	226.1	4,286.4
STANDARD METROPOLITAN STATISTICAL AREAS													
Appleton-Oshkosh, Wisc	500	237	42.9	582.2	30.9	61.8	375.9	1,368.9	1,905.2	3,233.2	96.3	38.4	723.8
Duluth-Superior, Minn.-Wisc	299	79	9.4	110.9	6.7	12.7	70.6	260.2	483.4	735.6	(D)	10.4	165.5
Portion in Minnesota	250	67	8.3	98.4	5.9	11.3	62.0	205.6	272.7	477.3	(D)	8.8	128.8
Portion in Wisconsin	49	12	1.0	12.5	.8	1.4	8.7	54.6	210.6	258.3	5.2	1.6	36.7
Eau Clarie, Wisc	177	57	8.7	114.4	6.5	13.5	85.1	271.5	428.6	688.9	19.0	5.2	141.4
Green Bay, Wisc	279	111	20.3	290.9	14.9	29.9	199.4	874.9	1,697.6	2,566.3	140.1	17.5	383.6
Kenosha, Wisc	145	44	17.7	246.2	13.1	21.4	170.2	416.6	1,058.0	1,480.3	14.6	15.8	382.5
La Crosse, Wisc	129	39	9.4	111.8	6.1	12.1	64.0	244.4	223.9	467.3	21.6	8.4	123.9
Madison, Wisc	436	132	18.2	264.5	12.3	24.4	160.3	536.7	882.7	1,414.2	34.3	16.2	300.0
Milwaukee, Wisc	2,859	1,141	204.1	3,042.5	138.7	268.8	1,882.5	6,408.8	6,272.7	12,554.3	389.1	200.0	3,700.0
Minneapolis-St. Paul, Minn.-Wisc	3,861	1,349	216.9	3,331.3	127.4	245.6	1,562.4	6,408.0	7,407.6	13,645.1	353.3	199.0	3,734.8
Portion in Minnesota	3,798	1,326	214.8	3,036.4	125.9	242.6	1,547.0	6,340.4	7,330.8	13,502.6	350.3	197.2	3,696,6
Portion in Wisconsin	63	23	2.1	24.9	1.5	3.1	15.4	67.6	76.8	142.4	3.1	1.8	38.1
Racine, Wisc	405	147	27.2	385.8	17.5	34.0	212.3	980.7	761.8	1,743.0	55.5	25.8	589.6
Wyoming	505	102	8.5	110.9	6.2	12.1	73.9	380.8	919.2	1,287.8	36.2	7.0	143.9

Note: See appendix F for definitions of standard metropolitan statistical areas (SMSA's) and standard consolidated statistical areas (SCSA's).

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. (Z) Less than 50 thousand dollars or hours; under 50 employees.

[1] Including administrative offices and auxiliaries (for definition, see appendix A).

[2] Aggregate cost of materials and value of shipments for all manufacturing industries includes extensive duplication, since products of some industries are used as materials by others (see appendix A).

Table 2. **Employment and Labor Cost by State: 1977**

State	Employees (1,000)	Labor costs[1] (million dollars)				Standard error of estimate[2] (percent) for column--	
		Total	Payroll	Social Security and other legally required payments	Employer payments for other programs		
	A	B	C	D	E	D	E
United States[3]	18,515.9	292,020.8	242,031.9	19,359.6	30,629.7	1	1
Alabama	335.5	4,392.2	3,684.3	290.7	417.2	1	1
Alaska	(D)	(D)	(D)	16.2	12.7	7	5
Arizona	105.8	1,642.4	1,374.5	108.2	159.7	1	1
Arkansas	193.6	2,229.3	1,881.4	169.6	178.3	1	1
California	1,682.9	28,059.7	23,248.3	2,074.0	2,737.4	1	1
Colorado	143.7	2,306.7	1,958.7	140.5	207.5	2	2
Connecticut	377.5	6,194.7	5,086.2	423.0	685.5	1	1
Delaware	42.2	751.0	589.9	49.0	112.1	2	1
District of Columbia	17.4	319.1	268.1	21.5	29.5	3	3
Florida	350.0	4,686.6	4,003.3	319.0	364.3	1	2
Georgia	470.3	5,715.0	4,856.5	378.8	479.7	1	1
Hawaii	23.6	303.5	253.9	23.6	26.0	4	4
Idaho	49.6	699.8	582.7	57.8	59.3	5	7
Illinois	1,190.1	20,193.1	16,737.2	1,334.9	2,121.0	1	1
Indiana	688.5	12,369.4	10,135.3	687.7	1,546.4	1	1
Iowa	235.5	4,002.1	3,291.7	250.9	459.5	1	1
Kansas	164.4	2,438.9	2,058.3	162.1	218.5	1	2
Kentucky	266.1	3,950.6	3,252.6	261.1	436.9	1	1
Louisiana	192.0	3,148.0	2,635.0	200.5	312.5	1	1
Maine	101.8	1,246.8	1,063.9	91.0	91.9	1	2
Maryland	228.5	3,888.2	3,163.9	253.8	470.5	1	1
Massachusetts	579.7	8,527.6	7,168.5	572.8	786.3	1	1
Michigan	1,011.1	22,069.9	17,434.0	1,447.6	3,188.3	1	1
Minnesota	301.6	4,708.7	3,988.0	333.6	387.1	2	1
Mississippi	216.8	2,355.6	2,032.6	163.2	159.8	1	1
Missouri	404.1	6,313.5	5,214.2	385.7	713.6	1	1
Montana	23.5	377.8	314.2	27.7	35.9	3	2
Nebraska	85.0	1,220.4	1,032.2	77.0	111.2	2	2
Nevada	14.5	217.7	184.9	16.5	16.3	3	8
New Hampshire	94.2	1,180.1	1,008.1	79.1	92.9	2	2
New Jersey	691.3	10,963.6	9,175.6	748.4	1,039.6	1	1
New Mexico	28.7	337.9	292.0	22.3	23.6	3	3
New York	1,383.7	21,546.9	18,088.8	1,384.1	2,074.0	1	1
North Carolina	739.4	8,170.4	7,042.5	517.5	610.4	1	1
North Dakota	(D)	(D)	(D)	13.4	14.7	4	3
Ohio	1,249.5	23,166.1	18,753.7	1,447.2	2,965.2	1	1
Oklahoma	150.1	2,123.9	1,786.3	139.6	198.0	1	2
Oregon	197.0	3,266.9	2,657.4	309.9	299.6	2	2
Pennsylvania	1,241.9	19,855.6	16,308.8	1,288.3	2,258.5	1	1
Rhode Island	123.6	1,515.7	1,296.8	107.8	111.1	2	3
South Carolina	365.2	4,267.5	3,663.9	280.6	323.0	1	1
South Dakota	(D)	(D)	(D)	18.2	24.5	2	2
Tennessee	481.1	6,045.4	5,098.9	378.9	567.6	1	1
Texas	841.5	12,739.3	10,735.9	845.3	1,158.1	1	1
Utah	68.1	984.0	834.8	61.1	88.1	2	2
Vermont	41.3	594.4	494.8	36.8	62.8	2	3
Virginia	383.5	4,997.6	4,244.9	309.3	443.4	1	1
Washington	256.2	4,802.8	3,871.0	350.1	581.7	2	1
West Virginia	114.3	1,934.3	1,568.4	116.7	249.2	1	1
Wisconsin	511.8	8,347.4	6,897.9	549.9	899.6	1	1
Wyoming	8.2	121.9	104.4	7.7	9.8	1	5

(D) Withheld to avoid disclosing operations of individual companies.

[1]For explanation of terms, see appendix A.

[2]A description of the standard error of estimate is given in appendix B under qualifications of the data. The percentage standard errors shown are the approximate relative standard errors of the estimates of level.

[3]Total figures may differ slightly from summation of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State. Data are for operating manufacturing establishments and exclude information for administrative offices and auxiliaries.

Table 3a. **Summary Statistics by State: 1977**

Item	United States total[1]	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	359 928	5 863	429	2 892	3 595	45 289	3 948	6 485	619
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	241 229	4 008	301	2 215	2 494	32 406	2 987	4 119	388
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	81 118	1 080	101	505	630	9 605	702	1 601	146
WITH 100 OR MORE EMPLOYEES . . . . . DO. .	37 581	775	27	172	471	3 278	259	765	85
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	19 590.1	341.0	11.4	110.9	197.1	1 751.5	152.5	412.1	66.5
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	264 013.1	3 773.2	166.0	1 462.9	1 932.4	24 671.5	2 124.8	5 852.3	1 140.6
PRODUCTION WORKERS:									
AVERAGE FOR YEAR. 1,000	13 691.0	273.0	9.3	69.8	160.6	1 142.6	97.7	255.3	32.3
MARCH . . . . . DO. .	13 354.1	265.6	7.3	67.5	155.0	1 100.9	93.3	253.3	30.5
MAY . . . . . DO. .	13 627.1	273.4	9.3	69.4	160.1	1 126.1	96.2	255.1	31.7
AUGUST. . . . . DO. .	13 842.3	278.3	12.7	70.1	163.8	1 185.6	100.6	254.5	33.8
NOVEMBER. . . . . DO. .	13 900.0	274.3	8.0	71.7	162.9	1 152.3	100.1	258.0	33.3
HOURS . . . . . .MILLIONS	26 686.7	525.2	16.9	135.0	310.4	2 224.2	190.1	509.0	63.0
JANUARY TO MARCH. . . . . DO. .	6 445.7	125.5	3.0	32.5	73.1	531.1	45.2	125.9	13.8
APRIL TO JUNE . . . . . DO. .	6 762.2	134.1	4.4	34.0	79.8	554.0	47.5	129.7	16.2
JULY TO SEPTEMBER . . . . . DO. .	6 693.2	133.5	5.9	33.7	79.3	574.5	48.7	122.2	16.9
OCTOBER TO DECEMBER . . . . . DO. .	6 785.4	132.1	3.6	34.9	78.2	564.7	48.7	131.1	16.0
WAGES . . . . . MIL. DOL.	157 163.7	2 697.6	122.7	780.7	1 400.7	13 150.5	1 141.3	2 901.8	409.9
COST OF MATERIALS, ETC.[3]. . . . . DO. .	782 417.7	12 814.7	767.2	3 773.4	7 554.1	66 881.2	5 594.2	9 084.4	3 635.3
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	689 922.1	11 226.3	697.6	3 249.9	6 769.3	58 076.6	5 068.2	7 467.9	3 392.0
RESALES . . . . . DO. .	40 146.2	381.2	33.3	173.0	330.3	4 537.9	317.6	876.7	74.1
FUELS CONSUMED. . . . . DO. .	18 910.3	451.4	19.7	72.8	210.3	1 009.1	69.6	171.3	82.8
PURCHASED ELECTRIC ENERGY . . . . . DO. .	14 594.4	473.8	5.8	79.8	167.4	1 138.3	65.5	198.3	72.5
CONTRACT WORK . . . . . DO. .	18 844.9	281.9	10.7	197.9	76.7	2 119.3	73.4	370.2	13.9
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	1 358 526.4	21 010.1	1 250.3	7 022.4	12 276.1	120 895.8	10 018.0	19 842.2	5 208.7
VALUE OF RESALES. . . . . DO. .	49 804.7	544.1	36.5	201.0	408.2	5 673.6	353.8	1 229.8	89.6
VALUE ADDED BY MANUFACTURE. . . . . DO. .	585 165.6	8 405.9	504.2	3 332.9	4 881.6	54 862.4	4 471.8	10 933.9	1 595.7
MANUFACTURERS' INVENTORIES:									
BEGINNING OF YEAR . . . . . DO. .	174 865.0	2 731.6	117.6	1 026.0	1 585.5	17 829.2	1 192.0	3 469.2	488.8
FINISHED PRODUCTS . . . . . DO. .	55 205.5	883.9	51.0	277.4	458.1	5 494.9	398.4	1 260.3	194.6
WORK IN PROCESS . . . . . DO. .	55 600.2	691.8	20.1	491.9	314.8	7 142.0	379.2	1 280.4	119.2
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	64 059.3	1 156.0	46.6	256.7	812.5	5 192.3	414.3	928.5	175.1
END OF YEAR . . . . . DO. .	188 436.4	3 003.6	159.7	1 145.6	1 816.2	19 210.1	1 293.7	3 662.7	563.4
FINISHED PRODUCTS . . . . . DO. .	59 429.9	1 025.6	80.4	346.8	561.4	5 972.1	376.7	1 308.6	178.5
WORK IN PROCESS . . . . . DO. .	60 732.6	761.2	30.7	507.4	379.5	7 669.9	448.0	1 407.3	158.5
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	68 273.9	1 216.8	48.5	291.3	875.4	5 568.1	469.1	946.8	226.4
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	50 329.4	1 369.7	180.4	228.0	540.4	3 700.0	467.3	616.2	154.6
NEW CAPITAL EXPENDITURES. . . . . DO. .	47 459.0	1 318.9	178.1	213.7	470.1	3 385.4	443.1	566.0	148.2
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	8 499.5	172.3	21.0	33.4	97.2	672.3	92.6	113.6	17.0
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	38 959.5	1 146.6	157.1	180.3	372.9	2 713.1	350.5	452.3	131.3
USED CAPITAL EXPENDITURES . . . . . DO. .	2 870.4	50.7	2.3	14.2	70.3	314.6	24.1	50.3	6.3

Item	District of Columbia	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	555	12 399	8 623	949	1 495	19 517	8 061	3 783	3 270
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	425	9 484	5 717	718	1 116	12 076	4 832	2 538	2 233
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	108	2 221	1 783	182	255	5 009	2 051	810	715
WITH 100 OR MORE EMPLOYEES . . . . . DO. .	22	694	1 123	49	124	2 432	1 178	435	322
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	18.6	358.0	484.7	25.0	51.6	1 286.2	705.9	240.3	168.1
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	297.6	4 133.1	5 124.5	276.8	625.2	18 740.8	10 438.9	3 382.5	2 114.8
PRODUCTION WORKERS:									
AVERAGE FOR YEAR. 1,000	7.5	249.6	376.2	17.4	39.8	857.8	521.9	170.6	121.6
MARCH . . . . . DO. .	7.6	246.7	369.3	15.8	38.6	845.7	509.7	167.9	119.3
MAY . . . . . DO. .	7.6	248.4	376.6	17.1	39.5	857.9	523.3	170.0	120.6
AUGUST. . . . . DO. .	7.3	246.4	378.1	20.7	40.1	861.6	524.4	170.2	122.3
NOVEMBER. . . . . DO. .	7.5	255.0	380.1	15.8	40.8	864.3	529.2	173.7	123.9
HOURS . . . . . .MILLIONS	13.3	485.2	740.6	31.3	76.5	1 676.7	1 024.8	331.7	241.5
JANUARY TO MARCH. . . . . DO. .	3.2	120.7	178.7	7.0	18.5	410.6	244.2	81.7	59.3
APRIL TO JUNE . . . . . DO. .	3.5	122.0	188.9	8.1	19.0	425.0	263.0	83.4	60.3
JULY TO SEPTEMBER . . . . . DO. .	3.2	118.9	185.3	9.3	19.3	416.1	258.5	81.9	60.9
OCTOBER TO DECEMBER . . . . . DO. .	3.3	123.6	187.6	6.9	19.7	425.1	259.2	84.7	61.0
WAGES . . . . . MIL. DOL.	102.3	2 335.5	3 404.4	160.5	431.9	10 756.5	7 046.5	2 191.3	1 370.8
COST OF MATERIALS, ETC.[3]. . . . . DO. .	377.7	11 898.4	20 343.6	1 176.1	2 233.6	53 342.1	29 829.1	14 943.6	10 783.0
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	255.1	10 419.0	18 323.5	1 023.6	1 941.7	46 936.4	26 995.3	13 494.0	9 384.2
RESALES . . . . . DO. .	18.2	649.0	841.6	88.6	91.2	3 362.9	1 101.4	786.1	960.3
FUELS CONSUMED. . . . . DO. .	2.1	307.5	380.3	17.6	69.5	1 159.9	851.4	231.6	140.7
PURCHASED ELECTRIC ENERGY . . . . . DO. .	5.7	279.0	374.3	15.2	46.9	781.6	567.2	170.8	127.4
CONTRACT WORK . . . . . DO. .	96.6	243.9	423.9	31.0	84.3	1 101.4	313.7	261.0	170.4
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	984.4	20 980.6	32 834.5	1 974.0	3 657.7	93 081.3	52 172.2	23 514.9	15 987.3
VALUE OF RESALES. . . . . DO. .	25.0	792.1	867.8	114.0	107.9	4 500.6	1 400.2	927.3	1 109.0
VALUE ADDED BY MANUFACTURE. . . . . DO. .	610.2	9 255.1	12 548.7	785.5	1 430.0	40 279.1	22 717.6	8 684.4	5 337.8
MANUFACTURERS' INVENTORIES:									
BEGINNING OF YEAR . . . . . DO. .	61.8	2 643.9	3 674.7	205.2	601.7	12 257.8	7 048.5	2 764.8	1 760.1
FINISHED PRODUCTS . . . . . DO. .	16.5	887.8	1 233.8	81.2	233.9	4 334.7	2 172.1	865.6	580.8
WORK IN PROCESS . . . . . DO. .	18.0	779.4	1 005.5	31.0	130.4	3 616.7	2 344.1	889.0	506.3
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	27.3	976.7	1 435.4	93.0	237.4	4 306.4	2 532.3	1 010.2	673.0
END OF YEAR . . . . . DO. .	79.4	2 957.8	3 903.4	189.1	590.7	13 028.2	7 568.4	2 872.1	1 894.2
FINISHED PRODUCTS . . . . . DO. .	19.6	1 015.8	1 311.2	78.7	249.8	4 469.3	2 326.2	906.6	602.5
WORK IN PROCESS . . . . . DO. .	18.4	856.7	987.5	25.9	122.2	4 022.4	2 555.2	963.0	617.3
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	41.4	1 085.4	1 604.8	84.5	218.7	4 536.5	2 687.0	1 002.5	674.4
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	19.1	819.6	1 207.3	48.0	166.1	2 818.3	2 155.9	708.3	371.7
NEW CAPITAL EXPENDITURES. . . . . DO. .	18.1	737.3	1 143.4	44.4	158.7	2 661.5	2 078.0	677.8	345.4
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	2.6	127.8	171.6	9.3	43.3	531.0	350.8	172.0	95.4
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	15.6	609.5	971.8	35.1	115.3	2 130.5	1 727.2	505.8	250.0
USED CAPITAL EXPENDITURES . . . . . DO. .	1.0	82.2	63.9	3.6	7.5	156.8	77.9	30.5	26.3

See footnotes at end of table.

Item	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	3 548	4 276	2 157	3 937	11 133	15 627	6 637	3 289	7 354
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	2 230	3 040	1 562	2 586	7 079	10 247	4 511	2 142	4 925
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	732	820	351	883	2 848	3 882	1 474	654	1 587
WITH 100 OR MORE EMPLOYEES . . . . . DO. .	586	416	244	468	1 206	1 498	652	493	842
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	277.5	194.8	102.8	243.2	613.4	1 115.9	331.7	219.4	433.0
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	3 452.2	2 682.7	1 077.6	3 419.5	7 818.8	20 054.0	4 693.0	2 061.5	5 703.9
PRODUCTION WORKERS:									
AVERAGE FOR YEAR. 1,000	209.0	145.2	84.2	162.9	407.9	789.4	211.1	177.9	298.8
MARCH . . . . . DO. .	205.3	140.5	80.9	160.2	399.7	774.0	200.8	172.4	289.9
MAY . . . . . DO. .	208.5	143.2	82.8	165.0	407.9	789.9	206.2	177.1	297.1
AUGUST. . . . . DO. .	209.7	146.7	87.7	162.8	406.5	773.4	223.5	179.9	301.8
NOVEMBER. . . . . DO. .	212.2	149.8	85.3	163.3	416.5	819.0	213.1	181.9	305.5
HOURS . . . . . .MILLIONS	399.5	292.0	163.6	311.6	791.9	1 626.3	403.8	348.1	571.9
JANUARY TO MARCH. . . . . DO. .	96.1	69.9	39.5	75.3	195.7	391.9	95.7	83.0	136.6
APRIL TO JUNE . . . . . DO. .	102.0	72.7	41.6	80.3	202.3	412.1	100.1	88.5	143.6
JULY TO SEPTEMBER . . . . . DO. .	98.8	73.5	40.8	78.0	190.3	407.8	105.2	87.7	145.9
OCTOBER TO DECEMBER . . . . . DO. .	102.7	75.9	41.8	77.9	203.6	414.5	102.8	88.9	146.0
WAGES . . . . . MIL. DOL.	2 302.5	1 798.9	781.0	1 976.0	4 199.2	12 720.6	2 413.1	1 477.3	3 404.7
COST OF MATERIALS, ETC.[3]. . . . . DO. .	13 565.7	20 266.6	2 845.1	8 908.4	14 075.4	56 775.9	13 598.6	7 279.4	19 976.4
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	12 200.3	18 261.8	2 412.6	7 779.1	12 115.8	52 806.6	12 079.3	6 616.1	18 110.9
RESALES . . . . . DO. .	497.3	541.5	100.5	512.3	821.6	1 328.3	906.1	264.4	1 078.9
FUELS CONSUMED. . . . . DO. .	279.6	833.9	174.5	216.9	261.4	1 004.2	194.0	168.5	251.7
PURCHASED ELECTRIC ENERGY . . . . . DO. .	502.2	325.8	64.8	184.2	291.8	836.6	166.3	142.9	230.3
CONTRACT WORK . . . . . DO. .	86.3	303.6	92.7	216.0	584.8	800.1	252.8	87.5	304.5
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	22 874.7	29 493.3	5 144.6	15 930.4	30 144.2	93 757.1	23 021.2	12 765.8	33 027.5
VALUE OF RESALES. . . . . DO. .	621.2	610.3	119.8	614.1	1 098.7	1 634.7	1 114.3	365.0	1 221.4
VALUE ADDED BY MANUFACTURE. . . . . DO. .	9 545.7	9 418.3	2 343.0	7 115.6	16 348.6	37 566.0	9 605.2	5 619.3	13 041.9
MANUFACTURERS' INVENTORIES:									
BEGINNING OF YEAR . . . . . DO. .	2 998.5	2 233.8	555.2	2 058.6	4 493.4	8 477.2	2 791.8	1 355.3	4 271.6
FINISHED PRODUCTS . . . . . DO. .	1 140.4	781.1	180.4	642.9	1 462.8	1 888.4	957.2	493.2	989.6
WORK IN PROCESS . . . . . DO. .	730.1	568.4	125.5	517.2	1 502.6	3 175.8	811.1	320.7	1 647.9
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	1 128.0	884.3	249.3	898.5	1 528.1	3 413.1	1 023.6	541.4	1 634.2
END OF YEAR . . . . . DO. .	3 273.2	2 506.3	633.8	2 185.6	4 972.7	9 409.9	3 037.5	1 494.0	4 409.9
FINISHED PRODUCTS . . . . . DO. .	1 227.7	940.7	207.7	718.3	1 565.5	2 065.2	1 029.5	587.5	993.1
WORK IN PROCESS . . . . . DO. .	878.0	596.5	146.3	546.6	1 683.2	3 587.8	928.0	348.0	1 633.2
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	1 167.5	969.1	279.8	920.6	1 724.0	3 756.8	1 080.0	558.6	1 783.6
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	787.4	2 134.6	232.9	560.1	1 024.5	3 884.9	610.0	502.5	830.6
NEW CAPITAL EXPENDITURES. . . . . DO. .	715.9	2 072.8	222.9	513.8	952.8	3 739.2	576.4	470.8	780.2
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	118.5	381.0	32.3	146.1	215.8	467.1	112.4	106.2	131.7
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	597.4	1 691.8	190.6	367.7	737.0	3 272.1	463.9	364.6	648.5
USED CAPITAL EXPENDITURES . . . . . DO. .	71.6	61.8	9.9	46.3	71.6	145.7	33.6	31.7	50.4

Item	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	1 169	1 965	729	1 825	15 696	1 323	36 578	9 954	571
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	966	1 339	582	1 202	9 921	1 065	25 153	5 949	426
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	157	436	112	405	4 144	200	8 864	2 240	114
WITH 100 OR MORE EMPLOYEES[2]. . . . . DO. .	46	190	35	218	1 631	58	2 561	1 765	31
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	23.8	87.7	15.0	95.3	778.3	29.0	1 509.9	765.3	13.8
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	317.0	1 075.4	191.6	1 029.0	10 924.2	296.9	20 876.1	7 518.5	162.3
PRODUCTION WORKERS:									
AVERAGE FOR YEAR. 1,000	18.7	62.8	10.0	72.0	489.6	20.9	958.1	611.3	9.2
MARCH . . . . . DO. .	17.7	61.4	9.7	69.6	482.2	20.4	938.9	596.0	9.0
MAY . . . . . DO. .	18.5	62.8	9.9	71.4	487.1	20.9	956.0	605.4	9.0
AUGUST. . . . . DO. .	19.3	63.5	10.0	73.0	492.8	21.2	962.9	620.4	9.2
NOVEMBER. . . . . DO. .	19.1	63.2	10.2	73.6	494.7	21.0	970.5	622.3	9.8
HOURS . . . . . .MILLIONS	36.4	124.0	19.3	138.0	955.8	39.5	1 827.5	1 186.5	17.7
JANUARY TO MARCH. . . . . DO. .	8.9	30.3	4.7	33.5	233.5	9.5	444.4	287.5	4.3
APRIL TO JUNE . . . . . DO. .	9.0	31.3	4.9	34.8	243.7	10.0	465.1	300.8	4.3
JULY TO SEPTEMBER . . . . . DO. .	9.2	31.1	4.8	33.9	235.1	9.9	451.4	296.3	4.4
OCTOBER TO DECEMBER . . . . . DO. .	9.2	31.3	4.9	35.9	243.5	10.1	466.6	302.0	4.7
WAGES . . . . . MIL. DOL.	239.8	680.9	113.4	645.3	5 561.7	183.8	10 418.8	5 086.3	97.2
COST OF MATERIALS, ETC.[3]. . . . . DO. .	1 994.7	5 864.0	461.0	1 893.7	28 633.9	1 289.4	42 441.9	23 009.8	842.7
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	1 764.8	5 259.1	371.5	1 662.5	25 229.0	1 145.7	35 326.9	20 630.7	775.5
RESALES . . . . . DO. .	101.2	454.7	44.6	87.1	1 541.0	63.0	2 000.0	1 005.0	38.9
FUELS CONSUMED. . . . . DO. .	52.3	64.0	20.5	51.7	619.1	37.4	746.5	471.9	14.6
PURCHASED ELECTRIC ENERGY . . . . . DO. .	29.8	53.1	14.0	41.9	516.2	25.0	732.8	486.8	9.5
CONTRACT WORK . . . . . DO. .	46.8	33.1	10.4	50.5	728.6	18.2	3 635.9	415.5	4.1
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	2 683.4	8 713.4	942.0	4 032.3	51 279.4	2 009.2	86 216.4	40 912.2	1 312.9
VALUE OF RESALES. . . . . DO. .	118.0	528.4	49.4	114.0	1 872.9	74.9	2 738.3	1 174.3	38.7
VALUE ADDED BY MANUFACTURE. . . . . DO. .	847.3	2 867.1	495.2	2 174.7	22 852.8	733.5	44 289.8	18 230.6	473.3
MANUFACTURERS' INVENTORIES:									
BEGINNING OF YEAR . . . . . DO. .	352.3	863.7	136.1	575.8	6 561.2	192.9	12 365.5	5 767.0	175.7
FINISHED PRODUCTS . . . . . DO. .	121.2	353.7	34.6	165.5	2 347.2	56.8	3 759.4	1 501.4	70.1
WORK IN PROCESS . . . . . DO. .	143.9	174.8	48.1	195.3	1 846.5	63.3	4 537.4	1 236.6	29.8
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	87.2	335.2	53.4	215.0	2 367.5	72.8	4 068.8	3 029.0	75.8
END OF YEAR . . . . . DO. .	402.1	896.3	161.7	635.6	6 965.5	214.8	13 113.4	6 088.5	193.4
FINISHED PRODUCTS . . . . . DO. .	147.0	359.9	45.3	190.5	2 489.8	61.9	3 977.6	1 570.6	69.8
WORK IN PROCESS . . . . . DO. .	155.2	187.0	51.6	208.2	1 914.2	72.0	4 822.4	1 474.9	33.2
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	99.9	349.4	64.8	237.0	2 561.5	80.9	4 313.4	3 042.9	90.4
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	125.6	201.9	48.6	168.6	1 486.7	81.0	2 694.4	1 506.9	54.7
NEW CAPITAL EXPENDITURES. . . . . DO. .	119.8	175.1	46.4	162.0	1 376.3	75.0	2 530.2	1 345.3	53.0
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	30.7	41.0	11.4	39.5	297.5	21.6	451.9	241.5	14.8
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	89.2	134.1	35.0	122.5	1 078.8	53.3	2 078.3	1 103.9	38.2
USED CAPITAL EXPENDITURES . . . . . DO. .	5.8	26.8	2.2	6.6	110.4	6.0	164.2	161.5	1.8

See footnotes at end of table.

Table 3a. **Summary Statistics by State: 1977**—Con.

Item	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	17 354	3 818	5 716	18 735	3 107	4 229	740	6 487	18 107
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	10 626	2 751	4 136	11 031	2 162	2 669	545	4 010	12 463
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	4 404	717	1 108	5 094	688	765	143	1 406	3 875
WITH 100 OR MORE EMPLOYEES . . . . . DO. .	2 324	350	472	2 610	257	795	52	1 071	1 769
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	1 331.2	164.4	202.4	1 329.2	125.0	374.2	22.5	489.8	886.4
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	20 356.0	2 050.9	2 760.0	18 042.7	1 326.5	3 804.9	251.4	5 218.7	11 653.1
PRODUCTION WORKERS:									
AVERAGE FOR YEAR. 1,000	924.4	110.4	155.1	934.1	94.7	299.8	16.7	375.7	600.7
MARCH . . . . . DO. .	903.4	107.9	144.5	918.2	92.4	294.7	16.0	366.3	584.3
MAY . . . . . DO. .	927.6	109.6	148.9	935.8	92.9	299.7	16.5	374.0	595.2
AUGUST. . . . . DO. .	922.7	111.3	168.4	944.2	95.0	302.3	17.2	379.0	604.9
NOVEMBER. . . . . DO. .	942.7	112.2	157.9	936.6	98.2	302.2	16.9	383.0	616.2
HOURS . . . . . .MILLIONS	1 838.5	214.3	291.6	1 781.6	177.5	594.0	32.0	720.3	1 190.1
JANUARY TO MARCH. . . . . DO. .	439.1	52.2	68.7	434.0	43.1	145.3	7.9	172.4	286.6
APRIL TO JUNE . . . . . DO. .	471.3	53.4	72.0	456.7	45.4	152.7	7.8	182.5	297.3
JULY TO SEPTEMBER . . . . . DO. .	461.5	53.9	76.8	442.7	42.6	145.6	8.2	179.9	302.1
OCTOBER TO DECEMBER . . . . . DO. .	466.6	54.9	74.2	448.2	46.5	150.3	8.1	185.4	304.1
WAGES . . . . . MIL. DOL.	12 907.5	1 164.3	1 901.7	10 948.8	825.2	2 640.3	169.1	3 481.2	5 626.6
COST OF MATERIALS, ETC.[3]. . . . . DO. .	52 736.3	8 048.4	8 317.0	44 393.0	2 673.5	10 855.2	1 184.7	16 318.9	60 462.2
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	46 541.7	7 132.7	7 215.7	37 910.3	2 334.1	9 491.4	1 100.1	14 014.8	53 059.2
RESALES . . . . . DO. .	2 729.7	496.8	477.8	2 439.6	142.4	386.8	58.5	1 153.5	2 863.3
FUELS CONSUMED. . . . . DO. .	1 442.4	188.7	167.7	1 681.0	45.4	320.2	12.5	355.4	2 594.5
PURCHASED ELECTRIC ENERGY . . . . . DO. .	1 217.1	115.4	139.4	963.1	54.7	334.4	8.7	554.4	1 017.1
CONTRACT WORK . . . . . DO. .	805.4	114.8	316.3	1 399.0	96.9	322.5	5.0	240.9	928.1
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	95 234.7	12 564.5	14 370.0	79 844.8	5 364.6	18 882.4	1 793.7	28 752.0	92 871.9
VALUE OF RESALES. . . . . DO. .	3 620.0	592.0	538.0	3 002.2	185.9	473.1	66.8	1 430.7	3 378.5
VALUE ADDED BY MANUFACTURE. . . . . DO. .	43 054.7	4 662.3	6 138.0	36 016.9	2 736.6	8 186.1	611.6	12 663.4	33 150.3
MANUFACTURERS' INVENTORIES:									
BEGINNING OF YEAR . . . . . DO. .	12 139.4	1 424.6	1 767.1	12 136.5	819.1	2 352.8	136.2	3 874.3	9 804.4
FINISHED PRODUCTS . . . . . DO. .	3 735.9	510.8	687.2	3 522.6	305.0	836.3	50.2	1 381.6	3 562.1
WORK IN PROCESS . . . . . DO. .	3 954.1	387.6	424.2	4 133.0	221.1	683.5	27.7	1 143.5	2 835.4
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	4 449.4	526.3	655.7	4 480.9	293.0	832.9	58.3	1 349.2	3 406.8
END OF YEAR . . . . . DO. .	13 037.2	1 600.8	1 913.4	12 857.3	899.8	2 613.5	149.0	4 197.5	10 813.0
FINISHED PRODUCTS . . . . . DO. .	4 009.0	565.2	772.3	3 783.8	332.6	900.6	47.9	1 491.0	3 896.4
WORK IN PROCESS . . . . . DO. .	4 232.0	478.6	446.0	4 433.7	239.4	783.7	33.6	1 292.2	3 261.6
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	4 796.2	557.0	695.1	4 639.8	327.8	929.2	67.5	1 414.3	3 654.9
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	2 930.6	510.5	618.7	2 423.0	158.2	831.4	40.2	1 026.4	5 345.9
NEW CAPITAL EXPENDITURES. . . . . DO. .	2 790.7	485.8	574.5	2 297.4	145.6	788.6	36.7	961.1	5 194.7
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	455.6	94.0	87.8	427.0	31.6	135.4	10.5	160.7	844.1
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	2 335.1	391.8	486.7	1 870.4	114.0	653.2	26.2	800.5	4 350.6
USED CAPITAL EXPENDITURES . . . . . DO. .	139.8	24.7	44.2	125.5	12.6	42.7	3.5	65.3	151.2

Item	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming
ALL ESTABLISHMENTS[2] . . . . . NUMBER.	1 748	1 030	5 519	6 723	1 857	8 678	505
WITH 1 TO 19 EMPLOYEES . . . . . DO. .	1 254	732	3 640	5 011	1 274	5 515	403
WITH 20 TO 99 EMPLOYEES. . . . . DO. .	347	214	1 135	1 239	368	2 116	84
WITH 100 OR MORE EMPLOYEES . . . . . DO. .	147	84	744	473	215	1 047	18
ALL EMPLOYEES, AVERAGE FOR YEAR[2]. . . . . 1,000 .	70.2	41.5	395.2	265.0	117.0	535.0	8.5
PAYROLL FOR YEAR, ALL EMPLOYEES[2]. . . . . MIL. DOL.	867.2	498.0	4 442.4	4 054.3	1 620.5	7 317.8	110.9
PRODUCTION WORKERS:							
AVERAGE FOR YEAR. 1,000	48.8	28.7	302.0	180.7	89.2	381.0	6.2
MARCH . . . . . DO. .	46.8	27.8	296.5	171.7	87.2	367.8	5.8
MAY . . . . . DO. .	48.3	28.6	299.3	179.3	89.2	374.9	6.0
AUGUST. . . . . DO. .	49.9	29.1	305.0	186.2	90.4	395.2	6.3
NOVEMBER. . . . . DO. .	49.8	29.0	306.6	184.9	89.6	385.3	6.5
HOURS . . . . . .MILLIONS	92.3	55.9	581.8	338.2	170.9	745.4	12.1
JANUARY TO MARCH. . . . . DO. .	22.3	13.6	142.7	80.7	40.9	178.8	2.9
APRIL TO JUNE . . . . . DO. .	23.2	14.2	146.5	86.0	43.7	186.2	2.9
JULY TO SEPTEMBER . . . . . DO. .	23.3	13.7	145.7	87.3	43.2	191.3	3.1
OCTOBER TO DECEMBER . . . . . DO. .	23.5	14.4	146.8	84.2	43.0	189.1	3.2
WAGES . . . . . MIL. DOL.	522.3	270.1	2 916.8	2 385.0	1 124.3	4 697.1	73.9
COST OF MATERIALS, ETC.[3]. . . . . DO. .	3 172.9	1 175.9	13 233.5	12 921.4	4 881.5	22 362.9	919.2
MATERIALS, PARTS, CONTAINERS, ETC., CONSUMED. DO. .	2 826.3	1 030.5	11 764.0	11 074.1	4 246.7	20 045.7	859.2
RESALES . . . . . DO. .	186.9	81.4	620.3	1 041.8	130.7	1 310.7	16.0
FUELS CONSUMED. . . . . DO. .	68.4	18.2	358.5	280.5	253.3	388.9	24.6
PURCHASED ELECTRIC ENERGY . . . . . DO. .	40.0	19.8	263.9	158.2	179.0	299.8	5.6
CONTRACT WORK . . . . . DO. .	51.3	26.0	226.8	366.8	71.7	317.8	13.7
VALUE OF SHIPMENTS, INCLUDING RESALES[3]. . . . . DO. .	5 092.8	2 189.3	23 988.6	21 746.9	8 705.9	38 725.3	1 287.8
VALUE OF RESALES. . . . . DO. .	223.3	87.8	721.0	1 245.9	153.1	1 580.2	17.3
VALUE ADDED BY MANUFACTURE. . . . . DO. .	1 974.0	1 050.1	10 882.0	8 955.0	3 880.2	16 606.0	380.8
MANUFACTURERS' INVENTORIES:							
BEGINNING OF YEAR . . . . . DO. .	627.5	276.0	4 182.2	3 347.7	1 325.1	4 842.3	124.5
FINISHED PRODUCTS . . . . . DO. .	178.1	67.2	831.8	1 020.7	486.2	1 600.1	58.5
WORK IN PROCESS . . . . . DO. .	227.7	127.2	801.5	1 416.2	378.3	1 371.3	33.0
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	221.6	81.6	2 548.9	910.8	460.6	1 871.0	33.0
END OF YEAR . . . . . DO. .	701.7	319.3	4 483.8	3 544.9	1 389.4	5 238.5	142.8
FINISHED PRODUCTS . . . . . DO. .	228.8	65.2	904.0	1 059.2	522.7	1 705.3	67.8
WORK IN PROCESS . . . . . DO. .	230.0	166.0	879.1	1 478.1	402.6	1 542.1	36.1
MATERIALS, SUPPLIES, FUEL, ETC. . . . . DO. .	243.0	88.1	2 700.7	1 007.7	464.0	1 991.1	38.9
CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT . DO. .	404.7	100.7	1 000.9	940.7	426.1	1 268.1	41.7
NEW CAPITAL EXPENDITURES. . . . . DO. .	393.6	93.0	953.0	850.0	402.3	1 184.4	36.2
NEW BUILDINGS AND STRUCTURES. . . . . DO. .	55.3	14.3	173.2	146.1	50.9	211.4	11.3
NEW MACHINERY AND EQUIPMENT . . . . . DO. .	338.3	78.7	779.8	703.9	351.4	973.1	24.9
USED CAPITAL EXPENDITURES . . . . . DO. .	11.1	7.7	47.9	90.7	23.8	83.7	5.5

[1]Total figures may differ slightly from summation of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State.

[2]Includes administrative offices and auxiliaries.

[3]Aggregate of cost of materials and value of shipments for industry groups and for all manufacturing industries includes extensive duplication, since products of some industries are used as materials by others.

Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	UNITED STATES[2]				CONNECTICUT				ILLINOIS			
ASSETS, BEGINNING OF YEAR.	402 067.0	104 196.3	297 870.6	1	6 019.3	1 868.6	4 151.1	1	26 450.4	7 629.9	18 821.0	1
CAPITAL EXPEND., NEW . .	48 641.4	8 603.7	40 035.9	1	554.5	(117.9)	436.5	1	2 779.7	538.4	2 241.3	1
CAPITAL EXPEND., USED. .	3 265.9	867.6	2 398.3	1	58.8	17.8	41.0	10	166.2	41.4	124.8	5
RETIREMENTS.	14 954.0	2 415.8	12 538.4	1	215.7	42.1	173.7	4	1 076.4	173.1	903.5	2
ASSETS, END OF YEAR. . . .	439 020.3	111 257.7	327 762.6	1	6 416.9	1 962.2	4 454.8	1	28 319.9	8 036.6	20 283.6	1
DEPRECIATION CHARGES . . .	26 734.9	4 587.4	22 147.3	1	430.6	85.4	345.2	2	1 749.3	310.3	1 439.0	1
RENTAL PAYMENTS.	7 064.2	3 207.9	3 856.3	1	160.0	70.7	89.2	6	461.9	212.8	248.9	2
	ALABAMA				DELAWARE				INDIANA			
ASSETS, BEGINNING OF YEAR.	9 028.3	1 704.3	7 324.1	1	1 855.4	383.7	1 471.7	1	18 962.4	4 587.2	14 375.0	1
CAPITAL EXPEND., NEW . .	1 318.5	170.0	1 148.5	1	143.7	16.2	127.5	3	2 080.0	347.7	1 732.4	1
CAPITAL EXPEND., USED. .	52.7	15.1	37.6	8	(10.4)	(7.4)	(3.0)	43	80.5	20.4	60.1	6
RETIREMENTS.	226.8	31.9	194.9	3	62.4	13.0	49.5	2	535.6	65.3	470.4	2
ASSETS, END OF YEAR. . . .	10 172.8	1 857.6	8 315.3	1	1 947.0	394.3	1 552.7	1	20 587.4	4 889.9	15 697.0	1
DEPRECIATION CHARGES . . .	594.0	89.2	504.9	1	127.2	21.4	105.8	2	1 052.1	174.8	877.4	1
RENTAL PAYMENTS.	87.4	28.6	58.6	7	15.4	4.5	10.9	5	200.8	66.6	134.1	2
	ALASKA				DISTRICT OF COLUMBIA				IOWA			
ASSETS, BEGINNING OF YEAR.	692.3	165.4	526.9	2	263.7	103.1	160.5	3	5 705.3	1 587.0	4 118.2	1
CAPITAL EXPEND., NEW . .	190.4	20.1	170.3	11	(17.7)	(3.0)	14.7	18	752.8	179.2	573.6	2
CAPITAL EXPEND., USED. .	(5.7)	(3.1)	(2.7)	55	(1.6)	(1.3)	(.3)	54	31.4	(11.7)	19.8	9
RETIREMENTS.	11.5	(1.2)	(10.4)	14	25.5	(.5)	25.0	3	176.9	36.6	140.5	5
ASSETS, END OF YEAR. . . .	876.9	187.4	689.5	2	257.4	106.8	150.5	3	6 312.6	1 741.3	4 571.0	1
DEPRECIATION CHARGES . . .	35.3	11.2	24.1	8	15.8	3.1	12.7	5	405.7	73.4	332.3	5
RENTAL PAYMENTS.	(11.9)	(3.8)	8.1	15	7.7	2.9	4.8	7	97.7	28.6	69.0	3
	ARIZONA				FLORIDA				KANSAS			
ASSETS, BEGINNING OF YEAR.	2 219.4	562.2	1 657.3	1	6 904.8	1 505.1	5 399.6	1	3 159.6	1 005.2	2 154.3	1
CAPITAL EXPEND., NEW . .	207.9	(35.6)	172.2	3	720.1	120.2	599.8	1	351.3	96.4	254.9	3
CAPITAL EXPEND., USED. .	(16.9)	(1.5)	(15.4)	20	133.9	11.9	122.0	10	30.0	8.2	(21.9)	12
RETIREMENTS.	78.6	10.0	68.6	4	303.4	27.6	275.9	2	107.8	30.9	77.0	7
ASSETS, END OF YEAR. . . .	2 365.5	589.4	1 776.3	1	7 455.3	1 609.6	5 845.5	1	3 433.1	1 078.9	2 354.1	1
DEPRECIATION CHARGES . . .	153.3	23.4	130.0	2	487.1	66.3	420.8	2	211.6	46.0	165.6	3
RENTAL PAYMENTS.	39.9	19.8	20.1	5	160.5	70.5	90.0	4	55.7	(21.0)	34.7	7
	ARKANSAS				GEORGIA				KENTUCKY			
ASSETS, BEGINNING OF YEAR.	3 568.4	852.1	2 716.4	1	8 829.1	2 201.1	6 628.7	1	6 193.5	1 627.9	4 565.5	1
CAPITAL EXPEND., NEW . .	469.2	96.0	373.3	2	1 128.8	168.3	960.5	2	756.3	132.1	624.2	3
CAPITAL EXPEND., USED. .	70.7	8.7	61.9	2	84.6	(30.0)	54.5	12	80.2	12.5	67.7	8
RETIREMENTS.	115.0	17.2	97.8	10	290.4	45.8	244.8	3	187.6	25.0	162.8	5
ASSETS, END OF YEAR. . . .	3 993.3	939.5	3 053.7	1	9 752.1	2 353.6	7 399.0	1	6 842.4	1 747.4	5 094.6	1
DEPRECIATION CHARGES . . .	255.6	36.9	218.6	2	583.1	93.9	489.2	1	400.1	65.1	334.9	2
RENTAL PAYMENTS.	59.4	23.3	36.0	3	145.0	56.6	88.2	4	77.7	27.9	50.0	5
	CALIFORNIA				HAWAII				LOUISIANA			
ASSETS, BEGINNING OF YEAR.	27 268.5	8 158.9	19 108.8	1	699.0	235.7	463.3	2	12 039.4	2 508.7	9 530.7	1
CAPITAL EXPEND., NEW . .	3 550.1	697.7	2 852.3	1	54.6	(9.8)	44.9	13	2 072.8	373.2	1 699.6	1
CAPITAL EXPEND., USED. .	363.4	129.1	234.2	2	(4.8)	(.8)	(4.0)	24	62.6	19.1	43.6	3
RETIREMENTS.	1 139.2	198.8	940.4	2	14.3	3.1	(11.2)	10	265.5	20.6	244.9	3
ASSETS, END OF YEAR. . . .	30 042.8	8 787.0	21 255.8	1	744.1	243.2	501.0	2	13 909.3	2 880.3	11 029.0	1
DEPRECIATION CHARGES . . .	2 035.0	392.4	1 642.7	1	39.5	9.5	30.0	3	789.6	126.6	663.1	1
RENTAL PAYMENTS.	886.4	511.4	374.6	2	(20.7)	(8.3)	(12.4)	26	98.6	27.0	71.5	2
	COLORADO				IDAHO				MAINE			
ASSETS, BEGINNING OF YEAR.	3 084.9	907.4	2 177.4	1	1 290.8	277.4	1 013.4	1	2 522.4	507.5	2 014.8	1
CAPITAL EXPEND., NEW . .	459.8	95.7	364.1	3	181.2	48.0	133.1	7	220.9	29.2	191.7	3
CAPITAL EXPEND., USED. .	(26.8)	(8.5)	18.2	15	(8.9)	(1.2)	(7.8)	21	9.1	2.8	6.4	11
RETIREMENTS.	121.3	13.2	108.2	7	32.9	4.1	28.8	9	79.3	11.7	67.6	7
ASSETS, END OF YEAR. . . .	3 450.1	998.4	2 451.6	1	1 448.1	322.5	1 125.5	1	2 673.1	527.8	2 145.3	1
DEPRECIATION CHARGES . . .	247.3	40.0	207.3	2	91.8	12.4	79.3	3	181.7	44.8	136.9	3
RENTAL PAYMENTS.	71.7	34.6	37.1	9	21.6	5.8	15.7	8	42.6	8.2	34.5	8

See footnotes at end of table.

Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	MARYLAND			
ASSETS, BEGINNING OF YEAR.	5 736.1	1 587.7	4 148.6	1
CAPITAL EXPEND., NEW . .	502.7	141.6	361.1	3
CAPITAL EXPEND., USED. .	46.6	20.8	25.8	4
RETIREMENTS.	231.0	54.4	176.7	4
ASSETS, END OF YEAR. . . .	6 054.3	1 695.7	4 358.7	1
DEPRECIATION CHARGES . . .	323.9	56.7	267.2	2
RENTAL PAYMENTS.	89.2	41.7	47.5	5
	MASSACHUSETTS			
ASSETS, BEGINNING OF YEAR.	7 740.2	2 118.0	5 622.4	1
CAPITAL EXPEND., NEW . .	1 001.0	220.9	780.1	1
CAPITAL EXPEND., USED. .	110.2	(50.3)	59.9	11
RETIREMENTS.	347.3	55.8	291.5	3
ASSETS, END OF YEAR. . . .	8 504.0	2 333.4	6 170.9	1
DEPRECIATION CHARGES . . .	591.6	96.7	495.0	2
RENTAL PAYMENTS.	251.5	141.8	109.7	3
	MICHIGAN			
ASSETS, BEGINNING OF YEAR.	23 364.8	5 865.5	17 499.2	1
CAPITAL EXPEND., NEW . .	3 838.7	474.7	3 363.9	1
CAPITAL EXPEND., USED. .	163.0	32.2	130.8	7
RETIREMENTS.	1 555.1	119.3	1 436.0	1
ASSETS, END OF YEAR. . . .	25 811.5	6 253.1	19 558.0	1
DEPRECIATION CHARGES . . .	1 606.5	247.6	1 358.9	1
RENTAL PAYMENTS.	319.1	120.0	198.9	1
	MINNESOTA			
ASSETS, BEGINNING OF YEAR.	4 843.2	1 539.3	3 304.0	1
CAPITAL EXPEND., NEW . .	630.0	112.5	517.5	1
CAPITAL EXPEND., USED. .	39.7	(10.4)	(29.3)	14
RETIREMENTS.	150.1	22.2	128.0	3
ASSETS, END OF YEAR. . . .	5 362.7	1 639.9	3 722.9	1
DEPRECIATION CHARGES . . .	362.9	74.0	288.8	3
RENTAL PAYMENTS.	136.7	62.6	74.1	4
	MISSISSIPPI			
ASSETS, BEGINNING OF YEAR.	3 621.4	1 225.1	2 396.2	1
CAPITAL EXPEND., NEW . .	485.5	107.7	377.8	2
CAPITAL EXPEND., USED. .	34.6	(6.3)	28.3	13
RETIREMENTS.	89.3	20.8	68.5	5
ASSETS, END OF YEAR. . . .	4 052.1	1 318.4	2 733.8	1
DEPRECIATION CHARGES . . .	312.4	65.2	247.3	1
RENTAL PAYMENTS.	63.1	21.6	41.5	4
	MISSOURI			
ASSETS, BEGINNING OF YEAR.	6 549.6	1 894.8	4 654.8	1
CAPITAL EXPEND., NEW . .	798.4	138.2	660.2	3
CAPITAL EXPEND., USED. .	49.5	22.7	26.8	5
RETIREMENTS.	187.1	27.8	159.4	5
ASSETS, END OF YEAR. . . .	7 210.5	2 027.9	5 182.3	1
DEPRECIATION CHARGES . . .	446.7	76.2	370.5	3
RENTAL PAYMENTS.	116.3	53.5	62.8	4
	MONTANA			
ASSETS, BEGINNING OF YEAR.	1 040.2	244.6	795.7	2
CAPITAL EXPEND., NEW . .	117.5	29.7	87.8	5
CAPITAL EXPEND., USED. .	(8.5)	2.0	(6.5)	30
RETIREMENTS.	28.2	10.7	17.5	4
ASSETS, END OF YEAR. . . .	1 138.0	265.5	872.6	2
DEPRECIATION CHARGES . . .	51.7	7.6	44.0	3
RENTAL PAYMENTS.	(4.2)	(S)	(S)	43
	NEBRASKA			
ASSETS, BEGINNING OF YEAR.	1 688.7	514.8	1 173.9	1
CAPITAL EXPEND., NEW . .	187.5	42.0	145.6	11
CAPITAL EXPEND., USED. .	27.1	(3.2)	23.9	5
RETIREMENTS.	59.2	12.9	46.3	3
ASSETS, END OF YEAR. . . .	1 844.3	547.1	1 297.1	1
DEPRECIATION CHARGES . . .	113.0	21.4	91.6	2
RENTAL PAYMENTS.	47.0	(10.2)	36.7	5
	NEVADA			
ASSETS, BEGINNING OF YEAR.	327.6	72.1	255.4	4
CAPITAL EXPEND., NEW . .	48.7	(12.5)	36.2	13
CAPITAL EXPEND., USED. .	(3.8)	(.1)	(3.7)	51
RETIREMENTS.	13.3	3.1	10.2	7
ASSETS, END OF YEAR. . . .	366.8	81.6	284.8	4
DEPRECIATION CHARGES . . .	26.3	3.3	23.0	3
RENTAL PAYMENTS.	9.6	5.1	(4.5)	11
	NEW HAMPSHIRE			
ASSETS, BEGINNING OF YEAR.	1 240.4	366.3	874.1	1
CAPITAL EXPEND., NEW . .	161.7	(46.6)	115.0	7
CAPITAL EXPEND., USED. .	(8.3)	(3.6)	4.7	21
RETIREMENTS.	50.8	9.4	41.4	10
ASSETS, END OF YEAR. . . .	1 359.5	407.0	952.5	1
DEPRECIATION CHARGES . . .	92.7	17.5	75.2	3
RENTAL PAYMENTS.	27.2	10.7	16.5	9
	NEW JERSEY			
ASSETS, BEGINNING OF YEAR.	13 958.0	4 103.7	9 854.2	1
CAPITAL EXPEND., NEW . .	1 421.5	296.5	1 125.0	1
CAPITAL EXPEND., USED. .	129.6	(31.9)	97.7	9
RETIREMENTS.	500.8	92.7	408.2	3
ASSETS, END OF YEAR. . . .	15 008.2	4 339.3	10 668.7	1
DEPRECIATION CHARGES . . .	920.8	169.6	751.2	2
RENTAL PAYMENTS.	317.8	179.9	137.5	3
	NEW MEXICO			
ASSETS, BEGINNING OF YEAR.	765.5	158.5	607.0	2
CAPITAL EXPEND., NEW . .	75.6	20.9	54.7	7
CAPITAL EXPEND., USED. .	(6.8)	(1.7)	(5.2)	32
RETIREMENTS.	(17.3)	(1.8)	(15.6)	27
ASSETS, END OF YEAR. . . .	830.7	179.3	651.2	2
DEPRECIATION CHARGES . . .	59.2	7.9	51.3	4
RENTAL PAYMENTS.	(15.1)	(7.4)	(7.7)	22
	NEW YORK			
ASSETS, BEGINNING OF YEAR.	22 526.4	6 351.1	16 175.2	1
CAPITAL EXPEND., NEW . .	2 640.9	473.3	2 167.6	1
CAPITAL EXPEND., USED. .	179.1	41.3	137.8	6
RETIREMENTS.	1 189.2	213.2	974.3	2
ASSETS, END OF YEAR. . . .	24 157.2	6 650.4	17 506.3	1
DEPRECIATION CHARGES . . .	1 473.7	270.0	1 203.8	1
RENTAL PAYMENTS.	681.8	413.2	268.1	2
	NORTH CAROLINA			
ASSETS, BEGINNING OF YEAR.	13 460.1	3 522.6	9 937.7	1
CAPITAL EXPEND., NEW . .	1 398.0	251.2	1 146.8	1
CAPITAL EXPEND., USED. .	180.7	33.3	147.5	4
RETIREMENTS.	664.0	119.8	544.2	2
ASSETS, END OF YEAR. . . .	14 374.8	3 687.2	10 687.8	1
DEPRECIATION CHARGES . . .	991.6	179.7	811.9	2
RENTAL PAYMENTS.	174.5	73.9	100.6	4
	NORTH DAKOTA			
ASSETS, BEGINNING OF YEAR.	343.3	98.8	244.5	6
CAPITAL EXPEND., NEW . .	52.5	(14.8)	37.7	9
CAPITAL EXPEND., USED. .	(2.6)	(1.1)	(1.4)	34
RETIREMENTS.	6.2	(1.0)	5.2	11
ASSETS, END OF YEAR. . . .	392.1	113.7	278.5	5
DEPRECIATION CHARGES . . .	25.5	(6.7)	18.8	6
RENTAL PAYMENTS.	5.0	(2.9)	2.1	11
	OHIO			
ASSETS, BEGINNING OF YEAR.	29 433.6	7 127.6	22 305.7	1
CAPITAL EXPEND., NEW . .	2 828.9	445.1	2 383.7	1
CAPITAL EXPEND., USED. .	167.3	(66.5)	100.8	12
RETIREMENTS.	1 107.7	145.3	962.7	2
ASSETS, END OF YEAR. . . .	31 322.1	7 493.8	23 827.7	1
DEPRECIATION CHARGES . . .	1 853.5	268.7	1 584.8	1
RENTAL PAYMENTS.	430.0	176.2	253.3	3
	OKLAHOMA			
ASSETS, BEGINNING OF YEAR.	3 398.2	937.9	2 460.3	1
CAPITAL EXPEND., NEW . .	490.1	97.5	392.6	3
CAPITAL EXPEND., USED. .	24.6	5.9	18.7	6
RETIREMENTS.	81.7	31.6	50.2	3
ASSETS, END OF YEAR. . . .	3 831.2	1 009.6	2 821.5	1
DEPRECIATION CHARGES . . .	247.5	41.7	205.8	2
RENTAL PAYMENTS.	51.4	21.0	30.5	4
	OREGON			
ASSETS, BEGINNING OF YEAR.	4 401.6	886.8	3 514.9	1
CAPITAL EXPEND., NEW . .	581.5	86.7	494.8	3
CAPITAL EXPEND., USED. .	51.0	7.8	43.2	12
RETIREMENTS.	166.8	28.4	138.5	5
ASSETS, END OF YEAR. . . .	4 867.3	952.9	3 914.4	1
DEPRECIATION CHARGES . . .	375.0	(56.3)	318.7	2
RENTAL PAYMENTS.	90.6	43.3	47.1	7
	PENNSYLVANIA			
ASSETS, BEGINNING OF YEAR.	27 574.6	6 662.9	20 912.0	1
CAPITAL EXPEND., NEW . .	2 381.9	432.8	1 949.1	1
CAPITAL EXPEND., USED. .	137.6	(40.7)	96.9	8
RETIREMENTS.	842.0	190.9	651.3	2
ASSETS, END OF YEAR. . . .	29 252.1	6 945.6	22 305.8	1
DEPRECIATION CHARGES . . .	1 490.8	267.8	1 222.9	1
RENTAL PAYMENTS.	395.4	156.4	238.6	3
	RHODE ISLAND			
ASSETS, BEGINNING OF YEAR.	1 347.5	367.6	980.0	1
CAPITAL EXPEND., NEW . .	166.7	(41.5)	125.3	4
CAPITAL EXPEND., USED. .	13.7	(5.9)	7.8	13
RETIREMENTS.	(61.0)	(10.3)	(50.7)	17
ASSETS, END OF YEAR. . . .	1 466.9	404.6	1 062.4	1
DEPRECIATION CHARGES . . .	104.8	16.5	88.3	9
RENTAL PAYMENTS.	39.9	24.0	15.9	4
	SOUTH CAROLINA			
ASSETS, BEGINNING OF YEAR.	8 476.2	1 973.0	6 503.3	1
CAPITAL EXPEND., NEW . .	785.1	135.1	650.0	2
CAPITAL EXPEND., USED. .	56.0	(7.7)	48.3	11
RETIREMENTS.	222.1	31.5	190.8	2
ASSETS, END OF YEAR. . . .	9 095.3	2 084.4	7 010.8	1
DEPRECIATION CHARGES . . .	550.7	83.8	466.9	1
RENTAL PAYMENTS.	77.9	28.9	49.0	5

See footnotes at end of table.

Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	SOUTH DAKOTA				VIRGINIA			
ASSETS, BEGINNING OF YEAR.	343.4	116.4	227.1	3	7 828.1	2 178.6	5 649.4	1
CAPITAL EXPEND., NEW . .	32.1	(6.5)	25.7	11	966.2	174.3	791.9	2
CAPITAL EXPEND., USED. .	(3.1)	.7	(2.4)	31	(58.9)	(18.5)	40.4	15
RETIREMENTS.	8.2	(1.3)	6.9	6	228.6	60.7	168.0	2
ASSETS, END OF YEAR. . . .	370.5	122.3	248.2	3	8 624.6	2 310.8	6 313.7	1
DEPRECIATION CHARGES . . .	25.8	5.4	20.4	3	501.0	88.3	412.7	1
RENTAL PAYMENTS.	6.9	2.3	4.6	11	111.2	40.8	70.3	3
	TENNESSEE				WASHINGTON			
ASSETS, BEGINNING OF YEAR.	9 380.4	2 287.0	7 093.3	1	7 351.1	2 108.4	5 242.8	1
CAPITAL EXPEND., NEW . .	1 032.0	179.3	852.7	2	951.7	159.4	792.3	2
CAPITAL EXPEND., USED. .	65.5	13.4	52.1	4	93.1	15.0	78.1	5
RETIREMENTS.	337.9	58.4	279.5	2	264.2	(65.0)	199.4	8
ASSETS, END OF YEAR. . . .	10 140.0	2 421.3	7 718.6	1	8 131.7	2 217.8	5 913.8	1
DEPRECIATION CHARGES . . .	669.3	111.9	557.4	1	461.0	93.1	368.0	2
RENTAL PAYMENTS.	137.8	50.7	87.1	3	100.9	44.1	56.9	4
	TEXAS				WEST VIRGINIA			
ASSETS, BEGINNING OF YEAR.	31 998.1	7 396.3	24 601.8	1	4 650.6	796.3	3 854.3	1
CAPITAL EXPEND., NEW . .	4 949.7	829.5	4 120.2	1	408.7	53.3	355.5	2
CAPITAL EXPEND., USED. .	162.6	37.9	125.5	5	24.1	2.0	22.2	5
RETIREMENTS.	915.2	163.7	752.0	2	179.2	25.8	153.4	2
ASSETS, END OF YEAR. . . .	36 195.7	8 100.0	28 095.4	1	4 904.3	825.7	4 078.5	1
DEPRECIATION CHARGES . . .	2 116.8	352.0	1 764.8	1	249.6	31.4	218.2	1
RENTAL PAYMENTS.	393.2	146.7	246.0	3	33.8	11.4	22.4	6
	UTAH				WISCONSIN			
ASSETS, BEGINNING OF YEAR.	1 433.9	334.9	1 098.9	1	9 302.8	2 672.2	6 630.6	1
CAPITAL EXPEND., NEW . .	387.7	(58.0)	329.7	3	1 159.9	205.6	954.3	2
CAPITAL EXPEND., USED. .	(10.0)	1.7	(8.3)	17	96.1	(28.9)	67.2	8
RETIREMENTS.	(40.7)	(13.2)	27.6	19	299.7	45.4	254.6	5
ASSETS, END OF YEAR. . . .	1 790.8	381.5	1 409.3	1	10 259.1	2 861.4	7 397.5	1
DEPRECIATION CHARGES . . .	89.3	14.6	74.7	3	617.1	113.4	503.7	1
RENTAL PAYMENTS.	22.5	(10.9)	11.6	8	171.9	66.2	105.7	2
	VERMONT				WYOMING			
ASSETS, BEGINNING OF YEAR.	738.3	200.4	538.0	3	397.2	99.2	298.0	3
CAPITAL EXPEND., NEW . .	102.6	17.3	85.4	7	(28.9)	(4.8)	24.1	15
CAPITAL EXPEND., USED. .	6.7	1.9	4.9	9	4.7	.1	4.6	11
RETIREMENTS.	(35.2)	(5.7)	(29.5)	23	8.2	1.6	6.6	6
ASSETS, END OF YEAR. . . .	812.5	213.9	598.7	2	422.5	102.5	320.1	3
DEPRECIATION CHARGES . . .	68.5	9.8	58.7	4	22.4	5.0	17.4	5
RENTAL PAYMENTS.	8.8	(3.2)	5.6	11	4.1	(.9)	3.2	6

Note: Expenditures data, shown in table 3a, are census universe figures and may differ from ASM sample estimates shown in this table. Table 3b figures represent best estimate of year-to year change as measured by continuing ASM sample, but are subject to sampling errors. Hence, as estimates of level, they are not as reliable as universe figures.
Figures in parentheses have standard errors of 15 percent or more. (S) Withheld because the estimate did not meet publication standards.

[1]For description of the standard error of estimate, see the section "Qualifications of the Data" in appendix B.
[2]Total figures may differ slightly from sum of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State.

Table 3c. **Cost of Purchased Services by State: 1977**

	Repair of buildings			Repair of machinery			Communication services		
	Cost (million dollars)	Response coverage ratio	Standard error of estimate (percent)	Cost (million dollars)	Response coverage ratio	Standard error of estimate (percent)	Cost (million dollars)	Response coverage ratio	Standard error of estimate (percent)
United States	2,300.2	61	(NA)	9,569.2	59	(NA)	3,576.7	63	(NA)
Alabama	35.8	57	5	219.2	58	11	41.5	62	13
Alaska	(4.0)	52	23	(17.0)	54	50	(1.0)	55	43
Arizona	(120.9)	63	20	(166.9)	61	46	(44.6)	67	30
Arkansas	(12.0)	58	17	81.3	58	10	30.5	59	11
California	(357.8)	63	(A)	(1,183.8)	63	25	(370.9)	62	49
Colorado	13.2	61	8	(64.0)	63	(A)	(25.4)	61	(A)
Connecticut	29.4	65	1	100.2	65	2	(101.1)	67	(A)
Delaware	6.2	55	9	30.4	54	9	(6.2)	61	19
District of Columbia	1.8	70	10	4.0	70	13	5.2	70	12
Florida	29.4	63	8	198.1	64	7	72.6	64	10
Georgia	38.4	57	13	(221.1)	59	(A)	(48.6)	61	(A)
Hawaii	(1.8)	60	33	(10.8)	59	57	(2.0)	62	49
Idaho	(3.1)	57	35	(26.5)	59	23	(5.3)	62	25
Illinois	(140.3)	62	42	(726.9)	64	25	(205.0)	64	25
Indiana	(106.4)	63	(A)	(572.3)	62	22	(89.8)	68	(A)
Iowa	24.4	60	5	(94.5)	62	(A)	(33.8)	68	(A)
Kansas	(15.6)	65	55	(78.7)	66	(A)	(25.7)	67	(A)
Kentucky	25.7	62	6	130.1	63	10	(31.9)	57	(A)
Louisana	36.3	60	9	279.3	60	7	(27.3)	61	(A)
Maine	(7.0)	58	15	(32.7)	58	21	9.5	57	13
Maryland	20.3	62	8	(71.8)	66	(A)	(36.2)	72	(A)
Massachusetts	(52.2)	60	54	(145.0)	61	20	(127.7)	64	27
Michigan	99.6	64	5	573.7	59	3	(109.1)	62	(A)
Minnesota	33.3	61	6	(95.7)	61	(A)	(50.8)	60	58
Mississippi	11.1	62	11	(80.2)	62	(A)	(18.9)	65	(A)
Missouri	89.2	63	4	264.6	61	6	382.2	62	2
Montana	(1.6)	60	25	(22.2)	57	18	(2.2)	59	37
Nebraska	(5.5)	61	19	(27.6)	63	16	(11.5)	61	43
Nevada	(.4)	60	75	(5.6)	59	33	(1.4)	57	55
New Hampshire	6.2	56	12	(19.6)	62	16	(14.4)	57	15
New Jersey	72.0	61	6	(227.6)	61	46	(119.3)	60	(A)
New Mexico	(1.4)	60	38	(8.3)	66	32	(3.5)	51	31
New York	115.0	64	7	(335.6)	64	77	(310.7)	65	67
North Carolina	52.2	59	5	247.4	59	14	(107.7)	62	33
North Dakota	(1.8)	67	15	(5.6)	63	66	(3.0)	65	24
Ohio	126.0	62	8	(599.8)	61	44	(167.6)	66	79
Oklahoma	(10.5)	61	(A)	(80.1)	62	(A)	(18.6)	62	(A)
Oregon	(12.4)	59	31	(86.1)	59	(A)	(21.3)	58	(A)
Pennsylvania	(126.3)	61	26	464.3	61	13	(181.2)	64	42
Rhode Island	7.6	64	13	26.6	66	14	14.9	65	13
South Carolina	(31.0)	55	(A)	335.9	57	10	(92.5)	65	(A)
South Dakota	(1.0)	48	33	(5.0)	54	26	(2.4)	53	33
Tennessee	90.2	60	5	309.3	58	6	(136.7)	62	29
Texas	(157.3)	61	27	(589.6)	62	49	(125.3)	62	38
Utah	(6.2)	60	22	37.0	59	14	(10.4)	64	21
Vermont	(5.2)	60	16	(10.4)	63	18	(7.0)	66	18
Virginia	45.3	59	6	(141.2)	59	(A)	(79.7)	65	44
Washington	23.3	60	1	(104.9)	60	21	(34.9)	62	99
West Virginia	13.6	60	12	54.7	59	10	(9.5)	63	(A)
Wisconsin	(66.8)	61	30	(348.1)	63	(A)	(118.3)	61	(A)
Wyoming	2.0	59	4	(4.2)	58	(A)	(.8)	56	45

Note: Figures in parenthesis have standard errors of 15 percent or more. Figures are estimates collected on the continuing ASM sample and, as such, are subject to sampling errors.

(A) Indicates standard errors of 100 percent or more. These estimates are of limited reliability and should be used with caution.
(NA) Not available.

[1]Total figures may differ slightly from summation of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State.

Table 4. Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																				
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	--
ALABAMA	5 863	385	3	180	345	1 957	169	80	490	145	40	102	11	328	158	437	489	115	158	57	135	79
1 TO 4 EMPLOYEES	2 757	116	-	25	53	1 407	65	14	288	39	15	23	8	132	29	122	224	36	60	24	63	14
5 TO 9 EMPLOYEES	626	49	-	8	14	164	21	2	67	22	5	18	1	34	9	57	74	16	23	9	23	10
10 TO 19 EMPLOYEES	625	38	-	11	24	135	21	11	59	23	3	20	-	54	18	65	79	10	14	8	20	12
20 TO 49 EMPLOYEES	670	60	-	22	30	119	22	14	42	26	9	17	1	63	23	88	60	11	18	6	15	24
50 TO 99 EMPLOYEES	410	54	-	16	51	75	18	10	21	12	4	8	-	22	17	44	21	13	12	3	4	5
100 TO 249 EMPLOYEES	440	40	-	47	104	49	15	9	9	10	4	7	-	18	29	33	21	16	13	4	6	6
250 TO 499 EMPLOYEES	205	23	3	27	48	6	7	9	3	6	-	1	-	4	17	22	6	6	6	3	2	6
500 TO 999 EMPLOYEES	91	5	-	18	17	2	-	7	1	4	-	3	1	1	7	5	4	4	8	-	2	2
1000 TO 2499 EMPLOYEES	32	-	-	6	4	-	-	3	-	3	-	4	-	-	5	1	-	2	4	-	-	-
2500 EMPLOYEES AND OVER	7	-	-	-	-	-	-	1	-	-	-	1	-	-	4	-	-	1	-	-	-	-
ALASKA	429	118	-	1	10	82	4	2	61	6	6	5	-	33	1	16	26	1	13	3	27	14
1 TO 4 EMPLOYEES	187	30	-	1	6	34	2	-	33	-	2	3	-	22	-	7	14	-	5	-	19	9
5 TO 9 EMPLOYEES	64	8	-	-	3	6	-	-	9	3	-	2	-	3	1	1	9	1	7	2	5	4
10 TO 19 EMPLOYEES	50	10	-	-	1	8	1	-	11	-	-	-	-	5	-	8	3	-	-	-	3	-
20 TO 49 EMPLOYEES	62	30	-	-	-	16	-	-	6	1	4	-	-	2	-	-	-	-	1	1	-	1
50 TO 99 EMPLOYEES	39	24	-	-	-	12	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-
100 TO 249 EMPLOYEES	23	15	-	-	-	6	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
250 TO 499 EMPLOYEES	2	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
500 TO 999 EMPLOYEES	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ARIZONA	2 892	194	-	7	117	211	103	29	478	82	14	103	27	204	64	261	380	159	100	78	219	62
1 TO 4 EMPLOYEES	1 444	90	-	3	47	113	46	13	286	43	8	50	16	92	20	123	190	61	53	45	136	9
5 TO 9 EMPLOYEES	397	17	-	1	12	17	15	3	67	13	-	24	3	33	7	33	62	29	15	12	26	8
10 TO 19 EMPLOYEES	374	23	-	1	19	21	21	3	59	9	3	10	2	28	1	43	51	19	9	8	31	13
20 TO 49 EMPLOYEES	353	27	-	1	11	24	20	5	43	10	2	9	2	27	13	39	51	18	14	4	18	15
50 TO 99 EMPLOYEES	152	24	-	1	8	19	2-	3	13	2	1	5	2	14	7	13	12	11	2	5	4	6
100 TO 249 EMPLOYEES	113	10	-	-	15	15	1	1	8	4	-	5	2	10	4	7	6	10	4	2	3	6
250 TO 499 EMPLOYEES	31	3	-	-	4	2	-	-	-	-	-	-	-	1-	7	3	2	4	1	1	1	3
500 TO 999 EMPLOYEES	15	-	-	-	1	-	-	1	1	1	-	-	-	1-	4	-	3	3	-	-	-	1
1000 TO 2499 EMPLOYEES	6	-	-	-	-	-	-	-	1	-	-	-	-	1-	1	-	2	1	-	-	-	1
2500 EMPLOYEES AND OVER	7	-	-	-	-	-	-	-	-	-	-	-	-	1-	-	-	1	3	2	1	-	-
ARKANSAS	3 595	353	-	18	124	1 076	124	68	363	87	23	98	35	240	52	216	301	90	121	27	100	79
1 TO 4 EMPLOYEES	1 698	109	-	4	31	705	47	9	206	34	7	36	5	93	12	78	167	29	48	11	51	16
5 TO 9 EMPLOYEES	383	30	-	-	6	97	14	4	46	12	5	4	2	54	4	21	30	8	20	5	13	12
10 TO 19 EMPLOYEES	413	44	-	2	3	94	12	5	42	11	-	15	-	49	-	39	39	6	18	5	13	16
20 TO 49 EMPLOYEES	379	57	-	1	10	81	13	15	46	9	4	10	3	23	5	30	27	9	15	-	8	13
50 TO 99 EMPLOYEES	251	46	-	-	22	51	15	12	10	8	3	11	2	10	9	10	8	12	8	-	4	10
100 TO 249 EMPLOYEES	265	41	-	4	32	37	9	13	8	8	1	8	10	10	17	17	15	9	5	4	6	11
250 TO 499 EMPLOYEES	135	17	-	3	18	9	8	5	4	2	2	10	10	1	2	15	12	7	4	-	5	1
500 TO 999 EMPLOYEES	49	8	-	4	2	2	3	3	-	1	1	2	3	-	3	5	2	8	1	1	-	-
1000 TO 2499 EMPLOYEES	20	1	-	-	-	-	3	2	1	2	-	2	-	-	-	1	1	5	2	-	-	-
2500 EMPLOYEES AND OVER	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-
CALIFORNIA	45 289	2 604	6	419	4 288	2 731	1 752	580	5 905	1 463	225	1 762	302	1 750	794	4 366	6 711	3 047	1 906	1 458	2 262	958
1 TO 4 EMPLOYEES	19 140	820	4	139	1 628	1 228	669	120	3 525	542	76	615	135	671	191	1 561	3 280	1 074	793	587	1 268	214
5 TO 9 EMPLOYEES	6 688	288	2	53	688	434	242	59	808	203	45	271	34	272	113	662	1 162	434	250	223	299	146
10 TO 19 EMPLOYEES	6 578	373	-	67	717	372	271	80	672	232	26	231	38	294	132	747	991	408	237	218	303	169
20 TO 49 EMPLOYEES	6 609	456	-	75	760	363	313	116	557	257	34	317	45	297	143	794	758	464	256	189	237	178
50 TO 99 EMPLOYEES	2 996	266	-	46	294	166	129	78	184	120	14	193	19	108	103	315	235	268	162	109	88	99
100 TO 249 EMPLOYEES	2 141	227	-	27	162	131	99	102	108	75	16	96	23	72	85	211	170	224	96	75	50	92
250 TO 499 EMPLOYEES	703	120	-	9	34	32	24	21	32	21	4	29	6	22	17	54	69	91	47	34	11	26
500 TO 999 EMPLOYEES	279	44	-	3	4	4	5	4	14	9	6	5	2	12	6	15	30	49	26	15	4	22
1000 TO 2499 EMPLOYEES	114	9	-	-	1	1	-	-	4	4	4	5	-	2	3	7	14	23	17	7	1	12
2500 EMPLOYEES AND OVER	41	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	2	12	22	1	1	-
COLORADO	3 948	383	-	16	149	282	127	40	747	116	19	140	45	256	61	318	517	158	113	121	260	80
1 TO 4 EMPLOYEES	1 905	137	-	9	82	157	64	8	456	56	6	55	27	106	16	116	253	63	59	64	152	19
5 TO 9 EMPLOYEES	569	49	-	1	12	39	22	1	103	19	4	28	6	46	7	51	84	24	13	14	35	11
10 TO 19 EMPLOYEES	513	61	-	2	14	37	13	10	76	17	2	16	1	33	15	53	68	22	14	14	29	16
20 TO 49 EMPLOYEES	492	55	-	4	19	23	17	6	75	11	2	30	4	38	14	52	54	23	13	10	30	12
50 TO 99 EMPLOYEES	210	25	-	-	11	14	8	8	15	7	2	9	4	17	2	23	30	8	3	8	9	7
100 TO 249 EMPLOYEES	171	40	-	-	9	10	2	6	14	5	3	-	2	11	4	16	18	14	6	2	2	7
250 TO 499 EMPLOYEES	50	11	-	-	2	2	1	1	5	1	-	-	-	4	2	3	6	1	2	3	1	5
500 TO 999 EMPLOYEES	16	3	-	-	-	-	-	-	2	-	-	-	-	-	-	2	3	-	2	2	2	-
1000 TO 2499 EMPLOYEES	15	1	-	-	-	-	-	-	1	-	-	1	1	1	-	1	1	3	-	2	-	3
2500 EMPLOYEES AND OVER	7	1	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-	1	2	-	-
CONNECTICUT	6 485	234	5	104	265	197	113	108	852	173	33	255	33	207	229	1 007	1 341	423	169	209	282	246
1 TO 4 EMPLOYEES	2 295	94	-	20	70	110	44	19	432	59	19	78	15	80	46	281	550	129	55	51	118	25
5 TO 9 EMPLOYEES	932	34	-	12	23	32	16	7	114	23	5	32	2	33	38	166	251	43	20	21	34	26
10 TO 19 EMPLOYEES	892	29	1	8	31	27	11	17	110	25	5	35	4	35	23	142	227	45	16	29	42	30
20 TO 49 EMPLOYEES	1 068	33	2	20	66	21	20	23	106	37	1	45	5	34	46	210	170	62	30	42	40	55
50 TO 99 EMPLOYEES	533	22	2	10	48	6	9	20	47	14	-	35	3	14	19	95	57	48	14	19	18	33
100 TO 249 EMPLOYEES	447	11	-	22	21	1	8	17	30	5	3	23	3	7	33	77	42	47	10	25	16	46
250 TO 499 EMPLOYEES	177	9	-	9	3	-	5	3	9	3	-	5	-	3	15	22	21	28	8	13	7	14
500 TO 999 EMPLOYEES	101	2	-	3	3	-	-	2	4	4	-	1	1	1	9	9	16	19	5	6	6	10
1000 TO 2499 EMPLOYEES	27	-	-	-	-	-	-	-	-	2	-	1	-	-	-	5	4	2	4	2	1	6
2500 EMPLOYEES AND OVER	13	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	3	-	7	1	-	1
DELAWARE	619	69	-	13	27	36	9	17	97	46	13	35	5	39	9	47	58	12	12	13	31	31
1 TO 4 EMPLOYEES	229	16	-	3	8	18	8	3	43	13	4	4	3	17	2	13	31	5	5	6	20	7
5 TO 9 EMPLOYEES	72	7	-	2	3	8	-	1	21	2	6	1	-	4	-	7	5	-	1	1	3	-
10 TO 19 EMPLOYEES	87	10	-	-	2	4	-	-	19	3	-	4	-	7	1	12	10	2	-	1	7	5
20 TO 49 EMPLOYEES	87	15	-	2	6	4	-	5	10	6	1	10	-	9	-	5	7	2	-	-	-	5
50 TO 99 EMPLOYEES	59	8	-	1	5	1	-	5	1	10	1	8	1	1	1	6	2	2	1	2	-	3
100 TO 249 EMPLOYEES	43	6	-	4	3	1	1	2	2	3	-	7	-	1	4	3	1	-	2	1	-	2
250 TO 499 EMPLOYEES	19	4	-	1	-	-	-	-	-	4	-	1	1	-	-	1	1	1	1	1	1	2
500 TO 999 EMPLOYEES	11	2	-	-	-	-	-	-	1	4	1	-	-	-	-	-	1	-	-	1	-	1
1000 TO 2499 EMPLOYEES	6	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	3
2500 EMPLOYEES AND OVER	6	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	3
DISTRICT OF COLUMBIA	555	15	-	-	14	8	11	4	341	8	1	1	-	4	-	19	11	9	1	4	17	87
1 TO 4 EMPLOYEES	246	4	-	-	7	4	2	1	153	4	1	-	-	2	-	8	5	4	1	3	10	37
5 TO 9 EMPLOYEES	97	2	-	-	2	2	5	1	50	3	-	-	-	-	-	5	1	2	-	-	1	23
10 TO 19 EMPLOYEES	82	2	-	-	5	-	3	-	53	-	-	1	-	-	-	1	3	2	-	-	2	10
20 TO 49 EMPLOYEES	79	3	-	-	-	2	1	1	52	-	-	-	-	1	-	1	1	1	-	1	4	11
50 TO 99 EMPLOYEES	28	1	-	-	-	-	-	-	19	-	-	-	-	1	-	2	-	-	-	-	-	5
100 TO 249 EMPLOYEES	12	2	-	-	-	-	-	-	5	1	-	-	-	-	-	2	1	-	-	-	-	1
250 TO 499 EMPLOYEES	5	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-
500 TO 999 EMPLOYEES	2	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
1000 TO 2499 EMPLOYEES	3	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 4. Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	--
FLORIDA	12 399	822	49	119	1 279	1 315	546	156	1 967	464	59	414	80	700	110	976	1 049	506	668	246	669	205
1 TO 4 EMPLOYEES	6 087	283	28	55	535	777	273	39	1 254	182	24	186	32	303	37	405	554	209	315	128	414	54
5 TO 9 EMPLOYEES	1 838	121	5	10	184	191	86	24	267	80	12	70	10	92	10	160	173	82	98	30	96	37
10 TO 19 EMPLOYEES	1 559	93	5	20	167	138	65	21	200	64	10	51	12	117	14	143	134	56	86	36	85	42
20 TO 49 EMPLOYEES	1 539	124	2	17	219	122	74	21	157	72	10	62	7	132	21	148	112	54	83	19	45	38
50 TO 99 EMPLOYEES	682	78	3	11	103	59	30	17	51	25	2	31	10	36	11	63	41	31	34	11	14	21
100 TO 249 EMPLOYEES	456	76	1	4	58	27	15	21	21	22	1	8	4	13	14	45	24	38	27	15	15	7
250 TO 499 EMPLOYEES	145	34	4	1	12	1	3	4	8	12	-	3	4	4	2	8	7	16	14	4	1-	4
500 TO 999 EMPLOYEES	60	11	1	-	1	-	-	7	5	5	-	2	1	3	1	4	2	8	5	3	1-	1
1000 TO 2499 EMPLOYEES	27	2	-	1	-	-	-	2	4	1	-	1	-	-	-	-	2	10	3	-	1-	1
2500 EMPLOYEES AND OVER	6	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	3	-	1-	-
GEORGIA	8 623	604	4	691	622	2 189	228	177	934	335	52	210	36	491	85	464	624	165	169	75	207	261
1 TO 4 EMPLOYEES	3 716	182	2	129	98	1 555	79	22	535	88	13	59	9	168	20	170	282	54	64	31	96	60
5 TO 9 EMPLOYEES	1 001	66	-	57	27	215	32	18	131	50	18	22	1	84	8	38	92	24	23	9	34	52
10 TO 19 EMPLOYEES	1 000	71	-	74	40	170	23	23	110	51	8	23	7	91	10	76	97	13	21	14	30	48
20 TO 49 EMPLOYEES	1 111	101	-	89	93	115	48	36	98	70	8	43	4	86	16	96	83	19	22	8	24	52
50 TO 99 EMPLOYEES	672	67	-	85	114	76	23	24	31	37	2	30	3	32	9	37	31	19	16	5	9	22
100 TO 249 EMPLOYEES	648	60	-	116	158	48	16	26	20	28	3	24	8	21	11	31	26	15	8	3	8	18
250 TO 499 EMPLOYEES	300	41	2	74	73	10	6	12	6	7	-	4	3	6	6	10	10	15	3	3	5	4
500 TO 999 EMPLOYEES	124	14	-	45	16	1-	1	12	2	4	-	3	1	2	1	6	3	3	6	2	-	3
1000 TO 2499 EMPLOYEES	44	2	-	21	3	1-	-	4	1	-	-	2	-	1	3	-	-	3	2	-	1	1
2500 EMPLOYEES AND OVER	7	-	-	1	-	1-	-	-	-	-	-	-	-	-	1	-	-	-	4	-	-	1
HAWAII	949	220	-	3	157	43	30	13	157	22	3	12	11	53	3	36	38	13	21	7	83	24
1 TO 4 EMPLOYEES	416	77	-	1	50	19	10	5	85	12	-	4	4	26	2	12	22	10	14	5	48	10
5 TO 9 EMPLOYEES	155	38	-	2	23	9	6	1	30	3	-	1	6	5	-	8	10	1	1-	-	10	2
10 TO 19 EMPLOYEES	147	42	-	-	29	7	8	2	15	2	1	3	-	8	-	7	3	1	3	1	14	3
20 TO 49 EMPLOYEES	124	26	-	-	33	7	4	4	16	4	-	3	-	6	-	4	3	1	2	1	8	2
50 TO 99 EMPLOYEES	58	11	-	-	17	1	1	1	9	-	1	1	1	9	-	3	-	-	-	-	-	3
100 TO 249 EMPLOYEES	34	18	-	-	3	-	1	-	1	1	1	-	-	1	1	1	-	-	1	-	2	3
250 TO 499 EMPLOYEES	8	3	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-
500 TO 999 EMPLOYEES	6	4	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
1000 TO 2499 EMPLOYEES	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IDAHO	1 495	184	-	5	17	585	20	13	175	24	2	19	6	83	10	73	129	8	49	14	47	32
1 TO 4 EMPLOYEES	732	59	-	3	13	265	9	5	109	11	1	7	4	34	4	39	87	4	27	9	31	11
5 TO 9 EMPLOYEES	198	18	-	1	1	86	2	2	25	5	-	4	1	13	1	6	13	1	6	1	7	5
10 TO 19 EMPLOYEES	186	22	-	-	1	85	4	-	20	2	-	2	-	20	1	8	8	1	4	2	4	2
20 TO 49 EMPLOYEES	175	28	-	-	-	71	5	-	12	2	1	4	1	8	2	15	14	-	3	2	2	5
50 TO 99 EMPLOYEES	80	20	-	-	-	30	-	4	4	-	-	1	-	5	-	4	1	-	4	-	2	5
100 TO 249 EMPLOYEES	78	20	-	-	2	37	-	1	4	1	-	-	-	3	-	-	4	-	5	-	-	1
250 TO 499 EMPLOYEES	29	10	-	1	-	9	-	-	1	1	-	-	-	-	2	-	1	1	-	-	1	2
500 TO 999 EMPLOYEES	12	4	-	-	-	1	-	1	-	2	-	1	-	-	-	1	-	1	-	-	-	1
1000 TO 2499 EMPLOYEES	5	3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
ILLINOIS	19 517	270	2	72	568	589	451	466	3 232	858	126	811	109	842	583	2 647	3 480	1 080	300	484	842	705
1 TO 4 EMPLOYEES	6 388	346	1	22	212	255	135	66	1 558	264	36	202	34	263	108	671	1 238	276	88	154	345	114
5 TO 9 EMPLOYEES	2 787	146	-	8	65	87	72	37	469	108	24	97	15	140	63	372	640	126	32	86	117	83
10 TO 19 EMPLOYEES	2 901	179	-	8	72	97	69	65	437	128	15	115	13	152	85	456	566	121	40	59	125	99
20 TO 49 EMPLOYEES	3 266	205	-	18	92	90	77	112	402	166	18	166	14	160	116	583	515	184	39	62	116	131
50 TO 99 EMPLOYEES	1 743	160	-	6	59	32	40	62	178	79	11	114	12	70	78	267	214	138	28	46	60	87
100 TO 249 EMPLOYEES	1 466	140	-	6	51	22	34	98	123	66	10	79	15	28	81	192	166	126	35	37	49	108
250 TO 499 EMPLOYEES	523	53	1	3	13	4	17	19	42	31	4	27	5	18	20	64	74	38	15	16	21	38
500 TO 999 EMPLOYEES	271	29	-	1	3	1	6	6	14	12	7	6	-	6	16	30	35	41	11	16	5	26
1000 TO 2499 EMPLOYEES	121	10	-	-	-	1	1	1	6	3	1	4	1	5	7	10	19	20	8	6	4	14
2500 EMPLOYEES AND OVER	51	2	-	-	1	-	-	-	3	1	-	1	-	-	9	2	13	10	4	2	-	3
INDIANA	8 061	555	2	19	186	697	242	179	984	245	57	383	31	523	283	931	1 386	329	448	129	267	185
1 TO 4 EMPLOYEES	2 691	162	1	5	64	266	63	27	527	77	20	91	9	172	43	249	502	84	120	48	128	33
5 TO 9 EMPLOYEES	1 008	62	-	2	16	92	24	14	130	46	6	34	1	91	29	102	220	30	39	16	31	23
10 TO 19 EMPLOYEES	1 133	68	-	6	17	118	27	17	113	33	10	54	3	106	27	131	249	29	46	21	30	28
20 TO 49 EMPLOYEES	1 334	107	-	2	25	109	43	41	127	38	11	71	5	73	57	200	217	43	71	16	41	37
50 TO 99 EMPLOYEES	717	66	-	-	23	60	35	29	45	19	2	60	8	33	33	98	84	29	51	7	11	24
100 TO 249 EMPLOYEES	659	56	1	2	25	41	28	41	24	16	5	42	-	25	50	88	64	46	56	8	17	24
250 TO 499 EMPLOYEES	283	19	-	2	13	9	13	9	11	5	1	17	5	14	18	45	23	28	29	8	6	8
500 TO 999 EMPLOYEES	136	13	-	-	3	2	7	1	4	6	1	9	-	6	10	15	16	22	12	3	1	5
1000 TO 2499 EMPLOYEES	72	2	-	-	-	-	2	-	3	3	1	5	-	3	12	2	9	8	15	2	2	3
2500 EMPLOYEES AND OVER	28	-	-	-	-	-	-	-	-	2	-	-	-	-	4	1	2	10	9	-	-	-
IOWA	3 783	591	-	9	78	174	65	56	775	135	15	110	17	372	77	293	564	95	102	51	142	62
1 TO 4 EMPLOYEES	1 490	176	-	1	27	71	26	9	441	54	5	30	5	159	18	84	202	30	37	29	74	12
5 TO 9 EMPLOYEES	518	70	-	-	10	34	11	4	97	22	4	17	-	74	9	37	70	12	13	4	20	10
10 TO 19 EMPLOYEES	530	87	-	1	8	29	5	6	101	20	1	14	3	62	9	54	82	9	14	4	11	10
20 TO 49 EMPLOYEES	517	99	-	2	8	19	8	10	84	14	4	16	3	49	12	45	81	9	10	7	19	18
50 TO 99 EMPLOYEES	293	69	-	2	5	14	8	11	30	11	1	16	2	13	10	27	41	7	12	1	8	5
100 TO 249 EMPLOYEES	261	49	-	2	18	4	4	11	15	8	-	10	4	12	12	30	48	16	10	1	4	3
250 TO 499 EMPLOYEES	91	19	-	-	1	2	1	4	4	5	-	1	-	3	5	10	20	3	4	3	4	2
500 TO 999 EMPLOYEES	48	16	-	1	1	-	2	1	1	1	-	2	-	-	1	3	9	5	1	2	1	1
1000 TO 2499 EMPLOYEES	25	5	-	-	-	1	-	-	2	-	-	3	-	-	-	2	9	1	-	-	1	1
2500 EMPLOYEES AND OVER	10	1	-	-	-	-	-	-	-	-	-	1	-	-	1	1	2	3	1	-	-	-
KANSAS	3 270	363	-	4	86	150	80	51	594	108	33	119	10	259	56	290	559	110	163	41	113	81
1 TO 4 EMPLOYEES	1 366	118	-	3	32	62	39	10	358	34	8	35	7	107	11	90	255	43	57	15	62	20
5 TO 9 EMPLOYEES	433	38	-	1	7	20	15	4	58	10	2	20	2	42	11	43	79	19	23	3	17	19
10 TO 19 EMPLOYEES	434	64	-	-	8	21	8	5	65	15	4	19	-	49	5	50	62	11	14	8	17	13
20 TO 49 EMPLOYEES	469	63	-	-	12	23	9	12	61	23	5	20	1	38	11	55	67	13	28	7	10	11
50 TO 99 EMPLOYEES	246	31	-	-	13	14	6	8	27	9	1	13	-	10	7	26	40	10	16	3	4	8
100 TO 249 EMPLOYEES	208	32	-	-	10	9	3	9	15	9	7	6	-	8	10	24	37	6	12	3	1	7
250 TO 499 EMPLOYEES	66	10	-	-	2	1	2	2	5	6	5	4	-	3	1-	1	9	4	6	3	1	2
500 TO 999 EMPLOYEES	32	5	-	-	1	-	-	1	5	2	1	1	-	1	1	1	6	3	1	1	1	1
1000 TO 2499 EMPLOYEES	10	2	-	-	1	-	-	-	-	-	-	-	-	1	-	-	4	1	1	-	-	-
2500 EMPLOYEES AND OVER	6	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	5	-	-	-
KENTUCKY	3 548	354	23	27	156	555	93	54	506	130	36	88	18	272	61	304	413	110	85	39	112	112
1 TO 4 EMPLOYEES	1 339	140	2	2	24	324	29	8	266	29	16	15	4	94	5	78	156	31	30	15	53	18
5 TO 9 EMPLOYEES	431	28	2	1	9	64	9	3	84	10	6	10	-	46	4	37	58	7	13	8	18	14
10 TO 19 EMPLOYEES	460	32	2	2	8	71	17	4	68	19	7	11	1	61	3	43	64	8	8	4	7	22
20 TO 49 EMPLOYEES	447	53	2	6	14	55	16	11	41	28	3	13	-	42	7	54	51	10	6	1	14	20
50 TO 99 EMPLOYEES	285	43	-	5	17	29	8	11	22	15	1	13	2	12	9	30	26	10	8	2	8	14
100 TO 249 EMPLOYEES	312	36	8	5	45	8	9	12	14	11	2	19	2	10	14	37	28	17	9	4	10	12
250 TO 499 EMPLOYEES	170	19	3	2	28	4	5	4	4	10	-	3	7	6	10	20	18	10	8	3	2	4
500 TO 999 EMPLOYEES	74	3	1	3	10	-	-	1	5	5	1	3	2	1	8	3	6	13	-	2	-	7
1000 TO 2499 EMPLOYEES	19	-	1	-	1	-	-	-	2	3	-	1	-	-	-	2	3	4	1	-	-	1
2500 EMPLOYEES AND OVER	11	-	2	1	-	-	-	-	-	-	-	-	-	-	1	-	3	2	2	-	-	-

See footnotes at end of table.

Table 4. Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	--
LOUISIANA	4 276	585	1	14	131	992	77	67	546	236	57	62	6	237	42	282	396	70	224	35	129	87
1 TO 4 EMPLOYEES	1 973	175	1	3	40	684	35	6	341	70	7	25	3	79	6	106	169	32	78	14	73	26
5 TO 9 EMPLOYEES	519	79	-	2	11	94	15	5	65	30	3	6	1	32	4	35	57	10	35	7	17	11
10 TO 19 EMPLOYEES	548	73	-	3	10	74	14	3	71	22	12	16	1	49	8	45	68	8	24	8	21	18
20 TO 49 EMPLOYEES	519	100	-	1	13	73	9	8	43	28	12	11	-	39	9	45	64	7	29	3	9	16
50 TO 99 EMPLOYEES	301	84	-	-	24	32	1	12	15	24	4	2	-	22	3	26	17	5	15	1	4	10
100 TO 249 EMPLOYEES	254	57	-	4	21	25	2	16	7	29	7	2	1	10	7	16	17	3	19	1	5	5
250 TO 499 EMPLOYEES	102	14	-	-	8	9	1	9	2	16	6	-	-	4	1	5	3	2	20	1	-	1
500 TO 999 EMPLOYEES	43	3	-	-	4	1	-	5	2	12	4	-	-	2	3	2	1	2	2	-	-	-
1000 TO 2499 EMPLOYEES	13	-	-	1	-	-	-	3	-	4	2	-	-	-	-	2	-	-	1	-	-	-
2500 EMPLOYEES AND OVER	4	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	-	-	-
MAINE	2 157	226	-	55	43	858	35	56	185	29	11	42	99	68	13	86	114	43	86	22	69	17
1 TO 4 EMPLOYEES	1 094	89	-	7	14	561	14	9	114	9	1	15	19	25	6	34	55	12	46	10	47	7
5 TO 9 EMPLOYEES	247	35	-	4	4	76	6	5	27	7	2	2	6	11	2	9	16	4	20	6	2	3
10 TO 19 EMPLOYEES	221	25	-	2	4	92	3	6	16	5	2	5	1	12	1	16	12	-	8	1	9	1
20 TO 49 EMPLOYEES	212	29	-	5	6	65	7	5	14	4	3	4	7	15	1	12	14	6	8	2	4	1
50 TO 99 EMPLOYEES	139	17	-	12	6	34	1	6	8	2	2	4	15	3	2	8	8	4	1	2	3	1
100 TO 249 EMPLOYEES	135	21	-	12	5	26	4	6	3	2	1	7	19	2	1	4	5	9	2	1	2	3
250 TO 499 EMPLOYEES	73	6	-	9	3	3	-	7	3	-	-	3	25	-	-	3	3	5	-	-	2	1
500 TO 999 EMPLOYEES	27	4	-	3	1	1	-	6	-	-	-	2	6	-	-	-	1	3	-	-	-	-
1000 TO 2499 EMPLOYEES	8	-	-	1	-	-	-	6	-	-	-	-	1	-	-	-	-	-	-	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
MARYLAND	3 937	451	1	26	249	294	108	85	773	177	37	108	18	204	62	310	348	179	117	107	154	129
1 TO 4 EMPLOYEES	1 492	134	1	9	67	151	38	16	383	48	9	35	3	65	17	88	162	56	61	53	74	22
5 TO 9 EMPLOYEES	542	66	-	3	26	51	23	9	103	20	9	13	-	22	10	50	51	23	15	10	22	16
10 TO 19 EMPLOYEES	552	50	-	4	37	32	17	11	120	29	8	15	2	34	5	61	36	20	12	18	24	17
20 TO 49 EMPLOYEES	575	73	-	4	45	40	13	16	76	32	4	13	2	45	9	55	55	25	11	13	19	25
50 TO 99 EMPLOYEES	308	54	-	1	27	13	9	8	44	19	4	12	3	20	5	25	17	13	7	5	6	16
100 TO 249 EMPLOYEES	293	46	-	4	28	7	6	21	33	15	3	15	6	9	9	25	13	21	5	4	7	16
250 TO 499 EMPLOYEES	99	17	-	1	17	-	1	2	11	6	-	2	1	6	1	3	7	9	1	4	2	8
500 TO 999 EMPLOYEES	49	10	-	-	1	-	1	-	1	8	-	1	1	2	2	3	4	7	1	-	-	7
1000 TO 2499 EMPLOYEES	19	1	-	-	1	-	-	1	2	-	-	2	-	1	3	-	2	2	2	-	-	2
2500 EMPLOYEES AND OVER	8	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	3	2	-	-	-
MASSACHUSETTS	11 133	678	3	277	767	393	295	339	1 521	349	67	539	339	321	249	1 195	1 634	684	189	435	600	259
1 TO 4 EMPLOYEES	3 869	262	1	49	165	192	117	49	738	113	23	131	91	126	44	380	652	203	84	146	257	46
5 TO 9 EMPLOYEES	1 576	82	1	28	82	66	44	32	208	71	22	63	43	58	37	170	276	76	21	65	97	34
10 TO 19 EMPLOYEES	1 634	93	1	26	96	58	53	52	231	52	7	79	45	58	39	205	267	79	26	51	75	41
20 TO 49 EMPLOYEES	1 830	110	-	68	181	49	37	55	192	56	9	114	55	44	60	273	211	101	29	72	73	41
50 TO 99 EMPLOYEES	1 018	62	-	39	124	20	26	54	77	24	4	81	45	17	33	88	114	77	11	42	46	34
100 TO 249 EMPLOYEES	733	48	-	41	89	7	15	74	45	18	1	55	35	12	22	46	48	80	5	26	32	34
250 TO 499 EMPLOYEES	269	14	-	16	21	-	2	17	15	8	1	8	21	3	13	18	29	40	7	15	10	11
500 TO 999 EMPLOYEES	138	6	-	9	9	1	1	5	12	6	-	5	4	1	1	12	22	18	1	8	5	12
1000 TO 2499 EMPLOYEES	47	1	-	1	-	-	-	-	3	1	-	3	-	1	-	3	11	5	2	6	5	5
2500 EMPLOYEES AND OVER	19	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	4	5	3	4	-	1
MICHIGAN	15 627	829	3	43	241	1 168	317	265	1 680	399	76	630	43	702	581	2 439	3 983	479	624	261	464	400
1 TO 4 EMPLOYEES	5 413	267	3	11	93	680	98	39	923	144	31	140	17	264	106	582	1 291	144	187	94	239	60
5 TO 9 EMPLOYEES	2 227	107	-	8	28	161	41	25	254	57	9	82	7	134	56	320	661	57	66	34	69	51
10 TO 19 EMPLOYEES	2 607	118	-	9	39	145	46	31	209	52	12	91	5	146	90	477	825	77	67	37	67	64
20 TO 49 EMPLOYEES	2 621	140	-	5	31	117	53	63	157	59	14	144	3	97	146	557	708	81	76	52	49	69
50 TO 99 EMPLOYEES	1 261	82	-	3	18	43	36	39	75	37	6	95	2	20	73	253	264	61	64	20	16	54
100 TO 249 EMPLOYEES	886	77	-	4	19	17	28	46	46	24	2	53	4	27	54	174	143	40	64	12	13	39
250 TO 499 EMPLOYEES	320	29	-	2	4	3	8	16	10	16	2	17	5	7	28	46	45	10	31	11	9	21
500 TO 999 EMPLOYEES	142	6	-	1	2	2	3	5	4	4	-	5	-	5	16	18	31	4	15	1-	2	19
1000 TO 2499 EMPLOYEES	72	2	-	-	5	-	3	1	2	3	-	2	-	2	5	1-	13	3	17	1	-	13
2500 EMPLOYEES AND OVER	78	1	-	-	2	-	1	-	-	3	-	1	-	-	7	12	2	2	37	-	-	10
MINNESOTA	6 637	691	-	24	176	591	133	95	1 126	185	32	255	24	426	112	609	1 112	279	151	145	266	205
1 TO 4 EMPLOYEES	2 698	213	-	4	68	361	50	17	596	73	8	82	9	164	21	187	464	86	66	57	142	30
5 TO 9 EMPLOYEES	934	87	-	3	19	74	17	11	184	30	5	36	3	89	13	80	159	33	15	15	31	30
10 TO 19 EMPLOYEES	879	82	-	2	18	52	28	12	135	29	5	24	-	76	14	92	167	40	14	16	34	39
20 TO 49 EMPLOYEES	935	123	-	4	24	52	18	10	117	31	6	54	5	56	27	130	126	37	24	25	27	39
50 TO 99 EMPLOYEES	539	74	-	3	30	33	10	15	43	10	3	30	4	25	16	64	87	31	12	10	18	21
100 TO 249 EMPLOYEES	418	80	-	6	16	14	7	20	36	8	4	20	1	9	15	41	61	24	15	13	7	21
250 TO 499 EMPLOYEES	134	23	-	1	1	2	3	3	7	2	1	8	1	5	5	7	27	12	3	3	5	15
500 TO 999 EMPLOYEES	60	5	-	1	-	2	-	4	4	1	-	1	-	1	1	4	13	11	1	3	1	7
1000 TO 2499 EMPLOYEES	29	3	-	-	-	-	-	3	4	1	-	-	1	-	-	2	5	4	1	2	1	2
2500 EMPLOYEES AND OVER	11	1	-	-	-	1	-	-	-	-	-	-	-	1	-	2	3	1	-	1	-	1
MISSISSIPPI	3 289	322	-	29	221	1 106	159	42	309	85	21	65	10	195	36	161	233	73	77	25	70	50
1 TO 4 EMPLOYEES	1 461	111	-	6	31	722	37	10	201	26	4	11	-	62	8	40	108	13	22	10	34	5
5 TO 9 EMPLOYEES	363	29	-	-	9	112	28	4	30	15	5	6	-	30	2	24	33	5	10	4	8	9
10 TO 19 EMPLOYEES	318	25	-	4	7	78	18	1	34	13	3	11	1	34	1	27	22	7	9	2	7	14
20 TO 49 EMPLOYEES	410	65	-	3	17	92	18	7	25	12	5	12	4	34	6	29	34	8	16	3	11	9
50 TO 99 EMPLOYEES	244	47	-	1	20	46	21	6	11	7	1	14	-	11	6	20	11	5	8	2	2	5
100 TO 249 EMPLOYEES	292	29	-	4	77	41	24	9	5	7	2	6	-	19	11	14	12	15	5	2	4	6
250 TO 499 EMPLOYEES	120	12	-	4	49	12	3	2	3	1	-	1	5	4	2	4	4	8	3	1	1	1
500 TO 999 EMPLOYEES	64	3	-	5	11	2	9	1	-	3	1	3	-	1	-	2	8	9	1	1	3	1
1000 TO 2499 EMPLOYEES	16	1	-	2	1-	1	1	2	-	1	-	1	-	-	-	1	1	3	2	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
MISSOURI	7 354	637	1	22	372	733	196	150	1 281	352	44	235	128	481	139	620	893	242	194	108	293	233
1 TO 4 EMPLOYEES	2 924	219	1	5	93	422	75	25	687	118	14	73	22	195	26	178	402	75	74	43	142	35
5 TO 9 EMPLOYEES	1 046	82	-	5	22	104	24	7	192	52	8	33	9	88	12	101	149	36	26	14	42	40
10 TO 19 EMPLOYEES	955	77	-	6	34	88	27	26	168	52	7	26	8	80	22	101	119	21	20	9	33	31
20 TO 49 EMPLOYEES	991	90	-	4	63	79	32	30	121	49	7	39	13	68	17	122	111	22	25	21	36	42
50 TO 99 EMPLOYEES	596	69	-	2	50	30	18	23	60	34	5	34	20	21	24	54	56	18	11	10	22	35
100 TO 249 EMPLOYEES	494	61	-	-	81	6	14	33	34	26	2	19	18	23	24	40	28	31	10	7	13	24
250 TO 499 EMPLOYEES	229	32	-	-	26	4	4	3	12	10	1	8	30	2	8	13	19	22	12	3	5	15
500 TO 999 EMPLOYEES	76	6	-	-	3	-	2	2	4	8	-	2	8	4	4	8	4	9	6	1	-	5
1000 TO 2499 EMPLOYEES	27	-	-	-	-	-	-	1	2	3	-	1	-	-	1	2	4	6	2	-	-	5
2500 EMPLOYEES AND OVER	16	1	-	-	-	-	-	-	1	-	-	-	-	-	1	1	1	2	8	-	-	1
MONTANA	1 169	137	-	3	11	481	14	4	171	21	9	6	6	100	17	44	51	7	24	10	45	8
1 TO 4 EMPLOYEES	685	49	-	2	5	309	7	2	111	10	2	4	6	56	8	24	32	2	14	6	33	3
5 TO 9 EMPLOYEES	158	28	-	-	-	56	3	1	22	3	-	2	-	16	1	8	4	3	2	2	6	1
10 TO 19 EMPLOYEES	123	19	-	-	3	48	-	-	15	3	1	-	-	13	1	2	8	1	3	1	2	3
20 TO 49 EMPLOYEES	109	26	-	-	3	26	3	-	15	2	1	-	-	11	-	8	6	-	5	-	2	1
50 TO 99 EMPLOYEES	48	8	-	1	-	18	1	-	5	2	2	-	-	3	2	2	1	-	-	1	2	-
100 TO 249 EMPLOYEES	31	5	-	-	-	19	-	-	3	-	1	-	-	1	1	-	-	1	-	-	-	-
250 TO 499 EMPLOYEES	8	2	-	-	-	2	-	-	-	1	2	-	-	-	1	-	-	-	-	-	-	-
500 TO 999 EMPLOYEES	5	-	-	-	-	2	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-
1000 TO 2499 EMPLOYEES	2	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-

See footnotes at end of table.

Table 4. **Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977**—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	--
NEBRASKA	1 965	393	-	5	46	88	32	23	417	60	6	49	8	174	26	130	263	50	43	33	73	46
1 TO 4 EMPLOYEES	772	92	-	2	17	33	9	2	247	23	3	17	4	75	3	47	112	9	16	11	39	11
5 TO 9 EMPLOYEES	280	47	-	-	6	20	6	5	43	8	-	4	-	40	4	16	43	11	7	4	8	8
10 TO 19 EMPLOYEES	287	70	-	1	8	9	5	3	60	9	-	10	-	19	4	14	45	2	5	2	13	8
20 TO 49 EMPLOYEES	282	82	-	-	3	11	4	6	41	8	1	7	4	31	5	19	25	10	3	6	7	9
50 TO 99 EMPLOYEES	154	50	-	1	5	9	3	2	17	5	1	4	-	9	3	15	17	4	5	3	2	4
100 TO 249 EMPLOYEES	115	32	-	-	5	5	3	5	6	6	1	4	-	5	4	11	10	9	1	1	3	4
250 TO 499 EMPLOYEES	41	14	-	1	2	1	1	-	2	-	-	2	-	-	2	5	4	-	1	4	1	1
500 TO 999 EMPLOYEES	27	5	-	-	-	-	1	-	1	1	-	-	-	-	-	3	4	4	5	2	-	1
1000 TO 2499 EMPLOYEES	6	1	-	-	-	-	-	-	-	-	-	1	-	-	1	-	3	-	-	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
NEVADA	729	49	-	3	25	45	24	3	141	27	2	22	3	72	12	63	88	37	21	16	69	27
1 TO 4 EMPLOYEES	369	16	-	1	15	19	10	-	92	6	2	12	2	27	6	34	43	22	14	8	34	6
5 TO 9 EMPLOYEES	117	4	-	-	6	12	6	1	12	8	-	3	-	16	2	11	10	3	2	4	10	7
10 TO 19 EMPLOYEES	96	11	-	1	2	8	3	-	18	3	-	3	1	8	1	8	8	3	2	1	9	6
20 TO 49 EMPLOYEES	78	8	-	1	1	3	4	2	8	3	-	1	-	13	-	7	2	3	1	2	14	5
50 TO 99 EMPLOYEES	34	8	-	-	1	1	-	-	6	4	-	1	-	2	1	1	2	2	2	-	1-	3
100 TO 249 EMPLOYEES	27	2	-	-	-	2	1	-	3	3	-	2	-	6	-	2	3	1	-	-	2	-
250 TO 499 EMPLOYEES	5	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	2	-	-	-	-
500 TO 999 EMPLOYEES	3	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-
NEW HAMPSHIRE	1 825	90	-	57	49	355	61	49	226	31	5	67	71	90	39	133	225	110	27	60	63	17
1 TO 4 EMPLOYEES	768	45	-	8	8	207	28	7	125	13	-	13	9	42	9	49	99	33	14	21	36	2
5 TO 9 EMPLOYEES	221	8	-	5	4	47	7	6	27	7	1	10	3	11	4	25	31	10	2	9	3	1
10 TO 19 EMPLOYEES	213	12	-	5	3	44	7	5	26	4	2	6	5	6	4	21	24	16	6	5	8	4
20 TO 49 EMPLOYEES	245	13	-	14	13	38	7	11	21	2	2	8	11	22	9	17	27	12	1	7	7	3
50 TO 99 EMPLOYEES	160	5	-	10	14	12	7	10	17	2	-	11	10	4	5	10	22	11	1	5	1	2
100 TO 249 EMPLOYEES	122	4	-	6	7	7	5	5	8	3	-	12	13	4	6	5	8	12	-	4	8	5
250 TO 499 EMPLOYEES	64	2	-	8	-	-	-	2	1	-	-	4	16	-	1	5	6	11	2	6	-	-
500 TO 999 EMPLOYEES	23	-	-	-	-	-	-	1	1	-	-	2	4	-	1	1	6	4	1	2	-	-
1000 TO 2499 EMPLOYEES	9	-	-	1	-	-	-	2	-	-	-	1	-	1	-	-	2	1	-	1	-	-
NEW JERSEY	15 696	753	3	527	1 920	357	324	422	2 006	986	87	751	107	571	314	1 555	2 173	919	225	431	754	511
1 TO 4 EMPLOYEES	5 382	242	2	121	606	158	123	67	1 057	251	16	169	27	189	71	475	930	273	103	127	301	74
5 TO 9 EMPLOYEES	2 230	91	-	65	254	67	53	54	301	108	19	86	11	92	36	245	386	118	20	70	106	48
10 TO 19 EMPLOYEES	2 309	91	-	92	269	60	44	45	254	137	16	116	16	81	48	303	351	138	25	55	107	61
20 TO 49 EMPLOYEES	2 695	135	-	113	431	49	61	84	207	190	18	154	16	107	62	288	286	161	33	86	123	91
50 TO 99 EMPLOYEES	1 449	83	-	73	233	15	28	72	95	122	7	117	14	41	35	119	114	84	16	41	68	72
100 TO 249 EMPLOYEES	1 042	77	1	47	105	6	10	82	61	102	5	82	16	36	39	81	55	85	17	26	33	76
250 TO 499 EMPLOYEES	370	23	-	15	19	1	2	11	22	42	2	24	5	14	17	33	32	34	5	13	10	46
500 TO 999 EMPLOYEES	139	7	-	1	3	1	3	6	7	18	2	3	2	6	5	8	12	12	3	8	6	26
1000 TO 2499 EMPLOYEES	63	4	-	-	-	-	-	1	1	12	2	-	-	4	1	2	7	10	1	5	-	13
2500 EMPLOYEES AND OVER	17	-	-	-	-	-	-	-	1	4	-	-	-	1	-	1	-	4	2	-	-	4
NEW MEXICO	1 323	141	-	7	34	131	34	4	198	37	11	21	9	118	21	74	148	43	20	20	238	14
1 TO 4 EMPLOYEES	730	59	-	5	16	68	23	1	123	18	5	11	5	52	9	41	78	20	10	13	169	4
5 TO 9 EMPLOYEES	178	12	-	-	2	13	7	2	29	7	1	5	1	22	3	5	23	7	2	1	33	3
10 TO 19 EMPLOYEES	157	22	-	1	1	13	1	1	20	2	-	2	-	12	2	15	29	4	3	2	23	4
20 TO 49 EMPLOYEES	139	26	-	-	4	21	3	-	15	4	1	3	-	21	3	7	11	5	1	2	10	2
50 TO 99 EMPLOYEES	61	10	-	-	3	10	-	-	6	4	3	-	2	8	2	3	6	1	1	1	1	-
100 TO 249 EMPLOYEES	36	11	-	-	2	5	-	-	4	2	-	-	-	3	-	3	1	2	1	-	1	1
250 TO 499 EMPLOYEES	14	1-	-	-	5	-	-	-	-	-	1	-	1	-	2	-	-	3	1	1	-	-
500 TO 999 EMPLOYEES	7	1	-	1	1	1	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-
1000 TO 2499 EMPLOYEES	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
NEW YORK	36 578	1 852	13	1 243	7 797	1 119	1 028	759	6 301	939	169	909	657	912	466	2 542	2 871	1 527	430	854	3 170	1 020
1 TO 4 EMPLOYEES	13 589	695	8	289	2 211	555	401	161	3 243	364	72	254	179	383	107	891	1 240	507	176	303	1 414	136
5 TO 9 EMPLOYEES	5 726	290	1	185	1 076	204	185	85	1 025	144	47	152	86	164	60	407	527	221	66	123	557	121
10 TO 19 EMPLOYEES	5 838	254	-	245	1 428	176	185	112	829	136	21	145	97	154	76	464	468	218	54	116	478	182
20 TO 49 EMPLOYEES	6 199	271	2	303	2 043	116	134	170	695	142	23	173	128	111	81	436	345	201	44	139	426	216
50 TO 99 EMPLOYEES	2 665	162	1	119	691	42	65	101	285	57	3	111	92	39	48	182	120	144	32	68	170	133
100 TO 249 EMPLOYEES	1 693	121	1	81	288	25	49	91	145	55	2	49	49	32	54	113	89	133	28	67	96	125
250 TO 499 EMPLOYEES	507	41	-	17	49	1	5	31	35	18	1	22	22	16	19	35	34	53	12	18	19	59
500 TO 999 EMPLOYEES	206	13	-	4	6	-	4	7	25	15	-	2	4	12	13	8	26	24	5	9	6	23
1000 TO 2499 EMPLOYEES	107	5	-	-	4	-	-	1	13	7	-	1	-	1	6	5	16	13	6	7	4	18
2500 EMPLOYEES AND OVER	48	-	-	-	1	-	-	-	6	1	-	-	-	-	2	1	6	13	7	4	-	7
NORTH CAROLINA	9 954	666	36	1 372	702	2 072	664	171	925	281	28	244	42	448	87	469	841	200	177	78	234	217
1 TO 4 EMPLOYEES	3 750	219	4	210	127	1 237	158	23	529	73	20	57	14	160	29	154	395	65	85	28	128	35
5 TO 9 EMPLOYEES	1 121	92	1	99	55	232	55	15	120	48	2	32	6	56	6	55	132	18	24	13	34	26
10 TO 19 EMPLOYEES	1 078	80	1	111	52	234	60	17	102	34	3	27	3	86	7	68	106	19	15	10	23	20
20 TO 49 EMPLOYEES	1 416	123	2	210	103	201	122	43	101	48	2	50	4	90	18	93	102	20	17	11	20	36
50 TO 99 EMPLOYEES	824	56	2	170	103	100	79	25	44	40	-	26	2	26	6	38	37	10	8	2	11	39
100 TO 249 EMPLOYEES	991	60	12	274	169	55	92	38	20	19	1	36	7	21	15	38	45	22	14	4	11	38
250 TO 499 EMPLOYEES	485	27	8	179	75	11	65	4	5	5	-	10	5	4	5	15	13	22	8	5	5	14
500 TO 999 EMPLOYEES	198	7	1	85	17	2	25	2	3	5	-	2	1	3	1	6	9	15	5	3	1	5
1000 TO 2499 EMPLOYEES	74	1	3	29	1	-	7	4	1	4	-	4	-	2	-	2	1	8	1	2	1	3
2500 EMPLOYEES AND OVER	17	1	2	5	-	-	1	-	-	5	-	-	-	-	-	-	1	1	-	-	-	1
NORTH DAKOTA	571	125	-	-	15	27	7	6	137	7	4	6	-	73	2	23	92	5	11	3	25	3
1 TO 4 EMPLOYEES	265	41	-	-	9	14	2	-	87	3	2	3	-	33	-	10	41	2	3	1	13	1
5 TO 9 EMPLOYEES	91	21	-	-	3	1	3	3	17	1	-	-	-	14	-	5	15	1	4	1	2	-
10 TO 19 EMPLOYEES	70	17	-	-	-	7	1	1	9	1	-	1	-	11	-	4	11	1	1	1	4	-
20 TO 49 EMPLOYEES	82	22	-	-	1	3	-	2	16	1	1	1	-	11	1	2	15	-	1	-	3	2
50 TO 99 EMPLOYEES	32	13	-	-	1	1	1	-	4	-	-	1	-	2	1	1	4	1	-	-	2	-
100 TO 249 EMPLOYEES	26	11	-	-	1	1	-	-	3	1	1	-	-	2	-	1	3	-	1	-	1	-
250 TO 499 EMPLOYEES	2	1-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-
500 TO 999 EMPLOYEES	3	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
OHIO	17 354	1 094	5	84	369	854	307	408	2 081	705	163	863	55	1 081	659	2 375	3 683	647	469	331	590	531
1 TO 4 EMPLOYEES	5 677	335	2	23	127	441	102	56	1 037	200	48	194	20	304	113	563	1 358	156	133	114	271	80
5 TO 9 EMPLOYEES	2 350	152	1	11	45	125	43	44	294	106	31	91	8	165	53	301	584	69	50	46	75	56
10 TO 19 EMPLOYEES	2 599	139	-	11	52	113	51	50	267	115	22	100	4	209	90	399	630	65	61	42	98	81
20 TO 49 EMPLOYEES	2 840	187	-	10	68	103	48	81	247	120	35	175	10	189	129	492	552	111	48	56	76	103
50 TO 99 EMPLOYEES	1 564	104	1	8	26	51	21	71	125	65	13	128	3	96	92	288	229	80	40	26	28	69
100 TO 249 EMPLOYEES	1 315	112	1	14	35	18	23	78	77	53	8	103	2	79	82	207	179	72	46	25	33	58
250 TO 499 EMPLOYEES	547	48	-	3	11	1	13	20	15	30	1	43	7	19	49	80	74	40	39	11	7	36
500 TO 999 EMPLOYEES	263	10	-	4	3	2	4	5	12	12	4	14	1	13	26	26	48	29	21	7	1	21
1000 TO 2499 EMPLOYEES	137	7	-	-	2	-	2	3	6	3	1	10	-	5	13	10	22	20	14	4	1	14
2500 EMPLOYEES AND OVER	62	-	-	-	-	-	-	-	1	1	-	5	-	2	12	9	7	5	17	-	-	3
OKLAHOMA	3 818	328	1	19	135	183	95	38	636	104	49	104	28	300	82	448	650	121	184	80	160	73
1 TO 4 EMPLOYEES	1 716	125	1	5	41	81	49	8	414	55	17	38	11	135	21	137	303	48	81	36	100	10
5 TO 9 EMPLOYEES	533	44	-	1	8	38	16	4	74	16	6	16	3	44	11	77	96	17	22	13	21	6
10 TO 19 EMPLOYEES	502	39	-	1	7	25	14	8	70	12	4	10	6	58	6	63	97	9	22	10	19	22
20 TO 49 EMPLOYEES	488	48	-	3	17	23	8	8	50	11	5	16	2	35	15	90	79	17	23	11	15	12
50 TO 99 EMPLOYEES	229	36	-	1	21	7	3	4	12	4	2	7	4	9	12	38	23	8	21	4	2	11

See footnotes at end of table.

Table 4. Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	--
OKLAHOMA--CON.																						
100 TO 249 EMPLOYEES	212	24	-	5	27	7	4	5	11	6	8	10	2	11	11	27	29	11	5	4	2	3
250 TO 499 EMPLOYEES	87	9	-	3	13	2	-	1	3	-	5	4	-	4	5	10	12	7	4	1	-	4
500 TO 999 EMPLOYEES	37	2	-	-	1	-	1	-	1	-	2	-	-	4	1	6	8	3	3	1	1	3
1000 TO 2499 EMPLOYEES	10	1	-	-	-	-	-	-	1	-	-	3	-	-	-	-	2	-	3	-	-	-
2500 EMPLOYEES AND OVER	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2
OREGON	5 716	413	-	23	116	2 184	123	55	544	110	29	103	26	226	72	406	560	149	210	81	185	101
1 TO 4 EMPLOYEES	2 624	138	-	8	53	1 033	50	11	341	31	6	38	13	93	19	169	277	53	104	42	120	25
5 TO 9 EMPLOYEES	805	49	-	2	20	297	22	2	61	23	6	17	6	50	7	52	80	35	24	10	24	18
10 TO 19 EMPLOYEES	707	45	-	1	19	246	20	5	63	16	3	19	1	32	13	63	73	15	26	11	23	13
20 TO 49 EMPLOYEES	738	76	-	5	12	244	16	7	44	26	10	17	4	36	13	60	75	21	28	10	13	21
50 TO 99 EMPLOYEES	370	43	-	4	5	148	10	7	19	12	3	9	2	5	5	37	27	10	13	2	1	8
100 TO 249 EMPLOYEES	318	43	-	2	6	149	4	9	13	1	1	3	-	9	5	17	20	11	7	2	4	12
250 TO 499 EMPLOYEES	104	12	-	-	1	55	1	7	2	1	-	-	-	-	4	7	3	4	3	2	-	2
500 TO 999 EMPLOYEES	42	6	-	-	-	12	-	7	1	-	-	-	-	1	4	1	4	-	3	1	-	2
1000 TO 2499 EMPLOYEES	7	1	-	1	-	1-	-	-	-	-	-	-	-	-	2	-	1	-	2	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
PENNSYLVANIA	18 735	1 579	30	536	1 979	1 324	454	398	2 190	595	167	570	161	978	597	1 940	2 497	776	341	410	667	546
1 TO 4 EMPLOYEES	6 156	550	6	99	318	699	135	62	1 097	192	46	136	34	305	112	544	951	231	106	139	318	76
5 TO 9 EMPLOYEES	2 309	209	3	38	124	193	57	20	288	73	44	73	9	151	54	265	376	74	48	53	92	65
10 TO 19 EMPLOYEES	2 566	197	2	68	167	188	76	50	295	88	25	86	11	156	77	293	438	89	33	64	84	79
20 TO 49 EMPLOYEES	3 153	268	9	115	542	148	83	94	243	110	24	113	23	169	93	386	355	105	38	58	82	95
50 TO 99 EMPLOYEES	1 941	131	3	83	474	54	46	59	127	50	11	65	26	75	78	201	166	81	43	36	46	86
100 TO 249 EMPLOYEES	1 560	147	2	87	266	39	42	78	86	42	6	62	31	69	74	163	114	100	29	28	23	72
250 TO 499 EMPLOYEES	615	46	3	32	74	2	11	22	34	21	6	25	23	29	49	60	46	55	16	15	12	34
500 TO 999 EMPLOYEES	261	24	2	11	10	1	4	8	16	11	3	5	4	19	27	22	30	19	10	9	7	19
1000 TO 2499 EMPLOYEES	122	6	-	3	4	-	-	5	2	7	2	4	-	5	14	5	14	16	12	6	2	15
2500 EMPLOYEES AND OVER	52	1	-	-	-	-	-	-	2	1	-	1	-	-	19	1	7	6	6	2	1	5
RHODE ISLAND	3 107	154	-	200	69	52	36	57	206	67	2	110	24	50	110	414	319	67	46	48	1 051	25
1 TO 4 EMPLOYEES	1 308	78	-	38	16	35	21	11	103	27	-	25	6	18	36	159	139	16	16	17	542	5
5 TO 9 EMPLOYEES	448	24	-	21	7	3	3	6	32	11	-	25	2	10	21	68	63	9	7	5	128	3
10 TO 19 EMPLOYEES	406	15	-	21	13	7	4	10	26	10	1	18	1	4	15	75	57	7	6	4	107	5
20 TO 49 EMPLOYEES	455	21	-	48	15	6	5	16	23	6	-	16	10	8	14	67	33	11	7	6	138	5
50 TO 99 EMPLOYEES	233	9	-	35	10	-	2	6	13	4	1	13	1	4	9	24	15	10	5	4	64	4
100 TO 249 EMPLOYEES	163	4	-	27	7	1	-	7	6	6	-	10	2	2	6	15	8	7	3	4	46	2
250 TO 499 EMPLOYEES	56	3	-	7	-	-	-	1	2	1	-	2	1	3	5	3	1	2	2	4	19	-
500 TO 999 EMPLOYEES	25	-	-	3	1	-	1	-	-	2	-	1	-	1	2	1	1	3	-	3	5	1
1000 TO 2499 EMPLOYEES	12	-	-	-	-	-	-	-	1	-	-	-	1	-	2	1	2	2	-	1	2	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
SOUTH CAROLINA	4 229	236	2	429	319	1 269	63	68	359	164	9	93	8	181	52	232	382	79	70	27	93	94
1 TO 4 EMPLOYEES	1 910	88	-	43	48	945	21	11	224	49	2	15	2	52	17	88	177	29	30	11	51	7
5 TO 9 EMPLOYEES	366	36	-	10	13	88	5	6	35	26	2	13	-	24	5	23	51	4	7	3	8	7
10 TO 19 EMPLOYEES	393	17	-	19	20	92	8	10	40	24	2	8	2	37	3	36	42	5	6	2	7	13
20 TO 49 EMPLOYEES	461	38	-	37	53	78	11	5	38	21	1	16	3	32	6	28	37	6	9	2	12	28
50 TO 99 EMPLOYEES	304	26	-	33	45	41	9	6	10	14	1	14	-	19	6	21	27	4	7	1	4	16
100 TO 249 EMPLOYEES	378	22	1	91	87	20	6	17	7	10	-	14	1	10	10	25	20	13	5	1	3	15
250 TO 499 EMPLOYEES	219	6	1	101	34	3	1	5	4	5	1	6	-	1	4	8	14	8	2	3	7	5
500 TO 999 EMPLOYEES	141	2	-	73	17	1	1	4	1	4	-	6	-	4	-	2	9	6	4	3	1	3
1000 TO 2499 EMPLOYEES	50	1	-	19	2	1	1	4	-	9	-	1	-	2	1	1	4	3	-	1	-	-
2500 EMPLOYEES AND OVER	7	-	-	3	-	-	-	-	-	2	-	-	-	-	-	-	1	1	-	-	-	-
SOUTH DAKOTA	740	122	-	3	22	81	6	5	183	15	3	18	3	88	1	35	75	9	26	7	31	7
1 TO 4 EMPLOYEES	387	38	-	1	7	40	5	4	126	9	-	7	2	50	-	15	42	1	15	3	18	4
5 TO 9 EMPLOYEES	88	13	-	-	4	13	-	-	19	2	2	3	-	10	-	4	8	1	4	-	5	-
10 TO 19 EMPLOYEES	70	17	-	-	3	6	1	-	13	1	-	1	-	13	-	6	2	2	1	-	4	-
20 TO 49 EMPLOYEES	85	19	-	1	3	11	-	1	16	3	1	5	-	9	-	3	5	1	1	2	2	2
50 TO 99 EMPLOYEES	58	21	-	-	1	6	-	-	5	-	-	1	-	3	1	3	9	2	4	-	1	1
100 TO 249 EMPLOYEES	39	9	-	-	3	5	-	-	4	-	-	-	1	3	-	4	7	-	1	1	1	-
250 TO 499 EMPLOYEES	10	4	-	1	1	-	-	-	-	-	-	1	-	-	-	-	1	2	-	-	-	-
500 TO 999 EMPLOYEES	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-
2500 EMPLOYEES AND OVER	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TENNESSEE	6 487	508	8	171	443	979	341	136	862	242	41	191	92	342	118	522	587	240	198	74	265	127
1 TO 4 EMPLOYEES	2 598	162	-	36	73	586	128	19	513	89	14	50	16	129	26	165	239	89	72	38	125	29
5 TO 9 EMPLOYEES	689	45	-	13	25	109	36	3	110	26	8	15	5	44	11	63	80	27	20	13	31	5
10 TO 19 EMPLOYEES	723	48	1	15	32	92	45	13	87	18	7	21	3	54	13	70	106	20	25	5	32	16
20 TO 49 EMPLOYEES	881	83	1	24	47	104	42	31	75	41	8	30	11	69	17	101	85	25	19	4	29	35
50 TO 99 EMPLOYEES	525	67	1	18	56	46	34	24	39	18	2	27	8	21	11	50	32	10	19	6	19	17
100 TO 249 EMPLOYEES	582	63	5	29	116	39	31	32	23	20	1	30	12	18	21	50	18	23	14	3	20	14
250 TO 499 EMPLOYEES	302	27	-	22	71	2	13	7	6	13	1	11	35	1	12	14	15	19	14	3	6	10
500 TO 999 EMPLOYEES	129	12	-	12	19	1	10	4	5	6	-	4	2	5	3	5	6	20	9	2	3	1
1000 TO 2499 EMPLOYEES	42	1	-	2	4	-	2	3	3	4	-	1	-	-	3	3	6	5	5	-	-	-
2500 EMPLOYEES AND OVER	16	-	-	-	-	-	-	-	1	7	-	2	-	1	1	1	-	2	1	-	-	-
TEXAS	18 107	1 507	1	113	925	1 258	512	253	2 735	843	180	582	144	1 080	324	1 933	2 794	674	635	352	733	529
1 TO 4 EMPLOYEES	7 729	523	-	42	309	662	199	55	1 693	308	53	186	56	415	96	671	1 237	282	278	144	412	108
5 TO 9 EMPLOYEES	2 361	191	-	16	75	147	63	27	312	103	23	80	21	155	41	271	438	90	87	54	91	76
10 TO 19 EMPLOYEES	2 373	177	-	15	96	144	66	31	325	118	21	85	14	163	36	284	406	82	72	49	100	89
20 TO 49 EMPLOYEES	2 500	222	-	13	133	144	92	50	229	126	21	117	18	174	53	353	365	81	75	52	77	105
50 TO 99 EMPLOYEES	1 375	166	-	9	123	71	51	33	100	82	13	55	20	84	37	165	160	46	43	23	27	67
100 TO 249 EMPLOYEES	1 081	147	1	11	114	65	31	44	52	47	23	41	9	64	29	128	105	45	45	18	18	44
250 TO 499 EMPLOYEES	419	56	-	4	45	21	8	7	11	22	9	11	4	22	20	41	43	33	23	7	7	25
500 TO 999 EMPLOYEES	169	21	-	2	26	3	2	2	9	24	10	5	2	1	3	17	21	4	4	3	1	9
1000 TO 2499 EMPLOYEES	75	4	-	1	2	1	-	4	3	12	5	2	-	2	6	3	15	6	4	2	-	3
2500 EMPLOYEES AND OVER	25	-	-	-	2	-	-	-	1	1	2	-	-	-	3	-	4	5	4	-	-	3
UTAH	1 748	201	-	8	101	146	67	19	249	62	16	53	5	119	35	164	193	73	57	53	81	46
1 TO 4 EMPLOYEES	787	81	-	4	34	70	30	6	146	23	4	24	2	51	12	60	89	38	23	28	51	11
5 TO 9 EMPLOYEES	253	29	-	2	6	28	9	2	24	16	2	11	-	13	5	22	37	9	12	9	10	7
10 TO 19 EMPLOYEES	214	23	-	-	10	17	8	2	42	9	3	12	2	10	3	27	19	6	6	3	6	6
20 TO 49 EMPLOYEES	231	29	-	1	17	17	10	4	21	4	1	3	1	22	6	29	27	8	6	7	6	12
50 TO 99 EMPLOYEES	116	17	-	-	13	6	9	2	5	6	2	2	-	12	3	15	7	1	3	3	4	6
100 TO 249 EMPLOYEES	100	19	-	-	16	6	1	3	8	3	4	1	-	9	1	11	5	5	2	1	2	3
250 TO 499 EMPLOYEES	26	3	-	1	4	2	-	-	2	-	-	-	-	2	1	-	6	2	3	-	-	-
500 TO 999 EMPLOYEES	13	-	-	-	1	-	-	-	1	1	-	-	-	-	2	-	1	4	-	-	2	1
1000 TO 2499 EMPLOYEES	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	1	2	-	-
2500 EMPLOYEES AND OVER	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-
VERMONT	1 030	89	-	15	36	263	27	28	162	13	-	24	8	115	14	43	85	31	12	11	44	10
1 TO 4 EMPLOYEES	489	34	-	2	13	164	2	8	96	5	-	6	3	47	4	23	37	12	3	4	24	2
5 TO 9 EMPLOYEES	115	9	-	1	2	31	7	1	17	2	-	2	-	15	2	4	7	5	2	1	4	3
10 TO 19 EMPLOYEES	128	11	-	1	5	26	2	4	12	2	-	3	2	26	1	6	9	3	2	2	9	2
20 TO 49 EMPLOYEES	144	23	-	6	9	22	7	2	21	3	-	3	-	17	2	7	12	2	2	-	5	1
50 TO 99 EMPLOYEES	70	8	-	3	2	12	2	5	9	1	-	3	1	7	2	1	6	1	2	1	2	2

See footnotes at end of table.

Table 4. **Distribution of Establishments, by Employment Size Class and Major Industry Group, for States: 1977**—Con.

(Major groups descriptions are: 20--food and kindred products; 21--tobacco manufactures; 22--textile mill products; 23--apparel and other textile products; 24--lumber and wood products; 25--furniture and fixtures; 26--paper and allied products; 27--printing and publishing; 28--chemicals and allied products; 29--petroleum and coal products; 30--rubber and miscellaneous plastics products; 31--leather and leather products; 32--stone, clay, and glass products; 33--primary metal industries; 34--fabricated metal products; 35--machinery, except electrical; 36--electric and electronic equipment; 37--transportation equipment; 38--instruments and related products; 39--miscellaneous manufacturing industries. For explanation of terms, see appendix A)

State and size class	All establishments	Number of establishments by major industry group (see headnote for titles)--																				
		20	21	22	23	24	25	26	27	28	29	39	31	32	33	34	35	36	37	38	39	--
VERMONT--CON.																						
100 TO 249 EMPLOYEES	56	4	-	2	5	8	4	4	6	-	-	5	2	3	1	-	7	4	-	1	-	-
250 TO 499 EMPLOYEES	16	-	-	-	-	-	1	4	-	-	-	2	-	-	2	1	3	2	-	1	-	-
500 TO 999 EMPLOYEES	9	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	4	1	-	1	-	-
1000 TO 2499 EMPLOYEES	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-
2500 EMPLOYEES AND OVER	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
VIRGINIA	5 519	543	19	100	287	1 424	175	97	800	155	22	86	27	335	64	297	414	175	131	80	130	158
1 TO 4 EMPLOYEES	2 263	156	-	13	48	874	56	13	409	52	10	13	7	95	15	96	158	59	53	34	69	33
5 TO 9 EMPLOYEES	678	54	2	4	13	160	21	9	132	16	5	10	2	55	6	40	61	26	15	12	15	20
10 TO 19 EMPLOYEES	699	70	1	1	12	164	13	13	96	27	3	15	-	76	9	43	72	22	14	7	17	24
20 TO 49 EMPLOYEES	722	107	2	10	37	128	16	11	97	24	2	22	3	58	6	49	61	13	19	10	13	34
50 TO 99 EMPLOYEES	414	78	2	9	52	49	18	18	35	8	1	4	3	24	7	31	27	10	6	7	8	17
100 TO 249 EMPLOYEES	404	51	6	19	78	36	19	21	20	7	1	7	6	22	10	21	19	17	11	6	4	23
250 TO 499 EMPLOYEES	187	16	2	19	39	11	13	8	5	5	-	9	5	3	3	12	10	13	5	2	4	3
500 TO 999 EMPLOYEES	97	6	2	15	8	2	16	1	4	3	-	3	1	2	6	5	5	9	5	2	-	2
1000 TO 2499 EMPLOYEES	46	5	-	8	-	-	3	3	2	11	-	3	-	-	2	-	1	4	2	-	-	2
2500 EMPLOYEES AND OVER	9	-	2	2	-	-	-	-	-	2	-	-	-	-	-	-	-	2	1	-	-	-
WASHINGTON	6 723	540	-	28	195	2 113	144	95	711	137	26	151	19	293	110	478	642	205	343	86	278	129
1 TO 4 EMPLOYEES	3 083	151	-	10	93	1 078	64	11	424	45	5	52	6	139	32	204	296	100	152	45	147	29
5 TO 9 EMPLOYEES	989	63	-	3	11	344	16	10	98	24	1	27	2	35	16	69	118	29	58	8	35	22
10 TO 19 EMPLOYEES	939	85	-	6	25	262	19	7	90	28	5	22	5	44	10	81	99	23	44	16	49	19
20 TO 49 EMPLOYEES	809	94	-	6	32	209	22	14	63	22	5	25	4	34	10	71	64	25	38	13	27	31
50 TO 99 EMPLOYEES	430	65	-	1	17	108	18	13	17	9	4	17	1	26	13	29	32	14	19	1	15	11
100 TO 249 EMPLOYEES	301	49	-	1	12	75	5	20	14	6	-	7	1	13	13	20	25	10	16	1	2	11
250 TO 499 EMPLOYEES	108	29	-	1	5	26	-	9	3	1	5	1	-	1	8	3	6	2	4	-	1	3
500 TO 999 EMPLOYEES	40	4	-	-	-	8	-	8	1	1	1	-	-	1	4	1	2	2	4	-	2	1
1000 TO 2499 EMPLOYEES	19	-	-	-	-	3	-	3	1	-	-	-	-	-	4	-	-	-	4	2	-	2
2500 EMPLOYEES AND OVER	5	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	4	-	-	-
WEST VIRGINIA	1 857	126	2	7	63	465	37	28	214	73	27	35	14	206	49	131	227	26	28	18	48	33
1 TO 4 EMPLOYEES	816	42	-	1	17	296	9	8	129	19	13	11	1	72	8	38	87	4	12	5	30	14
5 TO 9 EMPLOYEES	216	13	-	1	4	51	6	1	25	9	5	6	1	20	4	12	38	5	3	5	5	2
10 TO 19 EMPLOYEES	242	18	-	1	8	51	8	1	22	6	-	3	-	35	9	22	43	2	2	2	4	5
20 TO 49 EMPLOYEES	230	22	-	-	5	46	7	6	20	9	4	5	1	27	6	21	34	3	2	1	7	4
50 TO 99 EMPLOYEES	138	14	1	2	12	13	6	6	7	7	2	4	3	14	6	19	10	3	4	3	-	2
100 TO 249 EMPLOYEES	109	12	1	1	10	6	1	5	8	5	3	4	3	16	6	9	10	3	2	-	1	3
250 TO 499 EMPLOYEES	64	5	-	1	6	2	-	1	3	4	-	2	5	14	2	8	4	4	-	2	-	1
500 TO 999 EMPLOYEES	28	-	-	-	1	-	-	-	-	8	-	-	-	5	5	2	1	1	2	-	1	2
1000 TO 2499 EMPLOYEES	10	-	-	-	-	-	-	-	-	5	-	-	-	3	-	-	-	1	1	-	-	-
2500 EMPLOYEES AND OVER	4	-	-	-	-	-	-	-	-	1	-	-	-	-	3	-	-	-	-	-	-	-
WISCONSIN	8 678	1 205	5	50	144	903	169	226	1 143	228	34	278	111	443	233	835	1 512	315	178	119	350	197
1 TO 4 EMPLOYEES	3 133	422	3	17	52	458	53	31	585	77	10	61	22	184	39	248	492	84	64	46	160	25
5 TO 9 EMPLOYEES	1 163	158	2	4	15	125	26	10	167	33	12	23	7	82	15	99	252	34	20	13	42	24
10 TO 19 EMPLOYEES	1 219	166	-	5	13	118	16	20	152	32	6	39	11	74	35	137	248	40	19	10	52	26
20 TO 49 EMPLOYEES	1 370	195	-	4	32	104	32	39	123	52	4	70	19	73	37	171	246	36	20	17	51	45
50 TO 99 EMPLOYEES	746	130	-	5	11	48	19	33	64	19	-	42	17	19	39	75	119	24	25	9	21	27
100 TO 249 EMPLOYEES	582	92	-	7	11	35	14	46	34	8	2	32	23	4	34	57	73	41	13	13	16	27
250 TO 499 EMPLOYEES	258	30	-	7	9	11	6	22	14	6	-	9	7	5	18	28	30	30	7	6	5	8
500 TO 999 EMPLOYEES	146	8	-	1	1	3	2	20	3	-	-	1	5	2	15	14	32	17	3	4	3	12
1000 TO 2499 EMPLOYEES	48	2	-	-	-	1	1	5	-	1	-	1	-	-	1	5	15	8	4	1	-	3
2500 EMPLOYEES AND OVER	13	2	-	-	-	-	-	-	1	-	-	-	-	-	-	1	5	1	3	-	-	-
WYOMING	505	68	-	1	13	112	4	1	90	12	15	4	4	58	1	22	52	5	9	4	22	8
1 TO 4 EMPLOYEES	266	39	-	-	6	67	3	1	57	7	3	2	3	20	-	8	19	3	5	3	17	3
5 TO 9 EMPLOYEES	68	10	-	-	2	14	-	-	8	1	-	1	-	10	-	4	13	1	-	-	2	2
10 TO 19 EMPLOYEES	69	5	-	-	1	13	-	-	10	-	4	-	1	12	1	6	11	-	2	-	2	1
20 TO 49 EMPLOYEES	53	8	-	1	2	9	1	-	11	1	-	-	-	7	-	4	6	-	1	1	1	-
50 TO 99 EMPLOYEES	31	2	-	-	1	8	-	-	3	1	2	1	-	9	-	-	2	-	1	-	-	1
100 TO 249 EMPLOYEES	15	4	-	-	1	1	-	-	1	2	4	-	-	-	-	-	1	1	-	-	-	-
250 TO 499 EMPLOYEES	3	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1

Note: Data on number of establishments by employment size class by 4-digit SIC industry for States, counties, and selected cities are presented in Location of Manufacturing Plants data series. This series is available only on computer tape (see Introduction).

- Represents zero. --Administrative and auxiliary operations.

Manufacturing Activity in Government Establishments

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EXPLANATORY TEXT

GENERAL

This report presents data on the manufacturing activities of selected government establishments in the United States. The data are not included in other 1977 Census of Manufactures reports, which cover only privately operated establishments. Manufacturing establishments owned by the Federal Government and operated by private companies, either for the government or on their own account, are included with privately operated establishments.

Three types of U.S. Government manufacturing establishments are recognized for this report: (1) Department of Defense facilities, (2) Federal, State, and District of Columbia penitentiaries, and (3) other U.S. Government facilities. Data are shown for the first two types; the third is discussed in the text.

The data for department of Defense facilities were collected on Census report form MA-171, and for penitentiaries on MD-D4. The data are presented by industry groups as defined in the 1972 SIC manual[1]. The data are also presented by geographic areas—The United States, geographic divisions, States, and standard metropolitan statistical areas. (SMSA's are defined in appendix B.)

The data were prepared with the cooperation of the Department of Defense, Department of Justice, Department of Interior, and State and District of Columbia penal systems.

DEPARTMENT OF DEFENSE FACILITIES

Coverage

Data on Department of Defense manufacturing facilities were collected from 88 establishments and are shown in tables 1a, 1b, and 1c. Although these establishments may also be engaged in nonmanufacturing activities at the same location, the statistics represent only their manufacturing activities. All manufacturing installations producing goods or performing manufacturing services are included, such as industrial research and development and the conversion and modification of ships and aircraft by the Army, Navy, and Air Force. However, activities of Defense Department installations primarily or exclusively serving their own installations are not included, such as bakeries and some machine shops. Also not included are all printing and publishing activities. Coverage of printing and publishing activities is difficult because almost every large government installation engages in these activities to some degree.

Findings

Total revenue at Department of Defense manufacturing facilities amounted to $8.3 billion in 1977 as compared with $8.0 billion in 1976 and $7.1 billion in 1972. In 1977, total employment was 234.2 thousand of which 139.0 thousand were production workers. The wages of all employees totaled $4.4 billion; and those of production workers, $2.5 billion.

Explanation of Terms

In this survey, "wage board and graded" employees refer to those nonmilitary personnel employed by Department of Defense owned-and-operated establishments. "Costs" represent the cost of materials, supplies, and parts used; the cost of contractual services; and other costs directly related to the manufacturing activities of the installation. "Value of shipments for service" represents total billings (including progress billings) based on the Industrial Fund Accounting System of the Department of Defense, including receipts for construction and conversion, manufacture and assembly, and research and development. Unbilled costs of work in progress are reported separately. "Total revenue" represents total billings adjusted by the increase or decrease in the unbilled costs of work in progress. "Value added by manufacture" is represented two ways: In tables 1a-1c, data are shown for revenue less cost of materials and for revenue less cost of materials, contractual service, and other costs. (Note that prior to 1970 "value added" represented total revenue less cost of materials.)

FEDERAL, STATE, AND DISTRICT OF COLUMBIA PENITENTIARIES

Data were collected on Federal, State, and District of Columbia penal systems and are shown in tables 2a and 2b. During 1977, manufactured products valued at $272.8 million were produced at penitentiaries in the United States, of which $90.9 million worth was produced at Federal penitentiaries. The comparable 1972 data were $172.2 million in manufactured products, of which $56.3 million worth came from Federal peniteniaries. These data include the value of products manufactured for use within the institutions, products transferred to other government agencies, or products for sale in the open market. Tables 2a shows 1977 and 1972 production data by industry group, and table 2b shows total production data by States and industry.

[1] **Standard Industrial Classification Manual: 1972.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 4101-0066. Price $6.75. **1977 Supplement.** Stock No. 003-005-00176-0. Price 90 cents.

OTHER U.S. GOVERNMENT FACILITIES

No data are shown in this report on the production of other U.S. Government manufacturing facilities, such as the Bureau of Mines of the U.S. Department of Interior, which is the primary producer of refined helium in the United States. During 1977, it operated two plants from which 219.5 million cubic feet of helium valued at $7.7 million were shipped. Its average number of employees totaled 253, of which 152 were production and related workers. The total wages and salaries it paid amounted to approximately $5.0 million. Comparable data for other years, as well as additional details on production, shipments, consumption, prices, reserves, and activities relating to conservation and technology, appear in the Bureau of Mines' "Minerals Yearbook for 1977".

Other government agencies whose manufacturing activities are not covered in this report are the Government Printing Office, The National Aeronautic and Space Administration, and the Tennessee Valley Authority. The operation of these agencies are covered in their annual reports. Others not covered are the minor manufacturing activities of the Post Office Department and the General Services Administration.

Table 1a. **Department of Defense Facilities—Industry Statistics by Industry Group: 1977 and Earlier Years**

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	All employees (wage board and graded)		Production workers (wage board)			Costs	
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
	1977							
	U.S. total	234.2	4,382.2	139.0	256.9	2,468.7	1,638.9	2,526.2
23	Apparel and other textile products	1.4	17.2	1.3	2.1	15.5	1.7	1.6
28	Chemicals and allied products	3.4	62.0	1.4	2.9	26.1	24.6	36.5
281	Industrial inorganic chemicals	.5	10.1	.2	.4	3.6	1.8	3.0
289	Miscellaneous chemical products	1.0	16.1	.5	.9	8.7	3.7	5.8
348	Ordnance and accessories, n.e.c.	33.6	606.1	16.4	37.4	275.6	194.5	294.5
366	Communication equipment	12.6	272.5	4.8	8.8	95.7	63.1	207.9
37	Transportation equipment	130.2	2,372.9	91.9	164.9	1,629.3	970.3	912.7
372	Aircraft and parts	48.8	903.1	34.4	61.2	613.2	568.9	513.2
373	Ship and boat building and repairing	66.0	1,170.4	50.4	90.8	901.0	301.7	239.2
376	Guided missiles, space vehicles, and parts	13.6	271.0	5.6	10.4	91.8	91.3	150.0
379	Miscellaneous transportation equipment	1.8	28.4	1.5	2.5	23.3	8.3	10.3
---	Research and development	52.9	1,051.6	23.1	40.9	426.6	384.6	1,073.0
	1976							
23	U.S. total	239.7	4,200.3	138.4	249.9	2,270.8	1,562.9	2,364.9
23	Apparel and other textile products	1.5	16.8	1.4	2.3	15.2	1.6	1.5
28	Chemicals and allied products	5.5	99.8	1.7	3.3	29.1	30.6	62.5
281	Industrial inorganic chemicals	3.5	66.7	1.0	1.8	16.9	14.9	42.6
289	Miscellaneous chemical products	.9	14.7	.5	.8	7.9	7.5	3.5
348	Ordnance and accessories, n.e.c.	30.6	529.6	14.6	28.5	238.9	147.2	244.6
366	Communication equipment	15.5	292.6	6.0	10.5	97.8	75.7	89.6
37	Transportation equipment	132.9	2,255.3	90.0	161.9	1,473.6	933.0	979.4
372	Aircraft and parts	49.6	831.9	34.8	62.6	561.0	469.3	618.5
373	Ship and boat building and repairing	64.0	1,071.3	48.5	87.4	814.8	371.1	196.4
376	Guided missiles, space vehicles, and parts	17.1	327.0	5.1	9.2	77.0	84.7	156.7
379	Miscellaneous transportation equipment	1.9	25.1	1.6	2.7	20.8	7.9	7.9
---	Research and development	51.1	960.9	23.0	40.6	391.8	342.9	983.0
	1975							
	U.S. total	250.1	4,007.8	146.7	265.4	2,162.4	1,506.2	2,230.8
23	Apparel and other textile products	1.6	16.4	1.5	2.4	15.0	1.6	1.3
28	Chemicals and allied products	5.7	97.5	1.9	3.6	27.1	33.1	69.3
281	Industrial inorganic chemicals	1.9	38.0	.2	.3	2.8	4.9	35.0
289	Miscellaneous chemical products	.9	14.4	.5	1.0	7.9	7.4	2.8
348	Ordnance and accessories, n.e.c.	34.6	555.7	17.5	33.8	254.5	205.2	228.4
366	Communication equipment	16.8	295.8	6.5	11.5	99.9	77.1	101.2
37	Transportation equipment	136.1	2,104.6	93.6	168.4	1,373.3	817.8	900.0
372	Aircraft and parts	53.6	795.7	38.6	69.0	541.9	437.7	555.7
373	Ship and boat building and repairing	63.1	972.6	47.9	86.8	731.5	266.5	175.2
376	Guided missiles, space vehicles, and parts	17.2	309.4	5.3	9.6	76.9	104.8	161.6
379	Miscellaneous transportation equipment	2.1	26.9	1.8	3.0	22.9	8.8	7.5
---	Research and development	55.3	937.8	25.7	45.7	392.8	371.4	930.6
	1974							
	U.S. total	258.0	3,782.0	152.0	270.4	2,011.6	1,357.8	1,898.7
23	Apparel and other textile products	1.7	14.9	1.5	2.8	13.5	1.4	1.1
28	Chemicals and allied products	5.8	93.9	2.1	3.6	28.2	29.0	46.5
281	Industrial inorganic chemicals	2.0	36.6	.2	.4	2.6	3.1	22.9
289	Miscellaneous chemical products	1.1	14.1	.6	1.1	7.6	5.3	2.9
348	Ordnance and accessories, n.e.c.	36.4	547.3	18.7	34.4	253.8	183.2	220.3
366	Communication equipment	17.7	289.0	7.0	12.0	93.7	61.6	89.8
37	Transportation equipment	139.4	1,951.3	96.2	170.5	1,262.5	781.9	651.3
372	Aircraft and parts	57.8	784.5	41.9	74.4	542.6	489.8	374.4
373	Ship and boat building and repairing	62.0	848.9	47.2	83.6	630.0	211.5	132.3
376	Guided missiles, space vehicles, and parts	17.5	291.5	5.3	9.5	67.8	72.5	133.2
379	Miscellaneous transportation equipment	2.1	26.4	1.8	3.0	22.1	8.1	11.4
---	Research and development	56.9	885.7	26.5	46.9	360.0	300.7	889.8
	1973							
	U.S. total	276.3	3,718.5	165.0	290.0	1,948.0	1,200.1	1,770.0
23	Apparel and other textile products	1.6	13.4	1.5	2.7	12.1	1.8	1.0
28	Chemicals and allied products	6.0	89.5	2.4	4.1	29.1	29.2	40.1
281	Industrial inorganic chemicals	4.4	68.9	1.5	2.5	18.8	21.8	32.1
289	Miscellaneous chemical products	1.6	20.6	.9	1.6	10.2	7.4	7.9
348	Ordnance and accessories, n.e.c.	41.1	565.5	22.5	42.8	273.4	181.3	226.1
366	Communication equipment	22.0	321.3	9.3	16.4	112.6	62.7	93.6
37	Transportation equipment	147.5	1,869.7	102.3	175.9	1,189.3	647.6	612.6
372	Aircraft and parts	60.2	765.0	43.9	78.5	524.9	365.3	321.5
373	Ship and boat building and repairing	68.3	806.0	51.6	85.2	584.4	215.3	158.4
376	Guided missiles, space vehicles, and parts	17.0	274.7	5.3	9.4	60.4	59.1	121.1
379	Miscellaneous transportation equipment	2.0	24.0	1.6	2.8	19.6	7.9	11.6
---	Research and development	58.1	859.1	27.0	48.1	331.5	277.5	796.6

Table 1a. **Department of Defense Facilities—Industry Statistics by Industry Group: 1977 and Earlier Years**—Con.

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	Value of shipments for service by type of activity						Value added by manufacture	
		Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other costs (mil. dol.)
	1977								
	U.S. total	463.6	151.7	2,335.2	5,100.6	8,051.1	8,325.5	6,686.7	4,160.5
23	Apparel and other textile products	19.2	-	-	-	19.2	21.3	19.6	17.9
28	Chemicals and allied products	40.7	-	6.5	80.7	127.9	128.0	103.4	66.9
281	Industrial inorganic chemicals	.3	-	.5	14.1	14.9	14.9	13.1	10.2
289	Miscellaneous chemical products	10.9	-	-	15.2	26.1	26.0	22.3	16.5
348	Ordnance and accessories, n.e.c.	238.4	8.4	351.3	564.2	1,162.3	1,150.4	955.9	661.4
366	Communication equipment	96.7	-	121.5	334.8	553.0	549.8	486.6	278.7
37	Transportation equipment	57.9	141.2	521.9	3,172.9	3,894.0	4,305.3	3,335.1	2,422.4
372	Aircraft and parts	47.7	8.6	182.4	1,606.8	1,845.6	1,917.4	1,348.6	835.4
373	Ship and boat building and repairing	4.4	109.4	39.0	1,320.2	1,472.9	1,814.6	1,512.9	1,273.7
376	Guided missiles, space vehicles, and parts	5.6	18.2	300.5	204.3	528.6	526.3	434.9	285.0
379	Miscellaneous transportation equipment	.2	5.1	-	41.6	46.9	46.9	38.7	28.4
---	Research and development	10.7	2.0	1,334.0	948.0	2,294.6	2,170.8	1,786.1	713.2
	1976								
	U.S. total	409.3	304.7	2,511.6	4,781.7	8,007.3	7,951.2	6,388.3	4,023.4
23	Apparel and other textile products	20.6	-	-	-	20.7	19.9	18.3	16.8
28	Chemicals and allied products	31.8	-	47.4	114.7	193.9	197.8	167.2	104.7
281	Industrial inorganic chemicals	14.2	-	42.8	67.3	124.3	124.6	109.7	67.1
289	Miscellaneous chemical products	12.7	-	-	12.5	25.2	25.5	18.0	14.5
348	Ordnance and accessories, n.e.c.	117.4	17.8	336.8	495.5	967.5	951.7	804.4	559.8
366	Communication equipment	101.7	.6	157.6	213.1	473.0	457.9	382.2	292.6
37	Transportation equipment	61.7	284.3	583.4	3,198.7	4,128.0	4,103.0	3,170.0	2,190.6
372	Aircraft and parts	49.1	10.3	273.8	1,482.7	1,815.8	1,802.2	1,332.9	714.4
373	Ship and boat building and repairing	8.0	268.7	34.0	1,368.7	1,679.3	1,668.7	1,297.7	1,101.3
376	Guided missiles, space vehicles, and parts	4.5	4.2	275.6	307.7	592.0	591.1	506.4	349.8
379	Miscellaneous transportation equipment	.2	1.1	-	39.7	40.9	40.9	33.0	25.1
---	Research and development	9.5	2.0	1,380.7	746.1	2,138.2	2,139.2	1,796.3	813.3
	1975								
	U.S. total	406.5	69.4	2,563.1	4,448.1	7,487.1	7,778.6	6,272.4	4,041.6
23	Apparel and other textile products	18.2	-	.1	.1	18.4	18.9	17.4	16.1
28	Chemicals and allied products	36.6	-	40.4	127.9	204.8	201.4	168.3	99.0
281	Industrial inorganic chemicals	4.3	-	35.6	38.7	78.6	78.7	73.8	38.8
289	Miscellaneous chemical products	14.4	-	-	11.3	25.7	25.0	17.5	14.8
348	Ordnance and accessories, n.e.c.	169.3	8.5	329.0	488.9	995.8	1,107.2	802.0	573.5
366	Communication equipment	93.2	(Z)	160.2	211.8	465.2	478.8	401.7	300.5
37	Transportation equipment	75.7	59.9	662.1	2,892.9	3,690.4	3,954.3	3,136.5	2,236.5
372	Aircraft and parts	63.7	10.8	327.1	1,359.4	1,761.0	1,780.1	1,342.4	786.6
373	Ship and boat building and repairing	5.3	46.3	29.6	1,214.3	1,295.4	1,540.1	1,273.6	1,098.4
376	Guided missiles, space vehicles, and parts	6.5	2.5	305.4	276.5	590.8	590.9	486.1	324.5
379	Miscellaneous transportation equipment	.2	.3	-	42.7	43.2	43.2	34.4	26.9
---	Research and development	13.6	1.0	1,371.3	726.6	2,112.6	2,118.0	1,746.6	816.0
	1974								
	U.S. total	358.3	152.5	2,521.7	1,038.9	4,963.0	7,159.8	5,783.2	3,865.7
23	Apparel and other textile products	17.5	-	-	-	17.6	17.7	16.3	15.2
28	Chemicals and allied products	40.3	-	40.9	79.1	173.9	171.1	142.1	95.7
281	Industrial inorganic chemicals	2.6	-	31.1	29.1	62.8	62.8	59.7	36.8
289	Miscellaneous chemical products	12.0	-	-	10.3	22.3	22.4	17.1	14.2
348	Ordnance and accessories, n.e.c.	170.3	-	309.6	313.9	735.9	952.1	768.9	548.5
366	Communication equipment	87.7	-	140.5	114.2	364.1	443.5	381.9	292.1
37	Transportation equipment	37.3	149.1	638.6	431.7	2,778.2	3,512.1	2,713.8	2,044.8
372	Aircraft and parts	26.8	10.3	337.0	93.0	1,311.9	1,671.6	1,175.9	792.1
373	Ship and boat building and repairing	2.2	137.8	31.5	179.4	1,127.3	1,296.4	1,074.3	933.6
376	Guided missiles, space vehicles, and parts	5.5	-	270.0	159.2	293.2	498.3	425.9	292.7
379	Miscellaneous transportation equipment	2.8	1.0	-	-	45.9	45.9	37.8	26.4
---	Research and development	5.2	3.3	1,392.1	100.0	893.4	2,063.3	1,760.1	869.4
	1973								
	U.S. total	388.6	379.0	2,506.8	3,464.2	6,738.8	6,740.2	5,540.0	3,770.2
23	Apparel and other textile products	15.9	-	-	-	15.9	16.0	14.2	13.3
28	Chemicals and allied products	37.1	-	38.7	78.2	154.0	158.7	129.4	89.3
281	Industrial inorganic chemicals	24.5	-	38.7	55.0	118.2	122.6	100.8	68.6
289	Miscellaneous chemical products	12.6	-	-	23.2	35.8	36.1	28.6	20.7
348	Ordnance and accessories, n.e.c.	203.1	.2	305.1	454.8	963.2	956.8	775.5	549.4
366	Communication equipment	87.6	.8	151.0	220.7	460.1	463.3	400.6	307.0
37	Transportation equipment	38.9	374.8	631.1	2,150.9	3,195.8	3,198.6	2,551.0	1,938.5
372	Aircraft and parts	23.2	21.0	340.4	1,074.9	1,459.6	1,428.7	1,063.4	741.8
373	Ship and boat building and repairing	3.3	353.0	45.1	843.8	1,245.2	1,273.1	1,057.8	899.4
376	Guided missiles, space vehicles, and parts	7.8	-	245.6	194.1	447.6	453.4	394.3	273.3
379	Miscellaneous transportation equipment	4.6	.8	-	38.1	43.4	43.4	35.5	24.0
---	Research and development	6.0	3.2	1,380.9	559.6	1,949.8	1,946.8	1,669.3	872.7

Table 1a. **Department of Defense Facilities—Industry Statistics by Industry Group: 1977 and Earlier Years**—Con.

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	All employees (wage board and graded)		Production workers (wage board)			Costs	
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
	1972							
	U.S. total	281.5	3,638.0	171.0	311.4	1,960.2	1,177.4	1,730.7
19	Ordnance and accessories	64.1	873.9	31.6	57.9	357.5	236.9	339.3
23	Apparel and other textile products	1.6	12.8	1.5	2.7	11.5	2.2	.9
281	Industrial inorganic chemicals	3.9	54.9	1.2	2.1	13.5	12.0	24.6
289	Miscellaneous chemical products	2.4	32.0	1.3	2.4	14.9	19.3	13.7
353	Construction and related machinery	-	-	-	-	-	-	-
366	Communication equipment	19.1	254.6	8.7	15.3	96.2	64.9	70.6
372	Aircraft and parts	43.8	535.0	31.7	57.7	364.5	260.5	259.6
373	Ship and boat building and repairing	68.0	817.9	51.2	92.7	594.6	211.8	128.6
381	Engineering and scientific instruments	-	-	-	-	-	-	-
---	Research and development	78.6	1,057.0	43.7	80.5	507.5	369.8	893.4
	1971							
	U.S. total	290.0	3,527.4	177.7	318.6	1,925.0	1,157.5	1,520.2
19	Ordnance and accessories	61.9	785.9	29.9	54.3	313.1	186.1	256.4
23	Apparel and other textile products	1.6	11.4	1.5	2.7	10.0	2.0	.8
281	Industrial inorganic chemicals	4.6	60.3	1.6	2.8	15.3	11.1	21.1
289	Miscellaneous chemical products	2.3	29.6	1.2	2.2	13.6	19.6	5.4
353	Construction and related machinery	-	-	-	-	-	-	-
366	Communication equipment	19.5	242.9	8.9	15.5	89.4	53.9	55.3
372	Aircraft and parts	44.9	503.8	32.9	59.9	346.2	308.0	195.6
373	Ship and boat building and repairing	73.5	860.8	55.5	98.5	637.9	220.1	113.2
381	Engineering and scientific instruments	(Z)	.2	(Z)	(Z)	.2	(Z)	(Z)
---	Research and development	81.6	1,032.4	46.1	82.6	499.3	356.7	872.5
	1970							
	U.S. total	302.7	3,361.0	190.3	349.4	1,884.2	1,244.1	1,372.7
19	Ordnance and accessories	65.4	748.7	32.6	60.7	308.4	219.1	245.1
23	Apparel and other textile products	1.7	10.8	1.6	2.8	9.8	1.8	.7
281	Industrial inorganic chemicals	5.4	67.5	2.0	3.5	19.6	14.8	16.9
289	Miscellaneous chemical products	2.6	28.5	1.4	2.7	13.7	28.7	6.6
353	Construction and related machinery	-	-	-	-	-	-	-
366	Communication equipment	20.5	229.9	9.7	17.4	87.9	56.8	77.2
372	Aircraft and parts	46.3	469.6	34.5	65.4	328.8	293.7	170.5
373	Ship and boat building and repairing	80.1	883.6	61.3	111.7	662.8	265.2	100.0
381	Engineering and scientific instruments	(Z)	.3	(Z)	.1	.3	(Z)	.3
---	Research and development	80.8	922.1	47.3	85.1	453.0	364.1	755.4
	1969							
	U.S. total	334.4	3,324.6	215.2	396.6	1,940.7	1,442.9	1,364.8
19	Ordnance and accessories	73.8	753.0	39.1	72.5	335.1	255.0	240.2
23	Apparel and other textile products	1.7	10.8	1.6	2.9	9.8	1.8	.6
281	Industrial inorganic chemicals	6.1	63.0	2.4	4.4	20.1	16.3	18.0
289	Miscellaneous chemical products	3.3	32.3	2.1	3.9	17.9	45.4	8.4
353	Construction and related machinery	.2	2.7	.2	.4	2.4	1.9	4.8
366	Communication equipment	22.0	220.7	11.0	19.4	88.9	60.6	69.2
372	Aircraft and parts	51.7	491.7	39.7	77.3	365.3	337.9	111.9
373	Ship and boat building and repairing	88.0	863.5	68.6	123.0	666.5	304.5	98.1
381	Engineering and scientific instruments	(Z)	.1	(Z)	(Z)	.1	.3	(Z)
---	Research and development	87.3	886.8	50.2	92.5	434.6	419.2	813.2
	1968							
	U.S. total	347.9	3,164.5	225.9	421.7	1,884.9	1,326.8	1,391.8
19	Ordnance and accessories	77.3	729.7	41.4	80.9	345.2	274.1	268.8
23	Apparel and other textile products	1.8	10.5	1.7	2.9	9.6	2.3	.6
281	Industrial inorganic chemicals	6.5	62.3	2.8	5.1	21.0	22.7	20.6
289	Miscellaneous chemical products	3.6	31.2	2.4	4.5	18.7	35.3	5.6
353	Construction and related machinery	.3	3.2	.3	.5	2.8	1.5	1.9
366	Communication equipment	23.3	208.6	11.9	21.7	89.3	70.2	100.5
372	Aircraft and parts	50.4	448.0	39.0	78.1	337.5	195.7	190.0
373	Ship and boat building and repairing	91.8	818.8	72.3	130.5	638.3	326.0	85.0
382	Mechanical measuring and control devices	(Z)	.2	(Z)	(Z)	.1	.4	(Z)
---	Research and development	92.8	851.9	54.2	97.3	422.4	398.6	718.8

Table 1a. **Department of Defense Facilities — Industry Statistics by Industry Group: 1977 and Earlier Years** – Con.

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	Value of shipments for service by type of activity						Value added by manufacture	
		Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other cost (mil. dol.)
	1972								
	U.S. total	365.5	293.2	2,357.7	3,555.5	6,572.0	7,121.8	5,944.4	4,213.7
19	Ordnance and accessories	190.2	2.6	508.8	718.5	1,420.1	1,461.7	1,224.8	885.5
23	Apparel and other textile products	15.3	-	.2	(Z)	15.4	15.7	13.5	12.7
281	Industrial inorganic chemicals	20.2	-	31.3	40.7	92.2	92.4	80.4	55.8
289	Miscellaneous chemical products	26.5	-	11.7	28.3	66.5	64.7	45.4	31.7
353	Construction and related machinery	-	-	-	-	-	-	-	-
366	Communication equipment	76.5	.4	117.4	164.2	358.5	366.7	301.8	231.2
372	Aircraft and parts	23.4	-	236.7	739.5	999.5	1,024.8	764.3	504.7
373	Ship and boat building and repairing	5.3	283.3	35.6	936.1	1,260.3	1,759.1	1,547.3	1,418.7
381	Engineering and scientific instruments	-	-	-	-	-	-	-	-
---	Research and development	8.1	7.0	1,416.1	928.2	2,359.5	2,336.7	1,966.9	1,073.5
	1971								
	U.S. total	368.4	802.6	2,155.4	3,344.8	6,671.3	6,333.4	5,175.9	3,655.7
19	Ordnance and accessories	198.6	2.0	403.7	628.0	1,232.3	1,229.6	1,043.5	787.1
23	Apparel and other textile products	14.0	-	.1	.2	14.3	14.1	12.1	11.3
281	Industrial inorganic chemicals	19.3	-	31.0	41.5	91.7	91.8	80.7	59.6
389	Miscellaneous chemical products	29.8	-	8.5	23.0	61.3	55.2	35.6	30.2
353	Construction and related machinery	-	-	-	-	-	-	-	-
366	Communication equipment	77.9	-	100.5	153.5	331.9	332.6	278.7	223.4
372	Aircraft and parts	21.6	-	216.1	725.2	962.9	987.3	679.3	483.7
373	Ship and boat building and repairing	3.6	798.6	44.1	889.8	1,736.0	1,382.2	1.162.1	1,048.9
381	Engineering and scientific instruments	(Z)	-	-	.2	.2	.2	.2	.2
---	Research and development	3.6	2.0	1,351.4	883.6	2,240.6	2,240.4	1,883.7	1,011.2
	1970								
	U.S. total	406.0	414.8	1,919.7	3,222.4	5,962.8	6,206.8	4,962.7	3,589.9
19	Ordnance and accessories	232.2	1.9	401.0	580.3	1,215.4	1,219.2	1,000.2	755.1
23	Apparel and other textile products	13.3	-	(Z)	.1	13.4	13.5	11.7	11.0
281	Industrial inorganic chemicals	28.9	-	31.8	39.9	100.7	99.4	84.6	67.7
289	Miscellaneous chemical products	32.1	-	8.4	16.7	57.2	63.6	34.8	28.3
353	Construction and related machinery	-	-	-	-	-	-	-	-
366	Communication equipment	73.2	.3	103.2	160.0	336.7	343.3	286.5	209.3
372	Aircraft and parts	17.2	.1	178.9	737.2	933.3	930.5	636.8	466.2
373	Ship and boat building and repairing	5.4	410.5	33.7	807.9	1,257.5	1,466.2	1,201.0	1,101.0
381	Engineering and scientific instruments	.5	-	-	.2	.7	.7	.7	.3
---	Research and development	3.3	1.9	1,162.6	880.1	2,048.0	2,070.5	1,706.4	951.0
	1969								
	U.S. total	539.2	338.1	1,867.2	3,334.7	5,991.6	6,091.6	4,649.0	(NA)
19	Ordnance and accessories	310.3	.7	351.4	595.7	1,170.5	1,246.1	991.1	(NA)
23	Apparel and other textile products	12.4	-	.4	(Z)	12.8	13.3	11.4	(NA)
281	Industrial inorganic chemicals	33.2	-	33.6	30.9	97.7	97.9	81.9	(NA)
289	Miscellaneous chemical products	56.7	-	7.3	18.4	82.5	85.6	40.2	(NA)
353	Construction and related machinery	.5	-	-	11.6	12.2	11.4	9.4	(NA)
366	Communication equipment	93.4	1.8	89.4	141.6	326.3	327.7	267.0	(NA)
372	Aircraft and parts	18.4	.1	96.9	780.5	895.9	888.2	550.3	(NA)
373	Ship and boat building and repairing	9.1	334.4	26.1	914.1	1,283.8	1,306.5	1,002.0	(NA)
381	Engineering and scientific instruments	(Z)	-	-	.1	.1	.1	.1	(NA)
---	Research and development	4.9	1.1	1,261.9	841.3	2,109.3	2,114.4	1,695.3	(NA)
	1968								
	U.S. total	544.0	354.0	1,854.3	3,202.2	5,953.4	5,848.4	4,521.8	(NA)
19	Ordnance and accessories	301.6	2.9	406.4	545.1	1,255.8	1,264.8	990.7	(NA)
23	Apparel and other textile products	13.3	-	(Z)	(Z)	13.4	13.6	11.2	(NA)
281	Industrial inorganic chemicals	38.8	-	35.4	28.9	103.2	105.2	82.5	(NA)
289	Miscellaneous chemical products	49.2	-	6.4	16.1	71.6	72.0	36.7	(NA)
353	Construction and related machinery	.4	-	-	7.1	7.5	6.6	5.1	(NA)
366	Communication equipment	93.2	4.8	103.9	146.7	348.7	349.0	278.7	(NA)
372	Aircraft and parts	28.1	(Z)	180.2	557.6	765.8	796.3	600.4	(NA)
373	Ship and boat building and repairing	12.7	343.6	36.6	1,009.2	1,401.6	1,251.4	925.4	(NA)
382	Mechanical measuring and control devices	(Z)	-	-	.2	.2	.2	.2	(NA)
---	Research and development	6.6	2.9	1,085.3	891.2	1,985.6	1,989.3	1,590.7	(NA)

Table 1a. **Department of Defense Facilities — Industry Statistics by Industry Group: 1977 and Earlier Years** – Con.

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	All employees (wage board and graded)		Production workers (wage board)			Costs	
		Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
	1967							
	U.S. total	314.7	2,609.1	212.7	389.6	1,640.8	948.6	781.8
19	Ordnance and accessories	77.9	674.8	41.8	79.4	320.0	227.2	237.4
23	Apparel and other textile products	2.4	12.1	2.2	3.4	11.2	2.5	.6
281	Industrial inorganic chemicals	6.6	57.8	2.9	5.4	20.4	14.3	19.6
289	Miscellaneous chemical products	3.3	25.7	2.3	4.1	16.1	28.1	3.2
353	Construction and related machinery	.3	2.7	.3	.5	2.3	1.1	3.6
366	Communication equipment	18.3	157.9	8.1	14.6	60.5	69.2	95.9
372	Aircraft and parts	44.0	363.9	36.0	70.8	292.2	95.9	96.3
373	Ship and boat building and repairing	92.9	773.1	74.0	131.7	610.6	289.7	68.4
382	Mechanical measuring and control devices	(Z)	.2	(Z)	(Z)	.1	(Z)	(Z)
---	Research and development	69.1	540.9	45.0	79.7	307.4	220.7	256.8
	1966							
	U.S. total	288.5	2,369.7	194.8	357.6	1,482.4	1,079.8	646.1
19	Ordnance and accessories	70.5	620.4	36.5	67.1	280.7	272.1	185.8
23	Apparel and other textile products	2.4	11.9	2.3	4.0	11.1	2.2	.6
281	Industrial inorganic chemicals	6.0	51.8	2.4	4.3	17.1	16.4	13.0
289	Miscellaneous chemical products	3.0	22.8	2.0	3.7	14.1	38.8	1.8
353	Construction and related machinery	.2	2.0	.2	.4	1.7	.6	3.3
366	Communication equipment	16.8	137.4	7.3	13.4	52.8	77.9	31.8
372	Aircraft and parts	40.0	335.4	32.9	65.5	266.5	103.6	152.6
373	Ship and boat building and repairing	83.2	679.8	66.0	117.7	534.8	243.8	
382	Mechanical measuring and control devices	(Z)	.2	(Z)	(Z)	.1	(Z)	(Z)
---	Research and development	66.4	507.8	45.1	81.6	303.6	324.3	198.1
	1965							
	U.S. total	265.1	2,090.3	176.6	325.4	1,300.3	795.6	443.0
19	Ordnance and accessories	64.0	539.3	32.1	59.2	237.5	168.1	142.2
23	Apparel and other textile products	1.6	7.9	1.5	2.5	7.2	1.1	.5
281	Industrial inorganic chemicals	5.9	47.9	2.3	4.3	16.0	22.9	13.4
289	Miscellaneous chemical products	2.6	19.3	1.7	3.0	11.3	20.1	10.6
353	Construction and related machinery	.3	2.6	.3	.5	2.2	1.3	4.7
366	Communication equipment	14.1	112.8	5.8	10.3	38.9	53.7	20.9
372	Aircraft and parts	31.6	307.1	30.6	59.0	247.2	57.8	67.5
373	Ship and boat building and repairing	81.1	619.9	64.5	117.2	487.2	222.0	44.2
382	Mechanical measuring and control devices	(Z)	.2	(Z)	(Z)	.1	(Z)	(Z)
---	Research and development	63.9	433.4	37.8	69.5	252.7	248.8	143.9
	1963							
	U.S. total	230.6	1,691.7	155.3	284.1	1,096.8	588.0	315.0
19	Ordnance and accessories	66.2	495.7	35.6	64.6	243.6	174.5	121.3
23	Apparel and other textile products	1.8	8.3	1.7	2.8	7.5	1.4	.7
281	Industrial inorganic chemicals	5.8	40.4	2.4	4.0	14.4	21.6	20.0
289	Miscellaneous chemical products	2.7	18.5	1.8	3.3	12.2	27.4	3.3
353	Construction and related machinery	.3	1.9	.3	.5	1.6	.2	.2
366	Communication equipment	10.7	82.4	4.5	9.7	28.0	31.2	27.8
372	Aircraft and parts	34.5	246.9	28.6	53.2	202.6	46.4	45.8
373	Ship and boat building and repairing	94.7	691.6	76.3	138.6	560.6	253.4	45.3
381	Engineering and scientific instruments	(Z)	.2	(Z)	(Z)	(Z)	(Z)	(Z)
---	Research and development	14.0	105.8	4.2	7.3	26.1	32.0	50.5

Table 1a. **Department of Defense Facilities — Industry Statistics by Industry Group: 1977 and Earlier Years** – Con.

(For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

SIC code	Industry group	Value of shipments for service by type of activity						Value added by manufacture	
		Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other cost (mil. dol.)
	1967								
	U.S. total	486.2	370.4	989.5	2,460.4	4,323.6	4,340.5	3,390.9	(NA)
19	Ordnance and accessories	272.5	4.2	369.6	438.3	1,095.5	1,109.5	882.4	(NA)
23	Apparel and other textile products	15.0	-	(Z)	(Z)	15.0	15.0	12.5	(NA)
281	Industrial inorganic chemicals	32.3	-	33.0	27.2	92.5	92.5	78.1	(NA)
289	Miscellaneous chemical products	35.9	-	4.7	7.9	48.5	57.0	28.9	(NA)
353	Construction and related machinery	-	-	-	1.2	7.4	7.4	6.3	(NA)
366	Communication equipment	90.6	6.3	98.9	134.1	329.9	330.4	261.2	(NA)
372	Aircraft and parts	27.0	(Z)	57.6	439.2	523.8	538.6	442.8	(NA)
373	Ship and boat building and repairing	8.5	359.2	18.0	805.7	1,191.5	1,170.5	880.8	(NA)
382	Mechanical measuring and control devices	(Z)	-	-	.2	.2	.2	.2	(NA)
---	Research and development	4.4	.6	407.7	606.4	1,019.2	1,019.3	797.7	(NA)
	1966								
	U.S. total	424.6	293.8	1,019.5	2,326.5	4,064.5	4,075.8	2,997.4	(NA)
19	Ordnance and accessories	221.7	3.0	376.7	492.1	1,093.5	1,076.2	804.2	(NA)
23	Apparel and other textile products	14.4	-	.3	(Z)	14.7	14.8	12.5	(NA)
281	Industrial inorganic chemicals	23.3	-	33.0	24.9	81.2	81.9	65.4	(NA)
289	Miscellaneous chemical products	52.4	-	6.9	5.0	64.4	63.1	24.3	(NA)
353	Construction and related machinery	-	-	-	6.6	6.6	6.6	6.0	(NA)
366	Communication equipment	78.4	2.9	89.7	72.3	243.3	243.0	165.4	(NA)
372	Aircraft and parts	23.0	-	129.1	405.9	558.0	564.6	461.0	(NA)
373	Ship and boat building and repairing	6.7	287.9	19.7	658.8	973.1	995.8	753.0	(NA)
382	Mechanical measuring and control devices	-	(Z)	-	.2	.2	.2	.2	(NA)
---	Research and development	4.7	-	364.2	660.7	1,029.6	1,029.6	705.4	(NA)
	1965								
	U.S. total	414.9	307.5	729.1	1,881.4	3,332.7	3,363.2	2,555.8	(NA)
19	Ordnance and accessories	186.8	1.5	301.4	358.0	847.8	847.8	680.5	(NA)
23	Apparel and other textile products	9.4	-	(Z)	(Z)	9.5	9.6	8.4	(NA)
281	Industrial inorganic chemicals	27.1	-	34.9	21.9	84.0	84.4	61.5	(NA)
289	Miscellaneous chemical products	33.3	-	4.3	4.6	42.3	41.8	21.7	(NA)
353	Construction and related machinery	-	-	-	8.6	8.6	8.6	7.3	(NA)
366	Communication equipment	57.1	1.7	78.2	46.6	183.7	184.8	136.4	(NA)
372	Aircraft and parts	24.4	.3	68.6	326.8	420.1	421.3	357.9	(NA)
373	Ship and boat building and repairing	8.6	302.5	22.5	568.6	902.1	930.7	708.7	(NA)
382	Mechanical measuring and control devices	-	-	-	.2	.2	.2	.2	(NA)
---	Research and development	68.1	1.5	219.1	546.1	834.8	834.1	573.2	(NA)
	1963								
	U.S. total	433.1	597.3	634.2	877.2	2,541.8	2,641.2	2,053.3	(NA)
19	Ordnance and accessories	288.7	6.7	260.5	264.6	820.5	798.0	623.5	(NA)
23	Apparel and other textile products	10.9	-	-	.1	11.0	10.6	9.2	(NA)
281	Industrial inorganic chemicals	35.0	-	26.9	21.0	82.9	80.8	59.3	(NA)
289	Miscellaneous chemical products	37.6	-	4.3	6.4	48.2	49.8	22.5	(NA)
353	Construction and related machinery	-	-	-	2.2	2.2	2.2	2.1	(NA)
366	Communication equipment	40.6	.6	78.1	34.1	153.4	142.9	111.7	(NA)
372	Aircraft and parts	13.0	64.5	62.9	185.5	326.0	342.3	295.9	(NA)
373	Ship and boat building and repairing	7.3	525.5	18.0	352.9	903.7	1,021.8	768.5	(NA)
381	Engineering and scientific instruments	.1	-	-	.1	.2	.2	.2	(NA)
---	Research and development	-	-	183.4	10.2	193.6	192.4	160.5	(NA)

Note: (SIC) system has changed slightly between 1963 and 1977. In comparing industries, refer to 1957, 1967, and 1972 SIC manual and their 1958, 1963, and 1977 Supplements, as appropriate, for definition of industries.

Table 1b. **Department of Defense Facilities — Industry Statistics by Industry Group and Geographic Areas: 1977**

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F. Detail may not add to totals because of independent rounding)

Geographic area	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
United States	234.2	4,382.2	139.0	256.9	2,468.7	1,638.9	2,526.2
INDUSTRY GROUPS							
23 Apparel and other textile products	1.4	17.2	1.3	2.1	15.5	1.7	1.6
28 Chemicals and allied products	3.4	62.0	1.4	2.9	26.1	24.6	36.5
281 Industrial inorganic chemicals	.5	10.1	.2	.4	3.6	1.8	3.0
289 Miscellaneous chemical products	1.0	16.1	.5	.9	8.7	3.7	5.8
348 Ordnance and accessories, n.e.c	33.6	606.1	16.4	37.4	275.6	194.5	294.5
366 Communication equipment	12.6	272.5	4.8	8.8	95.7	63.1	207.9
37 Transportation equipment	130.2	2,372.9	91.9	164.9	1,629.3	970.2	912.7
372 Aircraft and parts	48.8	903.1	34.4	61.2	613.2	568.9	513.2
373 Ship and boat building and repairing	66.0	1,170.4	50.4	90.8	901.0	301.7	239.2
376 Guided missiles, space vehicles, and parts	13.6	271.0	5.6	10.4	91.8	91.3	150.0
379 Miscellaneous transportation equipment	1.8	28.4	1.5	2.5	23.3	8.3	10.3
--- Research and development	52.9	1,051.6	23.1	40.9	426.6	384.6	1,073.0
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S							
New England Division	11.8	215.9	5.6	10.0	87.5	48.5	160.3
New Hampshire	7.4	119.6	5.1	9.2	80.1	26.7	25.3
Massachusetts	1.2	28.4	.2	.3	2.9	3.6	36.6
Boston SMSA	1.2	28.4	.2	.3	2.9	3.6	36.6
Rhode Island	3.2	67.9	.3	.5	4.6	18.1	98.4
Middle Atlantic Division	28.5	557.7	15.1	27.3	261.2	174.1	388.6
New York	3.8	67.6	1.7	3.5	27.5	52.8	7.4
Albany-Schenectady-Troy SMSA	2.7	44.9	1.6	3.4	26.3	48.2	6.6
New Jersey	6.9	151.4	1.6	2.9	31.1	18.5	179.2
Newark SMSA	5.6	128.0	.9	1.5	19.2	12.1	167.2
Pennsylvania	17.8	338.8	11.9	21.0	202.6	102.9	202.0
Philadelphia, Pa.-N.J. SMSA	13.4	245.8	7.7	13.7	126.1	56.8	184.8
East North Central Division	13.6	254.7	6.4	11.2	105.8	90.8	252.3
Ohio	4.2	92.3	1.3	2.4	24.4	15.2	200.5
Dayton SMSA	2.5	59.9	.2	.4	3.1	2.8	196.9
Indiana	6.6	107.4	3.2	5.6	49.4	51.5	38.7
Indianapolis SMSA	2.5	46.6	1.1	2.0	20.6	30.5	15.4
Illinois	2.9	55.0	1.8	3.2	32.0	24.1	13.0
Davenport-Rock Island-Moline, Iowa-Ill., SMSA	2.9	55.0	1.8	3.2	32.0	24.1	13.0
South Atlantic Division	63.5	1,173.1	36.0	65.7	617.2	462.1	642.8
Maryland	8.9	185.8	2.8	5.3	51.6	90.7	143.9
District of Columbia	4.8	109.2	.7	1.5	13.6	18.2	111.4
Virginia	22.7	385.7	13.9	25.3	217.3	121.4	191.5
Norfolk Virginia Beach-Portsmouth, SMSA	15.3	241.7	11.9	21.3	183.5	101.6	66.1
North Carolina	2.5	42.0	1.9	3.4	32.1	38.8	9.3
South Carolina	8.1	134.6	6.1	11.1	101.2	33.1	34.0
Georgia	6.4	124.8	5.2	9.0	102.3	72.8	12.8
Atlanta SMSA	-	-	-	-	-	-	-
Macon SMSA	6.4	124.8	5.2	9.0	102.3	72.8	12.8
Florida	10.1	191.0	5.4	10.1	99.1	86.9	139.9
Jacksonville SMSA	2.8	51.6	2.0	3.7	38.4	36.7	15.5
Pensacola SMSA	3.4	60.6	2.5	4.5	44.8	28.1	19.5
East South Central Division	8.2	164.3	4.4	8.2	71.2	78.6	137.8
Kentucky	2.4	39.9	1.6	3.4	26.7	11.1	6.5
Lexington SMSA	-	-	-	-	-	-	-
Louisville, Ky.-Ind. SMSA	2.4	39.9	1.6	3.4	26.7	11.1	6.5
Tennessee	.2	3.3	(Z)	(Z)	.1	7.0	97.1
Alabama	5.4	116.7	2.8	4.8	44.4	58.3	20.3
Huntsville SMSA	2.4	68.3	(Z)	(Z)	.4	3.4	12.3
Mississippi	.2	4.5	(Z)	(Z)	(Z)	2.1	13.9
West South Central Division	24.2	428.1	18.5	38.5	324.8	287.1	151.1
Arkansas	1.0	16.1	.5	.9	8.7	3.7	5.8
Oklahoma	9.6	169.2	7.5	19.4	132.0	132.7	101.9
Oklahoma City SMSA	8.0	145.4	6.3	10.9	116.0	129.6	91.2
Texas	13.6	242.8	10.5	18.1	184.2	150.6	43.3
San Antonio SMSA	8.2	140.7	6.2	10.6	105.0	78.4	20.0
Texarkana, Tex.-Ark. SMSA	2.6	43.7	2.1	3.6	36.9	20.4	15.6
Mountain Division	12.2	202.8	8.3	14.5	133.6	74.4	185.6
Colorado	.9	18.4	.5	.9	10.0	5.0	4.3
New Mexico	.5	11.0	(Z)	(Z)	.1	3.7	135.5
Utah	9.3	152.1	6.8	11.9	109.1	61.3	41.2
Nevada	1.5	21.3	1.0	1.7	14.4	4.4	4.5
Pacific Division	72.2	1,385.5	44.8	81.4	867.4	423.4	607.7
Washington	13.0	240.2	9.2	17.2	174.9	71.3	44.3
California	53.8	1,037.8	31.4	56.7	608.5	323.7	542.0
Bakersfield SMSA	6.6	129.7	1.6	2.8	28.6	36.7	162.2
Los Angeles-Long Beach SMSA	7.4	129.6	6.0	10.6	106.4	42.8	33.5
San Diego SMSA	9.1	173.6	4.7	8.4	80.8	80.0	167.3
San Francisco-Oakland SMSA	5.8	116.7	4.2	7.8	87.7	49.1	32.1
Vallejo-Napa SMSA	10.1	209.7	7.7	14.1	165.2	32.4	31.5
Hawaii	5.5	107.5	4.2	7.6	84.0	28.4	21.5

Table 1b. **Department of Defense Facilities — Industry Statistics by Industry Group and Geographic Areas: 1977**—Con.

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F. Detail may not add to totals because of independent rounding)

Geographic area	Value of shipments for service by type of activity						Value added by manufacture	
	Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other cost (mil. dol.)
United States	463.6	151.7	2,335.2	5,100.6	8,051.1	8,325.5	6,686.7	4,160.5
INDUSTRY GROUP								
23 Apparel and other textile products	19.2	-	-	-	19.2	21.3	19.6	17.9
28 Chemicals and allied products	40.7	-	6.5	80.7	127.9	128.0	103.4	66.9
281 Industrial inorganic chemicals	.3	-	.5	14.1	14.9	14.9	13.1	10.2
289 Miscellaneous chemical products	10.9	-	-	15.2	26.1	26.0	22.3	16.5
348 Ordnance and accessories, n.e.c.	238.4	8.4	351.3	564.2	1,162.3	1,150.4	955.9	661.4
366 Communication equipment	96.7	-	121.5	334.8	553.0	549.8	486.6	278.7
37 Transportation equipment	57.9	141.2	521.9	3,172.9	3,894.0	4,305.3	3,335.1	2,422.4
372 Aircraft and parts	47.7	8.6	182.4	1,606.8	1,845.6	1,917.4	1,348.6	835.4
373 Ship and boat building and repairing	4.4	109.4	39.0	1,320.2	1,472.9	1,814.6	1,512.9	1,273.7
376 Guided missiles, space vehicles, and parts	5.6	18.2	300.5	204.3	528.6	526.3	434.9	285.0
379 Miscellaneous transportation equipment	.2	5.1	-	41.6	46.9	46.9	38.7	28.4
--- Research and development	10.7	2.0	1,334.0	948.0	2,294.6	2,170.8	1,786.1	713.2
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S								
New England Division	3.5	78.7	170.1	136.5	388.8	446.2	397.7	237.4
New Hampshire	.1	78.7	.5	45.7	125.0	185.2	158.5	133.2
Massachusetts	3.4	-	59.6	7.0	70.0	69.4	65.8	29.2
Boston SMSA	3.4	-	59.6	7.0	70.0	69.4	65.8	29.2
Rhode Island	-	-	110.0	83.8	193.8	191.5	173.4	75.1
Middle Atlantic Division	142.9	3.3	273.7	729.8	1,149.6	1,155.5	981.3	592.7
New York	73.2	-	27.9	24.9	126.0	133.2	80.4	73.0
Albany-Schenectady-Troy SMSA	73.2	-	5.1	19.5	97.7	105.0	56.8	50.2
New Jersey	5.5	-	101.2	234.3	341.0	348.6	330.1	151.0
Newark SMSA	4.8	-	82.3	211.7	298.9	304.9	292.8	125.5
Pennsylvania	64.2	3.3	144.6	470.5	682.6	673.7	570.8	368.8
Philadelphia, Pa.-N.J. SMSA	45.4	1.4	144.6	320.5	511.9	504.7	447.9	263.1
East North Central Division	131.0	2.9	201.5	237.3	572.6	581.7	490.9	238.6
Ohio	.4	.1	177.6	104.6	282.7	287.8	272.6	72.1
Dayton SMSA	.3	.1	177.6	61.4	239.4	239.4	236.6	39.7
Indiana	83.3	-	17.7	89.5	190.5	201.8	150.3	111.6
Indianapolis SMSA	61.2	-	14.4	9.4	85.0	90.9	60.4	45.0
Illinois	47.2	2.8	6.2	43.1	99.4	92.0	68.0	54.9
Davenport-Rock Island-Moline, Iowa-Ill., SMSA	47.2	2.8	6.2	43.1	99.4	92.0	68.0	54.9
South Atlantic Division	48.8	16.9	786.3	1,289.1	2,141.2	2,266.4	1,804.3	1,161.5
Maryland	37.6	-	213.8	210.1	461.5	457.0	366.3	222.3
District of Columbia	-	-	227.8	4.7	232.4	234.2	216.0	104.6
Virginia	7.6	16.9	248.9	445.9	719.3	727.4	606.0	414.4
Norfolk-Virginia Beach-Portsmouth, SMSA	4.7	16.9	1.3	390.4	413.3	418.9	317.3	251.2
North Carolina	.7	-	2.8	73.6	77.0	83.8	45.0	35.7
South Carolina	.6	-	-	149.2	149.9	221.4	188.3	154.3
Georgia	-	-	-	185.9	185.9	213.5	140.7	127.9
Atlanta SMSA	-	-	-	-	-	-	-	-
Macon SMSA	-	-	-	185.9	185.9	213.5	140.7	127.9
Florida	2.4	-	93.2	219.7	315.3	329.1	242.2	102.3
Jacksonville SMSA	1.7	-	-	99.4	101.1	107.2	70.5	55.0
Pensacola SMSA	.7	-	-	103.6	104.4	112.7	84.7	65.2
East South Central Division	24.4	18.2	130.5	136.8	309.8	302.6	224.0	86.2
Kentucky	22.7	-	.1	44.5	67.4	60.2	49.0	42.5
Lexington SMSA	-	-	-	-	-	-	-	-
Louisville, Ky.-Ind. SMSA	22.7	-	.1	44.5	67.4	60.2	49.0	42.5
Tennessee	-	-	25.3	-	25.3	25.3	18.3	-78.8
Alabama	1.6	18.2	84.5	92.2	196.6	196.6	138.3	118.0
Huntsville SMSA	-	-	84.5	-	84.5	84.5	81.1	68.8
Mississippi	-	-	20.6	-	20.6	20.6	18.4	4.5
West South Central Division	50.7	8.5	18.5	778.6	856.3	840.2	553.1	402.1
Arkansas	10.9	-	-	15.2	26.1	26.0	22.3	16.5
Oklahoma	25.4	8.5	-	373.5	407.4	396.5	263.8	161.9
Oklahoma City SMSA	4.5	8.5	-	345.0	358.0	352.4	222.9	131.7
Texas	14.3	-	18.5	389.9	422.8	417.7	267.1	223.7
San Antonio SMSA	-	-	18.5	198.6	217.2	217.2	138.8	118.7
Texarkana, Tex.-Ark. SMSA	14.3	-	-	70.3	84.7	79.7	59.3	43.7
Mountain Division	14.0	10.7	164.7	269.8	459.2	480.0	405.6	220.0
Colorado	.5	5.6	1.2	20.4	27.7	27.7	22.7	18.4
New Mexico	-	-	150.2	-	150.2	150.2	146.6	11.0
Utah	6.2	5.1	13.2	219.0	243.6	264.4	203.1	161.9
Nevada	7.3	-	-	30.3	37.7	37.7	33.3	28.7
Pacific Division	48.3	12.4	590.0	1,522.8	2,173.5	2,253.0	1,829.6	1,222.0
Washington	21.8	3.0	5.0	328.1	357.9	372.9	301.6	257.3
California	26.5	9.4	584.9	1,096.3	1,717.1	1,711.5	1,387.8	845.8
Bakersfield SMSA	-	-	232.9	24.2	257.1	253.6	216.9	54.7
Los Angeles-Long Beach SMSA	-	9.2	.4	140.9	150.5	220.2	177.4	143.9
San Diego SMSA	12.4	-	183.7	238.8	435.0	441.1	361.1	193.8
San Francisco-Oakland SMSA	9.5	.2	-	182.1	191.7	194.7	145.6	113.6
Vallejo-Napa SMSA	.3	-	33.6	181.4	215.3	282.3	249.9	218.4
Hawaii	-	.1	-	98.5	98.6	168.7	140.2	118.8

Table 1c. Department of Defense Facilities—Industry Statistics by Industry Group and Geographic Areas: 1972

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F. Detail may not add to totals because of independent rounding)

Geographic area	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
United States	281.5	3,638.0	171.0	311.4	1,960.2	1,177.4	1,730.7
INDUSTRY GROUP							
19 Ordnance and accessories	64.1	873.9	31.6	57.9	357.5	236.9	339.3
192 Ammunition, except small arms	44.6	612.4	21.4	39.1	234.0	147.3	260.8
194 Sighting and fire control equipment	4.1	58.9	1.4	2.4	17.7	8.3	9.8
199 Ordnance and accessories, n.e.c.	5.9	78.8	4.0	8.0	51.4	47.2	14.4
23 Apparel and other textile products	1.6	12.8	1.5	2.7	11.5	2.2	.9
28 Chemical and allied products	6.3	86.8	2.5	4.6	28.4	31.4	38.3
281 Industrial inorganic chemicals	3.9	54.9	1.2	2.1	13.5	12.0	24.6
289 Miscellaneous chemical products	2.4	32.0	1.3	2.4	14.9	19.3	13.7
366 Communication equipment	19.1	254.6	8.7	15.3	96.2	64.9	70.6
37 Transportation equipment	111.7	1,352.9	82.9	150.4	959.1	472.3	388.2
372 Aircraft and parts	43.8	535.0	31.7	57.7	364.5	260.5	259.6
373 Ship and boat building and repairing	68.0	817.9	51.2	92.7	594.6	211.8	128.6
--- Research and development	78.6	1,057.0	43.7	80.5	507.5	369.8	893.4
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S							
New England Division	18.5	235.2	10.3	18.2	107.2	64.2	82.3
New Hampshire	5.6	64.1	3.6	6.6	38.3	16.1	8.6
Massachusetts	7.0	91.0	4.2	7.2	43.6	19.9	35.7
Boston SMSA	6.0	70.4	4.1	7.1	43.0	16.6	14.6
Rhode Island	5.9	80.2	2.5	4.4	25.3	28.2	38.0
Middle Atlantic Division	36.5	492.0	17.5	31.0	191.0	118.9	226.6
New York	3.7	53.8	1.4	2.5	16.2	14.0	7.1
Albany-Schnectady-Troy SMSA	2.5	32.9	1.4	2.5	15.6	12.9	3.5
New Jersey	8.8	144.0	1.9	3.4	23.6	19.6	80.9
Newark SMSA	6.5	102.2	1.7	2.9	20.4	13.4	21.0
Pennsylvania	24.1	294.2	14.1	25.1	151.3	85.3	138.6
Philadelphia, Pa.-N.J. SMSA	16.2	212.5	8.4	14.9	93.9	56.0	115.4
East North Central Division	15.8	211.9	8.5	15.9	99.5	78.8	275.2
Ohio	4.5	70.1	1.6	2.8	18.6	18.2	242.9
Dayton SMSA	2.6	46.5	.3	.5	3.7	10.4	240.3
Indiana	8.3	101.9	4.8	9.2	55.2	47.3	27.9
Indianapolis SMSA	2.8	35.5	1.4	2.6	16.3	24.7	11.6
Illinois	3.1	39.9	2.1	3.9	25.7	13.2	4.4
Davenport-Rock Island-Moline, Iowa-Ill. SMSA	3.1	39.9	2.1	3.9	25.7	13.2	4.4
West North Central Division	(Z)	.8	(Z)	(Z)	.1	.2	(Z)
South Atlantic Division	69.5	884.9	40.4	73.3	434.1	268.5	496.0
Maryland	15.5	234.4	4.7	8.5	54.1	46.8	163.7
District of Columbia	5.4	83.1	.9	1.8	9.8	20.4	78.5
Virginia	19.5	228.6	13.9	25.3	142.9	68.6	61.2
Norfolk-Portsmouth SMSA	9.5	100.4	7.5	13.4	76.0	30.8	18.0
North Carolina	2.4	26.0	1.9	3.5	19.5	14.6	6.1
South Carolina	6.7	75.4	5.0	9.1	53.7	15.7	11.0
Georgia	9.5	107.0	7.3	12.9	80.6	39.6	12.3
Atlanta SMSA	2.7	27.2	1.7	3.0	16.2	4.2	4.8
Macon SMSA	6.8	79.8	5.6	9.9	64.4	35.4	7.5
Florida	10.4	130.4	6.6	12.3	73.5	62.8	163.3
Jacksonville SMSA	2.9	34.6	2.2	4.1	26.2	19.9	9.4
Pensacola SMSA	4.0	45.3	3.2	5.9	34.8	22.8	11.5
East South Central Division	16.8	232.1	7.2	12.9	80.4	64.2	109.2
Kentucky	6.8	80.3	4.5	8.6	52.0	41.8	17.2
Lexington SMSA	3.9	41.4	2.6	4.5	26.2	7.9	7.2
Louisville, Ky.-Ind. SMSA	2.8	38.9	1.9	4.0	25.7	34.0	10.0
Tennessee	.1	2.4	(Z)	(Z)	.1	2.6	57.7
Alabama	9.9	149.4	2.6	4.4	28.4	19.8	34.3
Huntsville SMSA	8.0	128.7	.9	1.7	10.2	7.4	26.4
West South Central Division	34.5	394.9	26.8	47.9	293.5	220.9	55.8
Arkansas	1.3	14.3	.8	1.4	7.4	6.6	2.5
Oklahoma	13.8	157.6	11.4	20.6	129.4	88.4	13.9
Oklahoma City SMSA	11.3	131.9	9.3	16.8	108.3	81.5	10.1
Texas	19.4	223.0	14.6	25.9	156.7	125.9	39.4
Corpus Christi SMSA	3.9	47.7	2.8	4.9	32.2	44.0	6.6
San Antonio SMSA	10.5	120.5	8.3	14.7	91.5	60.0	16.2
Texarkana, Tex.-Ark. SMSA	5.0	54.9	3.6	6.3	33.1	21.8	16.6
Mountain Division	15.5	189.2	10.6	21.2	124.5	66.9	147.5
Colorado	1.6	17.7	1.1	4.0	12.4	8.3	10.3
New Mexico	2.2	29.1	.7	1.4	7.4	11.3	105.5
Utah	10.3	126.1	7.7	13.6	91.7	42.6	29.7
Salt Lake City SMSA	7.5	92.7	5.9	10.5	71.0	31.6	8.4
Nevada	1.4	16.2	1.1	2.2	13.1	4.7	2.1

Table 1c. **Department of Defense Facilities—Industry Statistics by Industry Group and Geographic Areas: 1972**—Con.

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F. Detail may not add to totals because of independent rounding)

Geographic area	Value of shipments for service by type of activity						Value added by manufacture	
	Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other cost (mil. dol.)
United States	365.5	293.2	2,357.7	3,555.5	6,572.0	7,121.8	5,944.4	4,213.7
INDUSTRY GROUP								
19 Ordnance and accessories	190.2	2.6	508.8	718.5	1,420.1	1,461.7	1,224.8	885.5
192 Ammunition, except small arms	90.7	.1	421.0	498.6	1,010.4	1,031.3	884.0	623.2
194 Sighting and fire control equipment	10.8	-	21.1	43.7	75.6	76.2	67.9	58.1
199 Ordnance and accessories, n.e.c	43.6	.1	1.8	81.7	127.3	141.4	94.2	79.8
23 Apparel and other textile products	15.3	-	.2	(Z)	15.4	15.7	13.5	12.7
28 Chemicals and allied products	46.7	-	43.0	69.1	158.7	157.1	125.7	87.4
281 Industrial inorganic chemicals	20.2	-	31.3	40.7	92.2	92.4	80.4	55.8
289 Miscellaneous chemical products	26.5	-	11.7	28.3	66.5	64.7	45.4	31.7
366 Communication equipment	76.5	.4	117.4	164.2	358.5	366.7	301.8	231.2
37 Transportation equipment	28.7	283.3	272.2	1,675.5	2,259.8	2,783.9	2,311.6	1,923.4
372 Aircraft and parts	23.4	-	236.7	739.5	999.5	1,024.8	764.3	504.7
373 Ship and boat buidling and repairing	5.3	283.3	35.6	936.1	1,260.3	1,759.1	1,547.3	1,418.7
--- Research and development	8.1	7.0	1,416.1	928.2	2,359.5	2,336.7	1,966.9	1,073.5
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S								
New England Division	5.8	20.8	166.5	214.7	407.8	487.6	423.4	341.1
New Hampshire	2.0	3.2	1.0	95.8	102.0	207.3	191.2	182.6
Massachusetts	3.2	17.7	59.1	66.3	146.2	133.7	113.8	78.1
Boston SMSA	3.2	17.7	14.1	66.3	101.3	88.7	72.1	57.5
Rhode Island	.6	-	106.4	52.6	159.6	146.7	118.5	80.5
Middle Atantic Division	68.8	68.3	389.0	284.2	810.2	943.7	824.8	598.2
New York	25.2	1.5	31.1	10.9	68.7	74.9	60.9	53.8
Albany-Schnectady-Troy SMSA	25.2	1.5	6.1	10.4	43.1	49.3	36.4	32.9
New Jersey	12.7	-	166.1	64.2	242.9	244.7	225.1	144.2
Newark SMSA	12.7	-	58.1	64.2	135.0	136.8	123.4	102.4
Pennsylvania	30.9	66.8	191.8	209.1	498.6	624.1	538.8	400.2
Philadelphia, Pa.-N.J. SMSA	10.9	66.0	191.6	130.7	399.2	515.4	459.4	344.0
East North Central Division	114.4	.3	292.6	153.1	560.3	571.0	492.2	217.0
Ohio	1.0	.2	279.6	51.1	331.9	331.8	313.6	70.7
Dayton SMSA	.8	.2	279.6	17.2	297.8	297.8	287.4	47.1
Indiana	92.6	-	12.1	75.6	180.2	182.0	134.7	106.8
Indianapolis SMSA	51.5	-	7.5	12.8	71.8	72.6	47.9	36.3
Illinois	20.8	.1	.9	26.4	48.2	57.2	44.0	39.6
Davenport-Rock Island-Moline, Iowa-Ill. SMSA	20.8	.1	.9	26.4	48.2	57.2	44.0	39.6
West North Central Division	-	-	-	1.0	1.0	1.0	.8	.8
South Atlantic Division	67.0	15.0	787.1	799.9	1,669.2	1,709.3	1,440.8	944.8
Maryland	45.6	-	312.8	93.2	451.6	445.8	399.0	235.3
District of Columbia	-	-	168.8	12.0	180.8	182.3	161.9	83.4
Virginia	15.2	9.5	86.5	261.4	372.6	397.3	328.7	267.5
Norfolk-Portsmouth SMSA	.1	9.5	.8	143.6	154.0	185.9	155.1	137.1
North Carolina	1.4	-	1.1	42.4	45.0	46.0	31.4	25.3
South Carolina	.5	5.4	.1	101.5	107.6	119.7	104.0	93.0
Georgia	-	-	-	159.0	159.0	159.0	119.4	107.1
Atlanta SMSA	-	-	-	36.2	36.2	36.2	32.0	27.2
Macon SMSA	-	-	-	122.8	122.8	122.8	87.4	79.9
Florida	4.4	-	217.8	130.4	352.6	359.2	296.4	133.1
Jacksonville SMSA	1.5	-	(Z)	60.0	61.6	62.9	43.0	33.6
Pensacola SMSA	2.8	-	.6	67.8	71.2	77.3	54.5	43.0
East South Central Division	30.5	.4	107.4	257.8	396.1	407.7	343.5	234.3
Kentucky	30.3	.4	.9	104.1	135.7	141.6	99.8	82.6
Lexington SMSA	7.5	.4	-	48.7	56.6	57.4	49.5	42.3
Louisville, Ky.-Ind. SMSA	22.8	-	.9	55.3	79.1	84.2	50.2	40.2
Tennessee	-	-	62.7	-	62.7	62.7	60.1	2.4
Alabama	.2	-	43.8	153.7	197.7	203.4	183.6	149.3
Huntsville SMSA	-	-	43.8	118.7	162.5	162.5	155.1	128.7
West South Central Division	38.3	5.6	8.7	613.2	665.8	671.2	450.3	394.5
Arkansas	14.4	-	-	8.9	23.3	23.6	17.0	14.5
Oklahoma	20.7	5.5	.4	226.3	252.8	260.7	172.3	158.4
Oklahoma City SMSA	2.9	5.5	-	218.8	227.1	223.6	142.1	132.0
Texas	3.2	.1	8.3	378.0	389.7	387.0	261.1	221.7
Corpus Christi SMSA	2.7	-	-	97.0	99.7	96.9	52.9	46.3
San Antonio SMSA	-	-	8.3	188.4	196.7	196.7	136.7	120.5
Texarkana, Tex.-Ark. SMSA	.5	.1	-	92.6	93.3	93.3	71.5	54.9
Mountain Division	19.7	1.4	157.6	223.7	402.5	405.6	348.1	191.2
Colorado	1.8	-	.6	28.5	30.8	36.3	37.4	17.7
New Mexico	-	.6	141.8	3.4	145.9	145.9	134.6	29.1
Utah	5.6	.8	15.2	179.3	200.9	198.7	156.1	126.4
Salt Lake City SMSA	-	-	-	134.8	134.8	132.9	101.3	92.9
Nevada	12.3	-	-	12.5	24.9	24.7	20.0	17.9

Table 1c. Department of Defense Facilities—Industry Statistics by Industry Group and Geographic Areas: 1972—Con.

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F. Detail may not add to totals because of independent rounding)

Geographic area	All employees (wage board and graded)		Production workers (wage board)			Costs	
	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Materials, supplies, and parts used (million dollars)	Contractual services and other costs (million dollars)
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S--Con.							
Pacific Division	74.5	997.1	49.7	90.8	629.8	294.8	338.1
Washington	10.7	138.1	7.5	14.0	93.2	27.7	14.8
California	58.6	792.1	38.4	70.0	487.5	250.2	315.6
Bakersfield SMSA	6.6	106.2	1.7	3.3	21.5	29.4	110.7
Los Angeles-Long Beach SMSA	10.4	139.9	6.5	12.0	79.7	39.8	80.2
San Bernardino-Riverside-Ontario SMSA	8.7	114.4	6.4	11.0	82.2	34.2	15.0
San Diego SMSA	8.5	116.0	5.5	10.1	68.5	51.9	37.6
San Francisco-Oakland SMSA	13.7	181.2	10.8	20.0	143.5	65.2	33.5
Vallejo-Napa SMSA	10.7	134.4	7.5	13.6	92.1	29.7	38.6
Hawaii	5.1	66.9	3.8	6.9	49.1	16.9	7.7

Table 1c. Department of Defense Facilities—Inudstry Statistics by Industry Group and Geographic Areas: 1972—Con.

(For meaning of abbreviations and symbols, see introductory text. For definitions of SMSA's, see appendix F.) Detail may not add to totals because of independent rounding)

Geographic area	Value of shipment for service by type of activity						Value added by manufacture	
	Manufacture and assembly (million dollars)	Construction and conversion (million dollars)	Research and development (million dollars)	Other receipts (million dollars)	Total billings (million dollars)	Total revenue (million dollars)	Total revenue less cost of materials (million dollars)	Revenue less cost of materials, contractual services, other cost (mil. dol.)
GEOGRAPHIC DIVISIONS, STATES, AND SMSA'S--Con.								
Pacific Division	21.0	181.4	449.0	1,007.8	1,659.2	1,924.5	1,629.7	1,291.6
Washington	7.7	18.2	1.8	168.7	196.3	286.8	259.1	244.3
California	13.3	159.2	445.8	790.5	1,408.7	1,583.8	1,333.7	1,018.0
Bakersfield SMSA	2.8	-	210.5	36.2	249.5	247.5	180.4	107.4
Los Angeles-Long Beach SMSA	-	16.6	141.9	97.7	256.1	244.6	204.8	124.6
San Bernardino-Riverside-Ontario SMSA	.4	-	13.3	160.1	173.8	172.8	127.8	123.6
San Diego SMSA	5.4	-	51.8	132.6	189.8	202.8	150.9	113.3
San Francisco-Oakland SMSA	4.0	.7	.1	244.5	249.4	470.5	405.3	371.8
Vallejo-Napa SMSA	.7	141.9	28.2	119.4	290.1	245.6	264.5	177.3
Hawaii	-	4.1	1.4	48.6	54.1	53.9	37.0	29.3

Table 2a. Federal, State, and District of Columbia Penitentiaries—Production by Industry Group: 1977 and 1972

(Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of the products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Excludes agricultural products, road building, and other nonmanufacturing activities. For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

Industry group	Unit of measure	Product shipments 1977 Quantity	Product shipments 1977 Value (million dollars)	Product shipments 1972 Quantity	Product shipments 1972 Value (million dollars)	Industry group	Unit of measure	Product shipments 1977 Quantity	Product shipments 1977 Value (million dollars)	Product shipments 1972 Quantity	Product shipments 1972 Value (million dollars)
Total	.....	(X)	272.8	(X)	172.2	Mattresses	.....	(X)	7.8	(X)	3.4
						Wood furniture	.....	(X)	22.4	(X)	13.7
Meat products	.....	(X)	15.3	(X)	6.7						
Dairy products	.....	(X)	4.7	(X)	3.9	Printing and binding	.....	(X)	11.2	(X)	6.0
Canned foods	.....	(X)	3.2	(X)	3.0						
Prepared animal feeds	.....	(X)	1.7	(X)	2.4	Soaps	.....	(X)	7.1	(X)	5.0
Coffee and tea	.....	(X)	1.1	(X)	.8	Paints	.....	(X)	6.9	(X)	4.7
Tobacco, chewing and smoking	.....	(X)	.9	(X)	.7	Shoes	Mil. pr.	0.9	9.4	1.3	6.7
						Clay and concrete brick	Millions	2.3	.2	4.1	.2
Blankets	.....	(X)	5.6	(X)	2.3	Concrete blocks	.....	(X)	.2	(X)	.1
Woven fabrics	Million lin. yd.	15.2	12.3	15.5	9.5						
						Motor vehicle license plates	Millions	80.6	42.1	89.1	33.6
Cordage and twine	.....	(X)	.3	(X)	.3	Miscellaneous metal products	.....	(X)	26.7	(X)	15.2
Apparel and related products	.....	(X)	24.5	(X)	15.1						
Sheets and pillowcases	.....	(X)	2.8	(X)	1.0	Brooms and brushes	.....	(X)	9.4	(X)	6.6
						Highway and road signs	.....	(X)	15.3	(X)	9.3
Canvas and related products	.....	(X)	5.9	(X)	5.1	Miscellaneous products	.....	(X)	35.8	(X)	16.9

Table 2b. Federal, State, and District of Columbia Penitentiaries—Production by Geographic Areas and Industry: 1977 and 1972

(Millions of dollars. Geographic distribution is for State and District of Columbia penitentiaries only. Excludes agricultural products, road building, and other nonmanufacturing activities. For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

Geographic areas	1977 industries													
	Total	Meat products	Dairy products	Canned foods	Prepared animal feeds	Coffee and tea	Chewing and smoking tobacco	Blankets	Woven fabrics	Cordage and twine	Apparel and related products	Sheets and pillowcases	Canvass and related products	Mattresses
United States	272.8	15.3	4.7	3.2	1.7	1.1	0.9	5.6	12.3	0.3	24.5	2.8	5.9	7.8
Federal penitentiaries	90.9	-	-	-	-	-	-	5.4	10.3	-	5.4	-	5.7	3.5
State penitentiaries	181.9	15.3	4.7	3.2	1.7	1.1	.9	.2	2.0	.3	19.1	2.8	.2	4.3
New England Division	8.1	(Z)	.2	-	.1	-	-	-	-	-	.3	(Z)	-	.2
Maine	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire	.3	(Z)	.1	-	-	-	-	-	-	-	-	-	-	-
Vermont	.7	-	.1	-	-	-	-	-	-	-	-	-	-	-
Massachusetts	1.6	-	-	-	-	-	-	-	-	-	.1	(Z)	-	.1
Rhode Island	.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut	2.4	-	-	-	.1	-	-	-	-	-	.2	-	-	.1
Middle Atlantic Division	27.4	1.5	.9	.6	.6	1.1	-	.1	.6	-	4.6	.3	-	.8
New York	8.5	-	-	-	-	-	-	-	-	-	1.5	.3	-	.2
New Jersey	4.3	-	-	-	.6	-	-	.1	.2	-	.8	-	-	.2
Pennsylvania	14.6	1.5	.9	.6	-	1.1	-	-	.4	-	2.3	-	-	.4
East North Central Division	28.5	1.1	.4	-	-	-	.2	.1	.5	-	3.1	1.0	(Z)	.7
Ohio	9.7	-	-	-	-	-	.1	-	-	-	.7	.4	-	.2
Indiana	5.2	.6	-	-	-	-	(Z)	-	-	-	.2	-	-	.1
Illinois	4.4	.5	.4	-	-	-	.1	-	-	-	1.0	.2	-	.2
Michigan	7.3	-	-	-	-	-	-	.1	.5	-	1.2	.4	(Z)	.2
Wisconsin	1.9	-	-	-	-	-	-	-	-	-	(Z)	-	-	(Z)
West North Central Division	20.0	.3	.4	-	.3	-	-	(Z)	-	.3	.6	-	(Z)	.1
Minnesota	5.5	-	-	-	-	-	-	-	-	.3	-	-	(Z)	.1
Iowa	4.2	-	-	-	-	-	-	-	-	-	(Z)	-	-	-
Missouri	6.0	.2	.3	-	.3	-	-	-	-	-	.6	-	-	-
North Dakota	.7	.1	.1	-	-	-	-	-	-	-	-	-	-	-
South Dakota	.6	-	(Z)	-	-	-	-	-	-	-	-	-	-	-
Nebraska	.9	-	-	-	-	-	-	(Z)	-	-	(Z)	-	-	(Z)
Kansas	2.1	-	-	-	-	-	-	-	-	-	-	-	-	(Z)
South Atlantic Division	37.7	7.4	.9	1.0	.7	-	.6	(Z)	-	-	3.1	1.3	.2	.8
Delaware	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	2.5	.7	-	-	-	-	-	-	-	-	.2	-	-	.1
District of Columbia	2.2	.1	-	-	-	-	-	(Z)	-	-	.5	.1	-	-
Virginia	2.9	-	-	-	-	-	-	(Z)	-	-	.6	.1	-	-
West Virginia	.5	-	-	-	-	-	-	-	-	-	(Z)	-	-	(Z)
North Carolina	13.3	3.1	-	.6	-	-	-	-	-	-	.3	.7	-	.3
South Carolina	1.6	-	-	-	-	-	-	-	-	-	.4	(Z)	-	.1
Georgia	5.7	1.7	-	.4	-	-	-	-	-	-	.2	.2	.2	.2
Florida	9.0	1.8	.9	-	.7	-	.6	-	-	-	.9	.2	-	.1
East South Central Division	11.8	1.7	1.1	.6	-	-	-	-	-	-	.5	.1	-	(Z)
Kentucky	.9	-	-	-	-	-	-	-	-	-	.1	-	-	-
Tennessee	6.3	.5	1.1	-	-	-	-	-	-	-	.2	.1	-	(Z)
Alabama	4.5	1.2	-	.6	-	-	-	-	-	-	.2	-	-	-
Mississippi	.1	-	-	-	-	-	-	-	-	-	-	-	-	-
West South Central Division	21.7	1.9	-	.9	(Z)	-	-	-	.9	-	3.6	.1	-	1.0
Arkansas	1.2	.9	-	-	(Z)	-	-	-	-	-	.1	-	-	-
Louisiana	2.0	.4	-	.2	-	-	-	-	-	-	.2	(Z)	-	.1
Oklahoma	2.1	.6	-	.1	-	-	-	-	-	-	.3	(Z)	-	(Z)
Texas	16.4	-	-	.6	-	-	-	-	.9	-	3.0	.1	-	.9
Mountain Division	7.8	1.4	.8	.1	-	-	-	-	-	-	.1	(Z)	(Z)	.1
Montana	1.4	.9	-	-	-	-	-	-	-	-	-	-	-	(Z)
Idaho	.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	(Z)	-	-	-	-	-	-	-	-	-	(Z)	-	-	-
Colorado	1.2	-	-	.1	-	-	-	-	-	-	(Z)	(Z)	(Z)	-
New Mexico	1.0	.2	-	-	-	-	-	-	-	-	.1	(Z)	-	(Z)
Arizona	2.0	.1	.5	-	-	-	-	-	-	-	-	-	-	.1
Utah	1.4	.2	.3	-	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pacific Division	18.9	-	-	-	-	-	.1	-	-	-	3.2	-	-	.6
Washington	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	1.0	-	-	-	-	-	-	-	-	-	-	-	-	1
California	15.9	-	-	-	-	-	.1	-	-	-	3.2	-	-	.5
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii	.1	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2b. **Federal, State, and District of Columbia Penitentiaries — Production by Geographic Areas and Industry: 1977 and 1972**—Con.

(Millions of dollars. Geographic distribution is for State and District of Columbia penitentiaries only. Excludes agricultural products, road building, and other nonmanufacturing activities. For meaning of abbreviations and symbols, see introductory text. Detail may not add to totals because of independent rounding)

Geographic area	1977 industries												1972 industries
	Wood furniture	Printing and binding	Soaps	Paints	Shoes	Clay and concrete brick	Concrete block	Motor vehicle license plates	Miscellaneous metal products	Brooms and brushes	Highway and road signs	Other products	
United States.....	22.4	11.2	7.1	6.9	9.4	.2	.2	42.1	26.7	9.4	15.3	35.8	172.2
Federal penitentiaries	9.8	2.2	-	-	6.9	-	-	-	17.0	8.3	2.5	13.9	56.3
State penitentiaries..	12.6	9.0	7.1	6.9	2.5	.2	.2	42.1	9.7	1.1	12.8	21.9	115.9
New England Division.....	.5	.8	-	-	.1	-	-	4.0	.1	.1	.9	.8	3.6
Maine.....	.1	(Z)	-	-	-	-	-	2.5	-	-	-	(Z)	(Z)
New Hampshire.....	(Z)	.1	-	-	-	-	-	.1	-	-	-	(Z)	.3
Vermont.....	-	.1	-	-	-	-	-	.2	-	-	.2	.1	.6
Massachusetts.....	.1	.1	-	-	.1	-	-	.6	.1	.1	.1	.2	1.7
Rhode Island.....	-	.1	-	-	-	-	-	.3	-	-	.1	-	.2
Connecticut.....	.3	.4	-	-	-	-	-	.3	-	-	.5	.5	.8
Middle Atlantic Division....	1.2	1.2	1.7	-	.2	-	-	6.4	2.2	(Z)	1.2	2.2	16.8
New York.....	.8	.1	1.0	-	-	-	-	2.0	1.5	-	.7	.4	6.9
New Jersey.....	.1	.4	.3	-	-	-	-	.9	.2	(Z)	.5	-	2.3
Pennsylvania.....	.3	.7	.4	-	.2	-	-	3.5	.5	-	-	1.8	7.6
East North Central Division.	1.9	.6	.8	(Z)	.5	(Z)	-	8.7	1.6	.3	3.8	3.2	16.9
Ohio.....	.5	.2	.4	-	.2	-	-	4.0	.4	.1	.5	2.0	5.2
Indiana.....	.5	.2	.1	-	-	(Z)	-	2.0	.1	.1	1.1	.2	2.8
Illinois.....	.1	(Z)	.3	-	-	-	-	-	(Z)	.1	1.2	.3	2.2
Michigan.....	.7	-	-	-	.3	-	-	1.6	1.1	-	.7	.5	3.9
Wisconsin.....	.1	.2	-	(Z)	-	-	-	1.1	-	-	.3	.2	2.8
West North Central Division.	2.1	1.3	1.1	1.5	.1	-	-	5.4	.5	-	2.2	3.8	10.8
Minnesota.....	.5	.3	-	-	-	-	-	2.0	-	-	(Z)	2.3	1.3
Iowa.....	1.0	.4	.4	-	-	-	-	.7	-	-	.9	.8	3.0
Missouri.....	.4	.4	.5	-	.1	-	-	2.2	.2	-	.5	.3	3.6
North Dakota.....	.1	-	-	-	-	-	-	-	-	-	.4	(Z)	.4
South Dakota.....	-	(Z)	-	-	-	-	-	.2	.1	-	(Z)	.3	.3
Nebraska.....	.1	.2	.1	-	-	-	-	.3	.1	-	.1	-	.6
Kansas.....	(Z)	(Z)	.1	1.5	-	-	-	-	.1	-	.3	.1	1.6
South Atlantic Division.....	1.2	2.4	1.1	4.0	.2	.1	.1	5.8	1.4	.2	3.2	2.0	25.1
Delaware.....	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland.....	-	.5	-	.3	-	-	-	.5	-	.1	-	.1	3.0
District of Columbia.....	.3	.4	-	-	-	-	-	.2	.3	-	.1	.2	1.4
Virginia.....	.5	.3	-	-	.2	-	(Z)	.3	.2	-	.6	.1	3.0
West Virginia.....	-	(Z)	-	-	-	-	-	.4	-	-	.1	-	.4
North Carolina.....	-	1.0	.5	3.7	-	-	-	1.2	.5	-	1.4	-	10.7
South Carolina.....	.4	-	-	-	-	-	-	.4	(Z)	-	.3	-	1.3
Georgia.....	-	.2	-	-	-	-	.1	.7	.4	.1	.7	.6	1.2
Florida.....	-	(Z)	.6	-	-	.1	(Z)	2.1	-	-	-	1.0	4.1
East South Central Division.	1.2	.8	.4	1.4	-	-	-	2.0	1.2	-	.1	.7	5.4
Kentucky.....	.2	-	.2	-	-	-	-	-	-	-	-	.4	1.1
Tennessee.....	1.0	.2	.2	1.4	-	-	-	-	1.2	-	.1	.3	3.1
Alabama.....	-	.5	-	-	-	-	-	2.0	-	-	-	-	1.1
Mississippi.....	-	.1	-	-	-	-	-	-	-	-	-	-	.1
West South Central Division.	1.3	.3	1.5	-	.7	.1	-	3.9	-	.5	.4	4.6	10.1
Arkansas.....	-	.2	-	-	-	-	-	-	-	-	-	-	(Z)
Louisiana.....	-	-	.2	-	-	-	-	.9	-	(Z)	(Z)	-	2.3
Oklahoma.....	-	.1	-	-	-	-	-	.8	-	-	.1	.1	1.2
Texas.....	1.3	-	1.3	-	.7	.1	-	2.2	-	.5	.3	4.5	6.6
Mountain Division.....	.5	.3	-	-	-	(Z)	.1	3.4	.3	-	.4	.3	4.6
Montana.....	.1	.1	-	-	-	-	-	.3	-	-	(Z)	-	.4
Idaho.....	.2	-	-	-	-	-	-	.3	.2	-	.1	-	-
Wyoming.....	-	-	-	-	-	-	-	-	-	-	(Z)	-	.1
Colorado.....	(Z)	(Z)	-	-	-	-	-	.9	(Z)	-	(Z)	.2	2.2
New Mexico.....	.1	.1	-	-	-	(Z)	.1	.4	-	-	-	-	.3
Arizona.....	(Z)	.1	-	-	-	-	-	.8	.1	-	.2	.1	.8
Utah.....	.1	(Z)	-	-	-	-	-	.7	-	-	.1	-	.7
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-	.1
Pacific Division.....	2.7	1.3	.5	-	.7	-	-	2.5	2.4	-	.6	4.3	13.1
Washington.....	(Z)	.1	-	-	-	-	-	.9	.2	-	.4	.3	1.8
Oregon.....	.6	-	-	-	-	-	-	-	.3	-	-	-	.6
California.....	2.1	1.1	.5	-	.7	-	-	1.6	1.9	-	.2	4.0	10.6
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-	(Z)
Hawaii.....	-	.1	-	-	-	-	-	-	-	-	-	-	.1

Textile Machinery in Place

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EXPLANATORY TEXT

GENERAL

This report supplements the 1977 Census of Manufactures data shown for SIC Major Group 22, Textile Mill Products, in the industry reports series. The data included in this report were collected in an independent survey through a mail canvass on Census Form MC-22Z, Textile Machinery in Place as of June 30, 1978, as part of the 1977 Census of Manufactures .

SCOPE OF SURVEY

The manufacturing establishments reporting in this survey are defined as a single physical location where manufacturing operations are performed (e.g., a factory, mill, or plant). They were selected from the 1977 Census of Manufactures mailing panel for specific textile industries as defined and structured in the 1972 edition of the Standard Industrial Classification (SIC) Manual, published by the Office of Management and Budget, Executive Office of the President. The specific industries included cover the major textile operations, as follows: Yarn spinning (SIC 2281 and 2283), yarn texturing and throwing (SIC 2282), weaving (SIC 2211, 2221, 2231 and 2241), knitting (SIC 2251, 2252, 2253, 2254, 2257, 2258, and 2259), yarn and fabric finishing (SIC 2261, 2262, and 2269), tire cord and tire cord fabric (SIC 2296), nonwoven fabrics (SIC 2297), and carpet and rugs (SIC 2271, 2272, and 2279). Since a portion of textured yarn is also produced by chemical companies manufacturing filament yarn (SIC 2823 and 2824), respondents were also selected from these operations. However, the machinery in place at coated fabric plants (SIC 2295) were excluded from this survey.

METHOD OF OPERATION

The textile industries are characterized by several major types of business activities: Manufacturers, contractors, jobbers, converters, wholesalers, and piece-goods dealers.

The "manufacturer" purchases materials, employs production workers in his own plant to produce the product, and sells the product; in effect, this establishment performs all of the usual manufacturing functions.

The "contractor" employs productions workers in his own establishment to process materials owned by other companies (independent contractors) or supplied by other establishments of the same company (multiplant company contractor), makes products to specification, and is not involved in the sale of the finished product.

The "jobber", "converter", "wholesaler", and "piece-goods dealer" primarily perform only the entrepreneurial functions of the textile business, such as buying raw materials, designing and preparing samples, arranging for the manufacture of products from owned materials with contractors, and marketing the finished product.

The reporting establishments were asked to indicate their type of business (manufacturer, contractor, or jobber) and the kinds of operations (spinning, weaving, etc.) performed at each manufacturing location. Since there is a large degree of integrated or vertical operations within the establishments in the textile industries, each respondent received a complete copy of the report form including all machinery descriptions collected in this report. This gave the respondent the opportunity to report the machinery in place for all operations performed at the plant location. The information concerning the type of business and kind of operation of the respondent was then cross-checked against the type of machinery reported by that respondent to ensure a complete and full report from each reporting unit. Basically, the majority of the machinery-in-place data shown in this report are located at manufacturing and contracting establishments. However, only the jobbers within the knitting industries were mailed report forms since they are considered within the scope of the census of manufactures. All other jobbers, wholesalers, converters, and piece-goods dealers were excluded from the mailing panel of this survey.

All respondents were asked to report the number of machines in place. For the purpose of this report, "in place" includes all machinery set up in operating positions even though the machinery may have been idle on June 30, 1978. In addition, the respondents were also asked to include sample machinery.

SURVEY COVERAGE

As a means of evaluating the coverage of this information, the employment figures for those establishments responding to our survey were tabulated by four-digit SIC industries in which the responding establishments are classified. The total employment figure of the reporting establishments of each four-digit SIC industry was then compared to the total employment figure of the respective four-digit SIC industry as shown in the 1977 Census of Manufactures preliminary industry reports. The figures presented in this report are simple aggregates of reported data from companies representing approximately 90 percent of total employment in the industries covered by this survey. The reporting percentage shown above may be slightly higher or lower in some cases as a result of plants that were out of scope of this survey or out of business and had sold or dismantled their equipment during 1978. These plants were counted as reporting establishments, and their employment data were used in the computation of the reporting percentage. Also, an attempt was made to contact any known successors to the

plants that went out of business during 1978. Conversely, several multiplant companies had new plants come into business during 1978 and they were reported to us. Although the data for the successor establishments and new plants are included in the tables, they had no employees in 1977 and, therefore, could not be included in the reporting percentage.

COMPARABLE CURRENT INDUSTRIAL REPORTS SERIES DATA

The data for selected types of machinery in place are also collected in the Current Industrial Reports (CIR) series of the Census Bureau. Reference is made in footnotes of each table, where applicable, to indicate the appropriate CIR series containing the comparable machinery-in-place data.

COMPARABLE PRIOR CENSUS OF MANUFACTURES DATA

Similar textile machinery-in-place data were shown in previous census of manufactures publications. Volume II, Industry Statistics, Part 1, Major Groups 20 to 28 of the 1972, 1963, and the 1958 Censuses of Manufactures included textile machinery-in-place data for selected years between 1954 and 1965. Where applicable, selected comparable figures from these publications are shown in the tables of this report.

Table 1. Cotton System Machinery for Preparation of Cotton and Manmade Fiber and Spun Yarn: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Unit of measure	Machinery in place June 30, 1978	Machinery in place Dec. 31, 1973
Automated bale open machinery	Number	376	(NA)
Automated blending machinery	Number	2,504	(NA)
Pickers	Number	1,814	2,944
Cards	Number	30,371	46,505
Chute fed	Number	9,551	46,505
Other	Number	20,820	
Drawing	Deliveries	20,077	24,640
Combers	Deliveries	5,083	6,311
Roving machinery spindles	Number	539,332	728,000
Cotton system spinning spindles:[1]			
Ring spun	Number	17,182,204	17,865,000
1 3/8 inches and smaller	Number	1,236,714	1,303,000
1 7/16 thru 1 3/4 inches	Number	2,291,870	2,653,000
1 13/16 thru 2 1/4 inches	Number	10,115,128	10,198,000
2 5/16 inches and larger	Number	3,538,492	3,711,000
Cotton system spinning spindles--Con.			
Ringless	Producing positions	153,778	30,423
Rotary	Producing positions	145,012	30,423
Self cleaning	Producing positions	59,161	30,423
Other	Producing positions	85,851	30,423
Other	Producing positions	8,766	30,423
Double and twisting spindles:			
Ring spindles	Number	1,749,261	1,869,000
4 inches and smaller	Number	1,105,543	1,312,000
Larger than 4 inches	Number	643,718	557,000
Throwing spindles[2]	Number	284,036	456,000
Winders and spoolers	Number	617,839	761,987
Automatic	Producing positions	322,085	468,567
Manual	Producing positions	295,754	293,420

Note: Data are collected on a monthly basis and published in Current Industrial Reports M22P, Cotton, Manmade Fiber Staple, and Linters.

(NA) Not available.

[1]Excludes spindles operated on "American" and other new systems for spinning uncut top; see table 2.
[2]Includes up-twisters of either conventional or 2-for-1 type.

Table 2. Cotton System Spinning Spindles by Geographic Area: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Geographic area	Machinery in place, June 30, 1978: Ring spun spindles (number)	June 30, 1978: Ringless spindles (producing positions)	December 31, 1973: Ring spun spindles (number)	December 31, 1973: Ringless spindles (producing positions)
United States	17,182,204	153,778	17,865,000	30,423
Cotton growing States[1]	16,933,778	(D)	17,581,000	(NA)
Alabama	1,776,375	26,632	1,686,000	(NA)
Georgia	2,322,264	25,260	2,167,000	(NA)
North Carolina	5,502,012	57,957	5,980,000	(NA)
South Carolina	6,031,960	28,864	6,628,000	(NA)
Tennessee	451,716	4,902	402,000	(NA)
Texas	160,656	3,800	(D)	(NA)
Virginia	595,204	2,400	(D)	(NA)
Other States	93,591	(D)	80,000	(NA)
New England[2]	222,410	(D)	284,000	(NA)
Rest of United States	26,016	(D)	284,000	(NA)

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available.

[1]Includes Virginia, North Carolina, South Carolina, Georgia, Tennessee, Texas, Alabama, Missouri, Mississippi, Arkansas, Kentucky, Lousiana, Oklahoma, New Mexico, Arizona, California, and Florida.
[2]Includes Maine, New Hampshire, Vermont, Rhode Island, Connecticut, and Massachusetts.

Table 3. Cotton System Spinning Spindles by Type of Mill: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of mill	Machinery in place			
	June 30, 1978		December 31, 1973	
	Ring spun spindles (number)	Ringless spindles (producing positions)	Ring spun spindles (number)	Ringless spindles (producing positions)
All industries	17,182,204	153,778	17,865,000	30,423
Cotton mills (SIC 2211)	4,712,214	49,262	6,319,000	(NA)
Manmade fiber mills (SIC 2221)	6,204,232	21,712	5,741,000	
Yarn mills, except wool (SIC 2281)	5,344,030	72,012	5,226,000	
All other mills (SIC other than above)	921,728	10,792	579,000	

(NA) Not available

Table 4. Woolen and Worsted System Machinery, Including Midfiber: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place		Type of machinery	Machinery in place	
	June 30, 1978	Dec. 31, 1973		June 30, 1978	Dec. 31, 1973
Woolen and worsted spindles	938,824	1,256,139	Woolen and worsted spindles--Con.		
For carpet	222,901	(NA)	For knitting, including craft and hand knitting--Con.		
Woolen system spindles	(D)	72,947	American (modified) system spindles	53,268	(NA)
Worsted system spindles	96,932	165,905	Midfiber system spindles	12,130	
American (modified) system spindles	74,328	(NA)	Other spinning system spindles		
Other spinning system spindles	(D)	(NA)	For other uses	20,891	
For weaving, including craft	365,568		Woolen and worsted cards	1,736	2,670
Woolen system spindles	167,589		60 inches and below	1,233	2,670
Worsted system spindles	158,983		Above 60 inches	503	
American (modified) system spindles	24,699		Worsted combs	619	870
Midfiber system spindles	14,297	(NA)	Machines for converting manmade fiber tow to top or sliver	590	1,894
Other spinning system spindles					
For knitting, including craft and hand knitting	329,464				
Woolen system spindles	30,992				
Worsted system spindles	233,074				

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available.

Table 5. Woolen and Worsted System Machinery, Including Midfiber, by Type and Geographic Area: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Geographic area	Woolen system	Worsted system	American (modified) system
United States	(D)	488,989	152,295
Northeast Region[1]	124,853	8,927	27,711
New England Division	(D)	8,648	(D)
Maine	36,170	6,096	(D)
New Hampshire	15,060	(D)	-
Massachusetts	31,418	(D)	(D)
Rhode Island	(D)	-	(D)
Middle Atlantic Division	(D)	279	(D)
New York	10,730	(D)	-
Pennsylvania	6,632	(D)	5,344
South Region[2]	99,230	473,846	120,024
South Atlantic Division	84,386	446,474	110,120
North Carolina	43,460	261,132	21,088
South Carolina	4,944	101,766	29,860
Georgia	35,982	61,456	48,576
East South Central Division	(D)	(D)	(D)
Tennessee	8,400	-	-
Alabama	(D)	9,896	(D)
West South Central Division	(D)	(D)	(D)

Note: Detail may not add to total due to region, division, and State data which have been withheld to avoid disclosing operations of individual companies.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

[1]Includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

[2]Includes Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

Table 6. Textured Yarn Machinery for Filament Yarn Preparation: June 30, 1978 and December 31, 1973

(Excludes carpet yarn preparation machinery. Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Unit of measure	Machinery in place	
		June 30, 1978	Dec. 31, 1973
False twist:			
Single heater	Spindles	197,433	365,013
Pin spindle		146,230	365,013
Friction spindle		51,203	
Double heater		280,890	301,979
Pin spindle		183,004	301,979
Friction spindle	Spindles	97,886	
Air jet	Producing positions.	61,407	8,139
Free standing, nonintegrated units		12,663	8,139
Integrated with other texturing machines		48,744	
Stuffer box	Producing positions.	2,606	19,247
Knit-Deknit	Heads in place	6,029	(NA)
Edge crimping	Producing positions.	(D)	12,224
Gear crimping		2,688	(D)
Trapped twist	Producing positions.	637	2,740

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available.

Table 7. Warp Preparation Equipment: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of equipment	Equipment in place	
	June 30, 1978	Dec. 31, 1973
Warping and beaming equipment	2,781	2,862
Spindle driven	1,026	1,155
Drum driven	1,755	1,707
Slashing and sizing equipment	1,003	1,056
Drawing-in machines	358	(NA)

(NA) Not available.

Table 8. Broad Fabric Weaving Looms by Type and Width of Loom: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Width of loom[1]	Total shuttle type weaving looms in place, June 30, 1978	Shuttle type weaving looms in place			
		Single shuttle (cam and dobby)	Multiple shuttle-box or head motion looms	Jacquard	Double shuttle pile and plush
Shuttle type looms	261,904	233,879	16,753	6,722	4,550
40 inches and under	15,613	12,321	1,181	1,275	836
41 to 50 inches	121,590	117,117	2,258	845	1,370
51 to 60 inches	53,900	44,275	6,568	1,780	1,277
61 to 70 inches	31,663	28,904	1,193	970	596
71 to 80 inches	8,673	6,723	1,074	741	135
81 to 90 inches	19,256	16,997	1,796	(D)	(D)
91 to 100 inches	4,455	2,976	978	(D)	(D)
101 to 130 inches	4,954	3,550	1,142	(D)	(D)
131 inches and over	1,800	1,016	563	(D)	(D)

Width of loom[1]	Total shuttleless type weaving looms in place, June 30, 1978	Shuttleless type weaving looms in place		
		Single filling insertion	Multifilling insertion	Pile and plush
Shuttleless type looms	34,217	22,711	10,310	1,196
Jet, including water and air	6,106	5,834	272	(X)
Under 50 inches	509	509	-	(X)
50 to 63 inches	3,093	(D)	(D)	(X)
64 inches and over	2,504	(D)	(D)	(X)
Other, including rapier and projectile	28,111	16,877	10,038	1,196
50 inches and under	2,790	2,469	(D)	(D)
51 to 60 inches	4,838	3,020	1,672	146
61 to 70 inches	3,856	2,754	674	428
71 to 80 inches	3,033	(D)	2,322	(D)
81 to 90 inches	5,591	(D)	3,335	(D)
91 to 100 inches	64	(D)	(D)	-
101 to 130 inches	5,450	4,003	(D)	(D)
131 inches and over	2,489	1,858	631	-

Note: Data for broad fabric weaving looms in place are collected on a quarterly basis and published in Current Industrial Reports MQ-22T, "Broadwoven Fabrics (Gray)."

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (X) Not applicable.

[1]Maximum width that can be woven (width at take-off point), not finished width of fabric.

Table 9. Broad Fabric Weaving Looms by Type and Width of Loom: December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Width of loom[1]	Total looms in place at end of year	Type of loom					
		Single shuttle (cam and dobby)	Multiple shuttle-box or head motion	Jacquard	Double shuttle pile and plush	Shuttleless	
						Single color (cam and dobby)	Multicolor
Broad fabric weaving looms...	331,929	272,275	28,844	9,633	2,359	14,623	4,195
40 inches and under.....	31,202	25,792	3,539	1,391	(D)	(D)	(D)
41 to 50 inches.....	139,260	128,322	5,433	935	(D)	3,659	(D)
51 to 60 inches.....	79,156	61,820	10,079	3,600	797	2,424	436
61 to 70 inches.....	32,022	24,577	1,879	1,750	495	2,744	577
71 to 80 inches.....	8,697	4,996	2,057	995	-	177	472
81 to 90 inches.....	24,743	17,828	2,042	333	-	2,459	2,081
91 to 100 inches.....	6,820	5,102	1,503	142	(D)	(D)	(D)
101 to 130 inches.....	7,315	3,003	1,123	420	(D)	2,349	(D)
131 inches and over.....	2,714	835	1,189	67	-	539	84

Note: Data for broad fabric weaving looms in place are collected on a quarterly basis and published in Current Industrial Reports MQ-22T, "Broadwoven Fabrics (Gray)."

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

[1]Maximum width that can be woven (width at take-off point), not finished width of fabric.

Table 10. Broad Fabric Weaving Looms by Geographic Area: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Geographic area	Shuttle type weaving looms					Shuttleless type weaving looms	
	Total shuttle type weaving looms June 30, 1978	Single shuttle (command dobby)	Multiple shuttlebox or head motion looms	Jacquard	Double shuttle pile and plush	Total shuttle-less type weaving looms June 30, 1978	Jet, including water and air	Other, including rapier and projectile
United States.....	261,904	233,879	16,753	6,722	4,550	34,217	6,106	28,111
Northeast Region[1].....	12,592	8,066	2,873	1,055	598	3,058	1,066	1,992
New England Division.....	8,200	6,226	1,294	(D)	(D)	1,847	(D)	(D)
Maine.....	(D)	971	558	(D)	-	31	-	31
New Hampshire.....	456	456	-	-	-	149	(D)	(D)
Massachusetts.....	3,726	3,176	550	-	-	1,014	(D)	(D)
Rhode Island.....	(D)	1,473	150	-	(D)	511	(D)	(D)
Middle Atlantic Division.....	4,392	1,840	1,579	(D)	(D)	1,211	(D)	(D)
New York.....	1,106	(D)	(D)	(D)	-	(D)	-	(D)
New Jersey.....	588	-	(D)	257	(D)	(D)	-	(D)
Pennsylvania.....	2,698	(D)	1,018	501	(D)	970	(D)	(D)
North Central Region[2].....	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
South Region[3].....	248,382	225,162	13,615	5,662	3,943	31,045	5,028	26,017
South Atlantic Division.....	221,272	199,670	12,999	(D)	(D)	26,763	(D)	(D)
North Carolina.....	55,069	43,942	5,701	3,536	1,890	10,048	1,017	9,031
South Carolina.....	116,098	112,629	2,199	350	920	9,855	2,131	7,724
Georgia.....	33,563	31,232	1,466	366	499	3,536	238	3,298
East South Central Division....	(D)	22,593	(D)	(D)	(D)	2,852	-	2,852
Tennessee.....	(D)	4,114	(D)	-	-	(D)	-	(D)
Alabama.....	19,166	17,997	(D)	(D)	(D)	(D)	-	(D)
West South Central Division....	(D)	2,899	(D)	-	-	1,430	(D)	(D)
West Region[4].....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
California.....	(D)	(D)	(D)	-	-	(D)	(D)	(D)

Note: Detail may not add to total due to region, division, and State data which have been withheld to avoid disclosing figures for individual companies.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

[1]Includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.
[2]Includes Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.
[3]Includes Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.
[4]Includes Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

Table 11. Broad Fabric Weaving Looms by Type of Loom and Type of Mill: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of mill	Total weaving looms in place June 30, 1978	Shuttle				Shuttleless	
		Single shuttle	Multiple shuttle	Jacquard	Double shuttle	Jet, including water and air	Other
Cotton mills (SIC 2211)	101,036	83,042	4,260	3,710	1,251	7,841	932
Manmade fiber mills (SIC 2221)	182,741	143,951	10,753	2,257	2,905	18,099	4,776
Woolen and worsted mills (SIC 2231)	2,234	210	1,355	(D)	(D)	655	-
Tire cord mills (SIC 2296)	2,666	2,379	-	-	(D)	(D)	-
All other mills (SIC other than above)	7,444	4,297	385	(D)	(D)	(D)	398

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

Table 12. Narrow Fabric Weaving Looms by Type of Loom: June 30, 1978

(Data are aggregates of reported data from companies representing 90 percent of total employment in industries covered by survey)

Type of loom	Total looms	Shuttle type	Shuttleless type
Narrow fabric weaving looms[1]	8,800	3,801	4,999
Tape looms	5,785	2,777	3,008
Webbing looms	3,015	1,024	1,991
Light and/or medium weight	2,531	737	1,794
Heavy weight	328	(D)	(D)
Extra weight	156	(D)	(D)

Note: Data for narrow fabric looms in place are collected on an annual basis and published in Current Industrial Reports, series MA-22G, "Narrow Fabrics."

(D) Withheld to avoid disclosing operations of individual companies.

[1]Looms 12 inches and under.

Table 13. **Knitting Machinery: June 30, 1978 and December 31, 1973**

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place	
	June 30, 1978	Dec. 31, 1973
Weft knitting machines:		
Garments, trims and collars:		
Flat bar	6,232	6,825
V-bed flat latch needle	4,333	4,486
Flat-bed purl, or links and links	1,104	1,592
Multisection spring needle full fashioning	795	747
Cylinder and dial	3,293	
Circular lengths	2,701	6,430
Rib	1,925	
Interlock	776	
Circular headwear and other small diameter machines, excluding hosiery and knit deknit	1,516	4,234
Yard goods, outerwear, underwear, and industrial:		
Circular open top latch needle machines:		
Plain:		
64 feeds and under	5,943	
65 to 96 feeds	731	
Over 96 feeds	100	
Multiple track:		
64 feeds and under	726	
65 to 96 feeds	536	9,043
Over 96 feeds	112	
Patterned jersey:		
64 feeds and under	2,012	
65 to 96 feeds	140	
Over 96 feeds	86	
Sliver knit	512	836
Circular spring needle machines	2,423	5,219
Cylinder and dial machines:		
Interlock	3,692	4,712
By cut:		
18 and under	1,826	(NA)
22 to 24	1,265	(NA)
28 and over	601	(NA)
Weft knitting machines--Con.		
Yard goods, outerwear, underwear, and industrial--Con.		
Cylinder and dial machines--Con.		
Interlock--Con.		
By feed:		
64 feeds and under	3,161	(NA)
65 to 96 feeds	482	(NA)
Over 96 feeds	49	(NA)
Rib body size underwear machines	4,282	5,889
Double knit, including eight lock	8,266	15,590
By type:		
No pattern mechanism	1,870	3,712
Fixed selection, including patterns limited to one machine revolution	2,146	1,864
Patterning device, mechanical and electronic (more than one machine revolution)	4,250	10,014
By cut:		
18 and under	5,064	(NA)
22 to 24	2,499	(NA)
28 and over	703	(NA)
By feed:		
64 feeds and under	7,450	(NA)
65 to 96 feeds	766	(NA)
Over 96 feeds	50	(NA)
Purl or links	281	490
Warp knitting machines:		
Tricot (spring beard, latch, and compound needle)	4,431	5,537
Raschel (latch and compound)	2,248	2,852
Raschel-crochet	267	514
All other, including ketten raschel, simplex, weft insertion, milanese, and loop vending	818	362

Note: For 1978 knitting machinery in place were collected on a quarterly basis and published in Current Industrial Reports series MQ22K, "Knit Fabric Production."

(NA) Not available.

Table 14. Textile Finishing Machinery: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place	
	June 30, 1978	December 31, 1973
Preparatory machinery:		
Scouring and bleaching ranges	899	1,343
Rope	348	389
Open width	305	408
Other	246	546
Mercerizing ranges	69	98
Dyeing machinery:		
Raw stock and bale dyeing machines	344	419
Yarn dyeing machines	2,413	2,912
Package yarn	1,070	1,436
Beam	582	455
Continuous	102	43
Skein	520	816
Other	139	162
Batch fabric dyeing machines	5,629	9,017
Jigs	1,128	1,957
Padders	322	537
Becks (boxes, winches, dye kettles, etc):		
Atmospheric type	2,240	3,918
Pressure type	314	740
Jet	1,079	727
Beam	359	1,138
Other	187	
Carpet dyeing machines	685	(NA)
Beck	655	(NA)
Continuous	30	(NA)
Garment dyeing machines	1,123	(NA)
Rotary	562	(NA)
Paddle	561	(NA)
Continuous dyeing ranges	264	295
Thermosol-pad-steam	115	132
Other continuous	149	163
Printing machinery:		
Roller printing machines	259	394
Less than 70 inches	239	394
70 inches and over	20	

Type of machinery	Machinery in place	
	June 30, 1978	December 31, 1973
Printing machinery--Con.		
Screen printing machines	354	515
Flat screen, flat bed machines	153	211
For carpet	13	211
For other than carpet	140	
Rotary screen, flat bed machines	167	136
Under 60 inches	25	136
60 to 89 inches	98	
90 to 119 inches	27	
120 inches and over	17	
Other	34	168
Continuous piece goods heat transfer printing machines	43	59
Other	71	40
Selected finishing machinery:		
Compressive shrinkage machines	386	535
For woven fabrics	264	368
For knit fabrics	122	167
Tenter frames	1,391	1,684
Clip	654	823
Pin	693	762
Pin-clip combination	44	99
Solvent processing units (batch and continuous)	117	196
Decating	156	288
Fulling mills	228	(NA)
Surface finishing machinery:		
Napping	867	(NA)
Shearing	540	(NA)
Brushing, sueding and sanding	411	(NA)
Embossing	89	(NA)
Calendaring	726	1,054
Corduroy and velveteen cutting machines	451	(NA)

(NA) Not available.

Table 15. Textile Finishing Machinery by Type of Mill: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Total number in place June 30, 1978	Number of machines primarily processing			
		Cotton broadwoven fabric	Manmade fiber broadwoven fabric	Knitting mills	Other industries
Preparatory machinery:					
Scouring and bleaching ranges	899	203	320	214	162
Rope	348	76	74	92	106
Open width	305	63	161	58	23
Other	246	64	85	64	33
Mercerizing ranges	69	27	35	(D)	(D)
Dyeing machinery:					
Raw stock and bale dyeing machines	344	40	37	44	223
Yarn dyeing machines	2,413	465	501	130	1,317
Package yarn	1,070	183	153	93	641
Beam	582	211	304	(D)	(D)
Continuous	102	40	(D)	(D)	56
Skein	520	(D)	35	(D)	463
Other	139	(D)	(D)	30	(D)
Batch fabric dyeing machines	5,629	514	2,250	2,281	584
Jigs	1,128	238	731	101	58
Padders	322	58	104	125	35
Becks (boxes, winches, dye kettles, etc.):					
Atmospheric type	2,240	143	684	1,114	299
Pressure type	314	7	154	109	44
Jet	1,079	34	418	586	41
Beam	359	(D)	126	180	(D)
Other	187	(D)	33	66	(D)
Carpet dyeing machines	685	-	(D)	(D)	657
Beck	655	-	(D)	(D)	627
Continuous	30	-	-	-	30
Garment dyeing machines	1,123	(D)	(D)	1,054	38
Rotary	562	-	(D)	542	(D)
Paddle	561	(D)	(D)	512	(D)
Continuous dyeing ranges	264	76	123	11	54
Thermosol-pad-steam ranges	115	35	56	(D)	(D)
Other	149	41	67	(D)	(D)
Printing machinery:					
Roller printing machines (center cylinder type)	259	(D)	103	(D)	23
Less than 70 inches	239	(D)	92	(D)	17
70 inches and over	20	(D)	11	(D)	6
Screen printing machines	354	(D)	142	49	(D)
Flat screen, flat bed machines	153	36	54	18	45
Carpet	13	-	-	-	13
Other	140	36	54	18	32
Rotary screen, flat bed machines	167	64	72	23	8
Under 60 inches	25	13	8	(D)	(D)
60 to 89 inches	98	38	41	19	-
90 to 119 inches	27	(D)	17	(D)	-
120 inches and over	17	(D)	6	(D)	(D)
Other	34	(D)	16	8	(D)
Continuous piece goods heat transfer printing machines	43	(D)	10	21	(D)
Other printing machinery	71	6	19	25	21
Selected finishing machinery:					
Compressive shrinkage machines	386	120	115	107	44
For woven fabrics	264	(D)	106	7	(D)
For knit fabrics	122	(D)	9	100	(D)
Tenter frames	1,391	290	624	285	192
Clip	654	247	351	33	23
Pin	693	29	257	238	169
Pin-clip combination	44	14	16	14	-
Solvent processing units (batch and continuous)	117	14	19	54	30
Decating	156	(D)	43	52	(D)
Fulling mills	228	-	26	41	161
Surface finishing machinery	2,633	484	676	843	630
Napping	867	225	185	286	171
Shearing	540	51	158	146	185
Brushing, sueding, and sanding	411	61	77	99	174
Embossing	89	26	41	13	9
Calendaring	726	121	215	299	91
Corduroy and velveteen cutting machines	451	362	78	(D)	(D)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

Table 16. Textile Finishing Machinery by Type of Mill: December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Total number in place at end of year	Number of machines primarily processing			
		Cotton broad-woven fabrics	Manmade fiber broadwoven fabrics	Knitting mills	Other industries
Preparatory machinery:					
Scouring and bleaching ranges	1,343	331	369	357	286
Rope	389	102	73	105	109
Open width	408	102	196	75	35
Other	546	127	100	177	142
Mercerizing ranges	98	42	48	(D)	(D)
Batch fabric dyeing machines	9,017	1,140	3,009	3,359	1,509
Jigs	1,957	608	1,148	91	110
Padders	537	116	131	219	71
Becks (boxes, winches, dye kettles, etc.):					
Atmospheric type	3,918	303	1,210	1,489	916
Pressure type	740	53	210	265	212
Jet	727	15	148	515	49
Other	1,138	45	162	780	151
Yarn dyeing machines	2,912	354	464	251	1,843
Package yarn	1,436	68	289	103	976
Beam	455	237	111	42	65
Continuous	43	(D)	(D)	-	21
Skein	816	(D)	(D)	47	725
Other	162	(D)	(D)	59	56
Raw stock bale dyeing machines	419	24	51	42	302
Continuous dyeing ranges	295	115	116	7	57
Thermosol-pad steam	132	56	58	(D)	(D)
Other	163	59	58	(D)	(D)
Printing machinery:					
Roller printing machines	394	165	192	9	28
Using intaglio (gravure) color rolls	364	(D)	180	(D)	17
Using relief (cameo) color rolls	30	(D)	12	(D)	11
Screen printing machines	515	208	156	83	68
Flat screen, flat bed machines	211	60	80	36	35
Rotary screen, flat bed machines	136	41	56	(D)	(D)
Other	168	107	20	(D)	(D)
Stripe printing machines	16	(D)	(D)	(D)	8
Transfer printing machines	77	9	6	49	13
Continuous piece goods, printing machines only	59	(D)	(D)	35	(D)
Garment pressers	18	(D)	(D)	14	(D)
Polychromatic pattern dyeing machines	6	(D)	(D)	(D)	(D)
Selected finishing machinery:					
Compressive shrinkage machines	535	126	115	149	145
For woven fabrics	368	122	107	15	124
For knit fabrics	167	4	8	134	21
Tenter frames	1,684	411	653	445	175
Clip	823	352	443	-	28
Pin	762	41	178	418	125
Pin-clip combination	99	18	32	27	22
Solvent processing units (batch and continuous)	196	12	44	107	33
Decating	288	15	68	91	114
Calendering	1,054	259	330	389	76

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

Table 17. Other Fabric Forming Machinery: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place June 30, 1978[1]
Fine gauge tufting	70
Nonwoven fabric forming machinery:	
Needle looms	794
Web forming	241
Stitch bonding	(D)
Other	342

(D) Withheld to avoid disclosing operations of individual companies.

[1]Information presented in this table is new for 1978; no comparable data are available for prior years.

Table 18. Circular Hosiery Machinery: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place	
	June 30, 1978	Dec. 31, 1973
Ladies hosiery machines	22,905	43,683
1 feed	965	3,127
2 feed	6,983	19,647
3 and 4 feed	11,340	13,673
6 to 8 feed	3,617	7,236
Men's and boys' sock machines	26,075	33,646
Single cylinder	18,171	21,438
1 feed	16,078	18,763
2 feed	1,562	1,514
3 and 4 feed	531	1,161
Double cylinder	7,904	12,208
1 feed	413	915
2 feed	6,972	10,847
3 and 4 feed	519	446
Women's, misses', children's, and infants' sock machines	9,463	12,901
Single cylinder	6,109	10,290
1 feed	5,209	8,857
2 feed	579	985
3 and 4 feed	321	448
Double cylinder	3,354	2,611

Table 19. Circular Hosiery Machinery by Type of Machine and Geographic Area: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Geographic area	Machinery in place		Ladies hosiery machines		Men's and boys' sock machines		Women's, misses', children's and infants' sock machines	
	June 30, 1978	December 31, 1973	June 30, 1978	December 31, 1973	June 30, 1978	December 31, 1973	June 30, 1978	December 31, 1973
United States	58,443	90,230	22,905	43,683	26,075	33,646	9,463	12,901
Northeast Region	3,588	6,443	1,464	3,406	1,876	2,379	248	658
New England Division[1]	480	818	51	-	181	(D)	248	(D)
Massachusetts	185	202	-	-	(D)	(D)	(D)	(D)
Connecticut	75	(NA)	(D)	-	(D)	(D)	-	-
Middle Atlantic Division[2]	3,108	5,625	1,413	3,400	1,695	(D)	-	(D)
Pennsylvania	1,595	4,885	40	3,068	1,555	(D)	-	(D)
South Region	52,678	80,561	20,165	37,732	23,420	30,586	9,093	12,243
South Atlantic Division[3]	42,207	65,055	17,546	31,063	18,553	26,065	6,108	7,927
Virginia	1,636	2,244	1,019	1,442	(D)	(D)	(D)	(D)
North Carolina	35,862	49,525	13,292	24,650	16,717	22,997	5,853	1,878
South Carolina	3,140	3,630	(D)	3,425	(D)	205	(D)	-
East South Central Division[4]	9,646	14,609	1,794	(D)	4,867	4,521	2,985	(D)
Tennessee	6,937	9,454	1,794	3,117	2,515	2,846	2,628	3,491
Alabama	1,670	2,235	-	(D)	1,407	733	263	(D)

Note: Detail may not add to total due to region, division and State data which have been withheld to avoid disclosing operations of individual companies.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available.

[1]Includes Maine, New Hampshire, Vermont, Rhode Island, Connecticut, and Massachusetts.
[2]Includes New York, New Jersey, and Pennsylvania.
[3]Includes Virginia, West Virginia, North Carolina, South Carolina, Georgia, Delaware, Maryland, and Florida.
[4]Includes Tennessee, Alabama, Kentucky, and Mississippi.

Table 20. Carpet and Rug Weaving Looms and Machinery: June 30, 1978 and December 31, 1973

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place	
	June 30, 1978	Dec. 31, 1973
Weaving looms[1]	719	1,071
27 inches	64	151
3 feet to under 9 feet	283	414
9 feet	61	87
9 1/2 feet to 12 feet	250	302
15 feet and over	61	117
Tufting machines[1]	2,452	2,666
81 inches and under	463	865
9 feet	41	82
12 feet	609	293
15 feet	1,283	1,338
Over 15 feet	56	88
Fussion Bonding machines[1]	37	(NA)
Under 12 feet	13	(NA)
12 feet and over	24	(NA)
Custom carpet (multi-pass) tufting machines	381	420
Carpet braiding machines	909	1,247
Carpet knitting machines	40	72
Carpet and rug needle punch looms	82	73

(NA) Not available.

[1]Size is maximum width which can be woven, tufted, or bonded, not finished width of carpet or rug.

Table 21. Carpet Yarn Heatsetting Machinery: June 30, 1978

(Data are aggregates of reported data from companies representing approximately 90 percent of total employment in industries covered by survey)

Type of machinery	Machinery in place June 30, 1978
Filament carpet yarn:	
Twisting[1]	96,678
Heatsetting:	
Autoclaves	134
Continuous units	63
Spun carpet yarn:	
Twisting[1]	91,134
Headsetting:	
Autoclaves	170
Continuous units	30

Note: Information in this table is new for 1978; no comparable data are available for prior years.

[1]Number of spindles.

Fuels and Electric Energy Consumed

Industry Groups and Industries

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EXPLANATORY TEXT

SUMMARY DATA

In 1977 the U.S. consumption of purchased fuels and electric energy for heat and power by manufacturing establishments totaled 12.9 quadrillion British thermal units (Btu's). This represented a 1 percent increase over the 1976 consumption figure of 12.8 quadrillion Btu's, which was considerably lower than the 6.2 percent increase in the Federal Reserve Board's (FRB) index of manufacturing production for that period. From these statistics it appears that proportionately less energy is being consumed in the production of manufactured goods. Apparently, fuel shortages and resulting efforts to save energy have changed the historic correlation between levels of production and energy consumption.

Expenditures during 1977 by manufacturers for fuels and electric energy amounted to $33.4 billion, an increase of 19 percent over the 1976 total of $28.1 billion (chart 1). Manufacturers' expenditures in 1977 for natural gas totaled $8.9 billion, an 18 percent increase over the 1976 level of $7.5 billion. Purchased electric energy costs increased 19 percent from $12.2 billion in 1976 to $14.5 billion in 1977, while those for fuel oil increased 23 percent to a 1977 level of $4.9 billion. Expenditures for coal increased by 11 percent between 1976 and 1977 to $1.5 billion, while for coke and breeze they increased 22 percent from the revised 1976 figure of $1.4 billion to $1.8 billion in 1977 (chart 2). All dollar figures in this report are in current dollars and therefore are not adjusted for changes in price levels.

While overall energy consumption between 1976 and 1977 showed only a modest increase, some variations in the mix of the fuel types and electric energy occured (chart 3). Increases in consumption were recorded for each of the major fuels and purchased electric energy except natural gas. Consumption of gas declined 5 percent from the 1976 level. This decrease caused the proportion of total natural gas consumed to slide to 46 percent of all manufacturing energy usage during 1977. Although natural gas remains the dominant fuel used by manufacturers, its percent of total energy usage has dropped significantly from the 1971 level of 56 percent. This shows the increasing switch from natural gas to the other major fuels and electric energy, particularly to residual fuel oil (table A and chart 4).

The average cost per million Btu's of energy consumed in 1977 was $2.58, a 17 percent increase over the 1976 average cost. This increase, more than the 14 percent increase between 1975 and 1976, was considerably lower than the average annual increase of 25 percent between 1971 and 1975. The increased average cost per million Btu's resulted primarily from an increased unit cost of natural gas, which rose to $1.55 per million Btu's. This was a 24 percent jump over the 1976 average cost of $1.26 per million Btu's. Lesser increases in average unit cost were registered by each of the other major fuels and electric energy. Again in 1977, coal remained the lowest cost fuel (on a Btu-per-dollar basis) of any of the major fuels covered in this report (table B and chart 5). Chart 6 illustrates the sharp increase in unit costs of selected fuels and electric energy consumed by all manufacturing industries during 1967-1977.

Although purchased electric energy accounted for 17 percent of the total energy consumed by manufacturers, it accounted for 43 percent of total energy expenditures. While natural gas accounted for 46 percent of total energy used (chart 4), it accounted for only 27 percent of total expenditures, making it a considerably lower priced source of energy than electricity in terms of Btu's. This Btu computation assumes perfect conversion of various fuels into energy, which in practice does not occur. Thus, a decrease in fuel consumption with a corresponding increase in purchased electric energy will result in a lower Btu figure to the extent that conversion losses are shifted to a public utility.

Table A. Percent of Total Energy Consumed by All Manufacturing Industries for Selected Fuels and Purchased Electric Energy: 1967, 1971, and 1974-1977

(Data for fuels not specified by kind were distributed among detailed fuels)

Fuels and electric energy	1977	1976	1975	1974	1971	1967
Total	100	100	100	100	100	100
Residual fuel oil	12	12	10	9	7	7
Bituminous coal, lignite, and anthracite	11	10	10	10	13	19
Coke and breeze	4	4	3	3	3	3
Distillate fuel oil	5	4	5	5	5	4
Natural gas	46	49	52	54	56	53
Purchased electric energy	17	17	17	15	13	12
Other fuels	4	4	4	3	2	1

Note: Detail may not add to 100 because of independent rounding.

Table B. Unit Cost and Index of Change of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974-1977

Year	Total purchased fuels and electric energy	Natural gas	Bituminous coal, lignite, and Anthracite	Residual fuel oil	Distillate fuel oil	Coke and breeze	Purchased Electric energy
	UNIT COST (DOLLARS PER MILLION BTU)						
1977	2.58	1.55	1.13	2.14	2.70	3.37	6.41
1976	2.20	1.26	1.07	1.88	2.38	2.98	5.58
1975	1.93	.95	1.12	1.93	2.24	2.58	5.06
1974	1.44	.64	.86	1.83	2.04	1.87	4.02
1971	.80	.38	.41	.61	.74	.89	2.89
1967	.65	.32	.28	.42	.62	.71	2.55
	INDEX OF CHANGE (1971=100)						
1977	321	405	276	354	363	379	222
1976	275	328	262	310	321	335	193
1975	240	247	273	318	304	290	175
1974	179	167	210	301	275	211	139
1971	100	100	100	100	100	100	100
1967	81	83	68	69	84	80	88

CHART 1.

Purchased Fuels and Electric Energy Quantity Consumed, Expenditures, and Unit Cost: 1967,1971 and 1974–1977

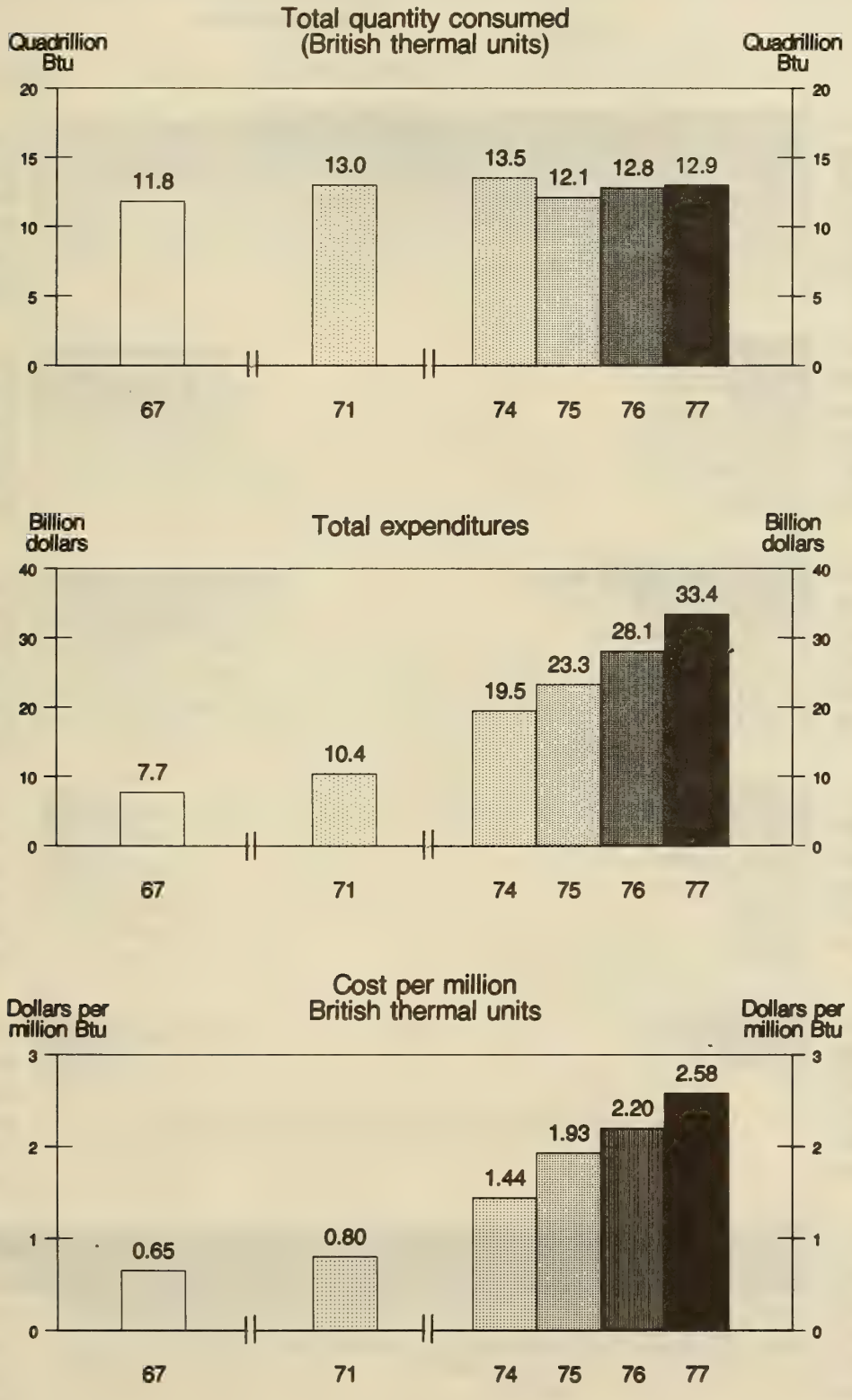


CHART 2.

Expenditures for Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971 and 1974–1977

(Excludes expenditures for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 3.2 and 2.3 percent of all fuel and electric energy expenditures by all manufacturing industries)

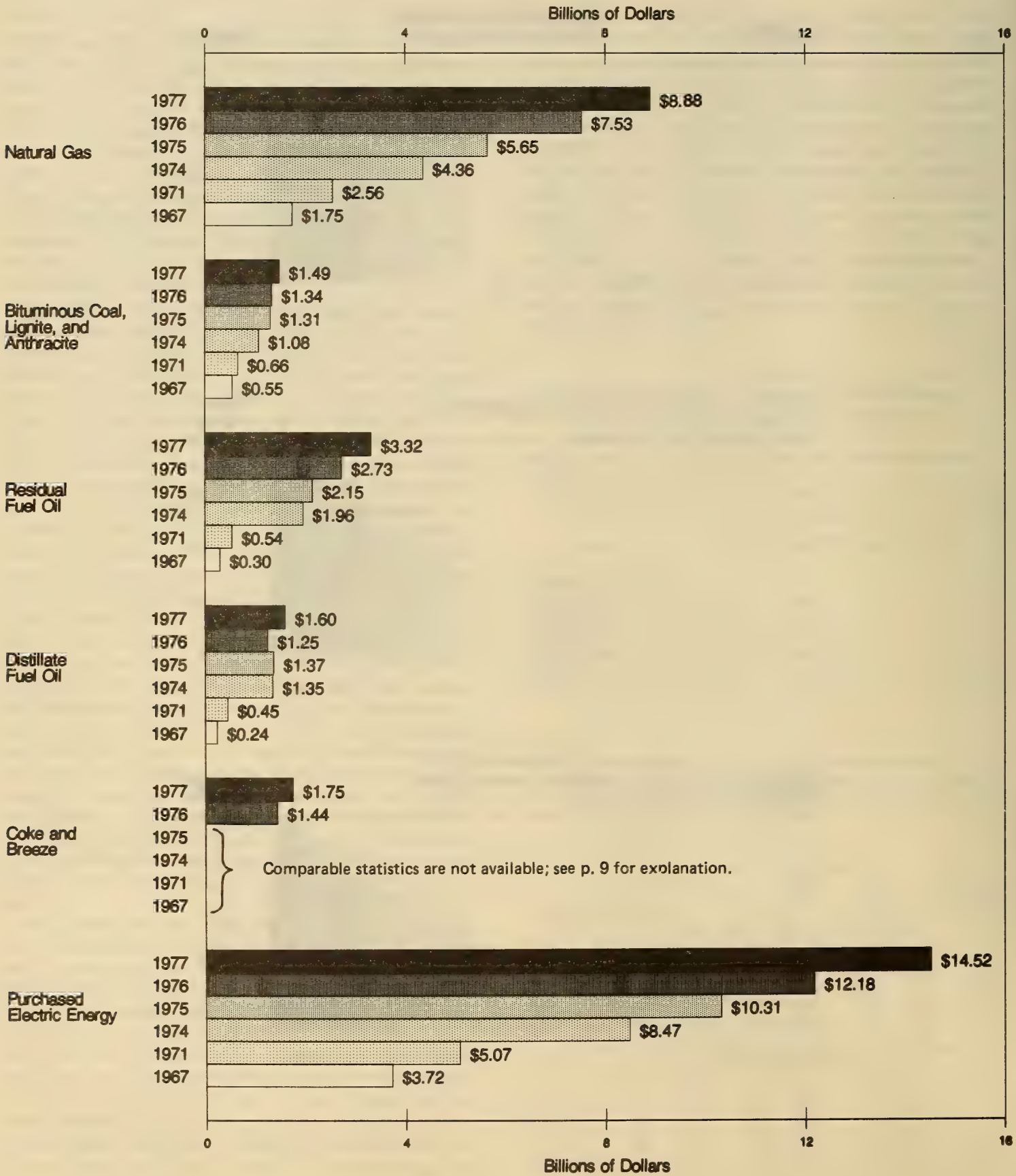


CHART 3.

Quantity of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971 and 1974–1977

(Excludes consumption for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 4.8 and 4.4 percent of all fuel and electric energy consumption by all manufacturing industries)

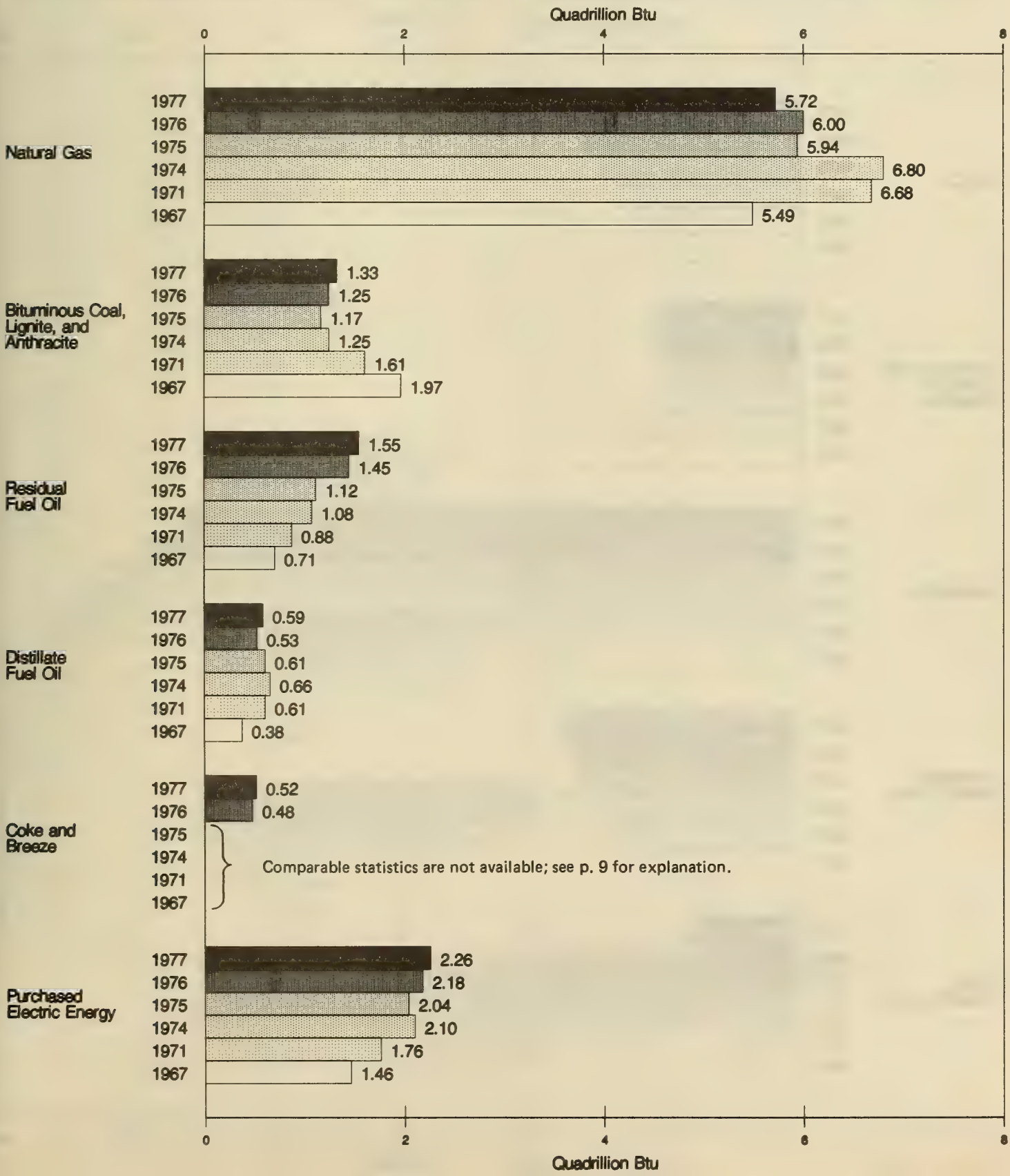


CHART 4.

Percent of Manufacturing Energy (BTU) Consumption Represented by Selected Individual Fuels and Purchased Electric Energy: 1967, 1971 and 1974–1977

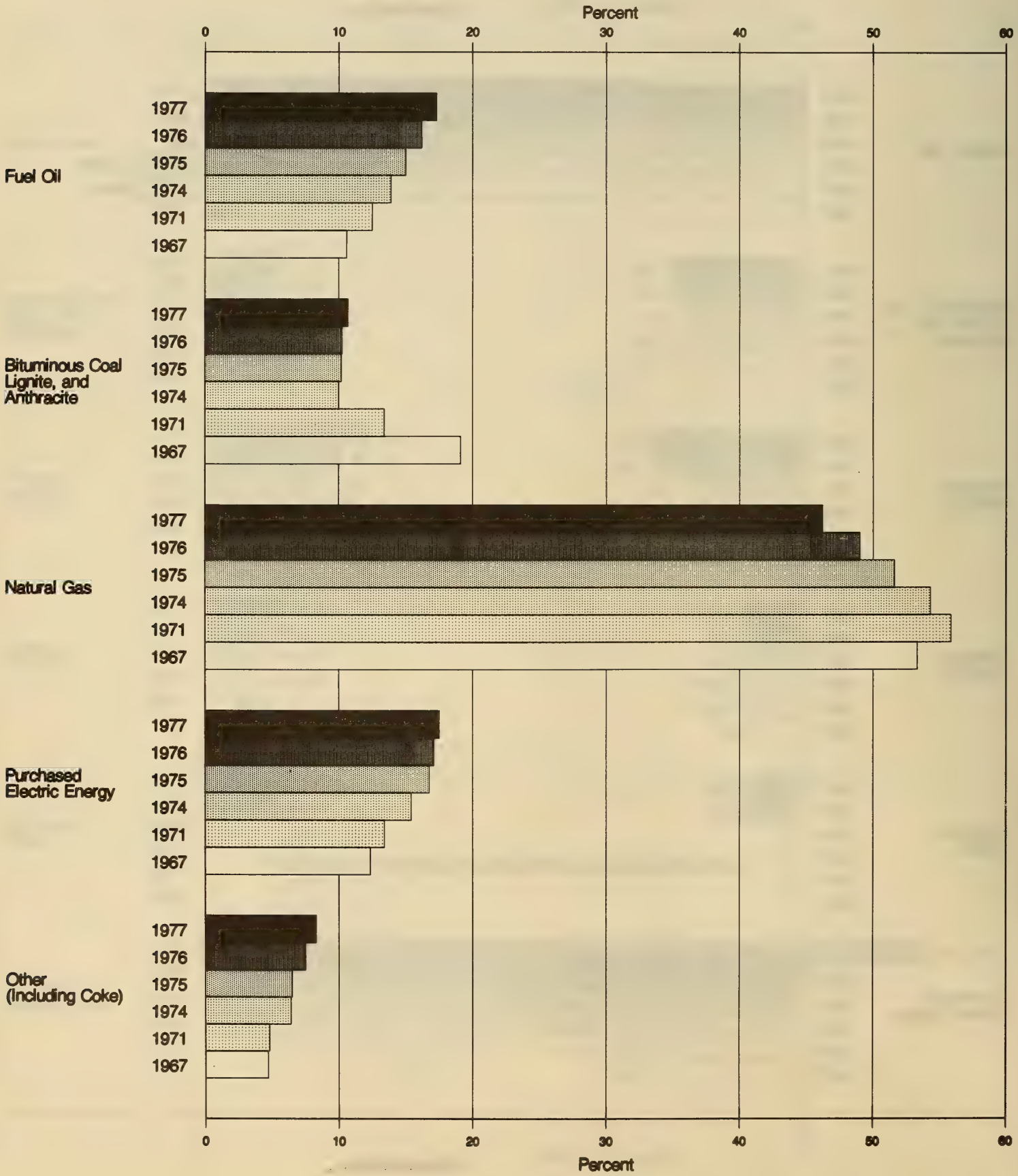


CHART 5.

Cost per Million British Thermal Units of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971 and 1974–1977

(Excludes Other Fuels and Fuels Not Specified by Kind, which for 1977 averaged $2.09 and $1.59 per million Btu's)

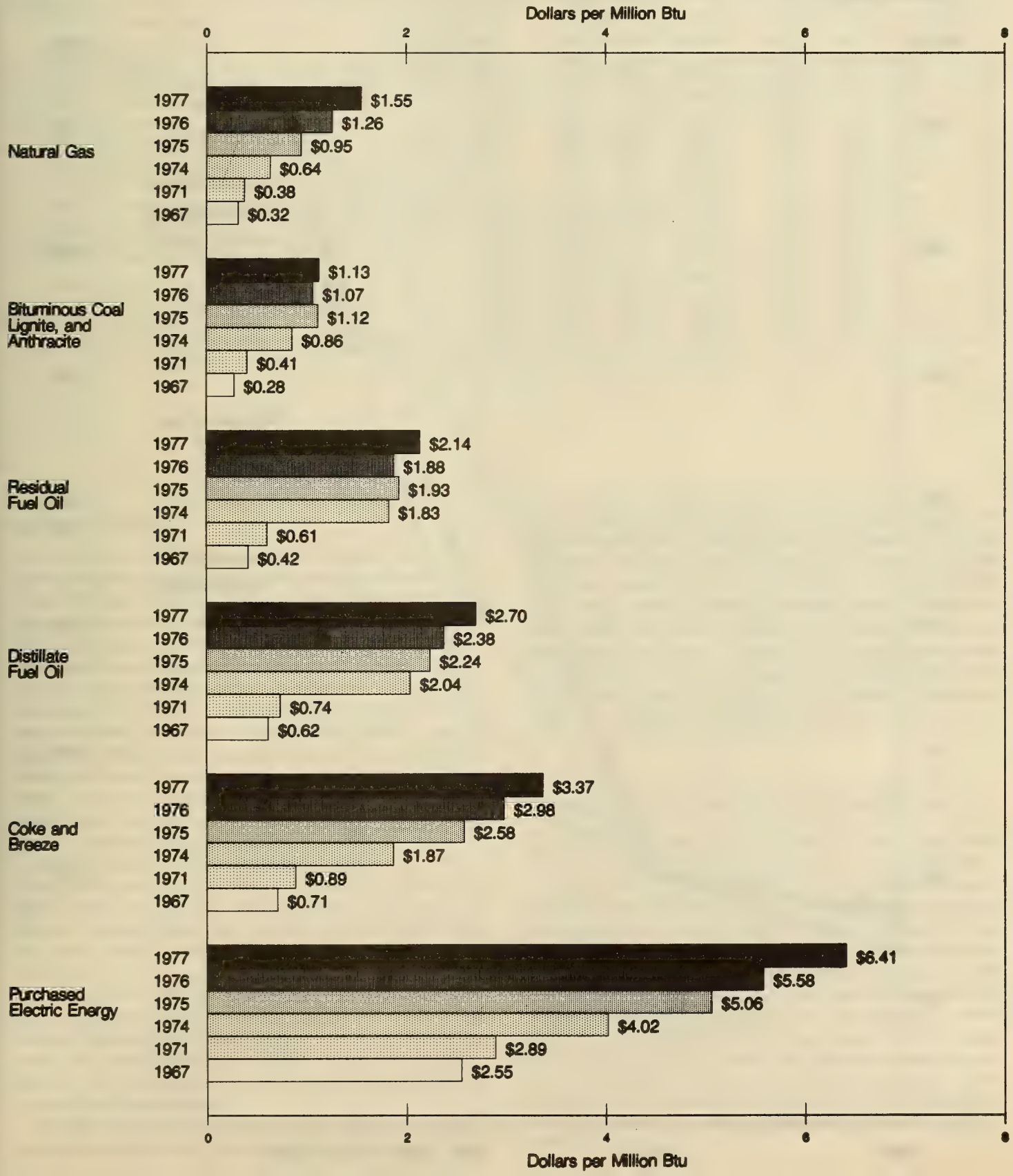


CHART 6.

Cost Per British Thermal Unit of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries 1967, 1971 and 1974–1977 (1971=100)



Table C. **Purchased Fuels and Electric Energy Consumed by Major Industry Groups: 1976 and 1977**

SIC code	Major group	Quantity (trillion Btu)			Total cost (million dollars)			Cost per million Btu's (dollars)		
		1977	1976	1977/1976 relative	1977	1976	1977/1976 relative	1977	1976	1977/1976 relative
	All industries	12,929.0	12,776.3	1.01	33,379.6	28,138.5	1.19	2.58	2.20	1.17
20	Food and kindred industries	952.4	945.0	1.01	2,537.8	2,173.5	1.17	2.66	2.30	1.16
21	Tobacco products	20.8	20.2	1.03	63.9	54.8	1.17	3.07	2.71	1.13
22	Textile mill products	339.2	336.7	1.01	1,136.6	1,009.0	1.13	3.35	3.00	1.12
23	Apparel and other textile products	65.6	62.0	1.06	285.8	245.3	1.17	4.36	3.96	1.10
24	Lumber and wood products	227.7	235.7	.97	726.5	640.0	1.14	3.19	2.72	1.17
25	Furniture and fixtures	52.7	49.7	1.06	198.3	168.2	1.18	3.76	3.38	1.11
26	Paper and allied products	1,308.4	1,300.2	1.01	2,960.4	2,526.6	1.17	2.26	1.94	1.16
27	Printing and publishing	92.3	88.8	1.04	421.7	362.6	1.16	4.57	4.08	1.12
28	Chemicals and allied products	2,978.5	2,989.3	1.00	6,448.7	5,430.6	1.19	2.17	1.82	1.19
29	Petroleum and coal products	1,303.4	1,304.8	1.00	2,445.4	2,108.2	1.16	1.88	1.62	1.16
30	Rubber and miscellaneous plastics products	272.3	250.3	1.09	962.4	765.3	1.26	3.53	3.06	1.15
31	Leather and leather products	23.1	22.6	1.02	82.6	71.7	1.15	3.58	3.17	1.13
32	Stone, clay, and glass products	1,251.8	1,226.9	1.02	2,587.4	2,167.8	1.19	2.07	1.77	1.17
33	Primary metal industries	2,539.4	2,470.6	1.03	7,043.6	5,752.2	1.22	2.77	2.33	1.19
34	Fabricated metal products	395.3	382.6	1.03	1,348.7	1,128.7	1.19	3.41	2.95	1.16
35	Machinery, except electrical	339.6	339.3	1.00	1,268.0	1,098.9	1.15	3.73	3.24	1.15
36	Electric and electronic equipment	249.3	241.5	1.03	986.7	824.5	1.20	3.96	3.41	1.16
37	Transportation equipment	389.9	385.0	1.01	1,402.6	1,195.8	1.17	3.60	3.11	1.16
38	Instruments and related products	78.4	76.7	1.02	272.5	239.3	1.14	3.48	3.12	1.12
39	Miscellaneous manufacturing industries	49.1	48.3	1.02	199.9	175.5	1.14	4.07	3.63	1.12

Btu British thermal units.

INDUSTRY DATA

At the 2-digit Standard Industrial Classification (SIC) level, purchased fuels and electric energy consumption increased in 17 of the 20 major industry groups and decreased slightly in the other 3 groups (table C). The largest decrease was in major group 24, Lumber and Wood Products, which showed a 3 percent drop, reflecting a decrease of 8.0 trillion Btu's from 1976. Those with the largest absolute increase in fuels and electric energy consumption in trillions of Btu's were major group 33, Primary Metal Industries; 32, Stone, Clay, and Glass Products; and 30, Rubber and Miscellaneous Plastics Products. The groups that recorded the largest percentage increase were major group 30, Rubber and Miscellaneous Plastics Products (9 percent); 23 Apparel and Other Textile Products (6 percent); and 25, Furniture and Fixtures (6 percent).

Between 1976 and 1977, the average cost per Btu of purchased fuels and electric energy increased in all 20 2-digit major industry groups. The largest increase (19 percent) was recorded in major group 28, Chemicals and Allied Products. This was caused primarily by an increased average cost of natural gas.

In 1977, as in 1976, 1975, and 1974, major industry groups 27, Printing and Publishing, and 23, Apparel and Other Textile Products, recorded the highest average cost per million Btu's: $4.57 and $4.36 respectively. Electric energy accounts for a relatively high percentage of energy consumed by establishments in these two industry groups.

Energy consumption in manufacturing is highly concentrated among a few industries that are energy intensive because of their use of large amounts of energy in manufacturing processes (rather than mainly for heat and light). SIC industry 3312, Blast Furnances and Steel Mills, consumed 1,519 trillion BTU's, making it the largest energy-consuming industry in manufacturing. Other major energy-consuming industries in descending order of consumption were 2911, Petroleum Refining (1,223 trillion); 2869, Industrial Organic Chemicals, not elsewhere classified (1,096 trillion); and 2621, Papermills, Except Building Paper (588 trillion). These four industries accounted for 34 percent of the total energy consumption of all 449 manufacturing industries (charts 7 and 8 and table D).

REVISIONS TO 1976 COKE AND BREEZE DATA

Data on the consumption of purchased coke and breeze before 1976 are not fully comparable with the data for 1976 and 1977.

During review of the 1977 Census of Manufactures data on the production and disposition of coke and breeze, it became evident that the amount of purchased coke consumed as a fuel was understated for some establishments. This occurred because some respondents misinterpreted instructions for reporting coke consumption. Correct 1977 data were obtained and the 1976 figures for purchased coke and breeze were adjusted to reflect the true consumption picture. These adjustments increased 1976 quantity and cost figures for coke and breeze (table E). It is not possible to develop comparable consumption figures for earlier years. However, the magnitude of the 1976 revisions gives a good indication of the probable impact on the 1974 and 1975 figures.

CHART 7.

Fuels and Purchased Electric Energy Consumed by Largest 4, 8, and 16 Energy Consuming Industries as a Percent of Total Consumed by All Manufacturing Industries: 1977

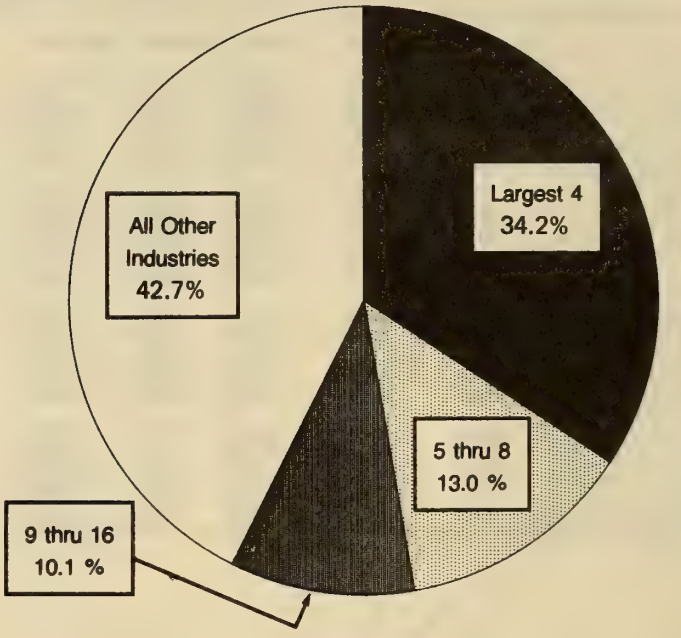


Table D. Purchased Fuels and Electric Energy Consumed by 16 Largest Energy-Consuming Industries: 1977

Rank	SIC code	Industry	Btu's consumed (trillions)
1	3312	Blast furnaces and steel mills.....	1,519.2
2	2911	Petroleum refining.....	1,222.8
3	2869	Industrial organic chemicals, n.e.c...	1,095.9
4	2621	Papermills, except building paper.....	587.5
(X)		Largest 4 industries.....	4,425.4
5	2631	Paperboard mills.....	482.8
6	3241	Cement, hydraulic.....	453.1
7	2819	Industrial inorganic chemicals, n.e.c.	422.2
8	3334	Primary aluminum.....	327.7
(X)		Largest 8 industries.....	6,111.2
9	2873	Nitrogenous fertilizers.....	251.5
10	2821	Plastics materials and resins.....	182.7
11	2865	Cyclic crudes and intermediates.....	171.9
12	2824	Organic fibers, noncellulosic.....	147.9
13	3221	Glass containers.....	144.5
14	3079	Miscellaneous plastics products.....	139.3
15	3714	Motor vehicle parts, and accessories..	137.0
16	2812	Alkalies and chlorine.....	126.9
(X)		Largest 16 industries.....	7,412.9
(X)		Other industries.....	5,516.1
		All industries.....	12,929.0

Btu British thermal units. (X) Not applicable.

CHART 8.

Fuels and Purchased Electric Energy Consumed by 8 Largest Consuming Industries: 1974-1977

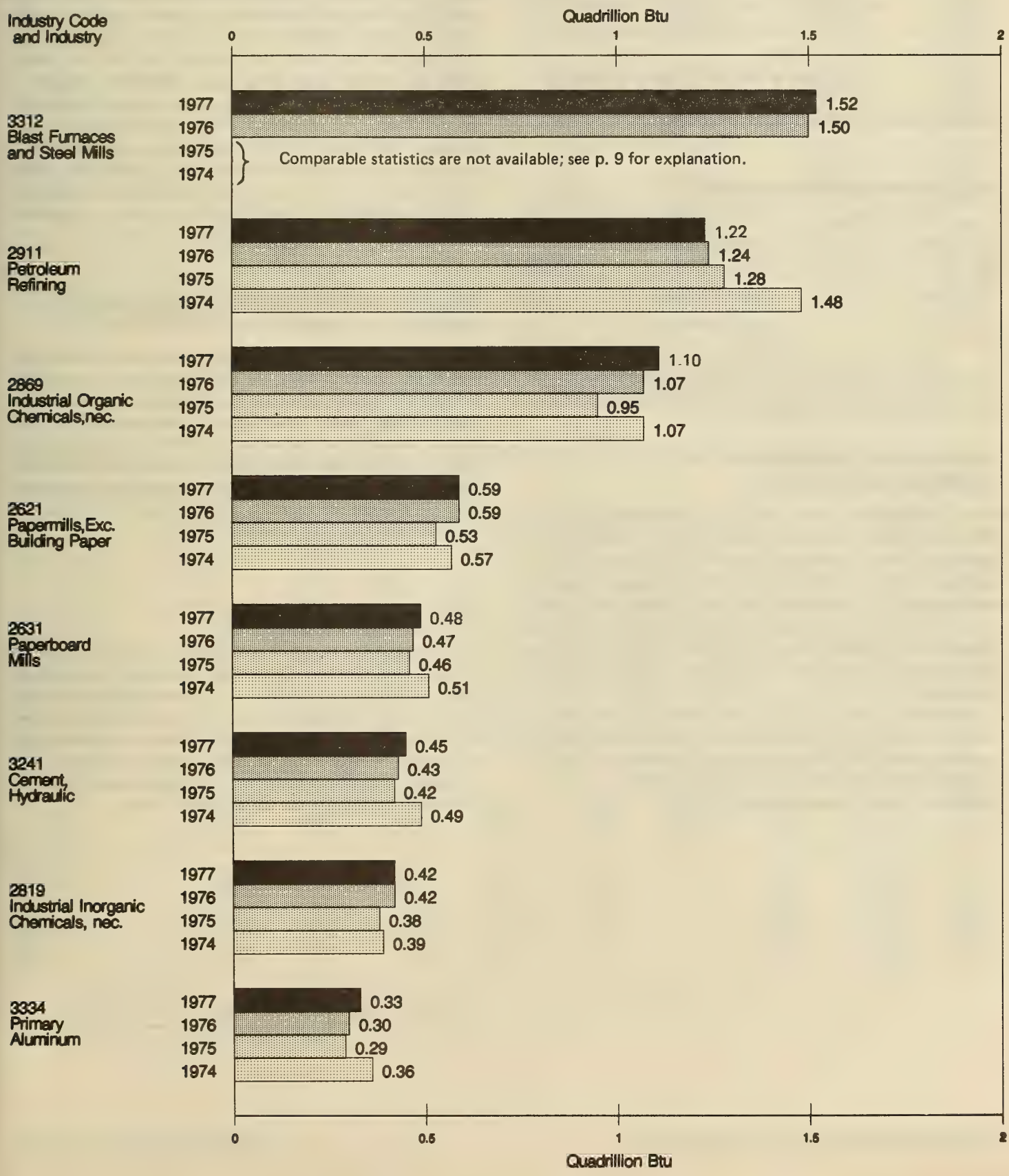


Table E. **Revisions to 1976 Coke and Breeze Statistics**

Fuel	Published 1976		Revised 1976	
	Quantity (1,000 s. tons)	Cost (mil. dol.)	Quantity (1,000 s. tons)	Cost (mil. dol.)
	All industries			
Coke and breeze.....	15,665.7	1,141.2	18,536.0	1,437.2
	Industry 3312, Blast furnaces and steel mills			
Coke and breeze.....	13,031.4	879.9	15,447.1	1,115.7

Table F. **Conversion to British Thermal Units: 1977**

Kind of energy	Unit of measure	Btu's (1,000)
Electric energy.	1,000 kWh	3,412
Coal	Short tons.	26,194
Coke	. . do.	25,993
Fuel oil:		
Distillate	Barrels (42-gal.) .	5,824
Residual	. . do.	6,285
Natural gas.	MCF (1,000 cu. ft.)	1,024
Other fuels.	Dollars	478

Note: For costs of "fuels, not specified by kind," conversion factors for 1977 were developed for each 2-digit SIC group, based on the relationship of total cost of fuels to the total kilowatt-hour equivalents for those groups, as published in M76(AS)-4.1, "Fuels and Electric Energy," 1976 Annual Survey of Manufactures.

CONVERSION TO BRITISH THERMAL UNITS (BTU'S)

Fuels consumed data were converted to British thermal units (BTU's) to provide comparable figures (table F). A Btu is the quantity of heat required to raise the temperature of one pound of water by 1 degree Fahrenheit. Btu factors reflect the energy content of the various fuels with no regard to efficiency of use. Since some fuel applications are considerably more efficient than others (none 100 percent efficient), the Btu figures must be considered as the maximum amount of available energy.

Beginning in 1976, the Btu rather than the kilowatt-hour equivalent was used as the common unit of measure for this statistical series. Several data users recommended the adoption of Btu's as the standard for energy quantification. There are 3,412 Btu's in one kilowatt-hour equivalent.

FUELS EXCLUDED FROM REPORT

Data on fuels produced and consumed in the same establishment, such as coke-oven gas or blast-furnaces gas; data on fuels used as raw materials, such as fuel oil and natural gas used to produce carbon black and crude petroleum used to produce fuels; and fuels converted to other fuel types, such as coal converted to coke, were not collected in the 1974, 1975, 1976, or 1977 surveys. As a result, significant amounts of energy materials used in manufacturing plants are not covered by this report. For example, in 1972 coke produced and consumed in SIC Industry 3312, Blast Furnaces and Steel Mills, amounted to 40.5 million short tons or 1.1 quadrillion Btu's. Inclusion of this coke would have increased the gross Btu's of fuels consumed by manufacturers by about 8 to 10 percent.

1972 AND 1977 REVISIONS TO STANDARD INDUSTRIAL CLASSIFICATION SYSTEM

A revised edition of the Standard Industrial Classification (SIC) manual was issued in 1972, the first major revision since 1957. In the 1972 version, extensive modifications were made in the manufacturing sector which affect comparability with the historic data in many industries. In 1977 a supplement to the 1972 SIC manual was issued presenting several minor additional changes to the classification system. More detailed descriptions of these changes are found in the 1972 and 1977 Census of Manufactures (MC72(1)-1 and MC77-SR-1).

CENSUS DISCLOSURE RULES

The Bureau of the Census is prohibited by law from publishing any statistics that would disclose information reported by individual companies. Additionally, quantity or cost data may be withheld if the figures do not meet publication standards on the basis of a consistency review. However, the total figures for a State, industry group, or major group include data for all component industries whether or not separate figures are shown for the individual industries comprising the total.

Table 1. Fuels and Electric Energy Used for Heat and Power: 1977 and Earlier Years

(For explanation of terms, see appendix A)

Year	Cost of purchased fuels and electric energy (million dollars)	Cost of purchased fuels (million dollars)	Electric energy: Purchased: Quantity (million kWh)	Electric energy: Purchased: Cost (million dollars)	Electric energy: Generated less sold (million kWh)
1977	33,379.6	18,864.7	663,351.0	14,515.1	63,194.2
1976[1]	28,138.5	15,959.5	640,164.6	12,179.1	63,843.9
1975[1]	23,290.7	12,977.8	596,798.0	10,312.9	63,275.0
1974[1]	19,468.3	11,003.0	616,665.1	8,465.3	80,932.3
1973[1]	13,625.5	7,012.3	612,601.5	6,613.2	84,864.7
1972	11,771.7	6,055.9	557,468.9	5,715.8	87,185.7
1971	10,432.1	5,360.6	514,612.7	5,070.6	82,828.0
1970	9,424.7	4,845.7	500,768.7	4,579.2	83,327.3
1969	8,751.4	4,456.6	497,015.7	4,294.8	83,351.7
1968	8,272.1	4,263.0	458,908.4	4,009.1	82,752.2
1967	7,691.7	3,974.9	427,465.1	3,716.8	78,355.8
1966	7,365.9	3,902.3	399,390.0	3,463.6	80,500.0
1965	6,973.4	3,727.3	373,428.0	3,246.1	80,453.0
1964	6,706.6	3,583.9	357,292.0	3,122.7	79,740.0
1963	6,369.7	3,409.0	333,512.0	2,960.7	72,949.0
1962	6,184.0	3,360.7	313,961.0	2,823.3	74,261.0
1961	5,825.3	3,192.6	298,325.0	2,632.7	68,533.0
1960	5,765.1	3,192.9	291,949.0	2,572.2	70,016.0
1959	5,544.6	3,082.7	281,301.0	2,461.9	69,291.0
1958	5,067.0	2,836.2	252,909.0	2,230.8	66,850.0

[1]Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample.

Table 2. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power: 1977 and Selected Earlier Years

(For explanation of terms, see appendix A)

Year	Purchased fuels and electric energy: British thermal units (trillions)	Purchased fuels and electric energy: Cost (million dollars)	Purchased fuels: British thermal units (trillions)	Purchased fuels: Cost (million dollars)	Fuel oil: Distillate: Quantity (1,000 barrels)	Fuel oil: Distillate: Cost (million dollars)	Fuel oil: Residual: Quantity (1,000 barrels)	Fuel oil: Residual: Cost (million dollars)	Bituminous coal, lignite, and anthracite: Quantity (1,000 short tons)	Bituminous coal, lignite, and anthracite: Cost (million dollars)
1977	12,929.0	33,379.6	10,665.5	18,864.7	101,594.5	1,596.4	246,176.3	3,317.0	50,622.6	1,494.0
1976[1]	12,776.3	28,138.5	10,592.1	15,959.5	90,202.6	1,252.3	231,122.5	2,733.4	47,903.0	1,344.2
1975[1]	12,084.1	23,290.7	10,047.8	12,977.8	104,894.2	1,369.7	177,452.4	2,149.0	44,623.3	1,310.3
1974[1]	13,548.3	19,468.3	11,444.2	11,003.0	113,823.6	1,350.4	171,095.3	1,964.9	47,806.8	1,083.1
1971	13,008.3	10,432.1	11,252.4	5,360.6	104,940.8	453.4	140,726.4	535.9	61,392.6	658.1
1967	11,810.3	7,691.7	10,351.7	3,974.9	65,653.9	236.9	112,958.9	298.7	75,100.0	551.7
1962	9,810.5	6,184.1	8,739.2	3,360.7	44,730.0	190.9	150,885.0	432.4	89,438.0	639.5
1958	8,247.8	5,067.0	7,384.9	2,836.2	[2]166,301.0	[2]522.7	([2])	([2])	81,784.0	638.2

Year	Coke and breeze: Quantity (1,000 short tons)	Coke and breeze: Cost (million dollars)	Natural gas: Quantity (billion cu. ft.)	Natural gas: Cost (million dollars)	Other fuels (million dollars)	Fuels not specified by kind (million dollars)	Electric energy: Purchased: Quantity (million kWh)	Electric energy: Purchased: Cost (million dollars)	Electric energy: Generated less sold (million kWh)
1977	19,957.7	1,747.6	5,585.7	8,879.4	[4]1,076.1	754.3	663,351.0	14,515.1	63,194.2
1976[1]	18,536.0	1,437.2	5,858.1	7,532.2	[4]911.4	748.8	640,164.6	12,179.1	63,843.9
1975[1]	13,156.8	880.8	5,804.8	5,653.1	[4]849.5	765.4	596,798.0	10,312.9	63,275.0
1974[1]	15,215.2	744.6	6,566.4	4,360.1	[4]702.6	797.2	616,665.1	8,465.3	80,932.3
1971	13,742.8	317.6	6,454.4	2,559.9	[4]377.5	458.2	514,612.7	5,070.6	82,828.0
1967	13,562.5	248.9	[3]5,306.9	[3]1,749.1	220.2	669.4	427,465.1	3,716.8	78,355.8
1962	17,747.0	304.8	[3]4,308.1	[3]1,455.9	337.1	-	313,961.0	2,823.3	74,261.0
1958	13,585.0	271.0	[3]3,112.2	[3]900.9	147.9	355.6	252,909.0	2,230.8	66,850.0

- Represents zero.
[1]Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample.
[2]Figures for residual fuel oil are included with distillate fuel oil.
[3]Figure includes manufactured, still, blast-furnace, and coke-oven gas.
[4]Figure includes gas, except natural gas.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ALL INDUSTRIES	12,929.0	33,379.6	10,665.5	18,864.7	101,594.5	1,596.4	246,176.3	3,317.0	50,622.6	1,494.0	1	1	1
20	FOOD AND KINDRED PRODUCTS	952.4	2,537.8	815.8	1,486.2	12,936.2	203.5	19,164.6	267.0	3,384.8	93.9	2	2	1
21	TOBACCO PRODUCTS	20.8	63.9	16.5	31.1	270.7	4.3	875.0	12.4	(D)	(D)	3	2	(X)
22	TEXTILE MILL PRODUCTS	339.2	1,136.6	245.0	492.9	4,979.0	78.1	11,639.2	167.3	1,206.8	42.9	5	3	1
23	APPAREL, OTH. TEXTILE PRODS.	65.6	285.8	43.0	85.2	770.7	12.6	666.2	9.8	68.2	2.8	13	7	25
24	LUMBER AND WOOD PRODUCTS	227.7	726.5	172.6	361.0	5,767.5	96.3	2,429.6	34.3	(D)	(D)	5	6	(X)
25	FURNITURE AND FIXTURES	52.7	198.3	38.5	76.1	905.1	15.0	444.8	6.8	111.5	4.3	5	5	4
26	PAPER AND ALLIED PRODUCTS	1,308.4	2,960.4	1,156.3	2,036.6	5,733.2	88.5	75,227.3	969.1	8,662.8	260.3	2	1	1
27	PRINTING AND PUBLISHING	92.3	421.7	56.3	113.8	1,020.7	16.9	447.2	6.7	(D)	(D)	7	5	(X)
28	CHEMICALS, ALLIED PRODUCTS	2,978.5	6,448.7	2,469.7	3,727.7	20,411.9	302.4	45,540.9	613.4	13,061.9	380.9	1	1	1
29	PETROLEUM AND COAL PRODUCTS	1,303.4	2,445.4	1,200.5	1,805.7	3,840.7	59.3	9,700.9	133.5	183.6	5.2	7	3	8
30	RUBBER, MISC. PLASTICS PROD.	272.3	962.4	195.3	362.1	3,181.7	49.8	7,508.4	104.9	910.6	24.3	2	2	1
31	LEATHER, LEATHER PRODUCTS	23.1	82.6	18.2	36.8	367.3	5.9	842.5	11.9	44.4	1.0	10	11	16
32	STONE, CLAY, GLASS PRODUCTS	1,251.8	2,587.4	1,146.3	1,825.4	13,893.2	225.1	13,075.0	168.4	13,147.6	359.3	3	5	1
33	PRIMARY METAL INDUSTRIES	2,539.4	7,043.6	2,001.2	4,296.7	12,448.4	194.2	41,304.7	560.3	5,167.8	161.5	1	1	1
34	FABRICATED METAL PRODUCTS	395.3	1,348.7	305.2	603.4	4,671.7	76.2	3,542.3	51.7	413.7	14.1	3	3	3
35	MACHINERY, EXCEPT ELECTRIC	339.6	1,268.0	242.5	471.7	3,434.2	57.0	3,432.7	50.6	704.7	22.3	3	2	1
36	ELECTRIC, ELECTRONIC EQUIP	249.3	986.7	164.1	317.3	2,763.1	44.2	2,422.4	35.2	547.6	17.0	2	1	1
37	TRANSPORTATION EQUIPMENT	389.9	1,402.6	284.2	553.5	2,856.2	45.3	5,594.0	80.1	1,842.9	62.3	2	1	1
38	INSTRUMENTS, RELATED PRODS	78.4	272.5	59.5	108.2	585.0	9.4	1,481.0	21.3	(D)	(D)	4	1	(X)
39	MISC. MANUFACTURING INDUS.	49.1	199.9	35.0	73.2	758.3	12.5	837.5	12.4	(D)	(D)	7	5	(X)
20	FOOD AND KINDRED PRODUCTS	952.4	2,537.8	815.8	1,486.2	12,936.2	203.5	19,164.6	267.0	3,384.8	93.9	2	2	1
201	MEAT PRODUCTS	107.4	322.9	84.5	150.4	1,544.9	24.5	1,285.5	18.6	147.5	5.3	2	2	3
2011	MEATPACKING PLANTS	64.3	171.5	52.8	90.1	912.0	14.3	699.3	9.9	(D)	(D)	3	3	(X)
2013	SAUSAGES, OTHER PREPARED MEATS	19.6	70.9	14.5	27.9	201.3	3.3	(D)	(D)	(D)	(D)	9	(X)	(X)
2016	POULTRY DRESSING PLANTS	20.2	70.6	14.6	27.8	393.7	6.4	(D)	(D)	(D)	(D)	4	(X)	(X)
2017	POULTRY AND EGG PROCESSING	3.3	9.9	2.6	4.6	37.9	.6	(D)	(D)	-	-	10	(X)	(X)
202	DAIRY PRODUCTS	93.9	289.7	75.9	147.3	1,605.5	26.3	1,654.6	23.8	33.9	1.3	8	5	1
2021	CREAMERY BUTTER	3.3	8.0	3.0	5.6	45.2	.7	24.7	.3	-	-	28	1	(X)
2022	CHEESE, NATURAL AND PROCESSED	23.7	59.4	21.0	39.6	457.2	7.4	673.6	9.5	(D)	(D)	20	5	(X)
2023	CONDENSED AND EVAPORATED MILK	25.5	59.5	23.6	44.1	279.6	4.3	403.6	5.7	(D)	(D)	5	5	(X)
2024	ICE CREAM AND FROZEN DESSERTS	6.6	34.1	3.6	7.3	85.6	1.4	41.0	.6	-	-	12	14	(X)
2026	FLUID MILK	34.7	128.9	24.7	50.7	737.9	12.4	511.8	7.6	(D)	(D)	12	12	(X)
203	PRESERVED FRUITS AND VEGETABLES	134.6	367.4	115.2	225.5	1,655.1	25.6	3,145.9	42.8	90.2	3.5	7	2	2
2032	CANNED SPECIALTIES	18.9	48.0	17.2	34.7	207.0	3.3	776.8	11.2	84.1	3.2	3	1	1
2033	CANNED FRUITS AND VEGETABLES	47.4	123.6	42.9	85.7	635.3	10.2	1,011.6	13.8	(D)	(D)	7	6	(X)
2034	DEHYD. FRUITS, VEGETABLES, SOUP	15.1	35.1	13.4	24.7	137.8	1.9	(D)	(D)	(D)	(D)	7	(X)	(X)
2035	PICKLES, SAUCES, SALAD DRESSING	7.9	23.5	6.6	12.9	104.6	1.7	175.2	2.6	-	-	2	8	(X)
2037	FROZEN FRUITS AND VEGETABLES	33.4	92.0	27.1	52.7	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
2038	FROZEN SPECIALTIES	11.9	45.2	8.0	14.7	137.2	2.3	(D)	(D)	-	-	5	(X)	(X)
204	GRAIN MILL PRODUCTS	151.6	369.9	129.1	205.6	2,014.0	31.1	2,078.2	28.6	1,210.4	36.3	2	4	1
2041	FLOUR, OTHER GRAIN MILL PRODS.	10.3	46.0	4.8	8.0	81.9	1.3	(D)	(D)	(D)	(D)	12	(X)	(X)
2043	CEREAL BREAKFAST FOODS	10.2	31.0	8.2	16.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2044	RICE MILLING	3.8	12.7	2.7	5.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2045	BLENDED AND PREPARED FLOUR	1.6	6.3	1.1	1.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
2046	WET CORN MILLING	84.4	153.3	78.9	115.8	1,206.4	18.2	1,202.1	16.2	1,151.4	34.3	1	4	1
2047	DOG, CAT, AND OTHER PET FOOD	12.9	39.9	10.3	19.7	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
2046	PREPARED FEEDS, NEC	28.4	80.7	23.1	37.9	324.3	5.5	154.6	2.0	(D)	(D)	9	6	(X)
205	BAKERY PRODUCTS	53.2	161.7	44.6	89.0	599.5	10.1	372.7	5.7	(D)	(D)	10	9	(X)
2051	BREAD, CAKE, RELATED PRODUCTS	42.3	127.9	35.6	70.1	542.5	9.0	248.8	3.8	(D)	(D)	11	14	(X)
2052	COOKIES AND CRACKERS	10.9	33.8	9.0	18.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	141.1	286.2	133.6	227.0	1,154.0	16.3	4,580.8	61.9	1,281.6	29.3	2	1	1
2061	RAW CANE SUGAR	12.9	30.9	12.3	26.0	104.0	1.7	705.5	9.5	-	-	2	1	(X)
2062	CANE SUGAR REFINING	32.5	69.6	32.1	65.8	209.9	3.2	2,043.5	29.1	-	-	1	1	(X)
2063	BEET SUGAR	75.0	111.0	73.8	103.9	532.9	6.5	(D)	(D)	(D)	(D)	1	(X)	(X)
2065	CONFECTIONERY PRODUCTS	14.6	50.8	10.8	21.2	234.2	3.7	312.9	4.5	(D)	(D)	6	3	(X)
2066	CHOCOLATE AND COCOA PRODUCTS	4.7	17.8	3.6	7.8	24.9	.4	340.1	4.8	(D)	(D)	1	1	(X)
2067	CHEWING GUM	1.4	6.1	1.0	2.3	48.0	.8	(D)	(D)	-	-	1	(X)	(X)
207	FATS AND OILS	110.8	272.9	99.3	186.6	1,965.8	30.4	2,994.9	42.4	177.9	5.2	6	8	1
2074	COTTONSEED OIL MILLS	6.6	22.6	4.7	8.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2075	SOYBEAN OIL MILLS	45.3	107.2	40.5	74.7	1,062.7	16.6	1,045.4	14.6	(D)	(D)	1	1	(X)
2076	VEGETABLE OIL MILLS, NEC	2.3	6.2	2.0	3.5	29.9	.5	(D)	(D)	(D)	(D)	1	(X)	(X)
2077	ANIMAL AND MARINE FATS AND OILS	29.6	74.5	27.1	53.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2079	SHORTENING AND COOKING OILS	27.0	62.4	25.0	47.0	332.4	5.1	802.9	11.2	(D)	(D)	2	5	(X)
208	BEVERAGES	105.9	289.7	90.4	166.1	1,421.6	22.7	2,203.9	30.9	439.3	12.9	5	2	4
2082	MALT BEVERAGES	50.1	132.2	43.2	81.2	678.8	10.4	1,722.9	24.0	(D)	(D)	4	1	(X)
2083	MALT	9.6	23.4	8.4	15.4	76.4	1.2	(D)	(Z)	(D)	(Z)	20	8	1
2084	WINES, BRANDY, BRANDY SPIRITS	3.6	13.3	2.7	5.4	23.3	.4	(D)	(D)	(D)	(Z)	4	(X)	85
2085	DISTILLED LIQUOR, EXCEPT BRANDY	15.6	30.1	14.5	22.2	284.6	4.6	(D)	(D)	(D)	(D)	2	(X)	(X)
2086	BOTTLED AND CANNED SOFT DRINKS	22.8	76.8	18.0	34.2	275.1	4.7	(D)	(D)	(D)	(Z)	17	(X)	80
2087	FLAVORING EXTRACTS, SIRUPS, NEC	4.3	13.9	3.5	7.7	83.5	1.4	157.9	2.3	-	-	27	10	(X)
209	MISC. FOODS, KINDRED PRODUCTS	53.8	177.3	43.2	88.7	975.9	16.5	848.2	12.4	(D)	(D)	7	1	(X)
2091	CANNED AND CURED SEAFOODS	4.2	13.3	3.5	7.5	83.3	1.7	51.0	.8	-	-	23	11	(X)
2092	FRESH OR FROZEN PACKAGED FISH	5.2	20.2	3.7	8.2	162.0	3.0	20.1	.3	-	-	13	1	(X)
2095	ROASTED COFFEE	9.9	30.7	8.4	18.0	(D)	(D)	382.9	5.8	-	-	(X)	1	(X)
2097	MANUFACTURED ICE	2.5	15.5	.6	1.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	85
2098	MACARONI AND SPAGHETTI	2.5	9.3	1.8	3.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2099	FOOD PREPARATIONS, NEC	29.6	88.4	25.2	50.2	523.4	8.5	361.1	5.0	(D)	(D)	11	1	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ALL INDUSTRIES	19,957.7	1,747.6	5,585.7	8,879.4	1,076.1	754.3	663,351.0	14,515.1	63,194.2	12,776.3	28,138.5	1
20	FOOD AND KINDRED PRODUCTS	53.7	6.1	426.5	743.3	77.5	94.8	40,046.0	1,051.6	2,344.9	945.0	2,173.5	1
21	TOBACCO PRODUCTS	-	-	2.3	4.2	.2	(D)	1,250.1	32.8	(D)	20.2	54.8	2
22	TEXTILE MILL PRODUCTS	(Z)	(Z)	74.0	134.6	34.2	35.8	27,609.5	643.7	438.8	336.7	1,009.0	2
23	APPAREL, OTH. TEXTILE PRODS.	(D)	(D)	15.2	27.0	4.4	(D)	6,619.9	200.6	(S)	62.0	245.3	5
24	LUMBER AND WOOD PRODUCTS	-	-	64.0	112.2	84.4	(D)	16,125.5	365.5	298.5	235.7	640.0	2
25	FURNITURE AND FIXTURES	-	-	18.0	32.2	5.5	12.4	4,190.3	122.3	(S)	49.7	168.2	3
26	PAPER AND ALLIED PRODUCTS	-	-	350.0	590.1	102.4	26.2	44,559.8	923.8	27,383.5	1,300.2	2,526.6	1
27	PRINTING AND PUBLISHING	-	-	28.4	53.4	13.7	(D)	10,553.7	307.9	6.2	88.8	362.6	4
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	1,484.0	2,049.4	301.1	(D)	149,140.9	2,721.0	12,942.6	2,989.3	5,430.6	1
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	1,051.0	1,546.3	27.0	(D)	30,153.2	639.7	4,516.7	1,304.8	2,108.2	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	71.3	124.4	14.1	44.7	22,556.9	600.3	423.9	250.3	765.3	2
31	LEATHER, LEATHER PRODUCTS	-	-	5.5	10.0	2.4	5.6	1,416.8	45.9	14.7	22.6	71.7	5
32	STONE, CLAY, GLASS PRODUCTS	373.2	23.9	523.5	890.3	72.8	85.7	30,924.4	762.0	452.5	1,226.9	2,167.8	2
33	PRIMARY METAL INDUSTRIES	19,089.2	1,662.1	905.6	1,496.8	153.8	68.0	157,737.4	2,746.9	13,600.2	2,470.6	5,752.2	1
34	FABRICATED METAL PRODUCTS	63.4	7.9	184.3	348.7	45.7	59.1	26,386.7	745.4	(S)	382.6	1,128.7	2
35	MACHINERY, EXCEPT ELECTRIC	109.2	14.6	127.9	234.7	36.5	56.0	28,441.4	796.4	199.7	339.3	1,098.9	1
36	ELECTRIC, ELECTRONIC EQUIP	12.2	1.5	84.4	158.3	33.2	27.9	24,996.9	669.4	(S)	241.5	824.5	1
37	TRANSPORTATION EQUIPMENT	209.1	28.1	137.6	262.0	55.4	20.3	30,985.1	849.1	(S)	385.0	1,195.8	1
38	INSTRUMENTS, RELATED PRODS	-	-	17.7	32.9	6.1	(D)	5,533.0	164.3	(D)	76.7	239.3	3
39	MISC. MANUFACTURING INDUS.	-	-	14.7	28.6	5.8	(D)	4,123.3	126.7	(S)	48.3	175.5	5
20	FOOD AND KINDRED PRODUCTS	53.7	6.1	426.5	743.3	77.5	94.8	40,046.0	1,051.6	2,344.9	945.0	2,173.5	1
201	MEAT PRODUCTS	(D)	(Z)	46.6	72.8	(D)	(D)	6,734.3	172.4	176.1	104.1	274.9	2
2011	MEATPACKING PLANTS	(D)	(Z)	30.6	46.0	(D)	7.9	3,389.9	81.4	(D)	65.5	155.0	1
2013	SAUSAGES, OTHER PREPARED MEATS	-	-	7.4	13.5	2.8	(D)	1,514.4	43.0	(D)	17.0	55.1	5
2016	POULTRY DRESSING PLANTS	-	-	7.0	10.8	2.8	2.9	1,636.4	42.7	(D)	17.8	53.9	2
2017	POULTRY AND EGG PROCESSING	-	-	1.6	2.5	(D)	(D)	193.5	5.3	-	3.8	10.9	12
202	DAIRY PRODUCTS	-	-	42.3	73.5	(D)	(D)	5,255.8	142.5	(S)	92.4	253.9	2
2021	CREAMERY BUTTER	-	-	1.6	2.7	(D)	(D)	84.7	2.4	-	5.1	12.1	4
2022	CHEESE, NATURAL AND PROCESSED	-	-	11.4	18.2	2.1	(D)	810.3	19.8	(Z)	21.7	49.7	4
2023	CONDENSED AND EVAPORATED MILK	-	-	14.8	26.3	3.5	(D)	540.7	15.3	(S)	20.6	42.4	4
2024	ICE CREAM AND FROZEN DESSERTS	-	-	1.9	3.5	(D)	(D)	876.3	26.8	(D)	6.7	29.3	7
2026	FLUID MILK	(D)	(D)	12.6	22.7	(D)	4.0	2,943.9	78.2	(S)	38.4	120.3	4
203	PRESERVED FRUITS AND VEGETABLES	(D)	(D)	71.3	134.7	(D)	12.1	5,679.9	141.9	15.2	126.1	297.9	2
2032	CANNED SPECIALTIES	-	-	8.3	16.0	(D)	(D)	490.2	13.3	(D)	19.9	41.7	8
2033	CANNED FRUITS AND VEGETABLES	(D)	(D)	27.1	52.5	(D)	(D)	1,306.5	37.9	-	46.0	102.9	2
2034	DEHYD. FRUITS, VEGETABLES, SOUP	-	-	9.9	18.5	(D)	3.0	512.9	10.4	(S)	13.6	28.4	5
2035	PICKLES, SAUCES, SALAD DRESSING	-	-	3.7	6.6	(D)	1.8	365.8	10.5	-	6.3	16.4	7
2037	FROZEN FRUITS AND VEGETABLES	-	-	(S)	(S)	(S)	(S)	1,852.6	39.3	(D)	28.6	69.3	(X)
2038	FROZEN SPECIALTIES	-	-	4.6	7.8	(D)	1.9	1,151.9	30.5	(Z)	11.8	39.2	3
204	GRAIN MILL PRODUCTS	-	-	61.4	92.0	(D)	(D)	6,603.9	164.3	748.0	151.2	313.0	3
2041	FLOUR, OTHER GRAIN MILL PRODS.	-	-	2.9	4.5	(D)	.6	1,597.9	38.0	-	10.9	41.7	2
2043	CEREAL BREAKFAST FOODS	-	-	(S)	(S)	(S)	(S)	575.8	14.4	(D)	9.3	24.2	(X)
2044	RICE MILLING	-	-	2.6	5.4	(D)	(Z)	309.7	7.1	(D)	3.6	10.3	1
2045	BLENDED AND PREPARED FLOUR	-	-	(S)	(S)	(S)	(S)	170.8	4.3	(D)	1.6	5.7	(X)
2046	WET CORN MILLING	-	-	33.1	46.7	.3	.2	1,617.8	37.5	710.8	83.0	123.2	1
2047	DOG, CAT, AND OTHER PET FOOD	-	-	(S)	(S)	(D)	(S)	790.1	20.2	-	12.4	31.6	(X)
2048	PREPARED FEEDS, NEC	-	-	11.4	15.4	(D)	12.0	1,541.9	42.8	(S)	30.4	76.3	14
205	BAKERY PRODUCTS	-	-	30.6	59.2	8.4	(D)	2,530.9	72.7	(D)	50.8	135.5	4
2051	BREAD, CAKE, RELATED PRODUCTS	-	-	23.7	44.9	6.5	(D)	1,984.5	57.9	(D)	39.9	106.0	4
2052	COOKIES AND CRACKERS	-	-	(S)	(S)	(S)	(S)	546.4	14.8	-	10.9	29.5	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	(D)	(D)	55.9	102.8	(D)	7.1	2,180.7	59.2	1,097.1	160.2	274.0	4
2061	RAW CANE SUGAR	-	-	5.0	10.9	1.6	2.3	175.1	5.0	310.0	12.9	27.4	34
2062	CANE SUGAR REFINING	-	-	17.5	33.3	(D)	(D)	116.9	3.7	357.0	33.8	60.3	1
2063	BEET SUGAR	(D)	(D)	26.9	46.8	(D)	(S)	348.8	7.1	430.1	93.4	120.9	1
2065	CONFECTIONERY PRODUCTS	-	-	(D)	(D)	1.1	2.9	1,109.0	29.6	-	14.2	44.4	(X)
2066	CHOCOLATE AND COCOA PRODUCTS	-	-	1.0	2.2	(D)	(D)	324.3	10.0	-	4.4	15.5	2
2067	CHEWING GUM	-	-	(D)	(D)	-	(D)	106.6	3.8	-	1.4	5.5	(X)
207	FATS AND OILS	-	-	52.3	88.7	9.8	10.2	3,382.0	86.3	67.1	105.7	220.7	4
2074	COTTONSEED OIL MILLS	-	-	4.2	7.0	.2	(D)	547.9	14.3	-	6.4	17.5	13
2075	SOYBEAN OIL MILLS	-	-	22.3	35.7	(D)	.3	1,422.8	32.5	(D)	46.8	93.3	2
2076	VEGETABLE OIL MILLS, NEC	-	-	.6	.9	(D)	.8	94.5	2.7	-	2.9	6.8	1
2077	ANIMAL AND MARINE FATS AND OILS	-	-	11.5	20.2	3.4	7.6	718.4	21.3	(S)	23.6	52.6	17
2079	SHORTENING AND COOKING OILS	-	-	13.7	24.9	1.4	(D)	598.4	15.5	(D)	26.1	50.4	2
208	BEVERAGES	(D)	(D)	46.0	81.0	(D)	(D)	4,564.6	123.6	240.4	100.2	243.7	4
2082	MALT BEVERAGES	-	-	21.8	39.3	3.7	(D)	2,033.0	50.9	228.9	45.2	108.4	6
2083	MALT	(D)	(D)	6.9	12.2	(D)	(D)	345.4	8.0	1.5	9.3	19.1	8
2084	WINES, BRANDY, BRANDY SPIRITS	-	-	1.6	3.3	(D)	.7	255.7	7.9	-	4.2	11.4	13
2085	DISTILLED LIQUOR, EXCEPT BRANDY	-	-	5.0	7.0	(D)	.8	305.9	7.9	(D)	15.3	25.6	4
2086	BOTTLED AND CANNED SOFT DRINKS	-	-	9.0	15.7	5.0	(D)	1,416.8	42.6	(D)	22.0	67.2	6
2087	FLAVORING EXTRACTS, SIRUPS, NEC	-	-	1.8	3.5	.5	(Z)	207.9	6.2	-	4.1	11.9	11
209	MISC. FOODS, KINDRED PRODUCTS	-	-	19.9	38.5	(D)	13.5	3,113.9	88.7	14.2	54.3	160.0	3
2091	CANNED AND CURED SEAFOODS	-	-	1.1	2.0	2.0	1.1	200.0	5.8	(D)	3.7	10.4	3
2092	FRESH OR FROZEN PACKAGED FISH	-	-	.5	1.1	.9	2.9	430.0	12.0	-	4.5	16.9	5
2095	ROASTED COFFEE	-	-	3.9	8.0	(D)	1.7	437.5	12.6	-	11.1	29.8	1
2097	MANUFACTURED ICE	-	-	(Z)	.1	(Z)	(D)	572.5	14.4	-	2.5	15.0	32
2098	MACARONI AND SPAGHETTI	-	-	.8	1.5	(D)	(D)	195.6	5.6	-	2.3	8.9	23
2099	FOOD PREPARATIONS, NEC	-	-	13.6	25.9	(D)	6.4	1,278.3	38.2	(D)	30.2	79.1	3

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
21	TOBACCO PRODUCTS	20.8	63.9	16.5	31.1	270.7	4.3	875.0	12.4	(D)	(D)	3	2	(X)
2111	CIGARETTES	13.3	37.9	10.5	17.9	(D)	(D)	426.6	6.1	(D)	(D)	(X)	1	(X)
2121	CIGARS	.7	2.9	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2131	CHEWING AND SMOKING TOBACCO	.9	3.1	.8	1.7	41.6	.7	(D)	(D)	(D)	(D)	1	(X)	(X)
2141	TOBACCO STEMMING AND REDRYING	5.9	20.0	4.8	10.6	157.9	2.4	431.9	6.1	15.1	.7	5	3	8
22	TEXTILE MILL PRODUCTS	339.2	1,136.6	245.0	492.9	4,979.0	78.1	11,639.2	167.3	1,206.8	42.9	5	3	1
2211	WEAVING MILLS, COTTON	37.3	146.3	21.0	39.0	429.5	6.6	895.1	13.0	245.6	8.4	1	1	1
2221	WEAV'G MILLS, MANMADE FIBER	49.9	194.2	27.9	54.9	575.8	9.1	1,298.8	18.8	246.5	9.0	1	1	1
2231	WEAVING, FINISHING MILLS, WOOL	5.2	16.9	4.3	9.5	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
2241	NARROW FABRIC MILLS	3.9	15.7	2.5	5.4	111.2	1.8	78.7	1.1	(D)	(D)	13	9	(X)
225	KNITTING MILLS	59.3	192.4	46.6	101.8	1,273.4	20.0	2,453.4	36.1	32.5	1.5	10	4	4
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	4.4	17.2	2.8	6.0	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	(X)
2252	HOSIERY, NEC	4.0	15.2	2.9	7.3	197.3	3.2	206.7	3.4	(D)	(D)	30	33	(X)
2253	KNIT OUTERWEAR MILLS	9.4	32.2	7.3	15.6	178.0	2.8	248.5	3.7	20.6	1.0	17	2	4
2254	KNIT UNDERWEAR MILLS	4.1	12.3	3.4	6.8	105.2	1.7	(D)	(D)	(D)	(Z)	17	(X)	(X)
2257	CIRCULAR KNIT FABRIC MILLS	25.5	76.9	20.7	45.1	508.9	7.9	1,131.5	16.1	7.8	.3	14	4	1
2258	WARP KNIT FABRIC MILLS	11.9	37.9	9.4	20.8	188.7	3.0	606.7	9.1	(D)	(D)	41	5	(X)
2259	KNITTING MILLS, NEC	.2	.7	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	81.5	199.6	74.7	147.6	1,181.9	19.1	3,812.1	53.3	555.7	19.4	14	6	1
2261	FINISHING PLANTS, COTTON	26.1	60.8	24.5	47.6	267.2	4.2	1,454.9	19.9	(D)	(D)	8	5	(X)
2262	FINISH. PLTS, MANMADE FIBER	46.0	109.0	42.2	81.7	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
2269	FINISHING PLANTS, NEC	9.5	29.8	8.0	18.3	444.2	7.5	348.6	4.9	(D)	(D)	30	13	(X)
227	FLOOR COVERING MILLS	32.7	84.6	29.0	54.3	382.7	5.7	1,095.9	15.8	(D)	(D)	23	1	(X)
2271	WOVEN CARPETS AND RUGS	.8	2.4	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2272	TUFTED CARPETS AND RUGS	31.2	79.7	27.7	51.7	(D)	(D)	1,037.9	14.9	(D)	(D)	(X)	1	(X)
2279	CARPETS AND RUGS, NEC	.7	2.5	.6	1.2	(D)	(Z)	(D)	(D)	-	-	23	(X)	(X)
228	YARN AND THREAD MILLS	39.7	186.6	16.7	35.6	608.7	9.4	787.6	11.7	33.6	1.4	3	3	4
2281	YARN MILLS, EXCEPT WOOL	25.1	123.0	9.6	20.3	390.2	6.1	445.6	6.5	(D)	(D)	3	3	(X)
2282	THROWING AND WINDING MILLS	9.0	42.0	3.5	7.6	122.5	1.9	(D)	(D)	-	-	11	(X)	(X)
2283	WOOL YARN MILLS	1.0	4.1	.7	1.6	38.9	.6	(D)	(D)	-	-	19	(X)	(X)
2284	THREAD MILLS	4.6	17.5	2.9	6.1	57.1	.8	124.6	2.1	(D)	(D)	1	1	(X)
229	MISCELLANEOUS TEXTILE GOODS	29.5	100.5	22.3	44.9	362.7	5.7	670.7	9.7	(D)	(D)	9	1	(X)
2291	FELT GOODS, EXC. WOVEN AND HATS	1.4	4.6	1.1	2.2	(D)	(D)	75.2	1.1	-	-	(X)	1	(X)
2292	LACE GOODS	.8	2.1	.7	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2293	PADDINGS AND UPHOLSTERY FILLING	1.9	6.3	1.6	2.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2294	PROCESSED TEXTILE WASTE	.9	3.6	.6	1.3	29.8	.5	(D)	(D)	-	-	52	(X)	(X)
2295	COATED FABRICS, NOT RUBBERIZED	6.7	21.3	5.5	11.4	73.8	1.1	144.0	2.2	(D)	(D)	3	2	(X)
2296	TIRE CORD AND FABRIC	5.4	21.7	2.5	4.5	38.0	.5	(D)	(D)	(D)	(D)	1	(X)	(X)
2297	NONWOVEN FABRICS	7.7	23.8	6.6	13.8	152.4	2.4	355.3	5.0	(D)	(D)	14	1	(X)
2298	CORDAGE AND TWINE	1.4	6.6	.8	1.7	36.7	.6	12.6	.2	(D)	(Z)	22	1	72
2299	TEXTILE GOODS, NEC	3.4	10.5	2.9	5.6	4.9	.1	37.6	.5	-	-	5	1	(X)
23	APPAREL, OTH. TEXTILE PRODS.	65.6	285.8	43.0	85.2	770.7	12.6	666.2	9.8	68.2	2.8	13	7	25
2311	MEN'S AND BOYS' SUITS AND COATS	5.5	23.0	4.0	8.5	110.5	1.8	60.1	.9	(D)	(D)	24	2	(X)
232	MEN'S AND BOYS' FURNISHINGS	14.1	64.1	8.3	15.6	143.1	2.4	53.4	.8	6.2	.3	10	9	13
2321	MEN'S, BOYS' SHIRTS, NIGHTWEAR	3.7	19.0	2.0	4.1	82.7	1.3	(D)	(D)	(D)	(D)	15	(X)	(X)
2322	MEN'S AND BOYS' UNDERWEAR	.6	2.3	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
2323	MEN'S AND BOYS' NECKWEAR	.2	1.3	.1	.3	(D)	(D)	(D)	(Z)	-	-	(X)	67	(X)
2327	MEN'S, BOYS' SEPARATE TROUSERS	3.3	12.7	2.2	3.7	8.6	.1	(D)	(D)	(D)	(Z)	1	(X)	15
2328	MEN'S AND BOYS' WORK CLOTHING	4.4	20.3	2.4	4.4	29.0	.5	9.4	.2	(D)	(Z)	16	20	1
2329	MEN'S AND BOYS: CLOTHING, NEC	2.0	8.5	1.2	2.4	9.5	.2	15.8	.2	(D)	(D)	17	20	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	16.8	82.6	10.2	20.2	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
2331	WOMEN'S, MISSES' BLOUSES	4.2	17.7	3.0	5.6	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
2335	WOMEN'S AND MISSES' DRESSES	5.1	27.4	3.1	6.2	(S)	(S)	(S)	(S)	(D)	(Z)	(X)	(X)	1
2337	WOMEN'S, MISSES' SUITS, COATS	3.7	18.8	2.0	4.1	(S)	(S)	(D)	(D)	(D)	(Z)	(X)	(X)	1
2339	WOMEN'S, MISSES' OUTERWEAR, NEC	3.8	18.8	2.1	4.3	(S)	(S)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
234	WOMEN'S, CHILDREN'S UNDERGARMS	3.6	18.9	1.9	4.2	136.9	2.1	19.8	.3	-	-	68	3	(X)
2341	WOMEN'S, CHILDREN'S UNDERWEAR	3.0	15.5	1.6	3.5	120.2	1.8	(D)	(D)	-	-	78	(X)	(X)
2342	BRASSIERES AND ALLIED GARMENTS	.6	3.4	.3	.6	16.7	.3	(D)	(Z)	-	-	16	1	(X)
235	HATS, CAPS, AND MILLINERY	1.2	4.1	1.0	2.0	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
2351	MILLINERY	.1	.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
2352	HATS AND CAPS, EXCEPT MILLINERY	1.1	3.6	.9	1.9	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
236	CHILDREN'S OUTERWEAR	2.7	12.5	1.6	3.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2361	CHILDREN'S DRESSES AND BLOUSES	1.5	6.8	1.0	2.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2363	CHILDREN'S COATS AND SUITS	.2	1.1	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2369	CHILDREN'S OUTERWEAR, NEC	.9	4.6	.4	.9	(D)	(D)	(D)	(Z)	(D)	(Z)	(X)	1	1
2371	FUR GOODS	.3	1.2	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES	2.8	12.0	1.9	3.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	45
2381	FABRIC DRESS AND WORK GLOVES	.5	2.0	.3	.7	(D)	(Z)	-	-	(D)	(Z)	66	(X)	60
2384	ROBES AND DRESSING GOWNS	.3	1.7	.2	.3	2.6	.1	(D)	(Z)	(S)	(S)	70	40	(X)
2385	WATERPROOF OUTERGARMENTS	.8	3.2	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2386	LEATHER, SHEEP LINED CLOTHING	.2	1.2	.1	.3	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
2387	APPAREL BELTS	.6	2.5	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2389	APPAREL AND ACCESSORIES, NEC	.3	1.3	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
21	TOBACCO PRODUCTS	-	-	2.3	4.2	.2	(D)	1,250.1	32.8	(D)	20.2	54.8	2
2111	CIGARETTES	-	-	(D)	(D)	(D)	(Z)	817.8	20.0	(D)	12.0	30.6	(X)
2121	CIGARS	-	-	.2	.3	-	(D)	69.1	2.1	-	.7	2.8	1
2131	CHEWING AND SMOKING TOBACCO	-	-	(D)	(D)	(Z)	(D)	44.9	1.4	-	.9	2.5	(X)
2141	TOBACCO STEMMING AND REDRYING	-	-	.3	.5	(D)	(D)	318.4	9.4	(S)	6.5	18.9	4
22	TEXTILE MILL PRODUCTS	(Z)	(Z)	74.0	134.6	34.2	35.8	27,609.5	643.7	438.8	336.7	1,009.0	2
2211	WEAVING MILLS, COTTON	-	-	5.7	9.7	.7	.6	4,750.4	107.3	193.8	33.4	113.7	1
2221	WEAV'G MILLS, MANMADE FIBER	-	-	7.1	12.6	3.0	2.4	6,441.3	139.3	72.8	53.5	187.7	1
2231	WEAVING, FINISHING MILLS, WOOL	-	-	(S)	(S)	(D)	(D)	271.3	7.4	(D)	6.4	18.6	(X)
2241	NARROW FABRIC MILLS	-	-	.7	1.2	(D)	1.0	426.2	10.2	(S)	3.9	14.8	26
225	KNITTING MILLS	-	-	11.3	22.0	(D)	(D)	3,744.3	90.5	(S)	56.8	167.4	4
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	-	-	.7	1.2	.2	.9	474.3	11.2	(D)	4.8	17.4	20
2252	HOSIERY, NEC	-	-	1.0	1.7	(D)	(D)	308.2	7.8	(D)	3.6	12.0	17
2253	KNIT OUTERWEAR MILLS	-	-	1.4	3.0	.7	4.4	595.8	16.6	(S)	9.5	30.9	4
2254	KNIT UNDERWEAR MILLS	-	-	(D)	(D)	(D)	.8	217.4	5.5	-	3.5	9.4	(X)
2257	CIRCULAR KNIT FABRIC MILLS	-	-	4.7	9.5	(D)	(D)	1,396.1	31.8	(S)	23.6	64.2	8
2258	WARP KNIT FABRIC MILLS	-	-	2.0	4.1	1.4	(D)	741.3	17.1	(S)	11.5	32.3	6
2259	KNITTING MILLS, NEC	-	-	(D)	(D)	(Z)	(D)	11.2	.4	-	.3	1.3	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	21.2	40.2	12.6	2.9	2,014.5	52.0	173.6	75.7	164.2	5
2261	FINISHING PLANTS, COTTON	-	-	7.7	12.9	6.0	(D)	476.5	13.2	40.9	26.2	53.7	5
2262	FINISH. PLTS, MANMADE FIBER	-	-	(S)	(S)	(S)	(S)	1,103.5	27.3	132.7	41.3	88.2	(X)
2269	FINISHING PLANTS, NEC	-	-	2.1	3.9	.8	(D)	434.5	11.5	-	8.2	22.3	4
227	FLOOR COVERING MILLS	-	-	14.2	23.2	1.7	(D)	1,104.2	30.3	(D)	30.9	68.6	6
2271	WOVEN CARPETS AND RUGS	-	-	.2	.2	-	(D)	43.8	1.0	-	2.1	5.5	3
2272	TUFTED CARPETS AND RUGS	-	-	13.7	22.3	1.7	6.2	1,019.6	27.9	(D)	28.1	60.9	6
2279	CARPETS AND RUGS, NEC	-	-	.3	.6	-	(D)	40.9	1.3	-	.7	2.3	12
228	YARN AND THREAD MILLS	-	-	5.2	9.1	1.9	2.2	6,734.8	151.0	(D)	45.1	177.8	2
2281	YARN MILLS, EXCEPT WOOL	-	-	3.5	5.9	.9	(D)	4,536.0	102.7	(D)	23.7	103.6	1
2282	THROWING AND WINDING MILLS	-	-	.8	1.5	(D)	1.1	1,623.9	34.4	-	15.9	55.4	5
2283	WOOL YARN MILLS	-	-	.1	.1	.1	(D)	87.3	2.6	-	1.7	6.2	23
2284	THREAD MILLS	-	-	.8	1.6	(D)	(D)	487.6	11.4	-	3.8	12.6	9
229	MISCELLANEOUS TEXTILE GOODS	-	-	8.1	15.6	3.1	(D)	2,122.4	55.6	(D)	31.0	96.2	3
2291	FELT GOODS, EXC. WOVEN AND HATS	-	-	.5	.9	(D)	.2	76.2	2.3	(D)	1.3	3.9	1
2292	LACE GOODS	-	-	(D)	(D)	-	(D)	22.0	.7	-	.7	1.9	(X)
2293	PADDINGS AND UPHOLSTERY FILLING	-	-	(D)	(D)	(Z)	1.0	106.7	3.5	-	1.8	5.4	(X)
2294	PROCESSED TEXTILE WASTE	-	-	.2	.3	(D)	.2	89.7	2.3	-	.8	3.2	41
2295	COATED FABRICS, NOT RUBBERIZED	-	-	2.5	5.5	.8	(D)	336.7	9.9	-	9.9	27.3	5
2296	TIRE CORD AND FABRIC	-	-	1.7	2.8	(D)	(Z)	842.2	17.2	(D)	4.7	18.5	1
2297	NONWOVEN FABRICS	-	-	2.0	3.7	(D)	.9	340.4	10.0	(S)	5.8	17.1	2
2298	CORDAGE AND TWINE	-	-	(D)	(D)	-	(D)	173.7	4.9	(D)	1.5	5.9	(X)
2299	TEXTILE GOODS, NEC	-	-	.1	.2	(D)	(D)	134.9	4.8	(D)	4.4	12.8	1
23	APPAREL, OTH. TEXTILE PRODS	(D)	(D)	15.2	27.0	4.4	(D)	6,619.9	200.6	(S)	62.0	245.3	5
2311	MEN'S AND BOYS' SUITS AND COATS	-	-	1.4	2.8	(D)	2.0	430.0	14.5	(Z)	5.3	20.8	12
232	MEN'S AND BOYS' FURNISHINGS	(D)	(D)	3.2	5.1	.7	6.4	1,707.6	48.5	(S)	12.7	52.9	4
2321	MEN'S, BOYS' SHIRTS, NIGHTWEAR	(D)	(D)	(D)	(D)	(D)	1.0	508.5	14.9	(D)	3.0	14.3	(X)
2322	MEN'S AND BOYS' UNDERWEAR	-	-	(D)	(D)	(Z)	(D)	57.5	1.5	(Z)	.5	2.0	(X)
2323	MEN'S AND BOYS' NECKWEAR	-	-	(Z)	(Z)	(D)	(Z)	32.2	1.0	-	.3	1.1	1
2327	MEN'S, BOYS' SEPARATE TROUSERS	-	-	.9	1.2	(D)	(D)	319.9	9.0	(Z)	3.6	13.8	7
2328	MEN'S AND BOYS' WORK CLOTHING	-	-	1.2	2.0	.2	1.6	574.6	15.9	(D)	3.3	13.7	3
2329	MEN'S AND BOYS' CLOTHING, NEC	-	-	.4	.6	(D)	(D)	214.9	6.1	(D)	2.0	8.1	21
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(S)	(S)	(S)	(S)	1,938.0	62.4	(S)	16.1	73.0	(X)
2331	WOMEN'S, MISSES' BLOUSES	-	-	(S)	(S)	.1	(D)	371.0	12.1	(S)	3.1	12.0	(X)
2335	WOMEN'S AND MISSES' DRESSES	-	-	(S)	(S)	(D)	(S)	577.0	21.2	(S)	6.8	31.0	(X)
2337	WOMEN'S, MISSES' SUITS, COATS	-	-	(S)	(S)	(D)	(S)	497.9	14.7	(S)	2.8	14.5	(X)
2339	WOMEN'S, MISSES' OUTERWEAR, NEC	-	-	(S)	(S)	(D)	(D)	492.2	14.4	(S)	3.3	15.5	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	.7	1.4	(D)	(D)	510.3	14.8	(D)	2.9	14.4	3
2341	WOMEN'S, CHILDREN'S UNDERWEAR	-	-	(D)	(D)	(D)	(D)	431.7	12.0	(D)	2.3	10.9	(X)
2342	BRASSIERES AND ALLIED GARMENTS	-	-	(D)	(D)	(Z)	.2	78.6	2.8	-	.6	3.5	(X)
235	HATS, CAPS, AND MILLINERY	-	-	.2	.4	(Z)	(D)	57.0	2.0	-	1.3	3.8	13
2351	MILLINERY	-	-	-	-	-	.2	7.2	.3	-	.1	.3	(X)
2352	HATS AND CAPS, EXCEPT MILLINERY	-	-	.2	.4	(Z)	(D)	49.8	1.8	-	1.1	3.5	13
236	CHILDREN'S OUTERWEAR	-	-	.4	.6	(D)	(D)	321.0	9.2	.5	2.5	11.2	17
2361	CHILDREN'S DRESSES AND BLOUSES	-	-	(S)	(S)	(D)	(D)	155.4	4.8	-	1.4	5.2	(X)
2363	CHILDREN'S COATS AND SUITS	-	-	.1	.1	(Z)	(D)	28.9	.8	.5	.1	.6	48
2369	CHILDREN'S OUTERWEAR, NEC	-	-	(S)	(S)	-	(D)	136.8	3.7	(Z)	1.0	5.4	(X)
2371	FUR GOODS	-	-	(Z)	(Z)	-	(S)	33.0	.9	-	.4	1.1	1
238	MISC. APPAREL AND ACCESSORIES	-	-	.7	1.4	.1	1.7	250.6	8.0	.5	2.3	9.6	20
2381	FABRIC DRESS AND WORK GLOVES	-	-	.3	.7	(D)	(D)	41.5	1.2	-	.4	1.5	36
2384	ROBES AND DRESSING GOWNS	-	-	(D)	(D)	-	(D)	39.5	1.3	.5	.3	1.2	(X)
2385	WATERPROOF OUTERGARMENTS	-	-	(D)	(D)	-	(S)	60.4	2.0	-	.6	2.7	(X)
2386	LEATHER, SHEEP LINED CLOTHING	-	-	(Z)	.1	(D)	(D)	31.6	1.0	-	.3	1.3	48
2387	APPAREL BELTS	-	-	(Z)	.1	(Z)	(D)	53.0	1.6	-	.3	1.6	6
2389	APPAREL AND ACCESSORIES, NEC	-	-	.1	.2	-	(D)	24.6	.9	(Z)	.3	1.4	28

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
23	APPAREL, OTH. TEXTILE PRODS--CON.													
239	MISC. FABRICATED TEXTILE PRODS	18.6	67.5	13.9	27.2	155.8	2.5	354.3	5.2	32.6	1.3	14	9	7
2391	CURTAINS AND DRAPERIES	1.6	7.0	1.0	1.8	13.5	.2	(D)	(D)	-	-	18	(X)	(X)
2392	HOUSEFURNISHINGS, NEC	8.8	26.5	7.3	13.9	84.9	1.3	(D)	(D)	(D)	(D)	24	(X)	(X)
2393	TEXTILE BAGS	.8	2.7	.6	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2394	CANVAS AND RELATED PRODUCTS	.8	2.9	.6	1.1	(D)	(Z)	(D)	(D)	(D)	(Z)	49	(X)	58
2395	PLEATING AND STITCHING	1.2	5.7	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2396	AUTOMOTIVE, APPAREL TRIMMINGS	2.6	11.3	1.9	3.8	29.4	.5	(D)	(D)	(D)	(D)	15	(X)	(X)
2397	SCHIFFLI MACHINE EMBROIDERIES	.3	1.5	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2399	FABRICATED TEXTILE PRODS., NEC	2.5	10.0	1.8	3.5	16.0	.3	28.6	.5	-	-	29	9	(X)
24	LUMBER AND WOOD PRODUCTS	227.7	726.5	172.6	361.0	5,767.5	96.3	2,429.6	34.3	(D)	(D)	5	6	(X)
2411	LOGGING CAMPS, LOG CONTRACTORS	33.9	85.6	32.6	78.6	2,298.8	38.0	(D)	(D)	-	-	10	(X)	(X)
242	SAWMILLS AND PLANING MILLS	68.5	247.0	45.6	96.8	2,081.1	35.9	(D)	(D)	2.2	.1	8	(X)	12
2421	SAWMILLS, PLANING MILLS, GENERAL	63.3	224.7	42.4	89.9	1,945.3	33.5	453.4	6.4	(D)	(D)	9	11	(X)
2426	HARDWOOD DIMENSION AND FLOORING	4.4	19.7	2.7	5.9	110.6	2.0	(D)	(D)	(D)	(D)	29	(X)	(X)
2429	SPECIAL PRODUCT SAWMILLS, NEC	.7	2.6	.4	1.0	25.2	.4	(D)	(Z)	-	-	54	83	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	54.1	167.4	39.2	76.0	404.9	6.6	370.9	5.3	(D)	(D)	9	6	(X)
2431	MILLWORK	8.0	32.5	4.9	9.6	79.6	1.4	7.5	.1	5.8	.2	9	39	1
2434	WOOD KITCHEN CABINETS	4.8	17.2	3.3	6.8	56.1	.9	(D)	(D)	(D)	(D)	22	(X)	(X)
2435	HARDWOOD VENEER AND PLYWOOD	5.8	19.8	4.2	8.2	91.5	1.5	59.3	.9	(D)	(D)	37	26	(X)
2436	SOFTWOOD VENEER AND PLYWOOD	33.7	92.4	25.5	48.8	170.1	2.7	272.9	3.8	(D)	(D)	2	2	(X)
2439	STRUCTURAL WOOD MEMBERS, NEC	1.7	5.5	1.4	2.7	7.6	.1	(D)	(D)	-	-	46	(X)	(X)
244	WOOD CONTAINERS	5.4	20.7	4.0	8.5	143.4	2.5	(D)	(D)	(D)	(D)	31	(X)	(X)
2441	NAILED WOOD BOXES AND SHOOK	1.2	4.3	.8	1.5	9.1	.1	(D)	(D)	(D)	(Z)	7	(X)	91
2448	WOOD PALLETS AND SKIDS	3.2	12.3	2.4	5.6	115.8	2.0	(D)	(D)	(D)	(D)	38	(X)	(X)
2449	WOOD CONTAINERS, NEC	1.0	4.1	.7	1.4	18.4	.3	(D)	(D)	(Z)	(Z)	31	(X)	1
245	WOOD BUILDINGS AND MOBILE HOMES	5.9	21.2	4.5	8.9	83.0	1.4	6.6	.1	(D)	(Z)	5	1	57
2451	MOBILE HOMES	3.1	12.2	2.2	4.1	15.9	.3	(D)	(D)	-	-	6	(X)	(X)
2452	PREFABRICATED WOOD BUILDINGS	2.8	9.0	2.2	4.8	67.1	1.1	(D)	(D)	(D)	(Z)	6	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	59.9	184.6	46.8	92.2	756.3	12.0	1,199.6	16.5	90.9	3.4	5	4	2
2491	WOOD PRESERVING	9.5	22.9	8.8	17.1	269.9	4.4	(D)	(D)	(D)	(D)	9	(X)	(X)
2492	PARTICLEBOARD	8.8	31.0	5.5	10.3	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2499	WOOD PRODUCTS, NEC	41.6	130.8	32.5	64.9	416.7	6.5	931.3	13.0	(D)	(D)	6	2	(X)
25	FURNITURE AND FIXTURES	52.7	198.3	38.5	76.1	905.1	15.0	444.8	6.8	111.5	4.3	5	5	4
251	HOUSEHOLD FURNITURE	31.0	121.7	21.4	43.1	719.3	11.9	275.0	4.2	95.3	3.7	6	6	2
2511	WOOD HOUSEHOLD FURNITURE	15.8	64.4	10.5	21.9	464.5	7.6	142.0	2.2	66.0	2.8	6	10	3
2512	UPHOLSTERED HOUSEHOLD FURNITURE	5.6	22.2	3.9	8.0	111.8	1.9	27.4	.5	6.9	.3	13	30	13
2514	METAL HOUSEHOLD FURNITURE	3.7	13.6	2.8	5.5	82.8	1.4	29.5	.5	(D)	(Z)	27	11	1
2515	MATTRESSES AND BEDSPRINGS	2.9	10.0	2.3	4.4	37.5	.7	(D)	(D)	(D)	(D)	26	(X)	(X)
2517	WOOD TV AND RADIO CABINETS	1.0	4.3	.6	1.1	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
2519	HOUSEHOLD FURNITURE, NEC	1.9	7.1	1.3	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
252	OFFICE FURNITURE	6.7	24.1	5.1	10.2	62.5	1.1	(D)	(D)	(D)	(D)	5	(X)	(X)
2521	WOOD OFFICE FURNITURE	1.7	6.5	1.2	2.3	36.0	.6	(D)	(D)	(D)	(D)	7	(X)	(X)
2522	METAL OFFICE FURNITURE	5.0	17.6	3.9	7.8	26.6	.5	(D)	(D)	-	-	7	(X)	(X)
2531	PUBLIC BLDG., RELATED FURNITURE	3.1	10.2	2.4	4.2	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	8.3	29.2	6.6	12.8	69.6	1.2	20.7	.3	3.9	.2	23	21	43
2541	WOOD PARTITIONS AND FIXTURES	2.6	10.7	1.9	3.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2542	METAL PARTITIONS AND FIXTURES	5.7	18.5	4.7	9.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	3.7	13.2	2.9	5.8	39.3	.6	(D)	(D)	(D)	(Z)	19	(X)	76
2591	DRAPERY HDWE., BLINDS, SHADES	1.6	5.8	1.2	2.5	11.2	.2	(D)	(D)	-	-	1	(X)	(X)
2599	FURNITURE AND FIXTURES, NEC	2.2	7.4	1.7	3.3	28.1	.5	(D)	(D)	(D)	(Z)	25	(X)	76
26	PAPER AND ALLIED PRODUCTS	1,308.4	2,960.4	1,156.3	2,036.6	5,733.2	88.5	75,227.3	969.1	8,662.8	260.3	2	1	1
2611	PULPMILLS	95.4	197.4	84.7	150.4	338.3	5.4	(D)	(D)	(D)	(D)	11	(X)	(X)
2621	PAPERMILLS, EXC. BUILDING PAPER	587.5	1,294.2	514.9	884.8	1,799.9	27.6	29,740.0	389.7	5,312.6	161.6	2	1	1
2631	PAPERBOARD MILLS	482.8	989.6	446.3	781.7	1,766.4	26.2	32,886.4	418.2	2,926.3	86.8	2	1	3
264	MISC. CONVERTED PAPER PRODUCTS	58.0	214.5	41.2	83.7	668.1	10.6	(D)	(D)	(D)	(D)	5	(X)	(X)
2641	PAPER COATING AND GLAZING	16.8	55.3	13.4	28.0	296.6	4.7	456.1	6.5	15.3	.6	7	7	1
2642	ENVELOPES	2.4	12.2	1.4	2.7	21.3	.4	(D)	(D)	-	-	30	(X)	(X)
2643	BAGS, EXCEPT TEXTILE BAGS	9.6	43.9	4.8	9.0	71.7	1.2	77.9	1.1	18.0	.5	12	2	1
2645	DIE-CUT PAPER AND BOARD	2.9	9.0	2.4	4.4	(D)	(D)	121.7	1.4	-	-	(X)	1	(X)
2646	PRESSED AND MOLDED PULP GOODS	7.6	23.7	5.7	10.8	77.5	1.3	(D)	(D)	(D)	(D)	1	(X)	(X)
2647	SANITARY PAPER PRODUCTS	11.4	41.2	8.1	15.9	42.0	.6	390.9	5.4	(D)	(D)	7	1	(X)
2648	STATIONERY PRODUCTS	1.3	5.2	.9	1.7	(D)	(D)	17.8	.3	-	-	(X)	1	(X)
2649	CONVERTED PAPER PRODUCTS, NEC	6.0	24.0	4.6	11.3	116.9	1.8	(D)	(D)	(D)	(D)	16	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	55.1	191.3	43.4	88.4	1,010.7	16.3	1,071.7	15.9	33.5	1.0	4	4	1
2651	FOLDING PAPERBOARD BOXES	7.8	30.2	5.6	10.8	(D)	(D)	133.6	2.0	(D)	(D)	(X)	13	(X)
2652	SETUP PAPERBOARD BOXES	1.3	4.6	1.0	1.9	28.7	.5	20.7	.3	-	-	53	52	(X)
2653	CORRUGATED, SOLID FIBER BOXES	36.8	116.4	30.7	62.7	750.0	12.1	758.4	11.3	9.5	.3	5	4	3
2654	SANITARY FOOD CONTAINERS	6.5	28.9	4.1	8.9	99.6	1.6	116.9	1.7	-	-	2	2	(X)
2655	FIBER CANS, DRUMS, SIMILAR PROD	2.8	11.1	2.1	4.1	(D)	(D)	42.0	.6	(D)	(D)	(X)	8	(X)
2661	BUILDING PAPER AND BOARD MILLS	29.5	73.4	25.8	47.5	149.9	2.4	1,075.6	15.4	(D)	(D)	20	3	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
23	APPAREL, OTH. TEXTILE PRODS--CON.												
239	MISC. FABRICATED TEXTILE PRODS	-	-	6.3	11.4	1.4	5.5	1,372.2	40.3	1.6	18.6	58.5	7
2391	CURTAINS AND DRAPERIES	-	-	.3	.5	(D)	.8	187.6	5.2	(Z)	1.6	6.5	27
2392	HOUSEFURNISHINGS, NEC	-	-	3.0	5.0	(D)	2.8	463.9	12.6	(D)	8.7	22.7	4
2393	TEXTILE BAGS	-	-	.2	.5	(Z)	(D)	62.0	1.6	-	.8	2.7	23
2394	CANVAS AND RELATED PRODUCTS	-	-	.4	.7	(Z)	(D)	64.9	1.8	-	.6	1.8	26
2395	PLEATING AND STITCHING	-	-	.6	1.2	(Z)	(D)	119.3	4.0	(S)	.9	3.9	52
2396	AUTOMOTIVE, APPAREL TRIMMINGS	-	-	1.0	2.1	(D)	.1	221.0	7.5	-	2.6	9.6	9
2397	SCHIFFLI MACHINE EMBROIDERIES	-	-	.1	.1	-	(D)	30.0	1.2	-	.3	1.5	48
2399	FABRICATED TEXTILE PRODS., NEC	-	-	.8	1.4	(D)	(D)	223.5	6.5	1.0	3.0	9.7	12
24	LUMBER AND WOOD PRODUCTS	-	-	64.0	112.2	84.4	(D)	16,125.5	365.5	298.5	235.7	640.0	2
2411	LOGGING CAMPS, LOG CONTRACTORS	-	-	(D)	(D)	31.5	4.7	371.4	6.9	(D)	38.9	87.6	(X)
242	SAWMILLS AND PLANING MILLS	-	-	16.3	25.6	23.8	(D)	6,704.0	150.2	178.0	74.6	226.5	6
2421	SAWMILLS, PLANING MILLS, GENERAL	-	-	15.5	24.3	(D)	(D)	6,127.3	134.8	177.6	68.2	203.2	7
2426	HARDWOOD DIMENSION AND FLOORING	-	-	(D)	(D)	.4	1.3	497.9	13.8	(D)	4.9	18.8	(X)
2429	SPECIAL PRODUCT SAWMILLS, NEC	-	-	(D)	(D)	(D)	.3	78.9	1.6	(D)	1.5	4.5	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	22.3	40.3	(D)	7.5	4,347.3	91.4	54.0	53.8	143.2	3
2431	MILLWORK	-	-	2.6	4.7	1.0	2.3	905.0	22.8	(D)	9.5	30.7	11
2434	WOOD KITCHEN CABINETS	-	-	1.2	2.2	(D)	2.5	416.4	10.4	-	3.9	12.3	13
2435	HARDWOOD VENEER AND PLYWOOD	-	-	2.4	4.3	(D)	.4	488.7	11.7	-	5.7	16.7	11
2436	SOFTWOOD VENEER AND PLYWOOD	-	-	15.7	28.4	(D)	1.3	2,423.8	43.6	(D)	33.0	78.8	2
2439	STRUCTURAL WOOD MEMBERS, NEC	-	-	.4	.8	(D)	1.0	113.5	2.8	(D)	1.7	4.8	12
244	WOOD CONTAINERS	-	-	(D)	(D)	1.9	(D)	425.4	12.3	(D)	4.1	14.4	(X)
2441	NAILED WOOD BOXES AND SHOOK	-	-	(D)	(D)	.4	(D)	112.1	2.8	(D)	1.0	3.5	(X)
2448	WOOD PALLETS AND SKIDS	-	-	.4	.7	(D)	(D)	223.3	6.7	-	1.6	5.1	20
2449	WOOD CONTAINERS, NEC	-	-	(D)	(D)	(D)	.4	90.0	2.8	(D)	1.5	5.8	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	2.0	3.6	(D)	(D)	419.6	12.3	(Z)	5.9	18.1	4
2451	MOBILE HOMES	-	-	1.4	2.4	(D)	(D)	268.1	8.1	(Z)	3.4	11.3	3
2452	PREFABRICATED WOOD BUILDINGS	-	-	.7	1.2	(D)	(D)	151.5	4.2	-	2.5	6.8	10
249	MISCELLANEOUS WOOD PRODUCTS	-	-	21.9	39.9	10.2	10.2	3,857.8	92.4	65.4	58.5	150.1	3
2491	WOOD PRESERVING	-	-	4.1	6.5	.6	(S)	188.8	5.8	-	8.4	17.1	13
2492	PARTICLEBOARD	-	-	(D)	(D)	(S)	(S)	994.7	20.7	-	8.3	24.7	(X)
2499	WOOD PRODUCTS, NEC	-	-	(D)	(D)	8.3	7.4	2,674.3	65.9	65.4	41.8	108.3	(X)
25	FURNITURE AND FIXTURES	-	-	18.0	32.2	5.5	12.4	4,190.3	122.3	(S)	49.7	168.2	3
251	HOUSEHOLD FURNITURE	-	-	7.0	12.0	2.7	8.7	2,803.2	78.5	(S)	30.3	107.8	4
2511	WOOD HOUSEHOLD FURNITURE	-	-	2.6	4.4	1.1	3.9	1,534.1	42.5	(D)	16.6	61.1	8
2512	UPHOLSTERED HOUSEHOLD FURNITURE	-	-	1.3	2.4	.4	2.6	516.5	14.3	(D)	5.6	19.4	5
2514	METAL HOUSEHOLD FURNITURE	-	-	1.5	2.5	(D)	(D)	271.8	8.1	(D)	3.4	10.7	6
2515	MATTRESSES AND BEDSPRINGS	-	-	1.2	2.0	(D)	.9	179.6	5.7	(D)	2.7	8.5	9
2517	WOOD TV AND RADIO CABINETS	-	-	.3	.4	(D)	.3	121.6	3.2	-	1.0	3.8	12
2519	HOUSEHOLD FURNITURE, NEC	-	-	.2	.3	(Z)	(D)	179.7	4.9	(D)	.9	4.3	2
252	OFFICE FURNITURE	-	-	(D)	(D)	.5	1.5	450.3	14.0	(D)	6.4	19.7	(X)
2521	WOOD OFFICE FURNITURE	-	-	(D)	(D)	.3	.4	130.3	4.2	-	1.4	5.1	(X)
2522	METAL OFFICE FURNITURE	-	-	(D)	(D)	.3	1.1	320.0	9.8	(D)	5.0	14.5	(X)
2531	PUBLIC BLDG., RELATED FURNITURE	-	-	(D)	(D)	(D)	(S)	198.3	6.0	(D)	2.7	8.1	(X)
254	PARTITIONS AND FIXTURES	-	-	4.4	8.2	1.4	1.5	507.0	16.4	(Z)	7.3	22.7	6
2541	WOOD PARTITIONS AND FIXTURES	-	-	.8	1.5	.4	1.3	199.3	6.8	(D)	2.8	9.9	15
2542	METAL PARTITIONS AND FIXTURES	-	-	3.6	6.8	1.0	.2	307.7	9.6	(S)	4.6	12.8	6
259	MISC. FURNITURE AND FIXTURES	-	-	1.5	2.7	(D)	.9	231.6	7.4	-	3.0	9.9	8
2591	DRAPERY HDWE., BLINDS, SHADES	-	-	.6	1.2	-	(D)	106.2	3.3	-	1.4	4.7	8
2599	FURNITURE AND FIXTURES, NEC	-	-	.9	1.5	(D)	(D)	125.4	4.1	-	1.6	5.2	14
26	PAPER AND ALLIED PRODUCTS	-	-	350.0	590.1	102.4	26.2	44,559.8	923.8	27,383.5	1,300.2	2,526.6	1
2611	PULPMILLS	-	-	17.6	25.2	5.2	(S)	3,126.2	47.0	2,762.0	96.0	176.8	1
2621	PAPERMILLS, EXC. BUILDING PAPER	-	-	150.5	257.7	39.2	9.1	21,292.0	409.4	13,080.2	592.3	1,118.0	1
2631	PAPERBOARD MILLS	-	-	129.5	208.9	(S)	(S)	10,694.1	207.9	11,445.5	467.4	826.4	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	18.1	35.7	9.7	5.5	4,925.2	130.8	(D)	55.6	169.5	11
2641	PAPER COATING AND GLAZING	-	-	6.2	12.1	3.2	.8	1,004.0	27.3	(D)	16.6	46.0	4
2642	ENVELOPES	-	-	.5	1.0	(D)	.9	291.5	9.5	(D)	2.4	10.8	5
2643	BAGS, EXCEPT TEXTILE BAGS	-	-	3.0	5.5	.7	(Z)	1,396.1	34.9	3.0	8.3	28.2	11
2645	DIE-CUT PAPER AND BOARD	-	-	1.2	1.9	(D)	.1	152.5	4.7	(D)	3.4	8.5	29
2646	PRESSED AND MOLDED PULP GOODS	-	-	2.5	4.2	(D)	.8	557.3	12.9	(D)	8.1	20.8	1
2647	SANITARY PAPER PRODUCTS	-	-	2.1	3.9	(D)	1.4	996.3	25.3	32.6	10.2	31.9	1
2648	STATIONERY PRODUCTS	-	-	.3	.5	(D)	.7	109.6	3.5	-	1.4	5.4	15
2649	CONVERTED PAPER PRODUCTS, NEC	-	-	2.3	6.5	.8	.8	417.9	12.7	(D)	5.3	18.0	55
265	PAPERBOARD CONTAINERS AND BOXES	-	-	19.6	37.9	4.9	12.4	3,424.0	102.9	(D)	52.9	162.8	2
2651	FOLDING PAPERBOARD BOXES	-	-	2.5	4.9	.6	1.4	638.4	19.4	(D)	6.8	24.3	6
2652	SETUP PAPERBOARD BOXES	-	-	.4	.6	.2	.4	87.9	2.7	(D)	1.3	4.6	51
2653	CORRUGATED, SOLID FIBER BOXES	-	-	14.2	27.2	3.3	8.5	1,787.9	53.7	(S)	34.7	96.5	2
2654	SANITARY FOOD CONTAINERS	-	-	1.7	3.7	.4	1.4	689.0	20.0	(D)	7.3	27.6	2
2655	FIBER CANS, DRUMS, SIMILAR PROD.	-	-	.8	1.6	.4	.8	220.9	7.0	(D)	2.9	9.8	11
2661	BUILDING PAPER AND BOARD MILLS	-	-	14.6	24.7	(D)	(D)	1,098.3	25.9	40.6	35.8	73.1	1

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
27	PRINTING AND PUBLISHING	92.3	421.7	56.3	113.8	1,020.7	16.9	447.2	6.7	(D)	(D)	7	5	(X)
2711	NEWSPAPERS	19.9	100.8	11.1	22.4	162.3	2.8	79.4	1.2	(D)	(D)	10	7	(X)
2721	PERIODICALS	2.6	13.0	1.5	3.1	13.7	.2	15.0	.2	-	-	39	1	(X)
273	BOOKS	7.7	34.0	4.7	9.7	115.4	1.9	60.9	.9	-	-	7	2	(X)
2731	BOOK PUBLISHING	2.4	11.0	1.5	3.0	22.1	.4	(D)	(D)	-	-	8	(X)	(X)
2732	BOOK PRINTING	5.3	23.0	3.2	6.7	93.2	1.5	(D)	(D)	-	-	8	(X)	(X)
2741	MISCELLANEOUS PUBLISHING	2.1	11.7	1.0	2.2	22.4	.4	(D)	(D)	(D)	(Z)	23	(X)	93
275	COMMERCIAL PRINTING	46.8	194.4	30.3	60.7	547.9	8.9	180.9	2.7	(D)	(D)	11	9	(X)
2751	COMMERCIAL PRINTING, LETTERPRESS	14.1	61.0	9.0	18.0	170.2	2.6	18.2	.3	(D)	(D)	14	27	(X)
2752	COMMERCIAL PRINTING, LITHOGRAPH	26.1	108.5	16.5	32.5	207.5	3.6	(D)	(D)	(D)	(D)	26	(X)	(X)
2753	ENGRAVING AND PLATE PRINTING	.9	4.3	.5	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2754	COMMERCIAL PRINTING, GRAVURE	5.7	20.7	4.3	9.1	(D)	(D)	74.0	1.1	(D)	(D)	(X)	1	(X)
2761	MANIFOLD BUSINESS FORMS	4.7	24.0	2.5	5.2	59.7	1.0	32.9	.5	-	-	4	22	(X)
2771	GREETING CARD PUBLISHING	1.5	7.1	.8	1.6	15.6	.2	(D)	(D)	-	-	1	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	3.7	17.3	2.4	5.2	56.0	1.0	28.7	.4	-	-	35	17	(X)
2782	BLANKBOOKS, LOOSELEAF BINDERS	2.3	10.6	1.5	3.2	31.1	.5	(D)	(D)	-	-	49	(X)	(X)
2789	BOOKBINDING AND RELATED WORK	1.5	6.8	.9	2.0	24.9	.4	(D)	(D)	-	-	51	(X)	(X)
279	PRINTING TRADE SERVICES	3.4	19.3	1.9	3.7	27.7	.5	2.0	(Z)	-	-	31	1	(X)
2791	TYPESETTING	1.3	7.5	.7	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
2793	PHOTOENGRAVING	.4	2.5	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
2794	ELECTROTYPING AND STEREOTYPING	(Z)	.2	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
2795	LITHOGRAPH PLATEMAKING SERVICES	1.7	9.2	1.0	2.1	19.9	.3	(D)	(Z)	-	-	35	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	2,978.5	6,448.7	2,469.7	3,727.7	20,411.9	302.4	45,540.9	613.4	13,061.9	380.9	1	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	669.3	1,878.9	390.9	592.9	3,920.8	60.9	6,696.2	87.1	2,817.9	84.3	2	1	1
2812	ALKALIES AND CHLORINE	126.9	327.4	88.0	144.2	466.9	7.1	(D)	(D)	1,349.0	42.9	1	(X)	1
2813	INDUSTRIAL GASES	73.9	301.7	30.6	46.1	332.2	4.7	-	-	(D)	(D)	9	(X)	(X)
2816	INORGANIC PIGMENTS	46.3	108.7	41.3	75.3	1,185.9	18.3	(D)	(D)	(D)	(D)	5	(X)	(X)
2819	INDUSTRIAL INORGANIC CHEM., NEC	422.2	1,141.1	230.9	327.3	1,935.9	30.7	3,829.5	50.3	997.8	27.9	3	1	1
282	PLASTICS MATERIALS, SYNTHETICS	432.6	1,024.1	369.2	638.7	(D)	(D)	(D)	(D)	4,392.1	129.7	(X)	(X)	1
2821	PLASTICS MATERIALS AND RESINS	182.7	478.7	151.3	283.7	2,135.5	32.3	4,310.1	59.3	775.4	21.5	1	1	1
2822	SYNTHETIC RUBBER	43.5	95.7	39.0	71.3	67.2	1.1	483.5	5.6	(D)	(D)	1	1	(X)
2823	CELLULOSIC MANMADE FIBERS	58.4	84.8	56.7	74.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2824	ORGANIC FIBERS, NONCELLULOSIC	147.9	364.9	122.1	209.7	711.9	11.0	7,587.7	100.6	1,838.0	58.2	1	1	1
283	DRUGS	70.8	225.5	57.5	115.5	998.8	15.1	3,805.4	54.2	317.2	11.4	2	1	1
2831	BIOLOGICAL PRODUCTS	3.2	13.6	2.3	3.9	31.2	.5	(D)	(D)	-	-	6	(X)	(X)
2833	MEDICINALS AND BOTANICALS	28.2	72.1	25.1	48.6	532.3	7.6	(D)	(D)	(D)	(D)	3	(X)	(X)
2834	PHARMACEUTICAL PREPARATIONS	39.3	139.8	30.1	63.0	435.3	6.9	(D)	(D)	(D)	(D)	2	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	46.5	136.9	39.8	78.6	798.6	12.6	1,363.0	20.1	105.7	3.4	5	5	5
2841	SOAP AND OTHER DETERGENTS	25.4	66.5	22.7	43.1	370.0	5.7	(D)	(D)	(D)	(D)	2	(X)	(X)
2842	POLISHES AND SANITATION GOODS	5.2	17.5	4.0	7.5	84.3	1.4	64.8	.9	-	-	32	1	(X)
2843	SURFACE ACTIVE AGENTS	9.6	26.3	8.7	18.5	207.6	3.3	363.9	5.3	-	-	9	5	(X)
2844	TOILET PREPARATIONS	6.3	26.6	4.5	9.5	136.7	2.2	(D)	(D)	(D)	(D)	8	(X)	(X)
2851	PAINTS AND ALLIED PRODUCTS	19.3	60.0	15.9	28.8	277.6	4.6	233.2	3.4	-	-	5	5	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	1,277.9	2,252.4	1,177.0	1,682.4	(D)	(D)	(D)	(D)	4,128.5	114.4	(X)	(X)	1
2861	GUM AND WOOD CHEMICALS	10.1	23.4	9.5	18.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
2865	CYCLIC CRUDES AND INTERMEDIATES	171.9	384.7	152.0	271.6	1,299.9	20.3	5,046.1	70.7	557.7	18.5	10	1	1
2869	INDUS. ORGANIC CHEMICALS, NEC	1,095.9	1,844.3	1,015.5	1,392.0	6,114.3	81.4	10,660.4	141.3	3,570.8	95.9	1	2	1
287	AGRICULTURAL CHEMICALS	347.9	639.3	314.4	429.5	3,199.6	49.0	2,188.7	28.0	(D)	(D)	2	7	(X)
2873	NITROGENOUS FERTILIZERS	251.5	421.1	233.8	317.1	2,134.0	32.7	1,121.9	14.9	(D)	(D)	1	12	(X)
2874	PHOSPHATIC FERTILIZERS	64.8	137.1	53.1	60.0	714.8	10.7	989.6	12.0	(D)	(Z)	1	1	1
2875	FERTILIZERS, MIXING ONLY	4.9	15.7	4.0	7.9	127.3	2.1	22.9	.3	-	-	1	2	(X)
2879	AGRICULTURAL CHEMICALS, NEC	26.7	65.4	23.5	44.5	223.5	3.4	54.3	.7	(D)	(D)	12	22	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	114.2	231.5	105.1	161.3	668.0	10.6	1,734.9	23.6	(D)	(D)	13	4	(X)
2891	ADHESIVES AND SEALANTS	8.1	25.8	6.8	14.4	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
2892	EXPLOSIVES	16.9	32.9	15.4	22.7	200.3	3.1	(D)	(D)	(D)	(D)	1	(X)	(X)
2893	PRINTING INK	3.0	9.8	2.4	4.0	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
2895	CARBON BLACK	29.5	49.9	27.2	36.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
2899	CHEMICAL PREPARATIONS, NEC	56.7	113.0	53.2	84.1	242.7	4.0	1,185.8	15.8	562.6	17.7	20	3	4
29	PETROLEUM AND COAL PRODUCTS	1,303.4	2,445.4	1,200.5	1,805.7	3,840.7	59.3	9,700.9	133.5	183.6	5.2	7	3	8
2911	PETROLEUM REFINING	1,222.8	2,247.1	1,125.7	1,658.4	(D)	(D)	8,010.8	109.1	(D)	(D)	(X)	1	(X)
295	PAVING AND ROOFING MATERIALS	66.6	165.1	61.9	123.3	(D)	(D)	1,576.6	22.7	(D)	(D)	(X)	13	(X)
2951	PAVING MIXTURES AND BLOCKS	36.0	93.9	33.5	69.3	1,776.2	28.2	419.1	6.2	-	-	13	41	(X)
2952	ASPHALT FELTS AND COATINGS	30.7	71.2	28.5	54.0	(D)	(D)	1,157.5	16.4	(D)	(D)	(X)	7	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	13.9	33.3	12.9	24.0	400.1	6.1	113.4	1.7	(D)	(D)	14	17	(X)
2992	LUBRICATING OILS AND GREASES	6.2	17.7	5.6	11.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
2999	PETROLEUM, COAL PRODUCTS, NEC	7.7	15.6	7.3	12.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	272.3	962.4	195.3	362.1	3,181.7	49.8	7,508.4	104.9	910.6	24.3	2	2	1
3011	TIRES AND INNER TUBES	82.8	236.8	64.8	113.6	888.1	13.4	3,548.4	49.3	469.6	11.5	1	1	1
3021	RUBBER AND PLASTICS FOOTWEAR	2.1	8.5	1.6	3.6	62.9	1.0	75.3	1.1	-	-	1	1	(X)
3031	RECLAIMED RUBBER	1.1	3.3	.8	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	V
27	PRINTING AND PUBLISHING	-	-	28.4	53.4	13.7	(D)	10,553.7	307.9	6.2	88.8	362.6	4
2711	NEWSPAPERS	-	-	5.5	10.2	6.1	(D)	2,591.7	78.4	(S)	18.5	88.8	12
2721	PERIODICALS	-	-	.4	.7	.4	1.6	298.8	9.9	(S)	3.3	14.5	11
273	BOOKS	-	-	2.2	4.2	(D)	(D)	869.3	24.2	(D)	7.2	27.5	6
2731	BOOK PUBLISHING	-	-	.7	1.2	(D)	(D)	267.6	7.9	-	2.5	9.6	12
2732	BOOK PRINTING	-	-	1.5	2.9	(D)	1.8	601.7	16.3	(D)	4.7	17.8	6
2741	MISCELLANEOUS PUBLISHING	-	-	.3	.6	(Z)	(D)	314.1	9.5	(S)	1.8	8.2	4
275	COMMERCIAL PRINTING	-	-	16.5	31.2	(D)	11.8	4,826.7	133.7	(S)	45.9	170.3	5
2751	COMMERCIAL PRINTING, LETTERPRESS	-	-	5.2	10.3	(D)	3.7	1,501.7	42.9	(S)	15.6	58.6	6
2752	COMMERCIAL PRINTING, LITHOGRAPH	-	-	9.4	17.5	2.8	6.7	2,803.1	76.0	(S)	24.0	91.2	7
2753	ENGRAVING AND PLATE PRINTING	-	-	.2	.5	(Z)	.3	96.0	3.1	(Z)	.9	3.3	28
2754	COMMERCIAL PRINTING, GRAVURE	-	-	1.6	3.0	1.5	1.0	425.8	11.6	(Z)	5.4	17.1	3
2761	MANIFOLD BUSINESS FORMS	-	-	1.3	2.5	(D)	(D)	655.4	18.9	(S)	4.3	18.5	7
2771	GREETING CARD PUBLISHING	-	-	.5	.9	(D)	.1	184.4	5.5	.2	1.3	5.4	9
278	BLANKBOOKS AND BOOKBINDING	-	-	.7	1.5	(D)	(D)	374.5	12.1	(S)	3.2	13.7	10
2782	BLANKBOOKS, LOOSELEAF BINDERS	-	-	.5	1.0	(D)	(D)	225.6	7.4	(Z)	1.9	7.9	8
2789	BOOKBINDING AND RELATED WORK	-	-	.2	.4	(D)	.8	148.9	4.8	(S)	1.3	5.8	27
279	PRINTING TRADE SERVICES	-	-	.9	1.7	.2	1.3	438.9	15.6	1.6	3.2	15.7	16
2791	TYPESETTING	-	-	.3	.4	(D)	(D)	174.4	6.3	-	1.2	6.6	46
2793	PHOTOENGRAVING	-	-	.1	.1	-	(D)	59.1	2.2	-	.6	3.5	6
2794	ELECTROTYPING AND STEREOTYPING	-	-	(Z)	(Z)	-	.1	4.3	.1	-	.1	.5	1
2795	LITHOGRAPH PLATEMAKING SERVICES	-	-	.6	1.1	(D)	(D)	201.0	7.1	1.6	1.2	5.2	16
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	1,484.0	2,049.4	301.1	(D)	149,140.9	2,721.0	12,942.6	2,989.3	5,430.6	1
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	230.5	331.6	16.8	(D)	81,594.7	1,286.0	4,012.6	706.4	1,697.5	1
2812	ALKALIES AND CHLORINE	(Z)	(Z)	36.7	71.0	(D)	(D)	11,395.9	183.2	1,885.5	145.7	311.9	1
2813	INDUSTRIAL GASES	-	-	23.8	34.6	(D)	3.9	12,679.7	255.5	(D)	90.7	262.8	2
2816	INORGANIC PIGMENTS	(D)	(D)	13.8	25.8	.8	(D)	1,450.8	33.5	(D)	46.8	95.4	2
2819	INDUSTRIAL INORGANIC CHEM., NEC	(D)	(D)	156.2	200.2	(D)	3.7	56,068.3	813.8	2,033.7	423.2	1,027.4	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	104.2	192.2	79.8	7.9	18,583.3	385.4	(D)	401.4	812.3	1
2821	PLASTICS MATERIALS AND RESINS	-	-	64.5	121.0	43.2	6.4	9,196.6	195.0	6.8	171.0	379.1	1
2822	SYNTHETIC RUBBER	-	-	(D)	(D)	18.8	.7	1,330.2	24.4	-	41.0	81.5	(X)
2823	CELLULOSIC MANMADE FIBERS	-	-	(D)	(D)	(Z)	.2	503.5	10.8	(D)	56.7	71.6	(X)
2824	ORGANIC FIBERS, NONCELLULOSIC	-	-	13.0	21.7	17.7	.5	7,552.9	155.2	682.1	132.6	280.1	1
283	DRUGS	(Z)	(Z)	12.2	22.5	(D)	(D)	3,898.8	109.9	158.7	67.1	187.7	2
2831	BIOLOGICAL PRODUCTS	-	-	.8	1.4	(D)	(D)	275.4	9.7	-	2.7	9.8	6
2833	MEDICINALS AND BOTANICALS	(Z)	(Z)	2.8	4.6	1.1	(D)	919.7	23.5	(D)	26.1	60.4	3
2834	PHARMACEUTICAL PREPARATIONS	-	-	8.6	16.4	7.3	.6	2,703.7	76.8	(D)	38.3	117.4	3
284	SOAPS, CLEANERS, TOILET GOODS	-	-	18.1	34.1	(D)	(D)	1,960.6	58.3	(D)	49.0	125.5	2
2841	SOAP AND OTHER DETERGENTS	-	-	11.2	20.4	.9	(D)	790.9	23.4	(D)	25.0	55.3	2
2842	POLISHES AND SANITATION GOODS	-	-	1.8	3.5	.1	1.6	334.2	10.0	.5	7.4	22.2	14
2843	SURFACE ACTIVE AGENTS	-	-	3.6	7.2	(D)	(D)	286.7	7.9	(D)	10.4	25.4	4
2844	TOILET PREPARATIONS	-	-	1.5	3.1	.4	.8	548.8	17.1	(Z)	6.2	22.6	4
2851	PAINTS AND ALLIED PRODUCTS	-	-	5.3	10.1	(D)	(D)	1,014.8	31.2	(D)	18.6	52.2	4
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	805.2	1,052.1	(D)	(S)	29,582.1	570.0	6,218.5	1,251.0	1,831.3	1
2861	GUM AND WOOD CHEMICALS	-	-	2.6	4.3	(D)	.7	175.3	4.7	32.1	8.9	17.5	11
2865	CYCLIC CRUDES AND INTERMEDIATES	-	-	74.4	119.0	38.1	5.0	5,828.5	113.1	159.8	171.8	325.7	1
2869	INDUS. ORGANIC CHEMICALS, NEC	-	-	728.2	928.8	(S)	(S)	23,578.2	452.3	6,026.6	1,070.4	1,488.1	1
287	AGRICULTURAL CHEMICALS	-	-	258.0	330.9	(D)	(D)	9,818.3	209.8	643.0	385.2	532.7	3
2873	NITROGENOUS FERTILIZERS	-	-	198.5	257.9	2.5	(D)	5,194.9	104.0	428.4	289.7	339.2	3
2874	PHOSPHATIC FERTILIZERS	-	-	40.6	35.3	.8	1.0	3,413.8	77.2	(D)	63.6	126.4	1
2875	FERTILIZERS, MIXING ONLY	-	-	1.5	2.7	1.8	1.0	263.5	7.8	.6	4.4	12.5	1
2879	AGRICULTURAL CHEMICALS, NEC	-	-	17.5	35.0	(D)	(D)	946.0	20.9	(D)	27.4	54.7	3
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	50.5	75.9	(D)	16.7	2,688.3	70.2	177.7	110.6	191.4	3
2891	ADHESIVES AND SEALANTS	-	-	4.2	8.3	(D)	.1	376.5	11.5	(D)	8.8	22.7	1
2892	EXPLOSIVES	-	-	4.1	5.6	(D)	.6	443.4	10.2	(D)	19.4	32.5	1
2893	PRINTING INK	-	-	(D)	(D)	.1	2.0	183.8	5.8	-	2.7	8.0	(X)
2895	CARBON BLACK	-	-	(D)	(D)	.1	(Z)	658.7	13.9	(D)	28.2	36.1	(X)
2899	CHEMICAL PREPARATIONS, NEC	-	-	15.8	26.6	6.0	14.1	1,025.9	28.9	139.8	51.5	92.0	3
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	1,051.0	1,546.3	27.0	(D)	30,153.2	639.7	4,516.7	1,304.8	2,108.2	1
2911	PETROLEUM REFINING	-	-	1,016.4	1,486.0	(D)	18.9	28,482.4	588.7	(D)	1,229.2	1,954.5	1
295	PAVING AND ROOFING MATERIALS	(D)	(D)	25.4	44.9	(D)	15.0	1,373.2	41.8	(D)	62.9	129.0	5
2951	PAVING MIXTURES AND BLOCKS	(D)	(D)	9.3	16.9	(D)	12.2	736.3	24.6	(Z)	33.8	74.6	14
2952	ASPHALT FELTS AND COATINGS	-	-	16.1	28.0	(D)	2.8	636.9	17.2	(D)	29.1	54.4	4
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	9.1	15.5	.2	(D)	297.6	9.2	-	12.7	24.7	7
2992	LUBRICATING OILS AND GREASES	-	-	(D)	(D)	(D)	(S)	181.1	6.0	-	5.4	12.5	(X)
2999	PETROLEUM, COAL PRODUCTS, NEC	-	-	(D)	(D)	(D)	1.4	116.5	3.2	-	7.4	12.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	71.3	124.4	14.1	44.7	22,556.9	600.3	423.9	250.3	765.3	2
3011	TIRES AND INNER TUBES	-	-	23.6	38.0	.9	.6	5,288.0	123.2	(D)	75.1	180.8	1
3021	RUBBER AND PLASTICS FOOTWEAR	-	-	.4	.8	(Z)	.6	155.9	4.9	(S)	2.4	9.0	1
3031	RECLAIMED RUBBER	-	-	(D)	(D)	-	(D)	93.5	2.1	-	.9	2.6	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
30	RUBBER, MISC. PLASTICS PROD--CON.													
304	RUBBER, PLASTICS HOSE, BELTING--CON.													
3041	RUBBER, PLASTICS HOSE, BELTING	13.9	37.0	11.2	17.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3069	FABRICATED RUBBER PRODUCTS, NEC.	33.1	109.2	25.6	49.6	533.3	8.7	699.5	10.2	(D)	(D)	8	4	(X)
3079	MISCELLANEOUS PLASTICS PRODUCTS.	139.3	567.7	91.4	176.6	1,517.8	24.0	2,825.1	39.4	230.7	6.3	3	5	2
31	LEATHER, LEATHER PRODUCTS.	23.1	82.6	18.2	36.8	367.3	5.9	842.5	11.9	44.4	1.0	10	11	16
3111	LEATHER TANNING AND FINISHING.	13.8	37.0	12.6	24.7	185.6	2.9	735.6	10.3	38.9	.8	18	12	19
3131	BOOT, SHOE CUT STOCK, FINDINGS	1.0	3.5	.8	1.5	16.9	.3	17.8	.3	(D)	(D)	27	9	(X)
314	FOOTWEAR, EXCEPT RUBBER.	5.2	27.8	2.9	6.6	116.2	2.0	76.2	1.2	(D)	(D)	8	2	(X)
3142	HOUSE SLIPPERS	.3	1.7	.2	.5	8.6	.1	(D)	(D)	-	-	22	(X)	(X)
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC.	2.1	11.2	1.2	2.6	38.0	.7	38.0	.6	(D)	(D)	2	4	(X)
3144	WOMEN'S FOOTWEAR, EXC. ATHLETIC.	1.9	10.2	1.1	2.5	53.3	.9	24.7	.4	.9	(Z)	16	1	1
3149	FOOTWEAR, EXCEPT RUBBER, NEC	.8	4.7	.5	1.0	16.3	.3	(D)	(D)	(D)	(Z)	20	(X)	55
3151	LEATHER GLOVES AND MITTENS	.4	1.4	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
3161	LUGGAGE.	1.1	4.5	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
317	WOMEN'S HANDBAGS AND PURSES.	1.1	6.3	.6	1.2	10.3	.2	(D)	(D)	(D)	(Z)	36	(X)	65
3171	WOMEN'S HANDBAGS AND PURSES.	.6	3.4	.3	.6	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	65
3172	PERSONAL LEATHER GOODS, NEC.	.5	2.9	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3199	LEATHER GOODS, NEC	.6	2.2	.4	1.0	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	87
32	STONE, CLAY, GLASS PRODUCTS.	1,251.8	2,587.4	1,146.3	1,825.4	13,893.2	225.1	13,075.0	168.4	13,147.6	359.3	3	5	1
3211	FLAT GLASS	59.8	135.5	55.4	105.1	815.4	12.2	(D)	(D)	(D)	(D)	1	(X)	(X)
322	GLASS, PRESSED OR BLOWN.	212.3	525.4	189.0	363.3	3,438.5	55.1	2,398.6	33.4	(D)	(Z)	1	4	1
3221	GLASS CONTAINERS	144.5	360.9	128.8	250.4	2,482.5	39.9	1,896.8	26.6	(D)	(Z)	1	1	1
3229	PRESSED AND BLOWN GLASS, NEC	67.8	164.5	60.2	112.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
3231	PRODUCTS OF PURCHASED GLASS.	14.8	43.0	12.1	20.7	40.5	.6	(D)	(D)	-	-	12	(X)	(X)
3241	CEMENT, HYDRAULIC.	453.1	732.9	419.5	503.5	727.5	11.8	5,892.1	68.4	10,567.5	277.8	13	1	1
325	STRUCTURAL CLAY PRODUCTS	116.0	226.6	110.8	184.2	2,052.8	32.1	178.4	2.7	62.1	1.9	10	13	1
3251	BRICK AND STRUCTURAL CLAY TILE	70.0	131.5	67.0	107.0	1,096.1	17.1	(D)	(D)	(D)	(D)	18	(X)	(X)
3253	CERAMIC WALL AND FLOOR TILE.	6.8	15.3	6.3	11.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3255	CLAY REFRACTORIES.	21.0	47.5	19.8	38.2	829.1	12.9	(D)	(D)	(D)	(Z)	6	(X)	1
3259	STRUCTURAL CLAY PRODUCTS, NEC.	18.2	32.3	17.6	27.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS	25.7	61.1	23.5	44.0	261.3	4.3	(D)	(D)	(D)	(D)	5	(X)	(X)
3261	VITREOUS PLUMBING FIXTURES	8.8	20.9	8.1	15.5	80.3	1.3	(D)	(D)	-	-	1	(X)	(X)
3262	VITREOUS CHINA FOOD UTENSILS	3.0	7.6	2.8	6.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3263	FINE EARTHENWARE FOOD UTENSILS	2.0	4.9	1.9	3.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3264	PORCELAIN ELECTRICAL SUPPLIES.	6.0	15.8	5.2	9.2	69.5	1.2	(D)	(D)	(D)	(D)	10	(X)	(X)
3269	POTTERY PRODUCTS, NEC.	5.9	11.9	5.6	9.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	222.9	466.4	210.8	366.5	4,676.8	78.8	1,854.5	25.6	2,109.6	67.0	6	30	4
3271	CONCRETE BLOCK AND BRICK	14.3	34.7	13.1	24.5	302.8	5.2	91.4	1.3	(D)	(D)	25	37	(X)
3272	CONCRETE PRODUCTS, NEC	20.3	49.1	18.7	34.7	490.9	8.0	140.0	2.1	(D)	(D)	12	21	(X)
3273	READY-MIXED CONCRETE	43.7	119.9	40.2	89.1	2,474.0	42.9	155.7	2.5	(D)	(D)	10	30	(X)
3274	LIME	98.2	160.3	95.4	139.5	308.6	4.9	1,202.7	16.2	2,033.4	64.7	8	47	4
3275	GYPSUM PRODUCTS.	46.5	102.5	43.5	78.8	1,100.5	17.6	264.7	3.5	49.7	1.3	1	1	1
3281	CUT STONE AND STONE PRODUCTS	3.9	13.3	3.0	5.6	90.1	1.5	(D)	(D)	(D)	(D)	21	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	143.3	383.1	122.2	232.6	1,790.3	28.7	1,770.8	24.0	386.5	12.0	5	3	17
3291	ABRASIVE PRODUCTS.	14.5	45.4	10.2	20.3	127.2	2.0	(D)	(D)	(D)	(D)	2	(X)	(X)
3292	ASBESTOS PRODUCTS.	9.4	30.3	7.6	15.2	137.1	2.2	234.3	3.5	(D)	(D)	2	3	(X)
3293	GASKETS, PACK'G, SEAL'G DEVICES.	5.8	20.9	4.2	7.8	77.5	1.2	(D)	(D)	(D)	(D)	12	(X)	(X)
3295	MINERALS, GROUND OR TREATED.	33.0	75.5	30.1	52.2	562.6	9.1	(D)	(D)	(D)	(D)	14	(X)	(X)
3296	MINERAL WOOL	54.9	152.2	46.7	95.4	455.1	7.3	138.3	1.9	(D)	(D)	1	1	(X)
3297	NONCLAY REFRACTORIES	17.3	39.9	15.9	28.8	303.8	4.7	86.5	1.3	(D)	(D)	7	29	(X)
3299	NONMETAL. MINERAL PRODUCTS, NEC.	8.3	19.0	7.6	12.8	127.0	2.2	(D)	(D)	-	-	10	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2,539.4	7,043.6	2,001.2	4,296.7	12,448.4	194.2	41,304.7	560.3	5,167.8	161.5	1	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	1,629.8	4,510.0	1,429.8	3,189.4	7,074.9	110.2	36,973.3	502.8	4,254.9	132.8	1	1	1
3312	BLAST FURNACES AND STEEL MILLS	1,519.2	4,160.1	1,359.0	3,056.1	6,400.9	99.0	36,643.8	498.0	3,519.4	109.0	1	1	1
3313	ELECTROMETALLURGICAL PRODUCTS.	57.6	171.3	(S)	(S)	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3315	STEEL WIRE AND RELATED PRODUCTS.	14.5	52.1	11.0	22.1	182.7	2.9	(D)	(D)	(D)	(Z)	4	(X)	1
3316	COLD FINISHING OF STEEL SHAPES	17.6	64.0	14.6	36.8	149.5	2.7	51.8	.8	(D)	(D)	2	1	(X)
3317	STEEL PIPE AND TUBES	20.8	62.5	17.7	36.0	290.9	4.8	63.9	.9	(D)	(D)	2	2	(X)
332	IRON AND STEEL FOUNDRIES	175.6	747.1	134.6	419.0	847.0	13.7	373.3	5.6	102.4	4.1	4	6	1
3321	GRAY IRON FOUNDRIES.	122.1	548.5	97.1	342.4	426.5	7.0	255.7	3.9	40.3	1.6	7	6	3
3322	MALLEABLE IRON FOUNDRIES	17.0	63.0	11.8	26.6	136.3	2.2	(D)	(D)	(D)	(D)	1	(X)	(X)
3324	STEEL INVESTMENT FOUNDRIES	2.9	11.6	2.0	4.1	8.1	.2	(D)	(Z)	-	-	1	1	(X)
3325	STEEL FOUNDRIES, NEC	33.6	124.0	23.6	45.8	276.2	4.4	(D)	(D)	(D)	(D)	1	(X)	(X)
333	PRIMARY NONFERROUS METALS.	462.7	988.6	218.9	272.2	999.8	14.7	2,405.9	30.4	(D)	(D)	1	1	(X)
3331	PRIMARY COPPER	66.3	122.9	59.7	89.0	527.0	7.3	1,343.6	17.3	(D)	(D)	1	1	(X)
3332	PRIMARY LEAD	12.5	34.4	11.7	30.1	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
3333	PRIMARY ZINC	25.5	51.6	21.6	30.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976 - Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
30	RUBBER, MISC. PLASTICS PROD--CON.												
304	RUBBER, PLASTICS HOSE, BELTING--CON.												
3041	RUBBER, PLASTICS HOSE, BELTING	-	-	(D)	(D)	(D)	(D)	784.1	19.4	(D)	13.8	29.4	(X)
3069	FABRICATED RUBBER PRODUCTS, NEC.	-	-	(D)	(D)	(D)	5.7	2,192.1	59.6	2.9	30.6	86.7	(X)
3079	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	31.4	59.2	10.2	37.5	14,043.4	391.1	143.7	127.4	456.9	3
31	LEATHER, LEATHER PRODUCTS.	-	-	5.5	10.0	2.4	5.6	1,416.8	45.9	14.7	22.6	71.7	5
3111	LEATHER TANNING AND FINISHING.	-	-	3.6	6.5	1.0	3.2	370.8	12.4	(D)	13.1	31.0	6
3131	BOOT, SHOE CUT STOCK, FINDINGS	-	-	.3	.6	(D)	.2	65.6	2.0	-	.9	2.9	38
314	FOOTWEAR, EXCEPT RUBBER.	-	-	.7	1.4	(D)	1.0	656.8	21.2	(D)	5.4	25.5	4
3142	HOUSE SLIPPERS	-	-	(Z)	.1	-	(D)	33.5	1.2	(D)	.4	1.7	13
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC.	-	-	.4	.8	(D)	.4	276.3	8.6	(Z)	2.3	10.3	1
3144	WOMEN'S FOOTWEAR, EXC. ATHLETIC.	-	-	.2	.4	.6	.2	236.4	7.7	(S)	1.8	8.9	10
3149	FOOTWEAR, EXCEPT RUBBER, NEC	-	-	.1	.2	(D)	(D)	110.5	3.7	-	.9	4.6	20
3151	LEATHER GLOVES AND MITTENS	-	-	.1	.1	-	(D)	29.0	.8	-	.3	1.1	37
3161	LUGGAGE.	-	-	(D)	(D)	.1	(D)	109.9	3.2	-	1.2	4.3	(X)
317	WOMEN'S HANDBAGS AND PURSES.	-	-	(D)	(D)	(D)	.4	147.5	5.1	(D)	1.2	5.3	(X)
3171	WOMEN'S HANDBAGS AND PURSES.	-	-	(Z)	(Z)	-	.5	73.6	2.7	(D)	.8	3.5	1
3172	PERSONAL LEATHER GOODS, NEC.	-	-	(D)	(D)	(D)	(Z)	73.9	2.4	-	.4	1.7	(X)
3199	LEATHER GOODS, NEC	-	-	.2	.5	(D)	.1	37.3	1.2	-	.5	1.7	2
32	STONE, CLAY, GLASS PRODUCTS.	373.2	23.9	523.5	890.3	72.8	85.7	30,924.4	762.0	452.5	1,226.9	2,167.8	2
3211	FLAT GLASS	-	-	42.2	77.6	1.4	2.4	1,297.7	30.4	(D)	53.7	99.8	1
322	GLASS, PRESSED OR BLOWN.	-	-	145.3	264.5	9.4	.9	6,828.9	162.1	(D)	214.6	425.1	1
3221	GLASS CONTAINERS	-	-	96.9	177.9	(S)	(S)	4,592.5	110.6	(S)	147.5	292.0	1
3229	PRESSED AND BLOWN GLASS, NEC	-	-	(S)	(S)	(S)	(S)	2,236.3	51.5	(D)	67.1	133.1	(X)
3231	PRODUCTS OF PURCHASED GLASS.	-	-	7.1	12.1	2.5	(D)	805.4	22.3	(D)	18.3	40.1	2
3241	CEMENT, HYDRAULIC.	(D)	(D)	93.1	136.7	5.0	(D)	9,822.7	229.5	362.5	433.0	616.6	2
325	STRUCTURAL CLAY PRODUCTS	(D)	(Z)	73.5	115.5	4.7	27.4	1,519.7	42.4	(D)	111.7	190.6	8
3251	BRICK AND STRUCTURAL CLAY TILE	-	-	44.1	66.2	2.8	17.9	874.1	24.5	(Z)	62.5	103.3	12
3253	CERAMIC WALL AND FLOOR TILE.	-	-	5.7	10.2	.7	(D)	137.3	3.6	-	6.5	12.3	14
3255	CLAY REFRACTORIES.	(D)	(Z)	12.1	20.9	.9	(D)	347.1	9.3	(Z)	23.7	46.1	14
3259	STRUCTURAL CLAY PRODUCTS, NEC.	-	-	11.5	18.2	.4	7.1	161.2	5.0	-	18.9	28.9	15
326	POTTERY AND RELATED PRODUCTS	-	-	15.9	29.8	2.6	4.9	637.3	17.1	(D)	24.7	50.4	5
3261	VITREOUS PLUMBING FIXTURES	-	-	6.0	11.1	(D)	.1	202.8	5.4	(D)	8.3	17.1	4
3262	VITREOUS CHINA FOOD UTENSILS	-	-	2.0	4.1	(D)	.2	55.8	1.7	-	2.8	5.7	1
3263	FINE EARTHENWARE FOOD UTENSILS	-	-	1.4	2.8	(D)	.2	36.9	1.2	(Z)	1.4	3.2	9
3264	PORCELAIN ELECTRICAL SUPPLIES.	-	-	3.7	6.5	(D)	.9	245.8	6.6	-	6.0	13.6	5
3269	POTTERY PRODUCTS, NEC.	-	-	2.8	5.3	.2	3.4	96.0	2.3	-	6.2	10.8	25
327	CONCRETE, GYPSUM, PLASTER PRODS.	(D)	(D)	72.3	122.7	35.3	(D)	3,561.3	99.9	(S)	217.9	406.1	3
3271	CONCRETE BLOCK AND BRICK	-	-	6.9	11.4	3.5	(D)	341.7	10.2	(D)	15.8	35.0	19
3272	CONCRETE PRODUCTS, NEC	-	-	7.4	11.8	(D)	6.5	465.8	14.4	-	20.9	45.8	7
3273	READY-MIXED CONCRETE	(D)	(D)	4.8	7.9	22.2	12.9	1,028.1	30.8	(S)	42.4	107.1	17
3274	LIME	(D)	(D)	22.5	39.8	.8	(D)	830.5	20.8	(S)	97.5	142.3	2
3275	GYPSUM PRODUCTS.	(Z)	(Z)	30.9	51.8	(D)	(D)	895.3	23.8	(D)	41.5	75.8	1
3281	CUT STONE AND STONE PRODUCTS	(D)	(Z)	.1	.3	1.3	2.4	268.7	7.7	(D)	4.1	13.5	26
329	MISC. NONMETALLIC MINERAL PRODS.	168.2	18.4	74.0	131.1	10.6	7.8	6,182.9	150.5	49.8	148.9	325.6	2
3291	ABRASIVE PRODUCTS.	-	-	5.3	10.0	(D)	1.1	1,252.2	25.1	(D)	12.7	35.2	5
3292	ASBESTOS PRODUCTS.	(D)	(Z)	3.5	7.0	(D)	1.3	541.8	15.1	(D)	10.7	30.7	2
3293	GASKETS, PACK'G, SEAL'G DEVICES.	-	-	1.8	3.1	.3	.6	479.0	13.1	(D)	5.8	17.4	7
3295	MINERALS, GROUND OR TREATED.	(D)	(Z)	17.8	29.7	.7	2.2	859.0	23.2	(D)	37.4	67.1	4
3296	MINERAL WOOL	163.5	17.7	33.4	60.1	(D)	2.9	2,416.0	56.8	-	54.4	121.8	1
3297	NONCLAY REFRACTORIES	-	-	7.8	15.1	2.8	(D)	410.0	11.1	-	19.8	37.4	8
3299	NONMETAL. MINERAL PRODUCTS, NEC.	(Z)	(Z)	4.3	6.2	.3	(D)	224.9	6.2	-	8.2	16.0	19
33	PRIMARY METAL INDUSTRIES	19,089.2	1,662.1	905.6	1,496.8	153.8	68.0	157,737.4	2,746.9	13,600.2	2,470.6	5,752.2	1
331	BLAST FURNACE, BASIC STEEL PROD.	16,632.6	1,361.0	536.6	954.2	102.3	26.1	58,613.2	1,320.6	7,072.1	1,593.4	3,638.4	1
3312	BLAST FURNACES AND STEEL MILLS	16,484.5	1,345.1	502.6	890.7	92.9	21.5	46,952.4	1,104.0	(D)	1,496.6	3,372.3	1
3313	ELECTROMETALLURGICAL PRODUCTS.	(D)	(D)	(D)	(D)	(S)	(S)	8,867.2	132.9	(D)	54.0	140.5	(X)
3315	STEEL WIRE AND RELATED PRODUCTS.	(D)	(D)	(D)	(D)	1.8	3.6	1,020.6	30.0	-	14.4	44.2	(X)
3316	COLD FINISHING OF STEEL SHAPES	99.1	12.2	9.2	18.5	(D)	(D)	867.4	27.2	(D)	16.3	48.0	1
3317	STEEL PIPE AND TUBES	-	-	12.2	23.9	(D)	(D)	905.6	26.4	(Z)	12.1	33.4	4
332	IRON AND STEEL FOUNDRIES	1,990.0	262.5	62.9	115.9	11.7	5.4	12,022.9	328.1	17.4	166.9	605.5	2
3321	GRAY IRON FOUNDRIES.	1,942.1	256.1	36.6	65.9	6.2	1.9	7,316.9	206.1	(D)	114.3	433.6	2
3322	MALLEABLE IRON FOUNDRIES	(D)	(D)	7.4	14.2	1.0	(D)	1,520.2	36.3	-	16.0	56.2	1
3324	STEEL INVESTMENT FOUNDRIES	-	-	1.5	3.1	.7	.2	263.0	7.5	-	3.5	12.1	23
3325	STEEL FOUNDRIES, NEC	(D)	(D)	17.3	32.7	3.8	(D)	2,922.9	78.2	(D)	33.1	103.6	2
333	PRIMARY NONFERROUS METALS.	(D)	(D)	157.9	160.0	8.2	5.8	71,475.1	716.4	6,592.5	442.5	835.7	1
3331	PRIMARY COPPER	(D)	(D)	39.6	50.2	3.4	4.9	1,926.1	33.9	(D)	69.5	111.8	1
3332	PRIMARY LEAD	(S)	(S)	(S)	(S)	(D)	(S)	252.9	4.2	(D)	13.3	32.8	(X)
3333	PRIMARY ZINC	(D)	(D)	(D)	(D)	(D)	(Z)	1,136.7	21.0	(D)	26.7	49.5	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
33	PRIMARY METAL INDUSTRIES--CON.													
333	PRIMARY NONFERROUS METALS--CON.													
3334	PRIMARY ALUMINUM	327.7	695.1	106.7	91.1	273.9	4.2	(D)	(D)	(D)	(D)	1	(X)	(X)
3339	PRIMARY NONFERROUS METALS, NEC	30.7	84.6	19.1	31.4	40.1	.6	(D)	(D)	66.3	2.5	1	(X)	1
3341	SECONDARY NONFERROUS METALS	36.9	90.2	34.2	67.6	885.6	14.0	256.0	2.6	(D)	(Z)	13	6	1
335	NONFERROUS ROLLING AND DRAWING	164.7	502.3	126.3	239.6	2,315.2	36.3	1,167.7	17.0	87.7	2.7	1	1	1
3351	COPPER ROLLING AND DRAWING	25.0	95.5	18.1	37.1	248.9	3.9	270.0	4.0	33.7	.9	1	1	1
3353	ALUMINUM SHEET, PLATE, AND FOIL	71.4	171.2	58.1	105.1	1,290.6	20.1	(D)	(D)	(D)	(D)	1	(X)	(X)
3354	ALUMINUM EXTRUDED PRODUCTS	21.3	63.4	17.2	30.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
3355	ALUMINUM ROLLING, DRAWING, NEC	7.4	18.0	6.4	13.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3356	NONFER. ROLLING, DRAWING, NEC	12.8	41.1	9.0	17.8	132.1	2.2	20.1	.3	-	-	1	5	(X)
3357	NONFER. WIREDRAWING, INSULATING	26.9	113.0	17.5	35.8	341.1	5.3	489.0	7.3	-	-	4	1	(X)
336	NONFERROUS FOUNDRIES	40.5	120.0	33.3	62.2	217.5	3.5	(D)	(D)	(D)	(D)	14	(X)	(X)
3361	ALUMINUM FOUNDRIES	29.7	81.4	24.9	45.7	139.5	2.2	(D)	(D)	(D)	(D)	13	(X)	(X)
3362	BRASS, BRONZE, COPPER FOUNDRIES	4.0	15.3	2.9	5.9	59.8	1.0	(D)	(D)	-	-	42	(X)	(X)
3369	NONFERROUS FOUNDRIES, NEC	6.9	23.2	5.5	10.7	18.2	.3	(D)	(D)	-	-	22	(X)	(X)
339	MISC. PRIMARY METAL PRODUCTS	29.2	85.4	24.3	46.6	108.3	1.8	(D)	(D)	(D)	(D)	40	(X)	(X)
3398	METAL HEAT TREATING	21.0	57.1	18.0	34.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3399	PRIMARY METAL PRODUCTS, NEC	8.2	28.2	6.2	12.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	395.3	1,348.7	305.2	603.4	4,671.7	76.2	3,542.3	51.7	413.7	14.1	3	3	3
341	METAL CANS, SHIPPING CONTAINERS	37.2	119.6	29.7	58.8	142.9	2.4	174.5	2.6	(D)	(D)	1	1	(X)
3411	METAL CANS	32.0	103.5	25.3	50.2	111.2	1.9	(D)	(D)	(D)	(D)	1	(X)	(X)
3412	METAL BARRELS, DRUMS, AND PAILS	5.2	16.1	4.4	8.5	31.6	.5	(D)	(D)	-	-	2	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	32.0	116.9	24.3	48.2	360.9	5.9	691.9	10.1	105.4	3.5	9	2	11
3421	CUTLERY	2.8	10.4	2.3	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3423	HAND AND EDGE TOOLS, NEC	10.9	35.8	8.8	17.1	176.9	2.8	(D)	(D)	(D)	(D)	7	(X)	(X)
3425	HANDSAWS AND SAW BLADES	1.1	5.4	.6	1.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
3429	HARDWARE, NEC	17.3	65.3	12.6	24.6	(D)	(D)	381.0	5.5	(D)	(D)	(X)	3	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	13.7	45.9	11.0	23.5	205.6	3.4	164.6	2.3	12.9	.5	6	2	1
3431	METAL SANITARY WARE	6.0	15.7	5.2	10.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3432	PLUMBING FITTINGS, BRASS GOODS	3.1	12.7	2.1	4.0	38.3	.6	(D)	(D)	(D)	(Z)	5	(X)	1
3433	HEATING EQUIP., EXCEPT ELECTRIC	4.6	17.4	3.7	9.5	(D)	(D)	28.9	.4	(D)	(D)	(X)	1	(X)
344	FABRICATED STRUC. METAL PRODS.	70.4	249.2	52.4	101.3	799.9	13.3	318.7	4.9	17.8	.5	10	10	19
3441	FABRICATED STRUCTURAL METAL	14.1	52.6	10.2	20.3	176.2	3.0	34.4	.6	(D)	(D)	13	53	(X)
3442	METAL DOORS, SASH, AND TRIM	8.1	28.6	6.1	11.7	55.7	1.0	48.0	.7	(D)	(Z)	16	41	91
3443	FABR. PLATEWORK, BOILER SHOPS	25.2	86.8	19.0	37.4	368.0	6.1	183.4	2.8	(D)	(D)	19	7	(X)
3444	SHEET METALWORK	12.6	38.7	10.2	18.6	100.1	1.6	23.6	.3	-	-	15	41	(X)
3446	ARCHITECTURAL METALWORK	2.9	10.8	2.1	4.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
3448	PREFABRICATED METAL BUILDINGS	3.4	13.7	2.2	4.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3449	MISCELLANEOUS METALWORK	4.1	18.0	2.6	5.0	49.2	.8	(D)	(D)	-	-	12	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	21.6	82.7	16.0	33.1	202.2	3.4	189.7	2.9	(D)	(Z)	7	5	63
3451	SCREW MACHINE PRODUCTS	5.1	22.9	3.3	6.6	49.6	.9	(D)	(D)	(D)	(Z)	22	(X)	1
3452	BOLTS, NUTS, RIVETS, WASHERS	16.5	59.8	12.7	26.5	152.6	2.5	(D)	(D)	(D)	(Z)	6	(X)	98
346	METAL FORGINGS AND STAMPINGS	106.0	345.0	85.0	169.4	1,585.3	25.3	926.1	13.8	202.3	7.0	4	4	1
3462	IRON AND STEEL FORGINGS	47.9	125.4	43.4	87.9	1,056.5	16.9	440.6	6.6	(D)	(D)	6	6	(X)
3463	NONFERROUS FORGINGS	5.7	15.8	4.9	8.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3465	AUTOMOTIVE STAMPINGS	31.3	125.9	20.5	40.7	267.2	4.2	277.8	4.1	123.9	4.9	4	3	1
3466	CROWNS AND CLOSURES	2.5	8.7	1.9	4.0	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
3469	METAL STAMPINGS, NEC	18.7	69.2	14.2	28.0	218.7	3.5	(D)	(D)	(D)	(D)	8	(X)	(X)
347	METAL SERVICES, NEC	42.9	131.2	34.3	65.4	388.5	6.7	251.3	3.7	26.6	.9	22	26	7
3471	PLATING AND POLISHING	23.9	82.2	18.7	35.6	334.4	5.8	175.8	2.6	-	-	24	31	(X)
3479	METAL COATING, ALLIED SERVICES	19.0	49.0	15.6	29.8	54.1	.9	75.5	1.1	26.6	.9	37	44	7
348	ORDNANCE AND ACCESSORIES, NEC	19.0	60.7	14.8	28.0	367.5	5.7	588.6	7.9	(D)	(D)	3	1	(X)
3482	SMALL ARMS AMMUNITION	3.7	11.0	3.1	5.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3483	AMMUNITION, EXC. SMALL ARMS NEC	7.1	21.7	5.9	12.5	283.7	4.4	186.8	2.4	(D)	(D)	1	1	(X)
3484	SMALL ARMS	2.1	9.5	1.4	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3489	ORDNANCE AND ACCESSORIES NEC	6.1	18.5	4.4	6.3	29.4	.4	(D)	(D)	-	-	1	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	52.5	197.6	37.7	75.7	618.9	10.2	237.0	3.5	33.8	1.1	9	13	4
3493	STEEL SPRINGS, EXCEPT WIRE	5.3	13.7	4.7	9.2	94.8	1.6	(D)	(D)	-	-	36	(X)	(X)
3494	VALVES AND PIPE FITTINGS	19.5	78.5	13.4	27.3	223.7	3.6	62.4	.9	31.7	1.0	3	3	1
3495	WIRE SPRINGS	2.6	11.2	1.9	4.1	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
3496	MISC. FABRICATED WIRE PRODUCTS	5.0	19.6	3.6	7.1	72.9	1.2	54.2	.8	(D)	(D)	39	31	(X)
3497	METAL FOIL AND LEAF	3.3	14.0	2.0	4.0	38.0	.6	(D)	(D)	(D)	(D)	10	(X)	(X)
3498	FABRICATED PIPE AND FITTINGS	4.7	17.6	3.6	7.4	57.0	1.0	(D)	(D)	(D)	(Z)	14	(X)	1
3499	FABRICATED METAL PRODUCTS, NEC	12.1	43.0	8.6	16.6	118.8	2.0	(D)	(D)	-	-	21	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	339.6	1,268.0	242.5	471.7	3,434.2	57.0	3,432.7	50.6	704.7	22.3	3	2	1
351	ENGINES AND TURBINES	31.1	112.2	23.1	49.4	610.2	10.0	884.3	13.4	(D)	(D)	1	1	(X)
3511	TURBINES, TURB. GENERATOR SETS	8.7	34.7	6.6	15.9	129.9	2.2	649.0	10.0	-	-	1	1	(X)
3519	INTERNAL COMBUS. ENGINES, NEC	22.4	77.5	16.5	33.5	480.3	7.8	235.3	3.4	(D)	(D)	1	3	(X)
352	FARM AND GARDEN MACHINERY	39.0	115.2	31.9	59.3	317.0	5.0	202.6	2.9	157.3	4.5	6	15	1
3523	FARM MACHINERY AND EQUIPMENT	35.7	103.8	29.4	54.8	309.8	4.9	187.6	2.7	157.3	4.5	6	16	1
3524	LAWN AND GARDEN EQUIPMENT	3.4	11.4	2.5	4.5	7.2	.1	15.0	.2	-	-	1	1	(X)
353	CONSTRUCTION, RELATED MACHINERY	67.2	221.2	49.9	89.9	509.5	8.2	325.3	4.8	(D)	(D)	4	3	(X)
3531	CONSTRUCTION MACHINERY	38.7	119.8	29.7	50.7	253.1	4.2	146.8	2.1	249.2	7.5	6	2	1
3532	MINING MACHINERY	4.8	16.5	3.4	5.6	13.3	.2	(D)	(D)	(D)	(D)	22	(X)	(X)
3533	OILFIELD MACHINERY	11.8	39.9	7.9	15.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
3534	ELEVATORS AND MOVING STAIRWAYS	1.4	5.9	1.1	2.2	27.4	.3	(D)	(D)	-	-	5	(X)	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
33	PRIMARY METAL INDUSTRIES--CON.												
333	PRIMARY NONFERROUS METALS--CON.												
3334	PRIMARY ALUMINUM	-	-	(D)	(D)	2.0	.1	64,760.8	604.0	5,497.7	297.1	541.8	(X)
3339	PRIMARY NONFERROUS METALS, NEC	(D)	(D)	10.8	16.5	.4	.9	3,398.7	53.2	(S)	36.0	99.8	1
3341	SECONDARY NONFERROUS METALS	55.1	6.7	20.1	34.0	3.1	7.2	803.0	22.6	(D)	36.7	76.1	6
335	NONFERROUS ROLLING AND DRAWING	-	-	88.2	157.8	(D)	(S)	11,265.6	262.6	(S)	155.5	405.0	1
3351	COPPER ROLLING AND DRAWING	-	-	11.6	23.8	(S)	(D)	2,018.6	58.4	(D)	24.5	80.7	1
3353	ALUMINUM SHEET, PLATE, AND FOIL	-	-	45.1	75.7	(D)	(S)	3,890.7	66.2	(S)	67.4	133.4	1
3354	ALUMINUM EXTRUDED PRODUCTS	-	-	12.9	23.0	2.6	1.6	1,203.9	32.7	(S)	19.2	49.0	2
3355	ALUMINUM ROLLING, DRAWING, NEC	-	-	4.0	8.0	(D)	.3	297.1	4.9	-	8.1	17.4	2
3356	NONFER. ROLLING, DRAWING, NEC	-	-	5.5	10.5	1.6	3.3	1,099.8	23.3	(D)	12.7	36.0	2
3357	NONFER. WIREDRAWING, INSULATING	-	-	9.2	16.8	(D)	(D)	2,755.6	77.2	(D)	23.6	88.5	3
336	NONFERROUS FOUNDRIES	(D)	(D)	26.0	48.2	(D)	5.5	2,124.4	57.8	(D)	40.5	105.0	5
3361	ALUMINUM FOUNDRIES	(D)	(D)	20.7	37.9	2.2	(D)	1,406.5	35.8	(D)	29.0	70.3	6
3362	BRASS, BRONZE, COPPER FOUNDRIES	-	-	1.6	3.1	(D)	1.6	311.8	9.5	(S)	4.6	14.7	15
3369	NONFERROUS FOUNDRIES, NEC	-	-	3.7	7.2	(D)	(D)	406.1	12.5	(D)	7.0	19.9	11
339	MISC. PRIMARY METAL PRODUCTS	-	-	13.9	26.7	(D)	(S)	1,433.2	38.7	-	35.0	86.6	15
3398	METAL HEAT TREATING	-	-	11.6	22.2	3.8	7.9	855.2	23.0	-	22.8	50.7	18
3399	PRIMARY METAL PRODUCTS, NEC	-	-	(S)	(S)	(D)	3.4	578.0	15.7	-	12.2	35.9	(X)
34	FABRICATED METAL PRODUCTS	63.4	7.9	184.3	348.7	45.7	59.1	26,386.7	745.4	(S)	382.6	1,128.7	2
341	METAL CANS, SHIPPING CONTAINERS	-	-	22.3	44.0	6.7	(D)	2,190.6	60.9	(Z)	36.5	99.2	1
3411	METAL CANS	-	-	19.3	38.1	(D)	(D)	1,961.8	53.3	(Z)	31.4	85.4	1
3412	METAL BARRELS, DRUMS, AND PAILS	-	-	3.0	5.8	(D)	(D)	228.9	7.5	(Z)	5.1	13.7	3
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	12.3	23.9	1.6	3.2	2,260.5	68.7	(D)	31.2	99.6	4
3421	CUTLERY	-	-	.9	1.9	(Z)	(S)	146.5	5.4	(D)	2.6	9.4	20
3423	HAND AND EDGE TOOLS, NEC	-	-	5.0	9.2	.5	1.6	601.5	18.7	-	8.9	25.9	6
3425	HANDSAWS AND SAW BLADES	-	-	(S)	(S)	(S)	(S)	142.7	3.9	-	1.0	4.3	(X)
3429	HARDWARE, NEC	-	-	5.8	11.5	.9	1.3	1,369.8	40.7	(Z)	18.7	60.0	3
343	PLUMBING, HEATING, EXCEPT ELEC	33.9	4.4	5.6	9.7	(D)	(D)	804.7	22.4	11.4	14.0	39.3	4
3431	METAL SANITARY WARE	(D)	(D)	2.9	4.7	.7	.3	226.1	5.7	(D)	5.8	13.3	5
3432	PLUMBING FITTINGS, BRASS GOODS	-	-	1.2	2.2	(D)	(D)	313.2	8.7	(D)	3.7	12.5	6
3433	HEATING EQUIP., EXCEPT ELECTRIC	(D)	(D)	1.5	2.8	.2	(D)	265.5	7.9	(S)	4.5	13.5	7
344	FABRICATED STRUC. METAL PRODS.	(D)	(D)	28.3	51.4	12.2	(D)	5,264.8	147.9	2.7	67.2	209.5	2
3441	FABRICATED STRUCTURAL METAL	(D)	(Z)	4.7	8.6	4.7	(D)	1,138.2	32.3	(D)	14.6	48.2	6
3442	METAL DOORS, SASH, AND TRIM	-	-	3.1	5.6	.8	3.6	574.8	16.9	(D)	8.0	25.7	6
3443	FABR. PLATEWORK, BOILER SHOPS	(D)	(D)	10.6	19.1	(D)	4.7	1,808.8	49.4	(D)	22.3	65.7	3
3444	SHEET METALWORK	-	-	6.4	11.2	(D)	(D)	714.4	20.1	(D)	12.6	34.7	4
3446	ARCHITECTURAL METALWORK	(D)	(Z)	.9	1.7	(D)	1.4	227.6	6.7	.1	2.7	9.9	9
3448	PREFABRICATED METAL BUILDINGS	(Z)	(Z)	1.1	2.0	.8	(D)	358.2	9.4	-	2.8	10.2	2
3449	MISCELLANEOUS METALWORK	-	-	1.7	3.1	(D)	.7	442.7	13.0	(S)	4.2	15.3	3
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	10.0	20.5	(D)	(D)	1,627.9	49.6	(D)	20.2	67.0	3
3451	SCREW MACHINE PRODUCTS	-	-	1.5	3.0	(D)	(D)	536.5	16.3	(D)	4.7	18.0	11
3452	BOLTS, NUTS, RIVETS, WASHERS	-	-	8.5	17.6	(D)	2.7	1,091.3	33.3	(D)	15.5	49.0	3
346	METAL FORGINGS AND STAMPINGS	(D)	(D)	54.0	104.7	10.7	(D)	6,162.5	175.6	(S)	100.4	275.6	3
3462	IRON AND STEEL FORGINGS	(D)	(D)	30.4	58.6	1.4	(D)	1,295.0	37.5	(D)	44.1	90.9	5
3463	NONFERROUS FORGINGS	-	-	(S)	(S)	(S)	(S)	225.5	7.0	-	5.9	13.6	(X)
3465	AUTOMOTIVE STAMPINGS	-	-	10.0	19.6	7.4	.4	3,154.5	85.3	(D)	31.6	111.5	4
3466	CROWNS AND CLOSURES	-	-	1.4	2.9	.1	.2	164.2	4.7	(D)	2.6	7.3	2
3469	METAL STAMPINGS, NEC	-	-	8.6	16.6	1.8	3.9	1,323.3	41.2	(S)	16.3	52.3	9
347	METAL SERVICES, NEC	-	-	22.3	41.1	(D)	(D)	2,529.8	65.7	(D)	39.3	111.4	7
3471	PLATING AND POLISHING	-	-	10.7	18.6	(D)	(D)	1,535.7	46.6	-	22.8	70.9	10
3479	METAL COATING, ALLIED SERVICES	-	-	11.6	22.4	3.0	1.5	994.1	19.1	(D)	16.5	40.5	10
348	ORDNANCE AND ACCESSORIES, NEC	-	-	6.6	10.2	2.9	(D)	1,218.7	32.7	(S)	20.8	55.2	1
3482	SMALL ARMS AMMUNITION	-	-	.9	1.2	(D)	.1	194.8	5.2	(D)	4.1	9.9	1
3483	AMMUNITION, EXC. SMALL ARMS NEC	-	-	2.1	4.0	(D)	.4	334.2	9.2	(D)	8.6	22.7	1
3484	SMALL ARMS	-	-	.5	1.1	(D)	.2	199.4	6.1	(D)	2.0	8.7	2
3489	ORDNANCE AND ACCESSORIES NEC	-	-	3.1	3.8	(Z)	(D)	490.3	12.2	(D)	6.1	13.9	2
349	MISC. FABRICATED METAL PRODUCTS	25.1	3.0	22.8	43.3	5.1	9.6	4,327.3	121.9	(S)	53.0	171.9	3
3493	STEEL SPRINGS, EXCEPT WIRE	-	-	3.8	7.0	1.1	(D)	168.5	4.5	(D)	4.8	12.4	8
3494	VALVES AND PIPE FITTINGS	(D)	(D)	9.0	17.0	1.1	(D)	1,786.4	51.3	(D)	19.3	64.8	5
3495	WIRE SPRINGS	-	-	(S)	(S)	(S)	(S)	202.6	7.0	-	2.4	8.2	(X)
3496	MISC. FABRICATED WIRE PRODUCTS	-	-	1.3	2.4	.2	(D)	394.1	12.5	-	4.6	15.7	10
3497	METAL FOIL AND LEAF	-	-	1.2	2.2	.4	(D)	398.0	10.0	-	2.5	9.6	5
3498	FABRICATED PIPE AND FITTINGS	-	-	2.1	4.2	1.3	(D)	341.3	10.2	-	4.1	13.7	9
3499	FABRICATED METAL PRODUCTS, NEC	(D)	(D)	3.8	7.0	.6	6.3	1,036.4	26.4	(D)	15.2	47.6	6
35	MACHINERY, EXCEPT ELECTRIC	109.2	14.6	127.9	234.7	36.5	56.0	28,441.4	796.4	199.7	339.3	1,098.9	1
351	ENGINES AND TURBINES	(D)	(D)	10.5	20.0	(D)	.4	2,351.7	62.8	79.5	30.2	95.7	1
3511	TURBINES, TURB. GENERATOR SETS	-	-	1.4	3.0	(D)	(D)	629.5	18.8	(D)	9.5	33.3	1
3519	INTERNAL COMBUS. ENGINES, NEC	(D)	(D)	9.1	17.0	(D)	(D)	1,722.1	44.0	(D)	20.7	62.3	1
352	FARM AND GARDEN MACHINERY	61.0	8.3	17.2	27.8	6.4	4.4	2,090.3	55.9	(D)	37.5	93.7	2
3523	FARM MACHINERY AND EQUIPMENT	61.0	8.3	15.4	24.7	5.7	4.0	1,840.3	49.1	(D)	34.0	83.8	2
3524	LAWN AND GARDEN EQUIPMENT	-	-	1.8	3.1	.7	.4	250.0	6.9	-	3.5	10.0	3
353	CONSTRUCTION, RELATED MACHINERY	(D)	(D)	29.5	53.0	6.3	8.1	5,069.0	131.4	48.9	68.1	187.4	1
3531	CONSTRUCTION MACHINERY	(D)	(D)	16.7	28.9	3.8	(D)	2,637.6	69.1	(D)	35.5	94.8	1
3532	MINING MACHINERY	-	-	2.1	3.2	.3	.9	404.6	11.0	(Z)	5.0	14.8	7
3533	OILFIELD MACHINERY	(D)	(D)	6.8	13.6	(D)	1.2	1,149.1	24.4	(S)	15.9	39.8	2
3534	ELEVATORS AND MOVING STAIRWAYS	-	-	.4	.8	(D)	(D)	102.9	3.8	-	1.4	5.2	7

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
35	MACHINERY, EXCEPT ELECTRIC--CON.													
353	CONSTRUCTION, RELATED MACHINERY--CON.													
3535	CONVEYORS AND CONVEYING EQUIP.	3.6	13.6	2.7	5.3	43.9	.7	18.1	.3	(D)	(D)	8	2	(X)
3536	HOISTS, CRANES, AND MONORAILS.	1.9	7.5	1.4	2.8	(D)	(D)	21.7	.3	(D)	(D)	(X)	23	(X)
3537	INDUSTRIAL TRUCKS AND TRACTORS	4.9	18.0	3.7	7.9	143.9	2.3	(D)	(D)	(D)	(Z)	4	(X)	59
354	METALWORKING MACHINERY	38.8	163.3	26.0	51.8	324.4	5.4	328.5	4.8	60.2	2.3	10	6	3
3541	MACHINE TOOLS, METAL-CUTTING	8.7	34.9	6.3	12.6	56.2	.9	133.9	2.0	56.0	2.2	11	11	1
3542	MACHINE TOOLS, METAL-FORMING	2.9	12.6	2.0	4.4	35.1	.6	32.0	.5	(Z)	(Z)	17	35	87
3544	SPECIAL DIES, TOOLS, JIGS, ETC	12.7	53.9	8.6	16.3	98.9	1.7	21.6	.3	(D)	(D)	29	24	(X)
3545	MACHINE TOOL ACCESSORIES	6.3	31.1	3.8	7.7	57.8	.9	51.2	.8	-	-	10	2	(X)
3546	POWER DRIVEN HANDTOOLS	3.5	12.9	1.7	3.5	15.8	.2	81.5	1.1	-	-	1	1	(X)
3547	ROLLING MILL MACHINERY	2.6	9.0	2.2	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3549	METALWORKING MACHINERY, NEC.	2.0	8.8	1.4	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	22.3	94.6	15.4	33.0	363.5	6.3	374.7	5.6	5.2	.2	12	4	44
3551	FOOD PRODUCTS MACHINERY.	3.9	16.2	2.8	5.7	59.6	1.0	(D)	(D)	(D)	(D)	14	(X)	(X)
3552	TEXTILE MACHINERY.	3.4	14.8	2.2	5.5	61.6	1.2	94.2	1.3	-	-	50	1	(X)
3553	WOODWORKING MACHINERY.	1.4	4.5	1.0	1.5	5.8	.1	(D)	(D)	-	-	52	(X)	(X)
3554	PAPER INDUSTRIES MACHINERY	1.8	8.7	1.2	2.9	48.3	.8	(D)	(D)	-	-	17	(X)	(X)
3555	PRINTING TRADES MACHINERY.	2.5	12.2	1.6	3.7	41.3	.7	(D)	(D)	-	-	12	(X)	(X)
3559	SPECIAL INDUSTRY MACHINERY, NEC.	9.3	38.3	6.6	13.6	146.8	2.5	169.4	2.4	(D)	(D)	15	6	(X)
356	GENERAL INDUSTRIAL MACHINERY	53.8	207.2	38.3	78.2	565.5	9.5	580.7	8.2	45.0	1.7	4	2	5
3561	PUMPS AND PUMPING EQUIPMENT.	8.3	37.0	5.2	10.9	104.3	1.8	81.1	1.2	-	-	5	3	(X)
3562	BALL AND ROLLER BEARINGS	16.3	58.0	11.9	24.5	94.8	1.5	(D)	(D)	(D)	(D)	10	(X)	(X)
3563	AIR AND GAS COMPRESSORS.	5.5	19.9	4.1	8.8	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
3564	BLOWERS AND FANS	3.6	14.1	2.7	5.4	28.1	.5	40.6	.6	(D)	(Z)	6	8	1
3565	INDUSTRIAL PATTERNS.	1.1	3.3	.8	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
3566	SPEED CHANGERS, DRIVES, GEARS.	4.7	17.2	3.4	6.6	40.7	.7	25.3	.4	(D)	(Z)	10	17	1
3567	INDUSTRIAL FURNACES AND OVENS.	1.6	6.9	1.1	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3568	POWER TRANSMISSION EQUIP., NEC	7.4	26.3	5.5	10.7	53.0	.9	13.7	.2	(D)	(D)	1	4	(X)
3569	GEN'L INDUSTRIAL MACHINERY, NEC.	5.5	24.4	3.7	7.8	90.7	1.5	41.3	.6	(D)	(D)	14	1	(X)
357	OFFICE AND COMPUTING MACHINES.	19.8	105.7	10.3	21.2	266.5	4.4	161.9	2.3	(D)	(D)	2	7	(X)
3573	ELECTRONIC COMPUTING EQUIPMENT	13.2	75.9	5.9	11.7	84.6	1.4	134.3	1.9	-	-	3	8	(X)
3574	CALCULATING, ACCOUNTING MACHINES.	1.4	6.4	.8	1.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
3576	SCALES, BALANCES, EXCEPT LAB	.6	2.9	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3579	OFF. MACHINES, TYPEWRITERS, ETC.	4.6	20.4	3.1	6.9	113.4	1.9	(D)	(D)	(D)	(D)	2	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	36.9	127.2	27.2	51.5	280.4	4.6	496.8	7.3	84.6	2.6	4	1	2
3581	AUTOMATIC MERCHANDISING MACHINES.	1.1	3.9	.8	1.6	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	69
3582	COMMERCIAL LAUNDRY EQUIPMENT	.5	1.9	.3	.8	(D)	(D)	(D)	(Z)	-	-	(X)	66	(X)
3585	REFRIGERATION, HEATING EQUIP	31.5	106.4	23.2	43.6	219.1	3.6	471.8	6.9	(D)	(D)	4	1	(X)
3586	MEASURING AND DISPENSING PUMPS	1.0	3.8	.8	1.5	8.1	.1	(D)	(D)	-	-	1	(X)	(X)
3589	SERVICE INDUSTRY MACHINERY, NEC.	2.8	11.1	2.1	4.0	43.0	.7	5.2	.1	(D)	(D)	16	46	(X)
359	MISC. MACHINERY, EXC. ELEC	30.6	121.5	20.4	37.5	197.1	3.5	77.9	1.2	(D)	(D)	24	22	(X)
3592	CARBURETORS, PISTONS, RINGS ETC.	7.8	29.7	5.1	8.7	45.8	.7	(D)	(D)	(D)	(D)	3	(X)	(X)
3599	MACHINERY, EXC. ELECTRICAL, NEC.	22.8	91.8	15.4	28.8	151.4	2.7	(D)	(D)	(D)	(D)	31	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	249.3	986.7	164.1	317.3	2,763.1	44.2	2,422.4	35.2	547.6	17.0	2	1	1
361	ELECTRIC DISTRIBUTING EQUIPMENT.	15.9	61.4	10.9	21.3	184.1	3.0	347.1	4.9	(D)	(D)	1	1	(X)
3612	TRANSFORMERS	9.0	29.9	6.5	11.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	6.9	31.5	4.4	9.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	42.6	150.9	27.9	55.9	580.6	9.2	231.1	3.2	19.2	.7	2	3	11
3621	MOTORS AND GENERATORS.	15.9	58.1	11.0	21.2	130.0	2.1	89.8	1.2	(D)	(D)	2	7	(X)
3622	INDUSTRIAL CONTROLS.	4.9	21.4	3.0	5.7	75.4	1.0	35.3	.5	-	-	4	1	(X)
3623	WELDING APPARATUS, ELECTRIC.	3.4	12.9	2.5	5.1	59.6	1.0	(D)	(D)	(D)	(D)	3	(X)	(X)
3624	CARBON AND GRAPHITE PRODUCTS	16.3	50.0	9.9	21.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	2.1	8.5	1.4	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	41.7	125.8	32.5	59.4	311.6	4.9	235.0	3.4	162.9	5.2	3	1	1
3631	HOUSEHOLD COOKING EQUIPMENT.	6.5	19.2	5.1	9.4	42.1	.7	(D)	(D)	(D)	(D)	16	(X)	(X)
3632	HSEHOLD REFRIGERATORS, FREEZERS.	12.1	32.5	9.8	17.3	17.8	.3	(D)	(D)	(D)	(D)	26	(X)	(X)
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	8.0	23.6	6.2	11.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3634	ELECTRIC HOUSEWARES AND FANS	6.5	24.8	4.4	8.6	59.1	.9	(D)	(D)	(D)	(Z)	3	(X)	73
3635	HOUSEHOLD VACUUM CLEANERS.	1.5	5.7	1.0	1.9	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
3636	SEWING MACHINES.	.9	4.2	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3639	HOUSEHOLD APPLIANCES, NEC.	6.2	15.7	5.3	9.7	(S)	(S)	(D)	(Z)	(D)	(D)	(X)	48	(X)
364	ELEC. LIGHTING, WIRING EQUIP	29.0	109.4	21.0	41.4	380.1	6.0	262.2	3.9	91.2	2.6	12	2	1
3641	ELECTRIC LAMPS	6.0	22.8	4.3	9.0	51.9	.8	66.7	1.0	-	-	1	1	(X)
3643	CURRENT-CARRYING WIRING DEVICES.	4.1	21.2	2.5	5.6	73.0	1.1	83.5	1.3	-	-	3	1	(X)
3644	NONCUR.-CARRYING WIRING DIVICES	6.0	24.2	4.4	9.6	127.7	2.1	(D)	(D)	(D)	(D)	32	(X)	(X)
3645	RESIDENTIAL LIGHTING FIXTURES.	3.6	11.7	2.9	5.7	(D)	(D)	8.3	.1	(D)	(Z)	(X)	1	76
3646	COMMERCIAL LIGHTING FIXTURES.	2.8	9.2	2.3	4.4	15.4	.3	(D)	(D)	-	-	13	(X)	(X)
3647	VEHICULAR LIGHTING EQUIPMENT	4.3	12.4	3.1	4.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3648	LIGHTING EQUIPMENT, NEC.	2.1	8.1	1.5	3.1	39.3	.5	(D)	(D)	-	-	5	(X)	(X)
365	RADIO, TV RECEIVING EQUIPMENT.	11.2	41.9	8.0	16.1	271.4	4.5	55.0	.9	(D)	(D)	4	1	(X)
3651	RADIO AND TV RECEIVING SETS.	5.6	24.0	3.5	6.6	51.1	.8	33.1	.6	(D)	(D)	17	1	(X)
3652	PHONO RECORDS, PRERECORDED TAPE.	5.6	17.9	4.5	9.5	220.3	3.6	21.9	.3	-	-	1	1	(X)
366	COMMUNICATION EQUIPMENT.	37.7	173.8	21.9	42.0	473.5	7.6	346.5	5.1	68.2	2.1	4	1	1
3661	TELEPHONE, TELEGRAPH APPARATUS	14.8	50.7	10.6	19.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3662	RADIO, TV COMMUNICATION EQUIP.	22.9	123.1	11.4	22.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	44.6	217.3	24.1	48.6	279.2	4.6	795.5	11.6	(D)	(D)	6	1	(X)
3671	ELECTRON TUBES, RECEIVING TYPE	7.7	30.3	4.8	9.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3674	SEMICONDUCTORS, RELATED DEVICES.	15.6	82.6	7.2	14.4	38.4	.6	261.6	3.5	-	-	3	1	(X)
3675	ELECTRONIC CAPACITORS.	3.3	16.5	1.7	3.6	38.5	.6	(D)	(D)	(D)	(Z)	1	(X)	96
3676	ELECTRONIC RESISTORS	1.8	8.8	.9	1.7	16.6	.3	(D)	(D)	-	-	13	(X)	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
35	MACHINERY, EXCEPT ELECTRIC--CON.												
353	CONSTRUCTION, RELATED MACHINERY--CON.												
3535	CONVEYORS AND CONVEYING EQUIP.	-	-	1.5	2.9	.2	(D)	267.0	8.3	-	3.2	11.2	12
3536	HOISTS, CRANES, AND MONORAILS.	(D)	(Z)	.8	1.4	.1	.6	148.8	4.7	-	2.5	7.7	7
3537	INDUSTRIAL TRUCKS AND TRACTORS	-	-	1.2	2.2	1.3	(D)	359.0	10.1	-	4.6	13.9	7
354	METALWORKING MACHINERY	(D)	(D)	12.6	24.8	(D)	10.1	3,736.1	111.5	(S)	40.9	150.3	4
3541	MACHINE TOOLS, METAL-CUTTING	-	-	2.3	4.9	(D)	(D)	701.2	22.4	-	9.0	31.1	6
3542	MACHINE TOOLS, METAL-FORMING	(D)	(D)	1.3	2.8	(D)	.1	269.6	8.2	-	3.7	12.6	6
3544	SPECIAL DIES, TOOLS, JIGS, ETC	-	-	4.1	7.4	(D)	4.8	1,190.4	37.6	(D)	13.2	51.6	10
3545	MACHINE TOOL ACCESSORIES	-	-	1.7	3.4	.3	2.3	741.6	23.4	(S)	5.5	24.9	5
3546	POWER DRIVEN HANDTOOLS	-	-	.9	1.8	(D)	(D)	510.5	9.4	-	2.5	10.3	8
3547	ROLLING MILL MACHINERY	-	-	1.6	3.2	(D)	(D)	139.9	4.5	-	4.1	10.6	1
3549	METALWORKING MACHINERY, NEC.	-	-	.7	1.4	(D)	.6	182.9	6.1	(D)	2.8	9.2	14
355	SPECIAL INDUSTRY MACHINERY	(D)	(D)	7.6	14.6	(D)	3.8	2,013.2	61.7	15.2	23.9	88.9	6
3551	FOOD PRODUCTS MACHINERY.	(D)	(D)	1.0	2.0	.3	1.6	333.3	10.5	(D)	4.0	14.3	8
3552	TEXTILE MACHINERY.	(D)	(D)	.9	1.9	.2	(D)	341.6	9.3	-	3.5	13.7	12
3553	WOODWORKING MACHINERY.	-	-	.9	1.3	.2	(D)	121.7	2.9	-	1.6	5.6	41
3554	PAPER INDUSTRIES MACHINERY	(D)	(D)	.5	1.2	.2	(D)	164.1	5.8	-	2.1	8.7	7
3555	PRINTING TRADES MACHINERY.	-	-	.6	1.4	(D)	.8	252.4	8.5	-	3.1	11.5	14
3559	SPECIAL INDUSTRY MACHINERY, NEC.	(Z)	(Z)	3.6	6.9	.5	(D)	800.0	24.6	(D)	9.6	35.1	8
356	GENERAL INDUSTRIAL MACHINERY	15.1	1.9	22.6	44.1	6.5	6.2	4,551.6	129.0	(S)	50.5	170.1	2
3561	PUMPS AND PUMPING EQUIPMENT.	4.3	.5	2.8	5.2	1.2	1.0	898.3	26.1	(D)	8.3	30.5	4
3562	BALL AND ROLLER BEARINGS	-	-	7.7	15.9	2.1	.4	1,286.1	33.6	(S)	15.7	49.2	1
3563	AIR AND GAS COMPRESSORS.	(D)	(D)	1.9	3.4	.8	(S)	410.9	11.1	(D)	4.9	15.6	4
3564	BLOWERS AND FANS	-	-	1.4	2.8	(D)	1.1	260.3	8.8	(Z)	3.2	11.9	7
3565	INDUSTRIAL PATTERNS.	-	-	.6	.9	(D)	.1	82.6	2.2	-	1.1	3.9	34
3566	SPEED CHANGERS, DRIVES, GEARS.	(D)	(D)	2.3	4.4	(D)	.5	383.1	10.5	(Z)	4.7	14.5	11
3567	INDUSTRIAL FURNACES AND OVENS.	(Z)	(Z)	(S)	(S)	(Z)	(S)	143.4	4.6	-	1.4	5.5	(X)
3568	POWER TRANSMISSION EQUIP., NEC	(D)	(D)	3.5	6.7	.7	1.2	575.2	15.6	(D)	6.2	20.1	1
3569	GEN'L INDUSTRIAL MACHINERY, NEC.	(D)	(Z)	1.6	3.1	(D)	1.7	511.6	16.6	(D)	5.0	19.0	8
357	OFFICE AND COMPUTING MACHINES.	-	-	5.4	10.5	(D)	(D)	2,801.8	84.4	(S)	20.4	92.2	2
3573	ELECTRONIC COMPUTING EQUIPMENT	-	-	2.9	5.5	.4	2.5	2,126.7	64.3	(D)	13.5	66.4	3
3574	CALCULATING, ACCOUNTING MACHINES.	-	-	(D)	(D)	-	(S)	186.1	4.8	(D)	2.1	7.9	(X)
3576	SCALES, BALANCES, EXCEPT LAB	-	-	(S)	(S)	(S)	(S)	52.9	1.8	-	.6	2.5	(X)
3579	OFF. MACHINES, TYPEWRITERS, ETC.	-	-	(D)	(D)	.3	.2	436.1	13.6	-	4.1	15.5	(X)
358	REFRIGERATION AND SERVICE MACH	(D)	(D)	12.5	22.8	4.1	(D)	2,840.8	75.6	(D)	39.0	112.1	2
3581	AUTOMATIC MERCHANDISING MACHINES.	-	-	.5	.9	(Z)	(D)	66.9	2.3	-	1.1	3.7	7
3582	COMMERCIAL LAUNDRY EQUIPMENT	(D)	(D)	.3	.6	-	(Z)	41.5	1.1	-	.5	1.5	2
3585	REFRIGERATION, HEATING EQUIP	(D)	(D)	10.2	18.5	4.0	7.8	2,440.8	62.8	(D)	33.4	94.2	1
3586	MEASURING AND DISPENSING PUMPS	-	-	.5	.8	.1	(D)	73.9	2.3	-	1.1	3.4	4
3589	SERVICE INDUSTRY MACHINERY, NEC.	-	-	1.0	1.9	.1	(D)	217.8	7.1	(S)	2.9	9.3	9
359	MISC. MACHINERY, EXC. ELEC	(D)	(D)	10.1	17.1	3.9	10.5	2,987.0	84.0	(D)	28.8	108.4	6
3592	CARBURETORS, PISTONS, RINGS ETC.	(Z)	(Z)	3.2	5.2	1.2	.3	810.3	21.0	-	8.2	26.8	1
3599	MACHINERY, EXC. ELECTRICAL, NEC.	(D)	(D)	6.9	11.9	2.7	10.3	2,176.7	63.0	(D)	20.7	81.5	8
36	ELECTRIC, ELECTRONIC EQUIP	12.2	1.5	84.4	158.3	33.2	27.9	24,996.9	669.4	(S)	241.5	824.5	1
361	ELECTRIC DISTRIBUTING EQUIPMENT.	-	-	4.2	7.9	1.6	(D)	1,453.5	40.1	(D)	14.9	51.7	1
3612	TRANSFORMERS	-	-	2.4	4.4	.5	.9	734.9	18.1	-	8.3	25.2	2
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	-	-	1.8	3.5	1.1	(D)	718.6	22.0	(D)	6.5	26.5	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	17.1	32.7	8.2	1.9	4,313.9	95.0	(S)	44.5	135.6	2
3621	MOTORS AND GENERATORS.	-	-	6.2	11.0	(D)	.5	1,410.3	36.9	(D)	15.9	48.0	4
3622	INDUSTRIAL CONTROLS.	-	-	1.8	3.1	.3	.8	552.4	15.7	.4	5.7	21.9	3
3623	WELDING APPARATUS, ELECTRIC.	-	-	1.3	2.6	.9	.2	261.1	7.8	(D)	3.0	9.3	7
3624	CARBON AND GRAPHITE PRODUCTS	-	-	7.4	15.1	(D)	.3	1,895.9	28.9	-	17.9	47.4	1
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	-	-	.5	.9	(D)	.1	194.2	5.7	-	2.0	9.0	18
363	HOUSEHOLD APPLIANCES	(D)	(D)	17.8	32.3	(D)	2.0	2,713.0	66.3	(S)	38.1	100.8	1
3631	HOUSEHOLD COOKING EQUIPMENT.	(D)	(D)	3.6	6.5	.7	.2	393.1	9.7	.2	7.0	17.0	2
3632	HSEHOLD REFRIGERATORS, FREEZERS.	-	-	3.6	6.3	(D)	(S)	660.8	15.3	(S)	9.0	20.9	2
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	-	-	3.4	6.3	(D)	(S)	536.1	12.6	-	7.8	19.8	1
3634	ELECTRIC HOUSEWARES AND FANS	-	-	2.5	4.4	(D)	1.5	612.3	16.2	-	6.2	22.2	6
3635	HOUSEHOLD VACUUM CLEANERS.	-	-	(D)	(D)	-	(Z)	153.7	3.8	(Z)	1.7	5.6	(X)
3636	SEWING MACHINES.	-	-	(D)	(D)	(Z)	(Z)	85.2	2.7	.4	.9	3.6	(X)
3639	HOUSEHOLD APPLIANCES, NEC.	-	-	(S)	(S)	(D)	(S)	271.8	6.0	-	5.4	11.7	(X)
364	ELEC. LIGHTING, WIRING EQUIP	(D)	(D)	10.3	20.5	3.7	(D)	2,332.5	68.1	(S)	28.9	94.8	2
3641	ELECTRIC LAMPS	-	-	3.1	6.2	(D)	(D)	489.1	13.8	(S)	6.1	19.4	1
3643	CURRENT-CARRYING WIRING DEVICES.	-	-	.9	1.9	.7	.5	469.2	15.6	(S)	4.0	18.2	4
3644	NONCUR.-CARRYING WIRING DIVICES	(D)	(D)	2.2	4.4	1.1	(Z)	490.1	14.6	(S)	6.1	21.3	5
3645	RESIDENTIAL LIGHTING FIXTURES.	-	-	1.2	2.2	(D)	1.9	186.5	6.0	(D)	3.5	10.6	1
3646	COMMERCIAL LIGHTING FIXTURES	-	-	1.4	2.6	.5	.7	151.5	4.8	-	3.4	10.0	7
3647	VEHICULAR LIGHTING EQUIPMENT	-	-	.8	1.6	(D)	(D)	369.0	8.3	-	4.2	9.4	7
3648	LIGHTING EQUIPMENT, NEC.	-	-	.7	1.5	.4	(D)	177.1	5.0	-	1.5	5.8	10
365	RADIO, TV RECEIVING EQUIPMENT.	-	-	3.0	5.5	(D)	4.1	930.6	25.8	-	10.7	34.9	3
3651	RADIO AND TV RECEIVING SETS.	-	-	1.8	3.3	(D)	1.0	624.7	17.4	-	5.6	20.4	4
3652	PHONO RECORDS, PRERECORDED TAPE.	-	-	1.2	2.2	.2	3.1	305.9	8.4	-	5.1	14.5	5
366	COMMUNICATION EQUIPMENT.	-	-	12.0	21.7	1.8	3.7	4,626.7	131.8	37.0	36.7	150.8	2
3661	TELEPHONE, TELEGRAPH APPARATUS	-	-	6.8	12.4	.1	.8	1,241.9	31.5	(D)	14.5	41.8	1
3662	RADIO, TV COMMUNICATION EQUIP.	-	-	5.1	9.3	1.7	3.0	3,384.8	100.3	(D)	22.2	109.0	4
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	10.9	20.8	3.5	(D)	6,004.9	168.7	(S)	43.0	175.0	4
3671	ELECTRON TUBES, RECEIVING TYPE	-	-	2.6	5.0	(D)	.4	848.3	20.9	(S)	7.9	28.4	1
3674	SEMICONDUCTORS, RELATED DEVICES.	-	-	3.6	7.3	.6	2.4	2,465.5	68.3	-	14.2	59.7	2
3675	ELECTRONIC CAPACITORS.	-	-	.5	.9	(D)	.2	463.8	12.9	(D)	3.2	13.2	9
3676	ELECTRONIC RESISTORS	-	-	.6	1.1	.2	(D)	269.1	7.0	(D)	1.5	6.9	2

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
36	ELECTRIC, ELECTRONIC EQUIP--CON.													
367	ELECTRONIC COMPONENTS, ACCESS--CON.													
3677	ELECTRONIC COILS, TRANSFORMERS	1.0	4.7	.6	1.1	14.2	.2	(D)	(D)	(D)	(D)	31	(X)	(X)
3678	ELECTRONIC CONNECTORS	1.9	11.4	.9	2.0	16.8	.3	37.1	.5	-	-	5	1	(X)
3679	ELECTRONIC COMPONENTS, NEC	13.4	63.0	8.1	16.4	139.8	2.3	(D)	(D)	(D)	(Z)	10	(X)	58
369	MISC. ELEC. EQUIPMENT, SUPPLIES	26.6	106.2	17.7	32.6	282.7	4.4	150.1	2.2	(D)	(D)	1	4	(X)
3691	STORAGE BATTERIES	10.7	43.7	7.0	14.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3692	PRIMARY BATTERIES, DRY AND WET	1.4	6.3	.9	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3693	X-RAY APPARATUS AND TUBES	2.2	11.5	1.3	2.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3694	ENGINE ELECTRICAL EQUIPMENT	10.0	34.7	6.9	10.8	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3699	ELECTRIC EQUIP., SUPPLIES, NEC	2.3	9.9	1.6	3.2	29.4	.4	(D)	(D)	(D)	(Z)	11	(X)	1
37	TRANSPORTATION EQUIPMENT	389.9	1,402.6	284.2	553.5	2,856.2	45.3	5,594.0	80.1	1,842.9	62.3	2	1	1
371	MOTOR VEHICLES AND EQUIPMENT	264.4	913.1	198.6	389.3	1,229.5	19.3	2,938.3	42.3	1,511.6	53.6	3	1	1
3711	MOTOR VEHICLES AND CAR BODIES	116.8	384.2	91.4	179.5	519.8	7.7	1,450.6	20.9	672.8	24.8	1	1	1
3713	TRUCK AND BUS BODIES	5.4	20.0	4.2	9.1	79.5	1.4	(D)	(D)	(D)	(D)	27	(X)	(X)
3714	MOTOR VEHICLE PTS., ACCESSORIES	137.0	490.3	99.1	193.2	594.1	9.6	1,409.6	20.2	830.6	28.6	5	2	1
3715	TRUCK TRAILERS	3.2	12.1	2.3	4.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3716	MOTOR HOMES	2.0	6.4	1.6	3.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	63.9	256.1	41.5	83.8	737.1	11.5	(D)	(D)	(D)	(D)	1	(X)	(X)
3721	AIRCRAFT	28.2	113.1	18.2	35.4	361.3	5.6	(D)	(D)	(D)	(D)	1	(X)	(X)
3724	AIRCRAFT ENGINES, ENGINE PARTS	21.9	86.8	15.0	32.4	244.4	3.8	(D)	(D)	(D)	(D)	2	(X)	(X)
3728	AIRCRAFT EQUIPMENT, NEC	13.8	56.2	8.4	16.0	131.4	2.1	110.9	1.6	(D)	(D)	4	4	(X)
373	SHIP, BOAT BUILDING, REPAIRING	23.5	96.0	16.3	32.4	283.9	4.8	809.1	11.4	(D)	(D)	8	1	(X)
3731	SHIP BUILDING AND REPAIRING	19.0	80.8	12.7	25.5	239.5	4.0	(D)	(D)	(D)	(D)	5	(X)	(X)
3732	BOAT BUILDING AND REPAIRING	4.6	15.3	3.6	6.9	44.3	.7	(D)	(D)	-	-	40	(X)	(X)
3743	RAILROAD EQUIPMENT	15.3	41.4	12.8	20.4	318.6	5.1	(D)	(D)	(D)	(D)	2	(X)	(X)
3751	MOTORCYCLES, BICYCLES, PARTS	2.7	9.3	2.0	4.1	7.7	.1	79.5	1.1	-	-	26	1	(X)
376	GUIDED MISSILES, SPACE VEHICLES	12.7	62.6	7.0	12.6	133.5	2.1	201.1	2.6	19.7	.6	1	1	1
3761	GUIDED MISSILES, SPACE VEHICLES	7.7	42.8	3.6	6.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3764	SPACE PROPULSION UNITS, PARTS	4.4	16.4	3.1	5.9	120.4	1.9	176.6	2.3	(D)	(D)	1	1	(X)
3769	SPACE VEHICLE EQUIPMENT, NEC	.5	3.5	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC	7.4	24.1	5.9	11.0	145.8	2.3	11.3	.2	(D)	(D)	21	19	(X)
3792	TRAVEL TRAILERS AND CAMPERS	2.4	8.3	1.9	3.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3795	TANKS AND TANK COMPONENTS	3.6	11.1	2.9	5.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3799	TRANSPORTATION EQUIPMENT, NEC	1.4	4.7	1.1	2.1	45.2	.8	(D)	(D)	(D)	(Z)	63	(X)	1
38	INSTRUMENTS, RELATED PRODS	78.4	272.5	59.5	108.2	585.0	9.4	1,481.0	21.3	(D)	(D)	4	1	(X)
3811	ENGINEERING, SCIENTIFIC INSTRU	3.8	18.3	2.3	4.7	27.4	.5	44.4	.7	-	-	16	1	(X)
382	MEASURING, CONTROLLING DEVICES	15.7	74.2	9.4	19.2	120.6	1.9	228.2	3.2	-	-	4	2	(X)
3822	ENVIRONMENTAL CONTROLS	3.4	16.3	2.0	4.1	31.1	.5	(D)	(D)	-	-	1	(X)	(X)
3823	PROCESS CONTROL INSTRUMENTS	3.1	15.8	1.8	3.9	23.5	.4	(D)	(D)	-	-	19	(X)	(X)
3824	FLUID METERS, COUNTING DEVICES	1.6	7.0	1.0	2.0	4.2	.1	(D)	(D)	-	-	1	(X)	(X)
3825	INSTRU. TO MEASURE ELECTRICITY	5.5	23.8	3.3	6.4	29.8	.5	71.8	1.0	-	-	5	4	(X)
3829	MEASURING, CONTROLLING DEVICES NEC	2.2	11.3	1.4	2.7	32.0	.5	12.3	.2	-	-	1	6	(X)
3832	OPTICAL INSTRUMENTS AND LENSES	2.0	8.4	1.5	2.9	9.0	.1	44.2	.7	-	-	5	1	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	11.5	49.9	7.6	15.1	154.7	2.5	96.9	1.4	(D)	(D)	5	1	(X)
3841	SURGICAL, MEDICAL INSTRUMENTS	4.0	19.0	2.3	4.6	26.9	.5	(D)	(D)	-	-	1	(X)	(X)
3842	SURGICAL APPLIANCES, SUPPLIES	6.2	25.1	4.4	8.7	115.1	1.8	41.6	.6	(D)	(D)	4	1	(X)
3843	DENTAL EQUIPMENT AND SUPPLIES	1.3	5.8	.9	1.8	12.7	.2	(D)	(D)	-	-	45	(X)	(X)
3851	OPHTHALMIC GOODS	4.3	16.7	3.3	7.2	29.9	.5	(D)	(D)	-	-	9	(X)	(X)
3861	PHOTOGRAPHIC EQUIP., SUPPLIES	39.0	94.5	34.0	56.5	180.6	2.9	(D)	(D)	(D)	(D)	11	(X)	(X)
3873	WATCHES, CLOCKS, AND WATCHCASES	2.2	10.4	1.3	2.7	62.8	1.0	17.2	.3	(D)	(D)	1	8	(X)
39	MISC. MANUFACTURING INDUS.	49.1	199.9	35.0	73.2	758.3	12.5	837.5	12.4	(D)	(D)	7	5	(X)
391	JEWELRY, SILVER AND PLATED WARE	4.4	19.6	3.2	7.5	108.4	1.7	132.8	2.0	(D)	(D)	5	14	(X)
3911	JEWELRY, PRECIOUS METAL	1.8	9.1	1.1	2.4	17.9	.3	(D)	(D)	-	-	21	(X)	(X)
3914	SILVERWARE AND PLATED WARE	2.2	7.9	1.8	4.2	78.7	1.2	113.5	1.7	(D)	(D)	1	16	(X)
3915	JEWELERS' MATS., LAPIDARY WORK	.5	2.5	.4	.9	11.9	.2	(D)	(D)	-	-	21	(X)	(X)
3931	MUSICAL INSTRUMENTS	2.1	9.1	1.5	3.1	41.3	.7	33.6	.5	(D)	(D)	6	1	(X)
394	TOYS AND SPORTING GOODS	14.3	59.0	9.8	19.8	140.6	2.3	165.2	2.5	-	-	4	9	(X)
3942	DOLLS	.7	3.1	.5	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
3944	GAMES, TOYS, CHILD'S VEHICLES	5.6	27.3	3.5	7.4	(D)	(D)	62.5	.9	-	-	(X)	1	(X)
3949	SPORTING, ATHLETIC GOODS, NEC	8.0	28.6	5.9	11.3	46.7	.7	102.8	1.6	-	-	6	6	(X)
395	PENS, OFFICE AND ART GOODS	3.7	16.6	2.4	5.1	48.4	.8	85.0	1.2	(D)	(D)	16	14	(X)
3951	PENS AND MECHNICAL PENCILS	1.1	6.6	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3952	LEAD PENCILS AND ART GOODS	1.1	4.1	.8	1.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3953	MARKING DEVICES	.6	2.6	.4	.8	4.8	.1	(D)	(D)	-	-	41	(X)	(X)
3955	CARBON PAPER AND INKED RIBBONS	.9	3.5	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS	4.9	22.8	3.4	8.0	86.9	1.5	175.5	2.6	-	-	18	19	(X)
3961	COSTUME JEWELRY	1.6	7.7	1.2	2.9	37.9	.6	52.7	.8	-	-	1	1	(X)
3962	ARTIFICIAL FLOWERS	.5	1.8	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3963	BUTTONS	.4	2.0	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
3964	NEEDLES, PINS, AND FASTENERS	2.3	11.3	1.4	3.4	39.4	.7	79.8	1.2	-	-	28	12	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	H	N	O	P	Q	R	S	T	U	N
36	ELECTRIC, ELECTRONIC EQUIP--CON.												
367	ELECTRONIC COMPONENTS, ACCESS--CON.												
3677	ELECTRONIC COILS, TRANSFORMERS	-	-	.2	.3	.1	.4	129.7	3.6	-	1.3	4.6	13
3678	ELECTRONIC CONNECTORS	-	-	.4	.9	(D)	(D)	287.6	9.4	-	2.0	9.8	1
3679	ELECTRONIC COMPONENTS, NEC	-	-	2.9	5.2	(D)	4.2	1,540.9	46.6	(Z)	12.9	52.4	14
369	MISC. ELEC. EQUIPMENT, SUPPLIES	(D)	(D)	9.1	16.9	2.4	(D)	2,621.9	73.6	(D)	24.8	81.0	5
3691	STORAGE BATTERIES	(D)	(D)	4.7	8.6	1.9	(Z)	1,086.8	29.7	(S)	9.8	33.2	9
3692	PRIMARY BATTERIES, DRY AND WET	-	-	(S)	(S)	(D)	(S)	149.7	4.3	-	1.4	5.4	(X)
3693	X-RAY APPARATUS AND TUBES	-	-	.6	1.1	(Z)	(D)	264.2	8.9	.1	1.6	5.9	2
3694	ENGINE ELECTRICAL EQUIPMENT	-	-	2.8	5.2	.2	(D)	908.0	23.9	(D)	9.5	26.2	1
3699	ELECTRIC EQUIP., SUPPLIES, NEC	-	-	.5	1.1	(D)	1.0	213.1	6.8	-	2.5	10.3	10
37	TRANSPORTATION EQUIPMENT	209.1	28.1	137.6	262.0	55.4	20.3	30,985.1	849.1	(S)	385.0	1,195.8	1
371	MOTOR VEHICLES AND EQUIPMENT	(D)	(D)	101.2	196.7	(D)	10.2	19,281.7	523.8	(S)	259.4	767.0	1
3711	MOTOR VEHICLES AND CAR BODIES	(D)	(D)	47.3	93.0	(D)	1.1	7,445.4	204.8	(D)	119.3	330.3	1
3713	TRUCK AND BUS BODIES	-	-	1.9	4.1	1.2	1.4	365.4	10.9	(D)	5.5	17.5	8
3714	MOTOR VEHICLE PTS., ACCESSORIES	(D)	(D)	50.4	96.5	(D)	6.2	11,097.3	297.1	(D)	131.8	409.8	1
3715	TRUCK TRAILERS	-	-	1.2	2.1	.6	1.0	255.9	7.6	-	2.8	9.3	4
3716	MOTOR HOMES	-	-	.5	.9	(D)	.5	117.6	3.4	-	-	-	5
372	AIRCRAFT AND PARTS	-	-	19.6	36.7	9.5	(D)	6,547.6	172.3	(S)	62.4	218.7	1
3721	AIRCRAFT	-	-	10.2	18.2	3.3	(D)	2,925.5	77.6	(D)	27.7	95.0	1
3724	AIRCRAFT ENGINES, ENGINE PARTS	-	-	3.9	8.6	5.2	(S)	2,020.1	54.5	(D)	20.8	72.9	2
3728	AIRCRAFT EQUIPMENT, NEC	-	-	5.5	9.9	1.0	(D)	1,601.9	40.1	(D)	14.0	50.7	4
373	SHIP, BOAT BUILDING, REPAIRING	(D)	(D)	5.2	7.8	4.3	4.0	2,115.6	63.6	(S)	20.9	79.5	9
3731	SHIP BUILDING AND REPAIRING	(D)	(D)	3.8	5.4	3.3	(D)	1,830.5	55.2	(D)	16.6	65.9	11
3732	BOAT BUILDING AND REPAIRING	-	-	1.4	2.4	1.0	(D)	285.1	8.4	-	4.3	13.6	15
3743	RAILROAD EQUIPMENT	(D)	(Z)	3.4	6.9	1.0	1.0	738.3	21.0	(D)	16.2	38.2	2
3751	MOTORCYCLES, BICYCLES, PARTS	-	-	1.0	2.1	.1	.6	188.9	5.2	-	2.5	8.1	5
376	GUIDED MISSILES, SPACE VEHICLES	-	-	3.8	6.3	.4	.6	1,675.3	50.0	(S)	15.6	60.6	1
3761	GUIDED MISSILES, SPACE VEHICLES	-	-	2.7	4.8	(D)	.4	1,202.1	36.6	(S)	9.6	38.7	1
3764	SPACE PROPULSION UNITS, PARTS	-	-	1.0	1.4	(D)	.1	382.2	10.4	(D)	4.5	14.1	1
3769	SPACE VEHICLE EQUIPMENT, NEC	-	-	(Z)	(Z)	(Z)	.1	91.0	3.0	-	1.5	7.8	1
379	TRANSPORTATION EQUIPMENT, NEC	-	-	3.3	5.5	(D)	(D)	437.7	13.1	-	8.0	23.6	6
3792	TRAVEL TRAILERS AND CAMPERS	-	-	.9	1.7	.6	(D)	154.7	4.8	-	2.5	8.1	15
3795	TANKS AND TANK COMPONENTS	-	-	1.7	2.7	.3	(D)	187.8	5.7	-	3.1	7.8	1
3799	TRANSPORTATION EQUIPMENT, NEC	-	-	.7	1.1	.1	(D)	95.2	2.7	-	2.3	7.7	15
38	INSTRUMENTS, RELATED PRODS	-	-	17.7	32.9	6.1	(D)	5,533.0	164.3	(D)	76.7	239.3	3
3811	ENGINEERING, SCIENTIFIC INSTRU	-	-	1.1	2.2	.2	1.1	420.7	13.6	(D)	4.2	19.0	8
382	MEASURING, CONTROLLING DEVICES	-	-	4.8	9.6	1.3	3.1	1,843.6	55.0	(D)	13.4	54.8	6
3822	ENVIRONMENTAL CONTROLS	-	-	1.2	2.2	(D)	.2	404.6	12.2	-	2.9	11.1	3
3823	PROCESS CONTROL INSTRUMENTS	-	-	.9	1.8	(D)	.2	363.8	11.9	(S)	2.3	10.5	29
3824	FLUID METERS, COUNTING DEVICES	-	-	.7	1.4	(D)	.1	185.2	5.0	-	1.6	5.8	3
3825	INSTRU. TO MEASURE ELECTRICITY	-	-	1.5	3.0	(D)	(D)	643.5	17.4	-	4.8	19.0	4
3829	MEASUR'G, CONTROL'G DEVICES NEC	-	-	.6	1.1	(D)	(D)	246.5	8.6	(D)	1.9	8.4	15
3832	OPTICAL INSTRUMENTS AND LENSES	-	-	.5	.8	.2	1.0	147.3	5.5	-	1.7	6.9	7
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	4.0	7.7	.9	(D)	1,166.2	34.8	(D)	11.2	45.0	7
3841	SURGICAL, MEDICAL INSTRUMENTS	-	-	.9	1.9	.3	(D)	489.7	14.4	(S)	4.3	.0	5
3842	SURGICAL APPLIANCES, SUPPLIES	-	-	2.8	5.1	(D)	(D)	560.4	16.4	(Z)	5.4	.9	10
3843	DENTAL EQUIPMENT AND SUPPLIES	-	-	.4	.7	(D)	(D)	116.1	4.0	(Z)	1.5	1	13
3851	OPHTHALMIC GOODS	-	-	.7	1.6	(D)	(D)	268.9	9.5	(D)	4.2	.5	1
3861	PHOTOGRAPHIC EQUIP., SUPPLIES	-	-	5.9	9.9	(D)	(D)	1,440.5	38.1	(D)	39.9	88.5	3
3873	WATCHES, CLOCKS, AND WATCHCASES	-	-	.7	1.1	(D)	.3	245.8	7.7	(S)	2.1	9.6	12
39	MISC. MANUFACTURING INDUS.	-	-	14.7	28.6	5.8	(D)	4,123.3	126.7	(S)	48.3	175.5	5
391	JEWELRY, SILVER AND PLATED WARE	-	-	.9	2.1	.5	(D)	356.5	12.1	(S)	4.7	18.4	5
3911	JEWELRY, PRECIOUS METAL	-	-	.4	.9	(D)	.7	200.7	6.7	(D)	1.8	8.2	11
3914	SILVERWARE AND PLATED WARE	-	-	.4	1.0	.3	(D)	117.8	3.7	-	2.4	7.8	3
3915	JEWELERS' MATS., LAPIDARY WORK	-	-	.1	.2	(D)	.5	38.1	1.7	-	.6	2.4	20
3931	MUSICAL INSTRUMENTS	-	-	.6	1.1	(D)	.5	184.6	6.0	(D)	2.1	7.9	16
394	TOYS AND SPORTING GOODS	-	-	5.6	10.2	1.8	2.9	1,279.0	39.2	(D)	14.8	53.1	11
3942	DOLLS	-	-	.1	.2	(D)	.6	51.3	2.0	-	.6	2.4	29
3944	GAMES, TOYS, CHILD'S VEHICLES	-	-	2.2	4.4	(D)	(Z)	614.5	19.9	(D)	6.1	23.9	1
3949	SPORTING, ATHLETIC GOODS, NEC	-	-	3.3	5.7	1.0	2.2	613.2	17.3	(D)	8.1	26.8	5
395	PENS, OFFICE AND ART GOODS	-	-	.9	1.9	.2	(D)	380.5	11.6	(D)	3.6	14.4	6
3951	PENS AND MECHNICAL PENCILS	-	-	.2	.4	(Z)	(D)	155.8	5.3	(D)	1.0	5.5	7
3952	LEAD PENCILS AND ART GOODS	-	-	.1	.3	(Z)	.1	84.5	2.4	-	1.1	3.8	5
3953	MARKING DEVICES	-	-	.2	.3	.1	(D)	71.6	1.7	(D)	.6	2.2	19
3955	CARBON PAPER AND INKED RIBBONS	-	-	.5	.9	(Z)	(D)	68.7	2.1	-	.9	3.0	11
396	COSTUME JEWELRY AND NOTIONS	-	-	1.0	2.3	(D)	(D)	426.5	14.8	(D)	4.6	19.4	10
3961	COSTUME JEWELRY	-	-	.3	.7	.2	.5	127.6	4.8	(D)	1.7	7.3	1
3962	ARTIFICIAL FLOWERS	-	-	.1	.2	(D)	(D)	18.8	.8	-	.5	1.7	16
3963	BUTTONS	-	-	.1	.1	.1	.2	43.5	1.4	-	.5	1.9	10
3964	NEEDLES, PINS, AND FASTENERS	-	-	.5	1.2	.1	.3	236.5	7.9	-	1.9	8.5	14

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
39	MISC. MANUFACTURING INDUS--CON.													
399	MISCELLANEOUS MANUFACTURES	19.8	72.9	14.7	29.8	332.8	5.5	245.3	3.5	53.4	1.7	14	4	1
3991	BROOMS AND BRUSHES	1.5	7.3	.8	1.9	26.2	.4	(D)	(D)	-	-	10	(X)	(X)
3993	SIGNS AND ADVERTISING DISPLAYS	5.1	19.3	3.8	7.6	93.5	1.5	(D)	(D)	(D)	(Z)	41	(X)	1
3995	BURIAL CASKETS	1.9	6.8	1.5	3.1	59.8	1.1	(D)	(D)	(D)	(D)	39	(X)	(X)
3996	HARD SURFACE FLOOR COVERINGS	3.8	11.8	3.1	6.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
3999	MANUFACTURING INDUSTRIES, NEC.	7.4	27.7	5.4	11.0	(D)	(D)	54.7	.9	(D)	(D)	(X)	10	(X)

See footnotes at end of table.

Table 3. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1977 and 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
39	MISC. MANUFACTURING INDUS--CON.												
399	MISCELLANEOUS MANUFACTURES	-	-	5.7	11.0	(D)	5.4	1,496.2	43.1	(S)	18.4	62.3	5
3991	BROOMS AND BRUSHES	-	-	(D)	(D)	.2	(D)	192.3	5.5	-	1.3	6.2	(X)
3993	SIGNS AND ADVERTISING DISPLAYS	-	-	(D)	(D)	1.2	1.0	391.0	11.7	(D)	4.9	17.4	(X)
3995	BURIAL CASKETS	-	-	.7	1.3	.3	.2	119.9	3.6	(D)	1.9	5.8	11
3996	HARD SURFACE FLOOR COVERINGS	-	-	(D)	(D)	(D)	(D)	220.2	5.5	-	3.3	9.0	(X)
3999	MANUFACTURING INDUSTRIES, NEC	-	-	1.9	3.7	(D)	3.8	572.7	16.7	(S)	7.0	24.0	8

- Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (S) Withheld because the estimate did not meet publication standards, either on the basis of the associated standard error of the estimate or on the basis of a consistency review. (X) Not applicable. (Z) Less than half of the unit of measure specified.

[1]Standard error of estimate is described in appendix G. Cost of fuels (col. D) and purchased electric energy (col. Q and R) were collected from all establishments in the 1977 Census of Manufactures. The figures shown for these items are census totals; therefore, sampling standard errors do not apply. Standard errors of estimates for the cost of coke for the 70 industries that reported this fuel and standard errors of estimates for "other fuels" are not shown in this table. Standard errors for "other fuels" are generally higher, and may sometimes be considerably higher than those for specified kinds of fuels for which standard errors of estimates are shown. Standard error for cost of coke consumed is less than 1 percent at "all industries" level. Estimated standard errors for the six most important coke consuming industries, which collectively account for 96 percent of total cost of coke consumed, are:

Industry	Standard error of estimate (percent)	Industry	Standard error of estimate (percent)
3296	3	3321	2
3312	1	3332	1
3316	1	3714	1

[2]Data presented in this table supersede 1976 published data. Data were revised as a result of adjustments to estimating technique. For a complete discussion of these adjustments see appendix G, Method of Estimation.

Table 4. Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	All industries	12,776.3	28,138.5	10,592.1	15,959.5	748.8	640,164.6	12,179.1	63,843.9	1	1
20	Food and kindred products	945.0	2,173.5	811.8	1,270.2	104.4	39,040.8	903.4	2,580.4	1	1
21	Tobacco products	20.2	54.8	16.4	28.1	(D)	1,122.4	26.7	(D)	2	1
22	Textile mill products	336.7	1,009.0	240.2	418.0	(D)	28,276.6	591.0	474.1	2	1
23	Apparel and other textile products	62.0	245.3	37.8	69.1	(D)	7,119.9	176.2	(S)	3	2
24	Lumber and wood products	235.7	640.0	180.6	332.8	(D)	16,158.4	307.2	313.8	3	2
25	Furniture and fixtures	49.7	168.2	35.7	63.6	12.5	4,100.1	104.7	49.9	2	2
26	Paper and allied products	1,300.2	2,526.6	1,151.5	1,752.6	30.6	43,555.2	774.1	25,490.2	1	1
27	Printing and publishing	88.8	362.6	53.4	94.5	(D)	10,377.1	268.0	(S)	2	2
28	Chemicals and allied products	2,989.3	5,430.6	2,489.3	3,129.2	68.3	146,545.4	2,301.4	14,800.1	1	1
29	Petroleum and coal products	1,304.8	2,108.2	1,209.3	1,624.2	30.4	27,973.2	484.0	3,934.2	1	1
30	Rubber and miscellaneous plastics products	250.3	765.3	181.2	289.4	38.4	20,248.9	476.0	482.3	1	2
31	Leather and leather products	22.6	71.7	17.5	31.6	4.1	1,522.7	40.1	14.8	5	3
32	Stone, clay, and glass products	1,226.9	2,167.8	1,127.4	1,534.2	75.5	29,165.8	633.6	510.7	1	1
33	Primary metal industries	2,470.6	5,752.2	1,964.8	3,517.6	54.6	148,250.1	2,234.6	13,698.1	1	1
34	Fabricated metal products	382.6	1,128.7	296.7	499.0	54.6	25,180.8	629.8	44.5	2	2
35	Machinery, except electric	339.3	1,098.9	242.1	405.6	51.1	28,489.9	693.2	355.1	1	1
36	Electric and electronic equipment	241.5	824.5	160.0	263.2	27.8	23,888.7	561.3	50.9	1	1
37	Transportation equipment	385.0	1,195.8	283.6	473.7	16.0	29,712.1	722.0	(S)	1	1
38	Instruments and related products	76.7	239.3	58.6	97.8	(D)	5,321.6	141.6	(D)	1	2
39	Miscellaneous manufacturing industries	48.3	175.5	34.2	65.2	(D)	4,114.8	110.3	(S)	4	2
20	Food and kindred products	945.0	2,173.5	811.8	1,270.2	104.4	39,040.8	903.4	2,580.4	1	1
201	Meat products	104.1	274.9	80.9	125.2	(D)	6,821.4	149.7	192.9	2	2
2011	Meatpacking plants	65.5	155.0	53.0	77.8	10.4	3,652.1	77.2	(D)	2	2
2013	Sausages and other prepared meats	17.0	55.1	12.2	21.0	(D)	1,421.3	34.1	(D)	6	3
2016	Poultry dressing plants	17.8	53.9	12.7	21.6	3.7	1,487.6	32.3	(D)	3	3
2017	Poultry and egg processing	3.8	10.9	2.9	4.8	(D)	260.4	6.1	(D)	8	6
202	Dairy products	92.4	253.9	74.0	125.1	16.1	5,414.4	128.8	(S)	3	3
2021	Creamery butter	5.1	12.1	4.5	7.6	(D)	177.7	4.5	-	10	28
2022	Cheese, natural and processed	21.7	49.7	18.8	31.2	(D)	849.8	18.6	(S)	4	3
2023	Condensed and evaporated milk	20.6	42.4	18.9	30.1	(D)	484.5	12.2	(S)	3	4
2024	Ice cream and frozen desserts	6.7	29.3	3.7	6.6	(D)	857.4	22.7	(D)	8	6
2026	Fluid milk	38.4	120.3	28.0	49.6	8.9	3,045.1	70.7	(S)	7	4
203	Preserved fruits and vegetables	126.1	297.9	108.6	184.8	12.1	5,135.5	113.1	60.9	2	2
2032	Canned specialties	19.9	41.7	18.2	30.6	(D)	484.8	11.1	(D)	4	5
2033	Canned fruits and vegetables	46.0	102.9	41.6	70.4	(D)	1,270.1	32.6	(D)	3	4
2034	Dehydrated fruits, vegetables, soup	13.6	28.4	12.0	20.7	3.0	476.9	7.7	-	3	3
2035	Pickles, sauces, and salad dressing	6.3	16.4	5.4	9.7	1.9	257.2	6.8	(D)	5	5
2037	Frozen fruits and vegetables	28.6	69.3	23.3	39.5	(S)	1,554.8	29.7	(D)	3	4
2038	Frozen specialties	11.8	39.2	8.1	14.0	2.2	1,091.7	25.3	(S)	3	3
204	Grain Mill products	151.2	313.0	130.2	176.7	(D)	6,149.2	136.3	805.4	2	2
2041	Flour and other grain mill products	10.9	41.7	5.5	8.2	.7	1,599.3	33.5	(Z)	5	3
2043	Cereal breakfast foods	9.3	24.2	7.5	12.6	(S)	504.2	11.6	(D)	1	2
2044	Rice milling	3.6	10.3	2.6	4.8	.1	274.4	5.5	(D)	2	7
2045	Blended and prepared flour	1.6	5.7	.9	1.6	(S)	192.4	4.1	(D)	13	7
2046	Wet corn milling	83.0	123.2	78.4	95.0	.3	1,368.1	28.2	761.5	1	1
2047	Dog, cat, and other pet food	12.4	31.6	10.1	16.1	.2	688.7	15.6	(D)	6	5
2048	Prepared feeds, n.e.c	30.4	76.3	25.2	38.4	12.0	1,522.2	37.9	(S)	9	4
205	Bakery products	50.8	135.5	42.1	72.7	(D)	2,553.0	62.8	(S)	4	4
2051	Bread, cake, and related products	39.9	106.0	33.0	56.3	(D)	2,015.3	49.8	(S)	4	5
2052	Cookies and crackers	10.9	29.5	9.1	16.4	(S)	537.7	13.1	(S)	5	5
206	Sugar and confectionery products	160.2	274.0	153.2	222.4	6.4	2,029.4	51.6	1,249.2	2	2
2061	Raw cane sugar	12.9	27.4	12.4	23.6	1.9	150.0	3.8	(D)	15	4
2062	Cane sugar refining	33.8	60.3	33.3	57.2	(D)	125.8	3.1	372.3	1	1
2063	Beet sugar	93.4	120.9	92.3	114.7	1.3	319.4	6.2	528.8	1	1
2065	Confectionery products	14.2	44.4	10.8	18.3	2.8	1,019.6	26.1	(D)	4	4
2066	Chocolate and cocoa products	4.4	15.5	3.4	6.4	(D)	311.6	9.1	-	1	2
2067	Chewing gum	1.4	5.5	1.1	2.1	(D)	102.8	3.4	-	1	1
207	Fats and oils	105.7	220.7	94.3	146.8	10.1	3,331.2	73.8	69.3	3	3
2074	Cottonseed oil mills	6.4	17.5	4.6	6.2	(D)	513.2	11.3	-	12	12
2075	Soybean oil mills	46.8	93.3	41.9	64.3	.7	1,433.1	29.0	(D)	1	1
2076	Vegetable oil mills, n.e.c	2.9	6.8	2.5	4.1	.6	106.3	2.7	-	2	6
2077	Animal and marine fats and oils	23.6	52.6	21.2	35.3	6.8	686.6	17.3	(S)	10	8
2079	Shortening and cooking oils	26.1	50.4	24.1	36.9	(D)	592.0	13.5	(S)	2	6
208	Beverages	100.2	243.7	85.4	139.3	(D)	4,326.1	104.4	183.6	2	2
2082	Malt beverages	45.2	108.4	38.6	65.8	(D)	1,945.5	42.6	171.5	4	3
2083	Malt	9.3	19.1	8.2	12.1	(D)	329.0	7.0	1.4	7	5
2084	Wines, brandy, and brandy spirits	4.2	11.4	3.4	5.5	1.0	245.1	5.9	(D)	7	10
2085	Distilled liquor, except brandy	15.3	25.6	14.3	18.8	.6	282.3	6.8	(D)	4	4
2086	Bottled and canned soft drinks	22.0	67.2	17.6	31.0	(D)	1,312.4	36.3	(S)	5	4
2087	Flavoring extracts and sirups, n.e.c	4.1	11.9	3.4	6.2	.5	211.8	5.7	(S)	7	6

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. (For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
20	Food and kindred products--Con.										
209	Miscellaneous foods and kindred products...	54.3	160.0	43.1	77.3	12.0	3,280.7	82.7	(S)	3	5
2091	Canned and cured seafoods.....	3.7	10.4	3.2	6.5	1.2	134.6	3.9	(S)	10	11
2092	Fresh or frozen packaged fish.....	4.5	16.9	3.2	6.3	2.3	390.3	10.6	(S)	5	9
2095	Roasted coffee.....	11.1	29.8	9.4	18.1	1.2	480.1	11.7	-	1	2
2097	Manufactured ice.....	2.5	15.0	.3	.5	(D)	653.3	14.5	(S)	32	25
2098	Macaroni and spaghetti.....	2.3	8.9	1.5	2.8	(D)	252.4	6.1	-	15	23
2099	Food preparations, n.e.c.....	30.2	79.1	25.5	43.1	6.4	1,369.9	35.9	(D)	4	4
21	Tobacco products.....	20.2	54.8	16.4	28.1	(D)	1,122.4	26.7	(D)	2	1
2111	Cigarettes.....	12.0	30.6	9.7	15.8	(Z)	662.7	14.8	(D)	1	1
2121	Cigars.....	.7	2.8	.5	.9	(D)	71.0	1.9	-	4	4
2131	Chewing and smoking tobacco.....	.9	2.5	.8	1.4	(D)	40.9	1.2	-	9	5
2141	Tobacco stemming and redrying.....	6.5	18.9	5.4	10.1	1.0	347.7	8.8	(S)	3	3
22	Textile mill products.....	336.7	1,009.0	240.2	418.0	(D)	28,276.6	591.0	474.1	2	1
2211	Weaving mills, cotton.....	33.4	113.7	18.8	28.7	.7	4,267.3	85.1	184.0	1	1
2221	Weaving mills, manmade fiber and silk.....	53.5	187.7	29.3	49.7	2.4	7,070.8	138.0	73.6	1	2
2231	Weaving and finishing mills, wool.....	6.4	18.6	5.1	9.4	(D)	376.8	9.1	(D)	19	16
2241	Narrow fabric mills.....	3.9	14.8	2.3	4.5	.9	470.6	10.3	(S)	6	7
225	Knitting mills.....	56.8	167.4	43.6	84.0	13.8	3,882.9	83.5	(S)	3	2
2251	Women's hoisery, except socks.....	4.8	17.4	2.9	5.5	.7	542.0	11.9	(D)	4	4
2252	Hosiery, n.e.c.....	3.6	12.0	2.6	5.3	(D)	291.4	6.7	(D)	12	10
2253	Knit outerwear mills.....	9.5	30.9	7.0	14.0	5.2	727.3	16.9	(S)	5	4
2254	Knit underwear mills.....	3.5	9.4	2.8	4.6	.4	218.5	4.8	-	5	4
2257	Circular knit fabric mills.....	23.6	64.2	19.0	36.7	(D)	1,354.4	27.5	(S)	6	4
2258	Warp knit fabric mills.....	11.5	32.3	9.0	17.4	(D)	722.9	14.9	(S)	4	4
2259	Knitting mills, n.e.c.....	.3	1.3	.2	.5	(D)	26.4	.8	-	13	12
226	Textile finishing, except wool.....	75.7	164.2	69.2	119.9	8.0	1,899.1	44.3	173.3	2	3
2261	Finishing plants, cotton.....	26.2	53.7	24.5	41.7	2.4	511.6	12.0	(D)	3	5
2262	Finishing plants, manmade fiber and silk.	41.3	88.2	37.9	65.0	4.2	989.3	23.2	115.5	2	5
2269	Finishing plants, n.e.c.....	8.2	22.3	6.8	13.1	1.4	398.2	9.2	(D)	6	5
227	Floor covering mills.....	30.9	68.6	27.2	41.9	(D)	1,094.0	26.7	(D)	3	2
2271	Woven carpets and rugs.....	2.1	5.5	1.8	3.0	(D)	100.7	2.5	-	4	6
2272	Tufted carpets and rugs.....	28.1	60.9	24.9	37.9	5.6	950.7	22.9	(D)	3	2
2279	Carpets and rugs, n.e.c.....	.7	2.3	.5	1.0	(D)	42.6	1.3	-	10	5
228	Yarn and thread mills.....	45.1	177.8	21.1	36.6	2.0	7,015.0	141.2	(D)	2	2
2281	Yarn mills, except wool.....	23.7	103.6	8.9	15.7	(D)	4,345.9	87.9	(D)	2	2
2282	Throwing and winding mills.....	15.9	55.4	8.6	14.3	1.4	2,123.7	41.0	(D)	2	3
2283	Wool yarn mills.....	1.7	6.2	1.1	2.0	(D)	169.4	4.1	(D)	15	13
2284	Thread mills.....	3.8	12.6	2.5	4.5	(D)	376.0	8.1	-	3	2
229	Miscellaneous textile goods.....	31.0	96.2	23.5	43.3	(D)	2,200.1	52.9	(D)	8	3
2291	Felt goods, except woven and hats.....	1.3	3.9	1.1	2.0	.2	68.8	1.9	(D)	9	10
2292	Lace goods.....	.7	1.9	.6	1.2	(D)	21.0	.6	-	23	19
2293	Paddings and upholstery filling.....	1.8	5.4	1.5	2.5	.7	106.7	2.9	-	6	8
2294	Processed textile waste.....	.8	3.2	.5	1.2	.3	84.0	2.1	-	27	28
2295	Coated fabrics, not rubberized.....	9.9	27.3	8.5	15.9	(D)	414.1	11.5	-	20	10
2296	Tire cord and fabric.....	4.7	18.5	2.2	3.3	(Z)	752.3	15.2	(D)	1	1
2297	Nonwoven fabrics.....	5.8	17.1	4.6	8.4	.7	339.7	8.7	(Z)	4	2
2298	Cordage and twine.....	1.5	5.9	.9	1.8	(D)	182.1	4.1	(D)	10	9
2299	Textile goods, n.e.c.....	4.4	12.8	3.6	7.0	(D)	231.4	5.8	(D)	12	7
23	Apparel and other textile products...	62.0	245.3	37.8	69.1	(D)	7,119.9	176.2	(S)	3	2
2311	Men's and boys' suits and coats.....	5.3	20.8	3.7	7.3	2.6	458.5	13.5	(S)	6	3
232	Men's and boys' furnishings.....	12.7	52.9	7.0	12.4	5.1	1,672.3	40.5	3.3	4	3
2321	Men's and boys' shirts, nightwear.....	3.0	14.3	1.4	2.7	.4	478.8	11.5	(D)	10	4
2322	Men's and boys' underwear.....	.5	2.0	.3	.6	(D)	53.5	1.4	-	6	4
2323	Men's, boys' neckwear.....	.3	1.1	.1	.3	.2	41.5	.9	(S)	60	45
2327	Men's, boys' separate trousers.....	3.6	13.8	2.2	3.5	(D)	432.2	10.3	(D)	4	4
2328	Men's and boys' work clothing.....	3.3	13.7	1.8	3.0	1.3	448.5	10.7	(D)	5	3
2329	Men's and boys' clothing, n.e.c.....	2.0	8.1	1.2	2.3	(D)	217.8	5.8	(D)	9	9
233	Women's and misses' outerwear.....	16.1	73.0	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)
2331	Women's and misses' blouses and waists...	3.1	12.0	(S)	(S)	(D)	(S)	(S)	(S)	(X)	(X)
2335	Women's and misses' dresses.....	6.8	31.0	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)
2337	Women's and misses' suits and coats.....	2.8	14.5	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)
2339	Women's and misses' outerwear, n.e.c.....	3.3	15.5	(S)	(S)	(D)	(S)	(S)	(S)	(X)	(X)
234	Women's and children's undergarments.....	2.9	14.4	1.2	2.3	(S)	490.4	12.1	(D)	11	3
2341	Women's and children's underwear.....	2.3	10.9	1.0	1.8	(S)	385.8	9.1	(D)	12	4
2342	Brassieres and allied garments.....	.6	3.5	.2	.5	.1	104.6	3.0	(S)	24	6

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. (For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
23	Apparel and other textile products--Con.										
235	Hats, caps, and millinery	1.3	3.8	1.0	1.8	(D)	72.1	2.0	-	24	19
2351	Millinery	.1	.3	.1	.1	.1	9.1	.2	-	52	42
2352	Hats and caps, except millinery	1.1	3.5	.9	1.6	(D)	63.0	1.8	-	26	21
236	Children's outerwear	2.5	11.2	1.3	2.6	(D)	364.7	8.6	(S)	12	10
2361	Children's dresses and blouses	1.4	5.2	.9	1.9	(D)	140.5	3.3	(Z)	11	10
2363	Children's coats and suits	.1	.6	(S)	(S)	(D)	26.4	.6	-	(X)	21
2369	Children's outerwear, n.e.c	1.0	5.4	(S)	(S)	(D)	197.8	4.8	(S)	(X)	17
2371	Fur goods	.4	1.1	(S)	(S)	(S)	(S)	(S)	-	(X)	(X)
238	Miscellaneous apparel and accessories	2.3	9.6	1.4	2.5	.7	268.9	7.1	(S)	9	7
2381	Fabric dress and work gloves	.4	1.5	.3	.6	(D)	30.1	.9	-	19	13
2384	Robes and dressing gowns	.3	1.2	.2	.3	(D)	37.6	.9	-	4	14
2385	Waterproof outer garments	.6	2.7	(S)	(S)	(S)	73.3	2.1	(D)	(X)	16
2386	Leather and sheep lined clothing	.3	1.3	.2	.3	(D)	43.3	.9	(S)	34	24
2387	Apparel belts	.3	1.6	.1	.2	(D)	56.8	1.4	(Z)	6	14
2389	Apparel and accessories, n.e.c	.3	1.4	.3	.4	.1	27.8	.9	(Z)	11	16
239	Miscellaneous fabricated textile products	18.6	58.5	13.6	23.9	6.2	1,447.9	34.6	(S)	4	4
2391	Curtains and draperies	1.6	6.5	.9	1.7	1.0	210.0	4.8	-	23	11
2392	House furnishing, n.e.c	8.7	22.7	7.1	11.8	2.5	492.5	10.9	(D)	4	4
2393	Textile bags	.8	2.7	.6	1.1	(D)	70.8	1.6	-	22	28
2394	Canvas and related products	.6	1.8	.5	.8	(D)	43.8	1.1	(D)	19	15
2395	Pleating and stitching	.9	3.9	.6	1.2	(D)	104.7	2.7	(Z)	49	20
2396	Automotive and apparel trimmings	2.6	9.6	1.7	3.2	.7	259.1	6.5	(S)	10	9
2397	Schiffli machine embroideries	.3	1.5	.2	.4	(D)	42.1	1.1	-	45	17
2399	Fabricated textile products, n.e.c	3.0	9.7	2.2	3.9	(D)	225.0	5.8	-	8	6
24	Lumber and wood products	235.7	640.0	180.6	332.8	(D)	16,158.4	307.2	313.8	3	2
2411	Logging camps and logging contractors	38.9	87.6	37.6	81.1	26.6	363.7	6.6	(S)	9	9
242	Sawmills and planing mills	74.6	226.5	49.3	94.1	(D)	7,412.2	132.4	182.8	5	3
2421	Sawmills and planing mills, general	68.2	203.2	45.3	86.7	(D)	6,709.8	116.5	173.8	5	4
2426	Hardwood dimension and flooring	4.9	18.8	2.8	5.3	1.7	602.7	13.5	(D)	17	9
2429	Special product sawmills, n.e.c	1.5	4.5	1.2	2.2	1.4	99.7	2.3	(D)	47	24
243	Millwork, plywood and structural members	53.8	143.2	39.7	67.7	8.9	4,117.1	75.5	49.4	3	2
2431	Millwork	9.5	30.7	6.2	10.7	3.2	955.7	20.0	(D)	8	6
2434	Wood kitchen cabinets	3.9	12.3	2.7	4.9	1.8	336.8	7.4	(Z)	9	9
2435	Hardwood veneer and plywood	5.7	16.7	4.2	6.7	.2	433.2	10.0	(D)	17	8
2436	Softwood veneer and plywood	33.0	78.8	25.2	42.8	2.4	2,285.6	36.0	(D)	2	1
2439	Structural wood members, n.e.c	1.7	4.8	1.4	2.6	1.3	105.8	2.2	(D)	12	9
244	Wood containers	4.1	14.4	3.0	5.6	(D)	330.3	8.8	(D)	19	16
2441	Nailed wood boxes and shook	1.0	3.5	.6	.9	(D)	111.9	2.6	(D)	48	33
2448	Wood pallets and skids	1.6	5.1	1.3	2.9	(D)	82.9	2.2	(S)	32	30
2449	Wood containers, n.e.c	1.5	5.8	1.1	1.8	.6	135.6	4.0	(D)	17	21
245	Wood buildings and mobile homes	5.9	18.1	4.7	8.3	(D)	364.4	9.8	(S)	4	3
2451	Mobile homes	3.4	11.3	2.5	4.4	(D)	251.7	6.9	(D)	6	4
2452	Prefabricated wood buildings	2.5	6.8	2.1	3.9	(D)	112.7	2.9	(D)	7	5
249	Miscellaneous wood products	58.5	150.1	46.3	76.0	9.7	3,570.7	74.2	72.0	2	2
2491	Wood preserving	8.4	17.1	7.9	12.9	2.6	146.5	4.2	-	9	10
2492	Particleboard	8.3	24.7	5.4	8.8	(Z)	854.0	15.9	-	4	3
2499	Wood products, n.e.c	41.8	108.3	33.0	54.3	7.1	2,570.2	54.0	72.0	2	3
25	Furniture and fixtures	49.7	168.2	35.7	63.6	12.5	4,100.1	104.7	49.9	2	2
251	Household furniture	30.3	107.8	20.7	38.2	8.7	2,799.7	69.7	32.7	3	2
2511	Wood household furniture	16.6	61.1	11.1	21.1	3.7	1,603.9	40.0	(D)	4	2
2512	Upholstered household furniture	5.6	19.4	4.0	7.4	2.6	488.3	11.9	(D)	6	4
2514	Metal household furniture	3.4	10.7	2.5	4.2	(D)	257.6	6.6	(D)	5	5
2515	Mattresses and bedsprings	2.7	8.5	2.1	3.5	1.0	193.8	5.0	(D)	9	6
2517	Wood TV and radio cabinets	1.0	3.8	.7	1.2	.3	106.9	2.6	-	9	14
2519	Household furniture, n.e.c	.9	4.3	.4	.7	(D)	149.2	3.6	(D)	18	14
252	Office furniture	6.4	19.7	5.0	8.3	1.4	419.8	11.3	(D)	3	3
2521	Wood office furniture	1.4	5.1	1.0	1.8	.5	114.7	3.4	-	7	7
2522	Metal office furniture	5.0	14.5	3.9	6.6	.9	305.1	8.0	(D)	3	2
2531	Public building and related furniture	2.7	8.1	2.2	3.5	(S)	170.7	4.7	(D)	11	8
254	Partitions and fixtures	7.3	22.7	5.7	9.6	1.5	496.2	13.0	(D)	5	6
2541	Wood partitions and fixtures	2.8	9.9	2.0	3.7	1.3	229.5	6.2	(D)	9	9
2542	Metal partitions and fixtures	4.6	12.8	3.7	5.9	.2	266.6	6.9	(Z)	6	8

See footnotes at end of table.

Table 4. Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	Furniture and fixtures--Con.										
259	Miscellaneous furniture and fixtures	3.0	9.9	2.3	4.0	1.1	213.8	5.9	-	6	6
2591	Drapery hardware and blinds and shades	1.4	4.7	1.0	1.9	(D)	99.6	2.8	-	4	6
2599	Furniture and fixtures, n.e.c	1.6	5.2	1.3	2.1	(D)	114.2	3.1	-	10	10
26	Paper and allied products	1,300.2	2,526.6	1,151.5	1,752.6	30.6	43,555.2	774.1	25,490.2	1	1
2611	Pulpmills	96.0	176.8	86.4	136.4	(S)	2,830.3	40.4	2,533.0	1	3
2621	Papermills, except building paper	592.3	1,118.0	520.6	769.7	11.2	21,013.2	348.3	12,646.0	1	1
2631	Paperboard mills	467.4	826.4	432.3	659.3	1.4	10,302.0	167.1	10,131.0	1	1
264	Miscellaneous converted paper products	55.6	169.5	40.0	68.7	5.6	4,582.0	100.8	63.2	3	3
2641	Paper coating and glazing	16.6	46.0	13.4	24.0	2.1	938.3	22.0	(D)	3	4
2642	Envelopes	2.4	10.8	1.3	2.4	.7	326.8	8.4	(D)	7	7
2643	Bags, except textile bags	8.3	28.2	4.5	7.2	(S)	1,105.9	20.9	2.6	4	6
2645	Die-cut paper and board	3.4	8.5	2.8	4.1	(Z)	177.9	4.4	(D)	5	8
2646	Pressed and molded pulp goods	8.1	20.8	6.0	9.4	.7	610.5	11.4	(D)	1	2
2647	Sanitary paper products	10.2	31.9	7.2	12.6	1.3	877.6	19.3	31.7	3	3
2648	Stationery products	1.4	5.4	.9	1.8	.7	136.5	3.6	-	10	13
2649	Converted paper products, n.e.c	5.3	18.0	3.9	7.2	.5	408.5	10.8	(D)	22	16
265	Paperboard containers and boxes	52.9	162.8	41.3	72.8	10.7	3,411.6	90.0	(D)	2	2
2651	Folding paperboard boxes	6.8	24.3	4.8	8.2	.9	591.4	16.1	(D)	3	4
2652	Setup paperboard boxes	1.3	4.6	.9	1.7	.4	125.0	2.9	(D)	26	15
2653	Corrugated and solid fiber boxes	34.7	96.5	28.9	50.9	7.8	1,702.1	45.6	16.0	2	2
2654	Sanitary food containers	7.3	27.6	4.7	8.3	1.1	765.5	19.4	(D)	2	3
2655	Fiber cans, drums, and similar products	2.9	9.8	2.1	3.8	.5	227.6	6.0	(D)	6	4
2661	Building paper and board mills	35.8	73.1	31.0	45.6	2.5	1,416.0	27.5	63.0	3	5
27	Printing and publishing	88.8	362.6	53.4	94.5	(D)	10,377.1	268.0	(S)	2	2
2711	Newspapers	18.5	88.8	9.7	18.4	(D)	2,571.5	70.5	(S)	4	3
2721	Periodicals	3.3	14.5	1.8	3.2	1.4	444.1	11.3	(S)	7	4
273	Books	7.2	27.5	4.2	7.3	(D)	884.7	20.2	(D)	4	6
2731	Book publishing	2.5	9.6	1.5	2.5	(D)	289.7	7.2	(D)	7	4
2732	Book printing	4.7	17.8	2.7	4.9	.8	594.9	13.0	(S)	5	9
2741	Miscellaneous publishing	1.8	8.2	.9	1.4	(D)	258.0	6.8	(S)	17	8
275	Commercial printing	45.9	170.3	30.0	52.3	12.6	4,655.2	117.9	34.5	4	3
2751	Commercial printing, letterpress	15.6	58.6	10.0	17.4	4.9	1,642.3	41.3	(S)	6	6
2752	Commercial printing, lithograph	24.0	91.2	15.4	26.3	6.5	2,533.4	65.0	(S)	6	4
2753	Engraving and plate printing	.9	3.3	.6	1.1	.3	(S)	(S)	(Z)	16	(X)
2754	Commercial printing, gravure	5.4	17.1	4.1	7.6	1.0	400.4	9.5	(D)	1	4
2761	Manifold business forms	4.3	18.5	2.3	3.9	(D)	596.0	14.6	(S)	5	5
2771	Greeting card publishing	1.3	5.4	.8	1.2	.2	154.0	4.2	-	6	9
278	Blankbooks and bookbinding	3.2	13.7	2.0	3.7	(D)	354.4	10.0	(S)	6	11
2782	Blankbooks and looseleaf binders	1.9	7.9	1.2	2.2	(D)	203.3	5.6	(S)	7	6
2789	Bookbinding and related work	1.3	5.8	.8	1.5	.7	151.1	4.4	(S)	11	24
279	Printing trade services	3.2	15.7	1.6	3.1	1.1	459.3	12.6	(S)	12	8
2791	Typesetting	1.2	6.6	.6	1.0	(D)	194.0	5.6	(Z)	24	11
2793	Photoengraving	.6	3.5	.2	.5	.1	116.2	2.9	(D)	34	20
2794	Electrotyping and sterotyping	.1	.5	.1	.2	(D)	10.2	.3	(S)	36	22
2795	Lithograph platemaking services	1.2	5.2	.7	1.4	.4	138.9	3.8	(S)	15	12
28	Chemicals and allied products	2,989.3	5,430.6	2,489.3	3,129.2	68.3	146,545.4	2,301.4	14,800.1	1	1
281	Industrial inorganic chemicals	706.4	1,697.5	422.1	539.6	8.9	83,313.1	1,158.0	4,761.9	1	1
2812	Alkalies and chlorine	145.7	311.9	101.8	129.6	(D)	12,887.3	182.4	2,616.9	1	1
2813	Industrial gases	90.7	262.8	51.9	64.4	2.7	11,364.2	198.4	(D)	2	1
2816	Inorganic pigments	46.8	95.4	41.8	64.2	(D)	1,444.1	31.2	(D)	2	6
2819	Industrial inorganic chemicals, n.e.c	423.2	1,027.4	226.6	281.4	4.5	57,617.6	746.0	2,031.5	1	1
282	Plastics materials and synthetics	401.4	812.3	343.8	510.4	7.2	16,869.8	301.9	(D)	1	1
2821	Plastics materials and resins	171.0	379.1	142.8	225.7	5.2	8,281.4	153.3	129.2	1	1
2822	Synthetic rubber	41.0	81.5	36.5	61.4	.6	1,313.3	20.1	-	1	2
2823	Cellulosic manmade fibers	56.7	71.6	55.0	62.1	.2	523.7	9.6	(D)	1	1
2824	Organic fibers, noncellulosic	132.6	280.1	109.5	161.2	1.2	6,751.3	118.9	655.5	1	1
283	Drugs	67.1	187.7	55.3	99.4	(D)	3,465.3	88.3	156.8	1	2
2831	Biological products	2.7	9.8	1.9	3.2	(D)	245.2	6.7	-	2	5
2833	Medicinals and botanicals	26.1	60.4	23.4	41.5	(D)	777.2	18.9	(D)	1	5
2834	Pharmaceutical preparations	38.3	117.4	30.0	54.7	1.6	2,442.9	62.7	(D)	1	1

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. (For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
28	Chemicals and allied products--Con.										
284	Soaps, cleaners, and toilet goods	49.0	125.5	41.8	69.7	(D)	2,090.8	55.8	(D)	5	8
2841	Soap and other detergents	25.0	55.3	22.4	35.4	(D)	766.9	19.9	(D)	3	2
2842	Polishes and sanitation goods	7.4	22.2	6.0	9.4	5.1	410.3	12.8	(S)	35	32
2843	Surface active agents	10.4	25.4	9.2	17.1	(D)	344.7	8.3	(D)	4	6
2844	Toilet preparations	6.2	22.6	4.2	7.7	1.1	568.9	14.8	(D)	3	3
2851	Paints and allied products	18.6	52.2	15.2	24.4	(D)	1,014.8	27.8	(D)	3	3
286	Industrial organic chemicals	1,251.0	1,831.3	1,157.3	1,394.1	18.3	27,487.6	437.2	7,330.1	1	1
2861	Gum and wood chemicals	8.9	17.5	8.3	13.5	1.2	176.6	4.0	62.4	3	8
2865	Cyclic crudes and intermediates	171.8	325.7	155.1	244.6	1.9	4,903.0	81.2	180.2	1	2
2869	Industrial organic chemicals, n.e.c.	1,070.4	1,488.1	993.9	1,136.1	15.2	22,408.0	352.0	7,087.5	1	1
287	Agricultural chemicals	385.2	532.7	352.5	360.3	(D)	9,574.5	172.5	647.8	3	2
2873	Nitrogenous fertilizers	289.7	339.2	272.6	257.2	(D)	5,014.4	82.0	441.1	3	2
2874	Phosphatic fertilizers	63.6	126.4	52.5	61.2	.3	3,274.9	65.2	(D)	3	1
2875	Fertilizers, mixing only	4.4	12.5	3.6	6.0	1.6	240.2	6.4	-	12	5
2879	Agricultural chemicals, n.e.c.	27.4	54.7	23.8	35.9	(D)	1,045.0	18.8	(D)	2	9
289	Miscellaneous chemical products	110.6	191.4	101.3	131.4	12.8	2,729.5	60.0	192.8	2	2
2891	Adhesives and sealants	8.8	22.7	7.6	12.9	(Z)	368.4	9.8	(D)	14	6
2892	Explosives	19.4	32.5	17.7	23.7	.7	483.3	8.8	(D)	1	1
2893	Printing ink	2.7	8.0	2.0	3.1	1.8	201.8	4.8	-	10	14
2895	Carbon black	28.2	36.1	26.3	26.4	(Z)	537.3	9.8	(D)	1	1
2899	Chemical preparations, n.e.c.	51.5	92.0	47.6	65.3	10.3	1,138.7	26.7	130.8	2	3
29	Petroleum and coal products	1,304.8	2,108.2	1,209.3	1,624.2	30.4	27,973.2	484.0	3,934.2	1	1
2911	Petroleum refining	1,229.2	1,954.5	1,138.9	1,510.6	15.1	26,461.7	443.9	(D)	1	1
295	Paving and roofing materials	62.9	129.0	58.6	95.2	14.6	1,270.5	33.7	(D)	6	5
2951	Paving mixtures and blocks	33.8	74.6	31.5	54.6	11.9	684.0	20.0	2.9	9	8
2952	Asphalt felts and coatings	29.1	54.4	27.1	40.7	2.7	586.5	13.8	(D)	3	3
299	Miscellaneous petroleum and coal products	12.7	24.7	11.9	18.4	.7	241.0	6.3	(S)	6	9
2992	Lubricating oils and greases	5.4	12.5	4.9	7.9	(Z)	153.9	4.6	(D)	14	13
2999	Petroleum and coal products, n.e.c.	7.4	12.2	7.1	10.5	.7	87.1	1.8	(S)	1	2
30	Rubber and miscellaneous plastics products	250.3	765.3	181.2	289.4	38.4	20,248.9	476.0	482.3	1	2
3011	Tires and inner tubes	75.1	180.8	59.9	88.3	1.1	4,458.8	92.5	(D)	1	1
3021	Rubber and plastics footwear	2.4	9.0	1.8	3.5	.3	193.1	5.6	-	1	3
3031	Reclaimed rubber	.9	2.6	.6	.7	(D)	89.2	1.9	-	1	1
3041	Rubber and plastics hose and belting	13.8	29.4	11.4	14.4	(D)	691.8	15.0	(D)	2	4
3069	Fabricated rubber products, n.e.c.	30.6	86.7	23.9	38.6	4.1	1,972.7	48.1	(S)	3	3
3079	Miscellaneous plastics products	127.4	456.9	83.6	144.0	32.6	12,843.4	312.9	195.9	2	2
31	Leather and leather products	22.6	71.7	17.5	31.6	4.1	1,522.7	40.1	14.8	5	3
3111	Leather tanning and finishing	13.1	31.0	11.8	20.4	1.5	375.6	10.6	(D)	7	7
3131	Boot and shoe cut stock and findings	.9	2.9	.7	1.4	.2	57.5	1.5	(S)	17	12
314	Footwear, except rubber	5.4	25.5	3.0	6.1	1.4	698.9	19.4	(D)	4	2
3142	House slippers	.4	1.7	.2	.5	.2	51.2	1.2	(D)	12	10
3143	Men's footwear, except athletic	2.3	10.3	1.3	2.6	.3	278.0	7.7	(D)	2	1
3144	Women's footwear, except athletic	1.8	8.9	1.0	2.0	.5	246.1	6.9	-	6	4
3149	Footwear, except rubber, n.e.c.	.9	4.6	.5	1.0	.4	123.6	3.6	-	21	8
3151	Leather gloves and mittens	.3	1.1	.2	.4	(D)	28.3	.7	-	10	14
3161	Luggage	1.2	4.3	.7	1.2	(D)	137.1	3.0	(Z)	10	9
317	Handbags and other personal leather goods	1.2	5.3	.6	1.2	.4	193.9	4.1	(D)	16	12
3171	Women's handbags and purses	.8	3.5	.3	.7	.3	147.4	2.8	(D)	20	17
3172	Personal leather goods, n.e.c.	.4	1.7	.2	.5	.1	46.5	1.3	(Z)	25	10
3199	Leather goods, n.e.c.	.5	1.7	.4	.9	(Z)	31.4	.9	(S)	36	25
32	Stone, clay, and glass products	1,226.9	2,167.8	1,127.4	1,534.2	75.5	29,165.8	633.6	510.7	1	1
3211	Flat glass	53.7	99.8	49.5	75.5	.1	1,248.2	24.3	(D)	1	1
322	Glass and glassware pressed or blown	214.6	425.1	192.4	293.3	.6	6,501.8	131.9	(D)	1	1
3221	Glass containers	147.5	292.0	132.5	204.3	1.4	4,391.3	87.8	(S)	1	1
3229	Pressed and blown glass, n.e.c.	67.1	133.1	59.9	89.0	(S)	2,110.5	44.1	(D)	3	1
3231	Products of purchased glass	18.3	40.1	15.5	21.5	(D)	812.6	18.6	(D)	4	9
3241	Cement, hydraulic	433.0	616.6	401.8	431.5	(D)	9,136.7	185.1	392.9	1	1

See footnotes at end of table.

Table 4. Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
32	Stone, clay, and glass products--Con.										
325	Structural clay products	111.7	190.6	106.5	153.2	22.9	1,520.3	37.4	(D)	5	5
3251	Brick and structural clay tile	62.5	103.3	59.6	82.7	15.3	862.9	20.6	(S)	8	8
3253	Ceramic wall and floor tile	6.5	12.3	6.0	8.8	(D)	149.1	3.5	(D)	11	11
3255	Clay refractories	23.7	46.1	22.4	37.2	(D)	355.1	8.9	(Z)	7	6
3259	Structural clay products, n.e.c.	18.9	28.9	18.4	24.5	4.5	153.2	4.4	-	14	9
326	Pottery and related products	24.7	50.4	22.6	34.6	4.1	602.0	15.8	(D)	5	5
3261	Nitreous plumbing fixtures	8.3	17.1	7.7	12.2	.1	192.0	4.8	(D)	3	2
3262	Vitreous china food utensils	2.8	5.7	2.6	4.2	.2	53.5	1.5	(Z)	1	1
3263	Fine earthenware food utensils	1.4	3.2	1.3	2.3	.1	31.0	.9	(S)	16	18
3264	Porcelain electrical supplies	6.0	13.6	5.2	7.3	.7	253.8	6.3	-	6	7
3269	Pottery products, n.e.c.	6.2	10.8	5.9	8.6	3.0	71.7	2.2	-	17	30
327	Concrete, gypsum, and plaster products	217.9	406.1	205.7	316.6	(D)	3,587.3	89.5	(S)	4	3
3271	Concrete block and brick	15.8	35.0	14.5	25.1	(D)	355.8	9.9	(D)	14	12
3272	Concrete products, n.e.c.	20.9	45.8	18.9	31.0	7.7	565.4	14.8	(D)	7	9
3273	Ready-mixed concrete	42.4	107.1	38.7	79.2	12.2	1,086.5	28.0	(S)	7	7
3274	Lime	97.5	142.3	94.7	124.4	(D)	807.0	17.9	-	7	6
3275	Gypsum products	41.5	75.8	38.8	56.8	(D)	772.8	18.9	(D)	1	1
3281	Cut stone and stone products	4.1	13.5	3.1	6.1	2.0	293.0	7.4	(D)	16	11
329	Miscellaneous nonmetallic mineral products	148.9	325.6	130.3	202.1	6.6	5,463.8	123.5	44.7	2	3
3291	Abrasive products	12.7	35.2	9.7	16.0	1.4	877.8	19.2	(D)	2	16
3292	Asbestos products	10.7	30.7	8.7	15.4	.7	585.4	15.4	(D)	2	2
3293	Gaskets, packing, and sealing devices	5.8	17.4	4.4	7.7	.5	408.9	9.8	(D)	5	7
3295	Minerals, ground or treated	37.4	67.1	34.6	46.8	2.0	841.3	20.3	(D)	7	6
3296	Mineral wool	54.4	121.8	47.1	78.1	2.6	2,128.7	43.7	(D)	1	1
3297	Nonclay refractories	19.8	37.4	18.3	27.4	(D)	420.9	10.0	(D)	3	5
3299	Nonmetallic mineral products, n.e.c.	8.2	16.0	7.5	10.9	(D)	200.8	5.1	(D)	11	15
33	Primary metal industries	2,470.6	5,752.2	1,964.8	3,517.6	54.6	148,250.1	2,234.6	13,698.1	1	1
331	Blast furnace and basic steel products	1,593.4	3,638.4	1,406.0	2,592.8	18.2	54,939.7	1,045.5	7,756.3	1	1
3312	Blast furnaces and steel mills	1,496.6	3,372.3	1,344.3	2,498.7	12.7	44,658.7	873.6	(D)	1	1
3313	Electrometallurgical products	54.0	140.5	27.6	34.7	.4	7,740.6	105.8	(D)	1	1
3315	Steel wire and related products	14.4	44.2	10.9	18.5	3.3	1,025.7	25.6	(S)	4	4
3316	Cold finishing of steel shapes	16.3	48.0	13.3	24.1	(D)	869.9	24.0	(D)	1	1
3317	Steel pipe and tubes	12.1	33.4	9.9	16.8	(D)	644.7	16.5	(D)	4	5
332	Iron and steel foundries	166.9	605.5	128.1	338.1	6.2	11,367.1	267.4	15.3	2	2
3321	Gray iron foundries	114.3	433.6	91.3	274.9	1.1	6,723.0	158.8	(D)	2	3
3322	Malleable iron foundries	16.0	56.2	11.1	22.5	.2	1,436.7	33.7	-	5	4
3324	Steel investment foundries	3.5	12.1	2.3	4.0	.2	337.6	8.1	-	13	14
3325	Steel foundries, n.e.c.	33.1	103.6	23.3	36.8	(D)	2,869.9	66.8	(D)	3	5
333	Primary nonferrous metals	442.5	835.7	214.2	240.4	.7	66,922.6	595.3	5,871.8	1	1
3331	Primary copper	69.5	111.8	63.7	82.4	(Z)	1,709.2	29.4	(D)	1	1
3332	Primary lead	13.3	32.8	12.5	29.2	(Z)	228.4	3.6	(D)	1	1
3333	Primary zinc	26.7	49.5	22.5	30.1	(Z)	1,221.1	19.4	(D)	1	1
3334	Primary Aluminum	297.1	541.8	96.5	70.8	(Z)	58,776.7	470.9	4,785.2	1	1
3339	Primary nonferrous metals, n.e.c.	36.0	99.8	19.0	27.8	.7	4,987.2	72.0	(D)	1	1
3341	Secondary nonferrous metals	36.7	76.1	33.8	54.8	7.8	864.3	21.2	(D)	7	6
335	Nonferrous rolling and drawing	155.5	405.0	119.6	186.1	5.2	10,519.7	218.9	69.1	1	1
3351	Copper rolling and drawing	24.5	80.7	17.7	30.4	(D)	2,006.3	50.3	(D)	1	11
3353	Aluminum sheet, plate, and foil	67.4	133.4	55.0	77.7	(S)	3,630.4	55.7	-	1	1
3354	Aluminum extruded products	19.2	49.0	15.7	22.8	1.4	1,044.5	26.2	-	2	3
3355	Aluminum rolling, drawing, n.e.c.	8.1	17.4	6.8	12.1	.1	375.0	5.3	-	1	4
3356	Nonferrous wiring and drawing, n.e.c.	12.7	36.0	8.9	15.1	2.6	1,114.1	20.9	(D)	2	2
3357	Nonferrous wiredrawing, insulating	23.6	88.5	15.5	27.9	(D)	2,349.4	60.6	(D)	2	2
336	Nonferrous foundries	40.5	105.0	33.3	55.4	5.9	2,111.5	49.6	(D)	11	10
3361	Aluminum foundries	29.0	70.3	24.5	40.3	(D)	1,304.2	30.0	(D)	15	15
3362	Brass, bronze, and copper foundries	4.6	14.7	3.4	5.9	2.3	356.3	8.8	(S)	13	11
3369	Nonferrous foundries, n.e.c.	7.0	19.9	5.4	9.1	(D)	450.9	10.8	(D)	9	10
339	Miscellaneous primary metal products	35.0	86.6	29.8	49.9	10.5	1,525.3	36.7	(D)	9	11
3398	Metal heat treating	22.8	50.7	20.0	31.3	6.7	828.0	19.4	(S)	11	17
3399	Primary metal products, n.e.c.	12.2	35.9	9.8	18.5	3.8	697.3	17.3	(D)	14	12
34	Fabricated metal products	382.6	1,128.7	296.7	499.0	54.6	25,180.8	629.8	44.5	2	2
341	Metal cans and shipping containers	36.5	99.2	29.4	48.8	(D)	2,077.6	50.4	(D)	1	1
3411	Metal cans	31.4	85.4	25.1	41.2	(D)	1,851.5	44.2	(D)	1	1
3412	Metal barrels, drums, and pails	5.1	13.7	4.3	7.6	(D)	226.2	6.2	(D)	4	3

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

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SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
34	Fabricated metal products--Con.										
342	Cutlery, handtools and hardware	31.2	99.6	23.7	40.7	2.1	2,210.4	58.9	(D)	3	2
3421	Cutlery	2.6	9.4	2.0	4.2	.2	153.7	5.2	(D)	5	5
3423	Hand and edge tools, n.e.c	8.9	25.9	7.2	12.2	.3	514.5	13.7	(D)	6	3
3425	Handsaws and saw blades	1.0	4.3	.6	1.0	(S)	119.2	3.2	-	43	12
3429	Hardware, n.e.c	18.7	60.0	13.9	23.2	2.1	1,423.1	36.8	(D)	3	3
343	Plumbing and heating, except electric	14.0	39.3	11.6	20.4	(D)	710.1	18.8	(S)	3	4
3431	Metal sanitary ware	5.8	13.3	5.0	7.8	.4	218.8	5.5	(D)	3	5
3432	Plumbing fittings, brass goods	3.7	12.5	2.6	4.4	(D)	322.4	8.1	(D)	9	6
3433	Heating equipment, except electric	4.5	13.5	3.9	8.3	(D)	168.8	5.2	(S)	5	8
344	Fabricated structural metal products	67.2	209.5	50.0	84.3	(D)	5,026.3	125.2	13.8	3	4
3441	Fabricated structural metal	14.6	48.2	10.6	18.1	(D)	1,185.5	30.1	(D)	12	14
3442	Metal doors, sash, and trim	8.0	25.7	5.8	10.1	2.8	633.7	15.6	(D)	6	5
3443	Fabricated plate work, boiler shops	22.3	65.7	17.0	28.1	3.5	1,566.5	37.5	(D)	5	4
3444	Sheet metalwork	12.6	34.7	10.2	16.9	(D)	705.0	17.8	(D)	4	6
3446	Architectural metalwork	2.7	9.9	1.8	3.3	1.2	249.5	6.5	(Z)	10	27
3448	Prefabricated metal buildings	2.8	10.2	1.8	3.3	(D)	286.2	6.8	-	5	3
3449	Miscellaneous metalwork	4.2	15.3	2.8	4.4	.8	399.9	10.9	(S)	6	4
345	Screw machine products, bolts, etc	20.2	67.0	14.7	25.2	(D)	1,591.0	41.8	(D)	5	5
3451	Screw machine products	4.7	18.0	2.8	5.2	(D)	539.3	12.8	(D)	20	10
3452	Bolts, nuts, rivets, and washers	15.5	49.0	11.9	20.1	2.4	1,051.7	29.0	(D)	3	5
346	Metal forgings and stampings	100.4	275.6	81.8	136.1	7.4	5,475.9	139.6	(S)	3	4
3462	Iron and steel forgings	44.1	90.9	40.8	66.0	(D)	969.4	25.0	(D)	4	3
3463	Nonferrous forgings	5.9	13.6	5.2	7.9	(S)	212.7	5.7	(D)	10	8
3465	Automotive stampings	31.6	111.5	21.4	37.4	2.2	2,996.1	74.1	(D)	6	6
3466	Crowns and closures	2.6	7.3	2.0	3.4	.3	164.6	3.9	(D)	1	3
3469	Metal stampings, n.e.c	16.3	52.3	12.4	21.3	3.0	1,133.0	31.0	(S)	4	5
347	Metal services, n.e.c	39.3	111.4	31.2	53.2	(D)	2,396.4	58.2	(D)	7	9
3471	Plating and polishing	22.8	70.9	17.4	30.7	(D)	1,596.7	40.2	(D)	9	8
3479	Metal coating, allied services	16.5	40.5	13.8	22.5	1.9	799.7	18.1	(D)	9	24
348	Ordnance and accessories, n.e.c	20.8	55.2	16.1	24.5	(D)	1,369.9	30.8	(S)	2	3
3482	Small arms ammunition	4.1	9.9	3.4	5.2	.1	205.6	4.7	(D)	1	1
3483	Ammunition, except for small arms, n.e.c.	8.6	22.7	6.9	11.3	.7	478.4	11.4	(D)	2	6
3484	Small arms	2.0	8.7	1.3	2.9	.1	211.1	5.8	(D)	1	3
3489	Ordnance and accessories, n.e.c	6.1	13.9	4.5	5.0	(D)	474.8	8.9	(D)	5	2
349	Miscellaneous fabricated metal products	53.0	171.9	38.2	65.8	10.3	4,323.2	106.1	4.1	3	3
3493	Steel springs, except wire	4.8	12.4	4.2	7.0	(D)	199.9	5.4	(D)	14	17
3494	Valves and pipe fittings	19.3	64.8	13.5	23.5	1.0	1,689.9	41.3	(D)	2	2
3495	Wire springs	2.4	8.2	1.8	3.0	(S)	180.8	5.2	(S)	9	9
3496	Miscellaneous fabricated wire products	4.6	15.7	3.3	5.9	(D)	376.5	9.8	(D)	12	8
3497	Metal foil and leaf	2.5	9.6	1.4	2.6	(D)	308.1	7.0	-	9	9
3498	Fabricated pipe and fittings	4.1	13.7	2.8	4.9	(D)	375.5	8.8	(D)	10	15
3499	Fabricated metal products, n.e.c.	15.2	47.6	11.2	19.0	7.6	1,192.4	28.6	(D)	6	5
35	Machinery, except electric	339.3	1,098.9	242.1	405.6	51.1	28,489.9	693.2	355.1	1	1
351	Engines and turbines	30.2	95.7	22.3	39.8	.5	2,313.5	55.9	89.1	1	1
3511	Turbines and turbine generator sets	9.5	33.3	7.1	15.0	(D)	711.1	18.3	(D)	1	1
3519	Internal combustion engines, n.e.c	20.7	62.3	15.2	24.8	(D)	1,602.4	37.6	(D)	2	1
352	Farm and garden machinery	37.5	93.7	30.7	48.1	5.0	1,996.0	45.7	(D)	2	2
3523	Farm machinery and equipment	34.0	83.8	27.9	43.7	4.6	1,771.5	40.1	(D)	2	3
3524	Lawn and garden equipment	3.5	10.0	2.8	4.4	.4	224.5	5.6	(D)	6	3
353	Construction and related machinery	68.1	187.4	50.3	76.6	5.9	5,198.1	110.8	64.5	2	2
3531	Construction machinery	35.5	94.8	27.3	39.3	(D)	2,404.2	55.6	(D)	1	1
3532	Mining machinery	5.0	14.8	3.6	4.7	.4	408.9	10.0	(D)	5	6
3533	Oil field machinery	15.9	39.8	10.8	17.3	1.2	1,502.2	22.6	(S)	4	3
3534	Elevators and moving stairways	1.4	5.2	1.1	2.0	(D)	101.6	3.2	-	9	4
3535	Conveyors and conveying equipment	3.2	11.2	2.3	4.1	(D)	270.7	7.1	(Z)	9	11
3536	Hoists, cranes, and monorails	2.5	7.7	1.9	3.2	.3	180.7	4.5	(D)	5	5
3537	Industrial trucks and tractors	4.6	13.9	3.5	6.1	(D)	330.0	7.9	(Z)	6	4
354	Metalworking machinery	40.9	150.3	28.0	50.3	10.0	3,762.9	100.0	(S)	5	5
3541	Machine tools, metal-cutting types	9.0	31.1	6.6	11.7	1.8	702.2	19.4	(D)	5	4
3542	Machine tools, metal-forming types	3.7	12.6	2.4	4.5	.2	383.4	8.0	(Z)	10	6
3544	Special dies, tools, jigs, and fixtures	13.2	51.6	8.6	15.3	6.1	1,363.3	36.3	(D)	7	12
3545	Machine tool accessories	5.5	24.9	3.2	5.8	1.0	676.7	19.0	2.0	4	5
3546	Power driven handtools	2.5	10.3	1.5	2.9	(D)	295.0	7.4	(D)	5	7
3547	Rolling mill machinery	4.1	10.6	3.5	5.7	(D)	174.1	4.9	-	2	3
3549	Metalworking machinery, n.e.c	2.8	9.2	2.2	4.2	.7	168.2	4.9	(D)	47	14

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. (For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
35	Machinery, except electric--Con.										
355	Special industry machinery	23.9	88.9	16.4	30.1	5.4	2,202.6	58.8	16.0	5	3
3551	Food products machinery	4.0	14.3	2.8	5.1	1.5	354.2	9.2	(D)	5	7
3552	Textile machinery	3.5	13.7	2.3	4.5	(Z)	351.6	9.2	(D)	10	9
3553	Woodworking machinery	1.6	5.6	1.1	1.7	(D)	161.2	3.9	(S)	35	17
3554	Paper industries machinery	2.1	8.7	1.5	3.0	(D)	180.9	5.7	(D)	7	4
3555	Printing trades machinery	3.1	11.5	2.3	4.2	2.1	248.0	7.3	(S)	23	6
3559	Special industry machinery, n.e.c.	9.6	35.1	6.5	11.6	(D)	906.8	23.5	(D)	6	5
356	General industrial machinery	50.5	170.1	35.8	62.8	5.4	4,318.5	107.4	8.6	2	2
3561	Pumps and pumping equipment	8.3	30.5	5.2	9.0	.8	911.5	21.5	(D)	4	3
3562	Ball and roller bearings	15.7	49.2	11.5	20.3	.5	1,234.8	28.9	-	1	2
3563	Air and gas compressors	4.9	15.6	3.7	7.2	.4	363.9	8.5	(D)	5	4
3564	Blowers and fans	3.2	11.9	2.4	4.3	.6	249.0	7.6	(D)	11	10
3565	Industrial patterns	1.1	3.9	.8	1.4	.2	95.2	2.5	(S)	26	19
3566	Speed changers, drives, and gears	4.7	14.5	3.5	5.5	.4	352.2	9.0	(D)	10	9
3567	Industrial furnaces and ovens	1.4	5.5	.9	1.6	(S)	145.5	3.9	(D)	15	12
3568	Power transmission equipment, n.e.c.	6.2	20.1	4.5	7.4	.8	485.7	12.7	(D)	1	2
3569	General industrial machinery, n.e.c.	5.0	19.0	3.3	6.1	1.8	480.7	12.8	(D)	7	6
357	Office and computing machines	20.4	92.2	10.5	18.7	2.9	2,883.0	73.6	(S)	2	1
3573	Electronic computing equipment	13.5	66.4	5.9	10.2	2.2	2,240.1	56.2	(D)	3	2
3574	Calculating and accounting machines	2.1	7.9	1.4	2.4	.2	202.6	5.4	(D)	1	4
3576	Scales, and balances, except laboratory	.6	2.5	.5	.9	.2	53.6	1.6	(Z)	15	6
3579	Office machines, typewriters, n.e.c.	4.1	15.5	2.8	5.2	.3	386.7	10.3	-	1	1
358	Refrigeration and service machinery	39.0	112.1	29.5	48.0	7.7	2,767.6	64.1	(S)	2	2
3581	Automatic merchandising machines	1.1	3.7	.9	1.5	(D)	72.7	2.2	(D)	6	7
3582	Commercial laundry equipment	.5	1.5	.3	.6	(S)	44.2	.9	-	26	22
3585	Refrigeration and heating equipment	33.4	94.2	25.3	40.7	6.0	2,369.2	53.5	(D)	2	1
3586	Measuring and dispensing pumps	1.1	3.4	.8	1.3	(D)	75.8	2.1	-	11	6
3589	Service industry machinery, n.e.c.	2.9	9.3	2.2	3.9	(D)	205.7	5.4	-	6	9
359	Miscellaneous machinery, except electrical	28.8	108.4	18.4	31.4	8.2	3,047.5	77.0	(D)	5	4
3592	Carburetors, pistons, rings, valves	8.2	26.8	5.5	8.2	.4	772.9	18.7	-	2	2
3599	Machinery, except electrical, n.e.c.	20.7	81.5	12.9	23.3	7.8	2,274.6	58.3	(D)	6	6
36	Electric and electronic equipment	241.5	824.5	160.0	263.2	27.8	23,888.7	561.3	50.9	1	1
361	Electric distributing equipment	14.9	51.7	10.2	17.3	(D)	1,381.5	34.4	(D)	1	2
3612	Transformers	8.3	25.2	6.0	9.7	.9	683.7	15.5	-	1	2
3613	Switchgear and switchboard apparatus	6.5	26.5	4.2	7.6	.6	697.8	18.9	(D)	2	3
362	Electrical industrial apparatus	44.5	135.6	30.4	48.8	2.5	4,120.3	86.8	(S)	1	2
3621	Motors and generators	15.9	48.0	11.5	18.5	.8	1,291.6	29.5	(D)	2	2
3622	Industrial controls	5.7	21.9	3.5	5.9	1.0	646.7	16.0	(S)	3	3
3623	Welding apparatus, electric	3.0	9.3	2.2	3.7	(S)	240.8	5.6	(D)	6	4
3624	Carbon and graphite products	17.9	47.4	12.1	18.5	.6	1,703.6	28.9	(D)	1	2
3629	Electrical industrial apparatus, n.e.c.	2.0	9.0	1.2	2.2	.1	237.6	6.7	-	3	14
363	Household appliances	38.1	100.8	29.4	44.2	1.7	2,549.0	56.7	(S)	1	1
3631	Household cooking equipment	7.0	17.0	5.7	8.7	.4	389.0	8.3	(S)	1	2
3632	Household refrigerators and freezers	9.0	20.9	7.0	8.5	(S)	588.5	12.3	(S)	2	1
3633	Household laundry equipment	7.8	19.8	6.1	9.5	.7	490.1	10.3	-	1	1
3634	Electric housewares and fans	6.2	22.2	4.1	7.1	.4	628.3	15.1	-	3	3
3635	Household vacuum cleaners	1.7	5.6	1.2	1.9	.2	158.6	3.7	(S)	2	2
3636	Sewing machines	.9	3.6	.6	1.3	(Z)	78.5	2.3	(S)	2	4
3639	Household appliances, n.e.c.	5.4	11.7	4.6	7.1	(Z)	216.1	4.6	-	3	2
364	Electric lighting and wiring equipment	28.9	94.8	21.0	36.3	(D)	2,308.9	58.5	(S)	3	2
3641	Electric lamps	6.1	19.4	4.5	7.3	(D)	478.9	12.0	(S)	2	1
3643	Current-carrying wiring devices	4.0	18.2	2.4	4.8	.3	459.5	13.4	(S)	3	3
3644	Noncurrent-carrying wiring devices	6.1	21.3	4.4	8.3	.8	488.3	13.0	(S)	8	4
3645	Residential lighting fixtures	3.5	10.6	2.8	5.2	2.1	198.7	5.4	(D)	6	8
3646	Commercial lighting fixtures	3.4	10.0	2.7	4.8	1.1	215.9	5.3	(D)	5	5
3647	Vehicular lighting equipment	4.2	9.4	3.1	3.8	(D)	326.1	5.7	-	8	2
3648	Lighting equipment, n.e.c.	1.5	5.8	1.1	2.1	.4	141.4	3.7	-	13	11
365	Radio and TV receiving equipment	10.7	34.9	7.6	13.4	3.8	919.6	21.6	(S)	4	2
3651	Radio and TV receiving sets	5.6	20.4	3.5	5.8	.8	613.9	14.6	(S)	4	2
3652	Phonograph records	5.1	14.5	4.1	7.5	3.0	305.8	6.9	-	6	5
366	Communication equipment	36.7	150.8	21.5	35.7	4.4	4,461.4	115.1	148.9	2	2
3661	Telephone and telegraph apparatus	14.5	41.8	10.5	15.6	.8	1,188.4	26.2	(D)	1	1
3662	Radio and TV communication equipment	22.2	109.0	11.0	20.1	3.6	3,273.0	88.9	(D)	3	2

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
36	Electric and electronic equipment--Con.										
367	Electronic components and accessories	3.0	175.0	23.3	41.5	6.8	5,771.5	133.5	(S)	2	2
3671	Electron tubes, all types	.6	2.7	.4	.6	.2	77.9	2.1	(S)	1	1
3672	Cathode ray TV picture tubes	4.8	15.0	3.2	5.2	(Z)	459.9	9.8	-	1	1
3673	Electron tubes, transmitting	2.5	10.7	1.3	2.7	.2	345.6	8.0	(D)	5	2
3674	Semiconductors and related devices	14.2	59.7	6.6	11.9	2.1	2,225.2	47.8	-	1	3
3675	Electronic capacitors	3.2	13.2	1.7	3.2	.2	441.4	10.0	(D)	3	2
3676	Electronic resistors	1.5	6.9	.7	1.1	(D)	237.0	5.8	(D)	5	3
3677	Electronic coils and transformers	1.3	4.6	.8	1.4	.4	145.0	3.1	-	14	8
3678	Electronic connectors	2.0	9.8	1.0	2.0	(D)	287.2	7.8	(D)	4	2
3679	Electronic components, n.e.c	12.9	52.4	7.6	13.3	3.3	1,552.3	39.1	(D)	4	3
369	Miscellaneous electrical equipment and supplies	24.8	81.0	16.7	26.2	(D)	2,376.6	54.8	(D)	3	2
3691	Storage batteries	9.8	33.2	6.5	10.6	.2	953.8	22.6	(S)	7	3
3692	Primary batteries, dry and wet	1.4	5.4	.9	1.7	.1	138.7	3.7	-	1	4
3693	X-ray apparatus and tubes	1.6	5.9	1.1	1.9	(D)	161.0	4.0	(Z)	3	6
3694	Engine electrical equipment	9.5	26.2	6.6	8.9	(D)	853.1	17.3	(D)	2	2
3699	Electrical equipment and supplies, n.e.c.	2.5	10.3	1.6	3.1	.9	269.9	7.2	(D)	8	9
37	Transportation equipment	385.0	1,195.8	283.6	473.7	16.0	29,712.1	722.0	(S)	1	1
371	Motor vehicles and equipment	259.4	767.0	198.6	331.0	7.8	17,814.6	436.0	(S)	1	1
3711	Motor vehicles and car bodies	119.3	330.3	95.2	156.2	.8	7,062.4	174.1	(D)	1	1
3713	Truck and bus bodies	5.5	17.5	4.2	7.6	1.0	354.0	10.0	(D)	6	8
3714	Motor vehicle parts and accessories	131.8	409.8	97.1	163.6	5.3	10,169.6	246.2	(D)	1	1
3715	Truck trailers	2.8	9.3	2.0	3.6	.7	227.3	5.7	-	5	5
372	Aircraft and parts	62.4	218.7	41.2	70.5	(D)	6,236.8	148.2	(S)	1	1
3721	Aircraft	27.7	95.0	18.1	29.8	(D)	2,801.9	65.3	(D)	1	1
3724	Aircraft engines and engine parts	20.8	72.9	14.5	27.2	.7	1,840.6	45.7	(D)	2	3
3728	Aircraft equipment, n.e.c	14.0	50.7	8.5	13.5	(D)	1,594.3	37.2	(D)	2	3
373	Ship and boat building and repairing	20.9	79.5	13.9	26.7	3.7	2,058.9	52.9	(S)	4	3
3731	Ship building and repairing	16.6	65.9	10.6	20.7	(D)	1,755.7	45.2	(D)	5	4
3732	Boat building and repairing	4.3	13.6	3.3	6.0	(D)	303.2	7.6	(S)	7	9
3743	Railroad equipment	16.2	38.2	13.4	18.9	.5	813.3	19.3	(D)	1	3
3751	Motorcycles, bicycles, and parts	2.5	8.1	1.8	3.2	.6	197.4	4.9	-	4	6
376	Guide missiles, space vehicles, parts	15.6	60.6	8.7	13.0	.4	2,030.3	47.6	(S)	1	1
3761	Guided missiles and space vehicles	9.6	38.7	4.8	6.6	.3	1,402.0	32.1	(S)	1	1
3764	Space propulsion units and parts	4.5	14.1	3.2	5.3	(Z)	383.7	8.8	(D)	1	1
3769	Space vehicle equipment, n.e.c	1.5	7.8	.7	1.1	.1	244.6	6.7	(D)	1	1
379	Miscellaneous transportation equipment	8.0	23.6	6.0	10.4	(D)	560.8	13.2	(S)	6	12
3792	Travel trailers and campers	2.5	8.1	1.9	3.3	(D)	180.4	4.7	(D)	9	6
3795	Tanks and tank components	3.1	7.8	2.6	4.2	(D)	151.3	3.6	-	1	1
3799	Transportation equipment, n.e.c	2.3	7.7	1.5	2.9	(D)	229.2	4.9	-	20	31
38	Instruments and related products	76.7	239.3	58.6	97.8	(D)	5,321.6	141.6	(D)	1	2
3811	Engineering and scientific instruments	4.2	19.0	2.5	4.6	1.3	501.0	14.4	(D)	9	6
382	Measuring and controlling devices	13.4	54.8	7.8	14.0	1.7	1,619.8	40.8	(D)	2	2
3822	Environmental controls	2.9	11.1	1.8	2.8	.5	322.8	8.3	-	3	3
3822	Process control instruments	2.3	10.5	1.4	2.8	.4	258.1	7.8	(Z)	2	4
3824	Fluid meters and counting devices	1.6	5.8	1.0	1.8	.1	166.4	4.0	-	3	5
3825	Instruments to measure electricity	4.8	19.0	2.6	4.6	(D)	633.9	14.4	(D)	3	4
3829	Measuring and controlling devices, n.e.c.	1.9	8.4	1.1	2.1	(D)	238.6	6.3	(D)	12	7
3832	Optical instruments and lenses	1.7	6.9	1.3	2.6	1.0	120.5	4.3	-	4	11
384	Medical instruments and supplies	11.2	45.0	7.2	13.1	1.7	1,160.5	31.9	(D)	3	3
3841	Surgical and medical instruments	4.3	19.0	2.5	4.5	(D)	516.6	14.5	(Z)	2	4
3842	Surgical appliances and supplies	5.4	19.9	3.6	6.6	(D)	506.9	13.4	(D)	5	5
3843	Dental equipment and supplies	1.5	6.1	1.1	2.0	(D)	137.0	4.1	(D)	10	9
3851	Ophthalmic goods	4.2	15.5	3.2	6.7	(D)	285.2	8.8	(D)	2	4
3861	Photographic equipment and supplies	39.9	88.5	35.1	54.3	(D)	1,394.7	34.2	(D)	1	2
3873	Watches, clocks, and watchcases	2.1	9.6	1.3	2.6	.3	240.0	7.0	(S)	5	3
39	Miscellaneous manufacturing industries	48.3	175.5	34.2	65.2	(D)	4,114.8	110.3	(S)	4	2
391	Jewelry, silverware and plated ware	4.7	18.4	3.4	7.3	(D)	388.6	11.1	(S)	5	5
3911	Jewelry, precious metal	1.8	8.2	1.1	2.2	.7	207.7	6.0	(D)	9	7
3914	Silverware and plated ware	2.4	7.8	1.9	4.1	(D)	137.0	3.7	(D)	6	9
3915	Jewelers' materials and lapidary work	.6	2.4	.5	1.0	.4	44.0	1.4	-	9	16
3931	Musical instruments	2.1	7.9	1.5	2.8	.5	179.1	5.0	(D)	7	6

See footnotes at end of table.

Table 4. **Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating technique; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns--[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Total cost (million dollars)	British thermal units (trillions)	Total cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
39	Miscellaneous manufacturing industries--Con.										
394	Toys and sporting goods	14.8	53.1	10.4	18.9	2.6	1,285.7	34.2	(D)	10	3
3942	Dolls	.6	2.4	.4	.8	.5	52.5	1.6	-	14	23
3944	Games, toys, and children's vehicles	6.1	23.9	4.1	7.4	.1	586.6	16.4	(D)	24	4
3949	Sporting and athletic goods, n.e.c.	8.1	26.8	5.9	10.7	2.0	646.6	16.2	(D)	7	5
395	Pens, pencils, office and art supplies	3.6	14.4	2.4	4.6	(D)	367.6	9.8	(D)	7	4
3951	Pens and mechanical pencils	1.0	5.5	.5	.9	(D)	155.8	4.6	-	7	4
3952	Lead pencils and art goods	1.1	3.8	.8	1.5	.7	89.5	2.3		3	4
3953	Marking devices	.6	2.2	.4	.8	(D)	58.1	1.3		22	15
3955	Carbon paper and inked ribbons	.9	3.0	.7	1.4	(D)	64.2	1.6	-	18	11
396	Costume jewelry and notions	4.6	19.4	3.1	6.6	1.3	442.3	12.8	(S)	9	5
3961	Costume jewelry	1.7	7.3	1.2	2.7	.7	143.0	4.5	(D)	9	9
3962	Artificial flowers	.5	1.7	.4	.9	.1	23.5	.8	(Z)	56	24
3963	Buttons	.5	1.9	.3	.6	.3	50.6	1.3	(Z)	14	17
3964	Needles, pins, and fasteners	1.9	8.5	1.1	2.3	.2	225.2	6.1	(D)	7	7
399	Miscellaneous manufactures	18.4	62.3	13.4	25.0	5.9	1,451.5	37.3	(S)	4	4
3991	Brooms and brushes	1.3	6.2	.7	1.4	(D)	182.3	4.8	(D)	10	10
3993	Signs and advertising displays	4.9	17.4	3.4	6.3	1.7	443.8	11.1	(D)	13	11
3995	Burial caskets	1.9	5.8	1.5	2.5	.2	117.4	3.3	(D)	15	13
3996	Hard surface floor coverings	3.3	9.0	2.6	4.9	(D)	188.8	4.1	(S)	2	2
3999	Manufacturing industries, n.e.c.	7.0	24.0	5.3	9.9	3.6	519.1	14.1	(S)	6	6

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards. (X) Not applicable. (Z) Less than 50 thousand dollars or less than half the unit of measure specified.

[1]For further explanation see appendix G, Standard Error of Estimate.

Fuels and Electric Energy Consumed

States by Industry Group

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GUIDE TO STATE DATA

State	Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976 (page numbers)	Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised (page numbers)
Alabama	78	131
Alaska	98	143
Arizona	90	138
Arkansas	80	133
California	96	141
Colorado	90	138
Connecticut	24	103
Delaware	58	121
District of Columbia	60	123
Florida	72	128
Georgia	68	126
Hawaii	98	143
Idaho	88	137
Illinois	42	112
Indiana	38	111
Iowa	52	117
Kansas	58	121
Kentucky	72	129
Louisiana	82	134
Maine	18	100
Maryland	60	122
Massachusetts	20	101
Michigan	44	114
Minnesota	50	116
Mississippi	80	132
Missouri	54	118
Montana	88	137
Nebraska	56	120
Nevada	92	139
New Hampshire	18	100
New Jersey	30	106
New Mexico	90	138
New York	26	104
North Carolina	64	124
North Dakota	56	120
Ohio	36	109
Oklahoma	84	135
Oregon	94	140
Pennsylvania	32	107
Rhode Island	22	102
South Carolina	66	126
South Dakota	56	120
Tennessee	74	130
Texas	86	135
Utah	92	139
Vermont	20	101
Virginia	62	123
Washington	92	140
West Virginia	64	124
Wisconsin	48	115
Wyoming	88	137

GEOGRAPHIC DIVISIONS OF THE UNITED STATES



U. S. Department of Commerce
BUREAU OF THE CENSUS

EXPLANATORY TEXT

SUMMARY DATA

In 1977 the U.S. consumption of purchased fuels and electric energy for heat and power by manufacturing establishments totaled 12.9 quadrillion British thermal units (Btu's). This represented a 1 percent increase over the 1976 consumption figure of 12.8 quadrillion Btu's, which was considerably lower than the 6.2 percent increase in the Federal Reserve Board's (FRB) index of manufacturing production for that period. From these statistics it appears that proportionately less energy is being consumed in the production of manufactured goods. Apparently, fuel shortages and resulting efforts to save energy have changed the historic correlation between levels of production and energy consumption.

Expenditures during 1977 by manufacturers for fuels and electric energy amounted to $33.4 billion, an increase of 19 percent over the 1976 total of $28.1 billion (chart 1). Manufacturers' expenditures in 1977 for natural gas totaled $8.9 billion, an 18 percent increase over the 1976 level of $7.5 billion. Purchased electric energy costs increased 19 percent from $12.2 billion in 1976 to $14.5 billion in 1977, while those for fuel oil increased 23 percent to a 1977 level of $4.9 billion. Expenditures for coal increased by 11 percent between 1976 and 1977 to $1.5 billion, while for coke and breeze they increased 22 percent from the revised 1976 figure of $1.4 billion to $1.8 billion in 1977 (chart 2). All dollar figures in this report are in current dollars and therefore are not adjusted for changes in price levels.

While overall energy consumption between 1976 and 1977 showed only a modest increase, some variations in the mix of the fuel types and electric energy occured (chart 3). Increases in consumption were recorded for each of the major fuels and purchased electric energy except natural gas. Consumption of gas declined 5 percent from the 1976 level. This decrease caused the proportion of total natural gas consumed to slide to 46 percent of all manufacturing energy usage during 1977. Although natural gas remains the dominant fuel used by manufacturers, its percent of total energy usage has dropped significantly from the 1971 level of 56 percent. This shows the increasing switch from natural gas to the other major fuels and electric energy, particularly to residual fuel oil (table A and chart 4).

The average cost per million Btu's of energy consumed in 1977 was $2.58, a 17 percent increase over the 1976 average cost. This increase, more than the 14 percent increase between 1975 and 1976, was considerably lower than the average annual increase of 25 percent between 1971 and 1975. The increased average cost per million Btu's resulted primarily from an increased unit cost of natural gas, which rose to $1.55 per million Btu's. This was a 24 percent jump over the 1976 average cost of $1.26 per million Btu's. Lesser increases in average unit cost were registered by each of the other major fuels and electric energy. Again in 1977, coal remained the lowest cost fuel (on a Btu-per-dollar basis) of any of the major fuels covered in this report (table B and chart 5). Chart 6 illustrates the sharp increase in unit costs of selected fuels and electric energy consumed by all manufacturing industries during 1967-1977.

Although purchased electric energy accounted for 17 percent of the total energy consumed by manufacturers, it accounted for 43 percent of total energy expenditures. While natural gas accounted for 46 percent of total energy used (chart 4), it accounted for only 27 percent of total expenditures, making it a considerably lower priced source of energy than electricity in terms of Btu's. This Btu computation assumes perfect conversion of various fuels into energy, which in practice does not occur. Thus, a decrease in fuel consumption with a corresponding increase in purchased electric energy will result in a lower Btu figure to the extent that conversion losses are shifted to a public utility.

Table A. **Percent of Total Energy Consumed by All Manufacturing Industries for Selected Fuels and Purchased Electric Energy: 1967, 1971, and 1974-1977**

(Data for fuels not specified by kind were distributed among detailed fuels)

Fuels and electric energy	1977	1976	1975	1974	1971	1967
Total	100	100	100	100	100	100
Residual fuel oil	12	12	10	9	7	7
Bituminous coal, lignite, and anthracite	11	10	10	10	13	19
Coke and breeze	4	4	3	3	3	3
Distillate fuel oil	5	4	5	5	5	4
Natural gas	46	49	52	54	56	53
Purchased electric energy	17	17	17	15	13	12
Other fuels	4	4	4	3	2	1

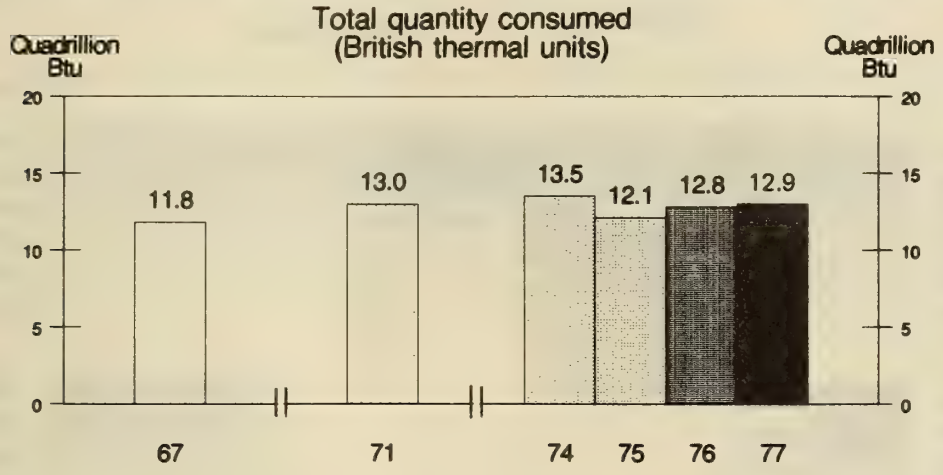
Note: Detail may not add to 100 because of independent rounding.

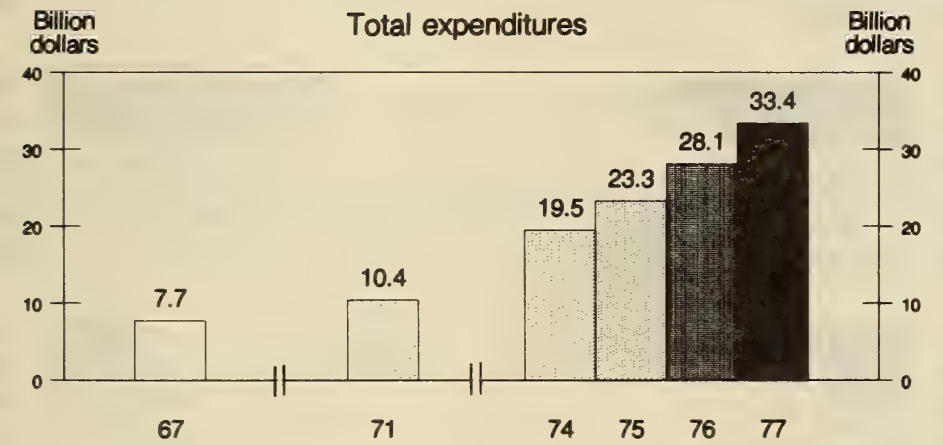
Table B. **Unit Cost and Index of Change of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974-1977**

Year	Total purchased fuels and electric energy	Natural gas	Bituminous coal, lignite, and Anthracite	Residual fuel oil	Distillate fuel oil	Coke and breeze	Purchased Electric energy
	UNIT COST (DOLLARS PER MILLION BTU)						
1977	2.58	1.55	1.13	2.14	2.70	3.37	6.41
1976	2.20	1.26	1.07	1.88	2.38	2.98	5.58
1975	1.93	.95	1.12	1.93	2.24	2.58	5.06
1974	1.44	.64	.86	1.83	2.04	1.87	4.02
1971	.80	.38	.41	.61	.74	.89	2.89
1967	.65	.32	.28	.42	.62	.71	2.55
	INDEX OF CHANGE (1971=100)						
1977	321	405	276	354	363	379	222
1976	275	328	262	310	321	335	193
1975	240	247	273	318	304	290	175
1974	179	167	210	301	275	211	139
1971	100	100	100	100	100	100	100
1967	81	83	68	69	84	80	88

CHART 1.

Purchased Fuels and Electric Energy Quantity Consumed, Expenditures, and Unit Cost: 1967,1971, and 1974–1977





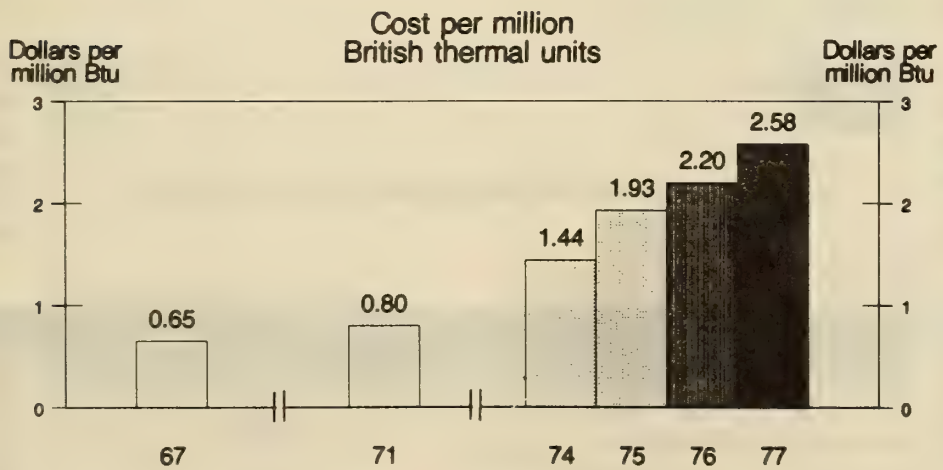


CHART 2.

Expenditures for Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes expenditures for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 3.2 and 2.3 percent of all fuel and electric energy expenditures by all manufacturing industries)

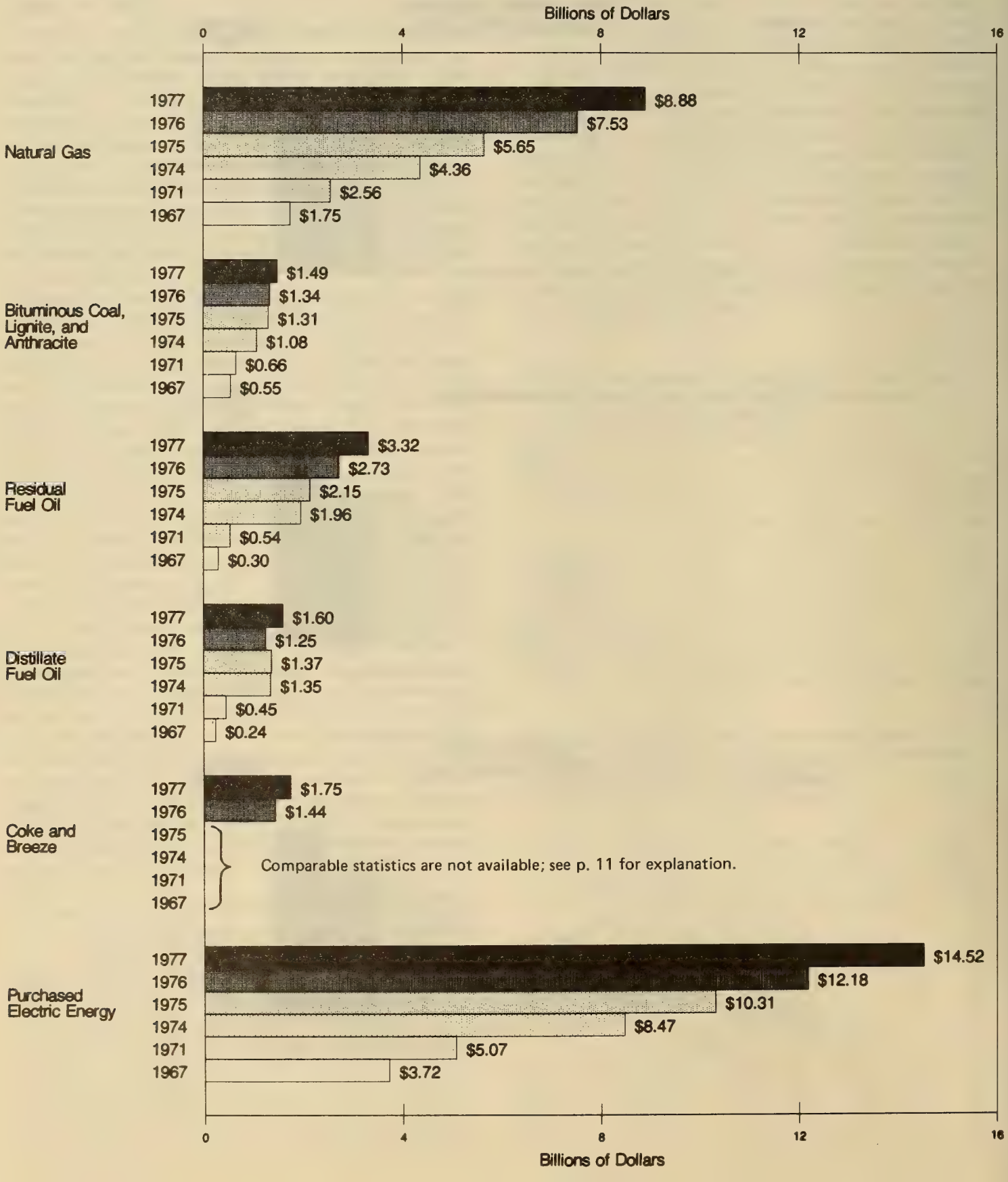


CHART 3.

Quantity of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes consumption for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 4.8 and 4.4 percent of all fuel and electric energy consumption by all manufacturing industries)

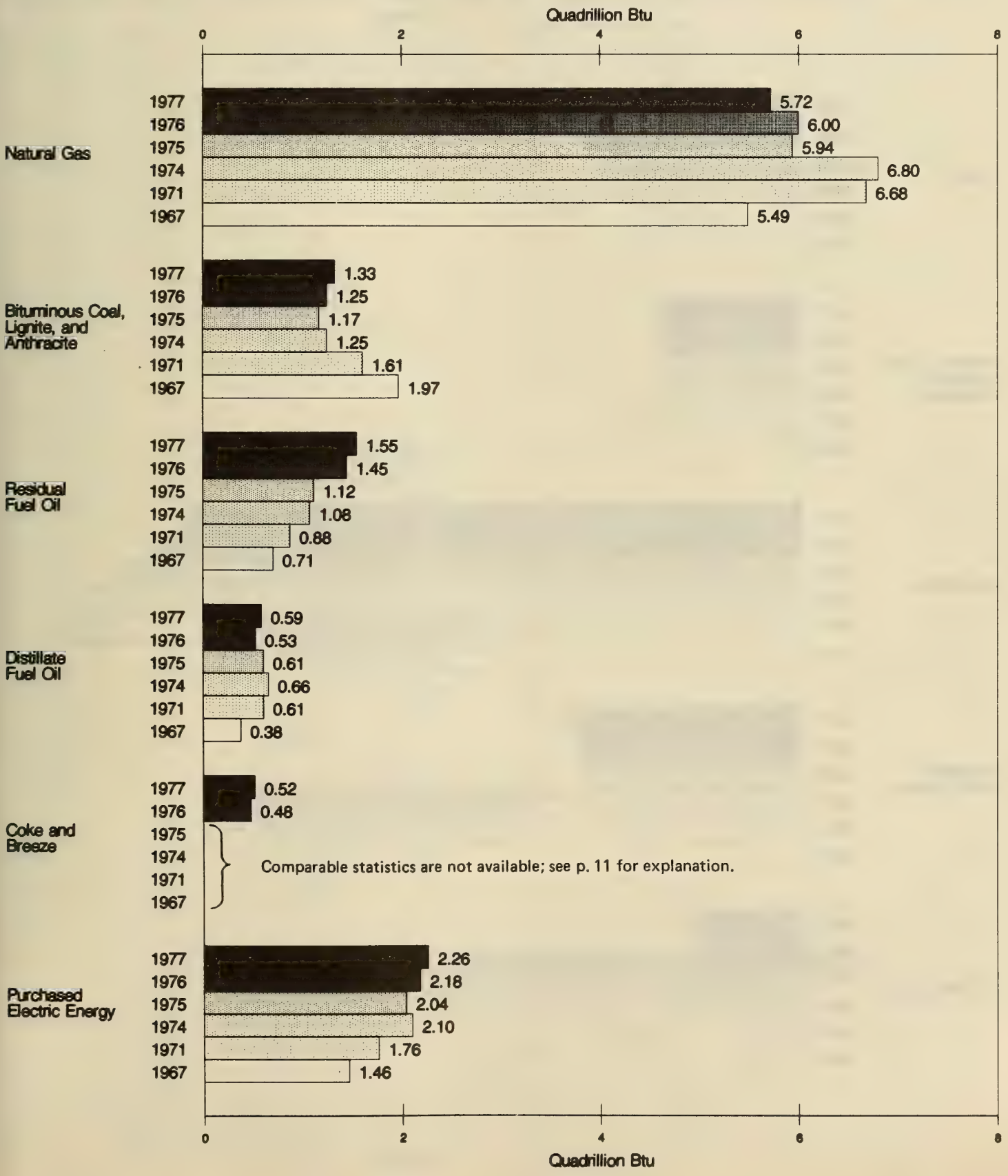


CHART 4.

Percent of Manufacturing Energy (BTU) Consumption Represented by Selected Individual Fuels and Purchased Electric Energy: 1967, 1971, and 1974–1977

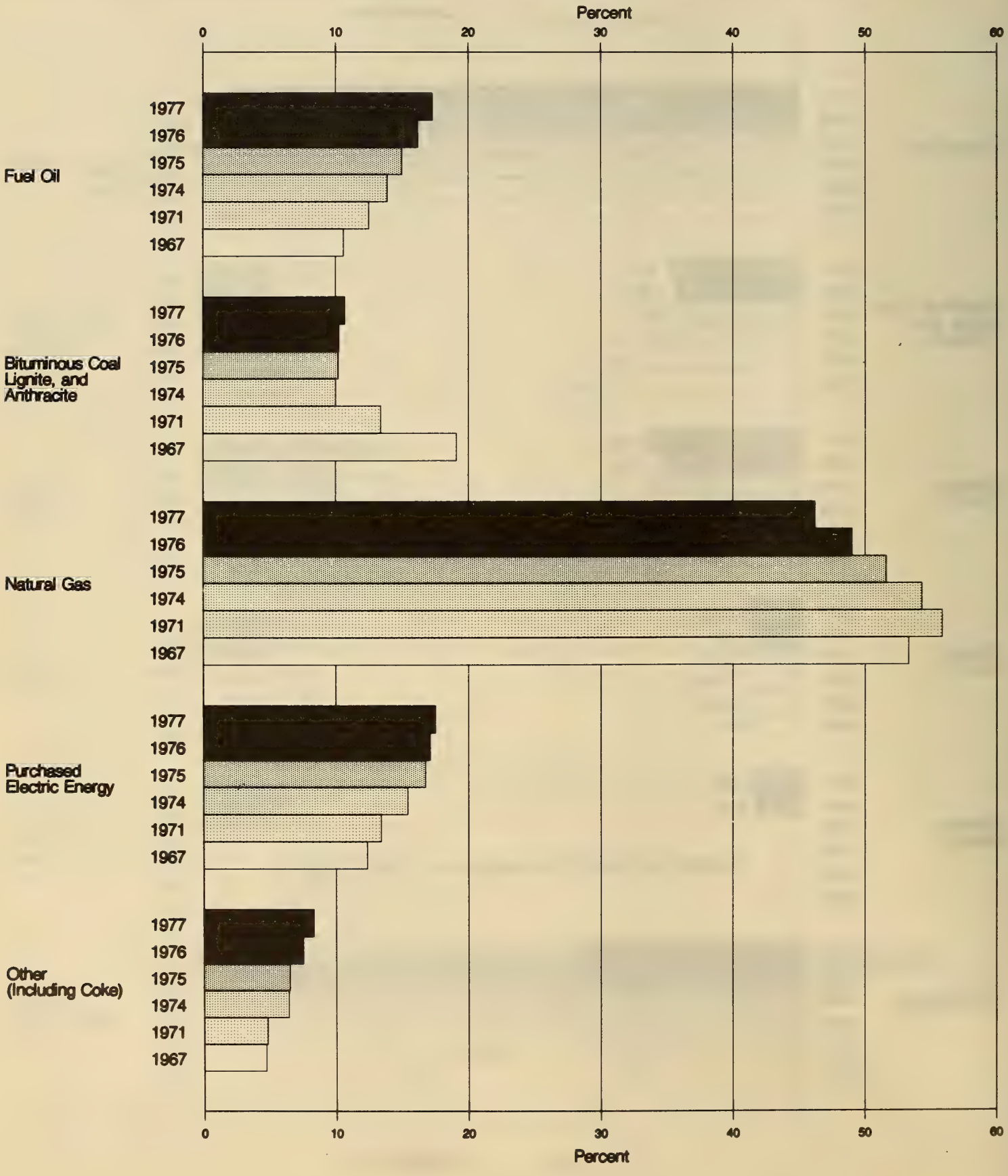


CHART 5.

Cost per Million British Thermal Units of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes Other Fuels and Fuels Not Specified by Kind, which for 1977 averaged $2.09 and $1.59 per million Btu's)

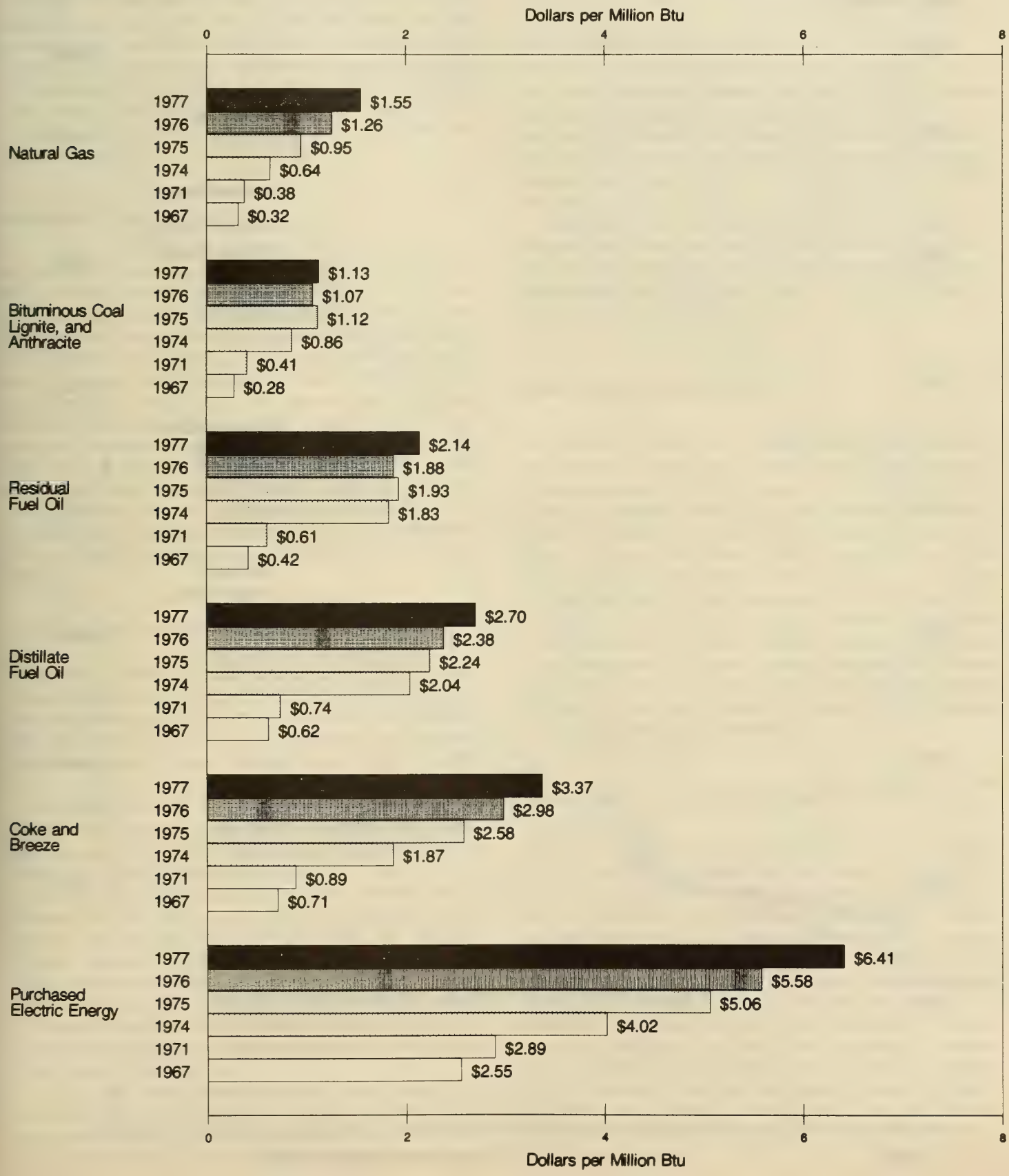
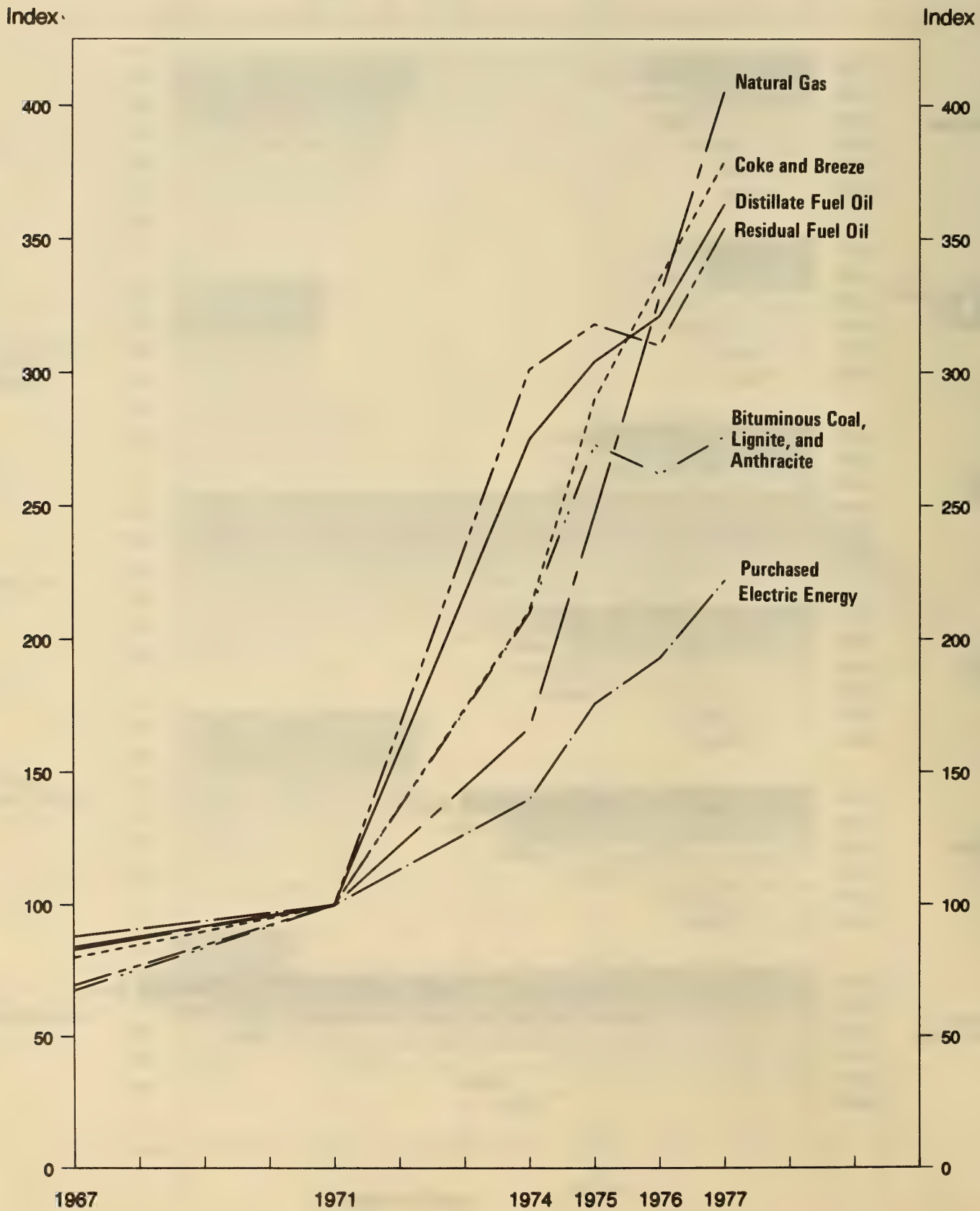


CHART 6.

Cost Per British Thermal Unit of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries 1967, 1971, and 1974–1977 (1971=100)



STATE DATA

This report on fuels and electric energy consumed presents 1977 Census of Manufactures statistics on the quantity and cost of purchased fuels and electric energy for States by 2- and 3-digit standard industrial classification (SIC) industry groups. The data in this report supplement those previously published on this subject for the United States by industry groups and industries in publication series number MC77-SR-4 (Part 1). A subsequent report [MC77-SR-4 (Part 3)] will present final statistics for standard metropolitan statistical areas by major industry groups (2-digit SIC).

Consumption (Quantity of Btu's)

An increase in consumption of purchased fuels and electric energy occurred in most States between 1976 and 1977. At the individual State level, 34 States showed increases in consumption while 16 States and the District of Columbia recorded decreases. The largest absolute increases in consumption, from the 1976 level in trillions of Btu's were recorded by Pennsylvania (35.4), Louisiana (33.8), Illinois (30.5), and Alabama (12.1). Together these four States accounted for 22 percent of total consumption, and represented 73 percent of the increase in total usage. None of the percentage increases among the 20 largest consuming States exceeded 5 percent (table C). For the majority of the country, the increases can be attributed to increases in both purchased fuels and purchased electric energy with purchased fuels comprising the larger portion of the increase.

Cost of Fuel and Electric Energy

From 1976 to 1977, all States experienced an increase in the average cost per Btu of energy. The largest percentage increases were recorded by Kansas (30), New Mexico (29), and Oklahoma (28). The States with the smallest percentage increases were Nevada (less than 1), South Dakota (3), and Alaska (6) (table D).

The average cost per Btu for establishments in a State is dependent on the fuel mix as well as the cost of the various fuels consumed. No attempt has been made to standardize the State costs to adjust for differences in industry or fuel mix.

The 1977 unit cost of purchased energy for manufacturers in Louisiana ($1.34), Wyoming ($1.39), and Montana ($1.68) averaged less than $1.75 per million Btu's. At the other extreme, manufacturers in the District of Columbia, Rhode Island, Connecticut, and Vermont had an average cost in excess of $4.00 per million Btu's (table D). Chart 7 provides groupings of States categorized by the average unit costs paid by manufacturers for fuels, purchased electric energy, and the total of fuels plus electric energy.

Among the major energy-consuming States, there is a relationship between the types of industries which prevail in the higher cost States of Ohio and Pennsylvania versus the lower cost States of Texas and Louisiana. While the largest consuming industries in Texas and Louisiana are the nondurable chemical and petroleum refining industries (SIC Major Groups 28 and 29), the dominant energy-consuming industry in Ohio and Pennsylvania is primary metals (SIC Major Group 33).

Cost of Purchased Electric Energy

The largest percentage increases from 1976 to 1977 in the cost per Btu of purchased electric energy were recorded by manufacturers in Indiana (27 percent), California (26 percent), Montana (25 percent), and Oklahoma (25 percent). Plants in California and Hawaii recorded the highest absolute increases in unit cost.

Manufacturers in the Northwestern States of Washington, Montana, and Oregon maintained their positions as the lowest unit cost States while the New England States of Rhode Island, Massachusetts, and Connecticut had the highest unit costs for purchased electricity in 1977.

Major Energy-Consuming States

A significant amount of industrial energy consumption is concentrated in a few States. The 10 largest energy consuming States accounted for over 60 percent of the United States total (chart 8). Selected statistics for these 10 States are shown in chart 9. Included are the 1976 and 1977 consumption and cost per unit figures. Also shown is the percentage increase in cost per Btu equivalent between 1976 and 1977.

Manufacturers in Texas accounted for 14 percent of all purchased fuels and electric energy consumed in the manufacturing sector. After Texas, the largest consuming States were Ohio, Pennsylvania, Louisiana, Illinois, California, and Michigan, respectively (table C). These seven largest energy-consuming States accounted for 50 percent of the total energy consumed by manufacturers in the United States.

REVISIONS TO 1976 COKE AND BREEZE DATA

Data on the consumption of purchased coke and breeze before 1976 are not fully comparable with the data for 1976 and 1977.

During review of the 1977 Census of Manufactures data on the production and disposition of coke and breeze, it became evident that the amount of purchased coke consumed as a fuel was understated for some establishments. This occurred because some respondents misinterpreted instructions for reporting coke consumption. Correct 1977 data were obtained and the 1976 figures for purchased coke and breeze were adjusted to reflect the true consumption picture. These adjustments increased 1976 quantity and cost figures for coke and breeze (table E). It is not possible to develop comparable consumption figures for earlier years. However, the magnitude of the 1976 revisions gives a good indication of the probable impact on the 1974 and 1975 figures.

Table C. **Consumption and Cost for the Largest Energy-Consuming States, Ranked by 1977 Consumption: 1977 and 1976**

Rank	State	Consumption of purchased fuels and purchased electric energy			Cost of fuels and purchased electric energy					
					Total			Per million Btu's		
		1977 Btu's (trillions)	1976 Btu's (trillions)	1977/1976 relative	1977 (mil. dol.)	1976 (mil. dol.)	1977/1976 relative	1977 (dollars)	1976 (dollars)	1977/1976 relative
X	United States	12,929.0	12,776.3	1.01	33,379.6	28,138.5	1.19	2.58	2.20	1.17
1	Texas	1,805.4	1,816.8	.99	3,601.3	3,101.1	1.16	1.99	1.71	1.17
2	Ohio	930.9	930.8	1.00	2,647.2	2,215.8	1.19	2.84	2.38	1.19
3	Pennsylvania	908.5	873.1	1.04	2,641.0	2,093.2	1.26	2.91	2.40	1.21
4	Louisiana	865.2	831.4	1.04	1,157.3	873.6	1.32	1.34	1.05	1.27
5	Illinois	672.6	642.1	1.05	1,935.6	1,594.9	1.21	2.88	2.48	1.16
6	California	664.4	659.5	1.01	2,131.2	1,667.3	1.28	3.21	2.53	1.27
7	Michigan	615.2	622.7	.99	1,836.0	1,686.9	1.09	2.98	2.71	1.10
8	Indiana	555.7	559.9	.99	1,418.4	1,181.6	1.20	2.55	2.11	1.21
9	New York	466.9	464.2	1.01	1,470.6	1,267.5	1.16	3.15	2.73	1.15
10	Alabama	344.5	332.4	1.04	923.5	732.4	1.26	2.68	2.20	1.22
X	Largest 10	7,829.3	7,732.9	1.01	19,762.1	16,414.3	1.20	2.52	2.12	1.19
11	Tennessee	341.7	351.0	.97	902.9	826.1	1.09	2.64	2.35	1.12
12	New Jersey	324.3	323.2	1.00	1,123.1	990.4	1.13	3.46	3.06	1.13
13	North Carolina	304.3	293.5	1.04	955.9	825.0	1.16	3.14	2.81	1.12
14	Georgia	263.6	253.8	1.04	756.5	631.0	1.20	2.87	2.49	1.15
15	Wisconsin	252.7	252.5	1.00	687.4	599.2	1.15	2.72	2.37	1.15
16	Kentucky	252.6	258.0	.98	781.1	689.3	1.13	3.09	2.67	1.16
17	Washington	240.9	237.6	1.01	433.5	388.1	1.12	1.80	1.63	1.10
18	South Carolina	233.1	226.2	1.03	650.7	554.7	1.17	2.79	2.45	1.14
19	Virginia	219.9	214.3	1.03	620.3	508.9	1.22	2.82	2.37	1.19
20	Florida	202.7	198.4	1.02	585.4	504.9	1.16	2.89	2.54	1.13
X	Largest 20	10,465.1	10,341.4	1.01	27,258.9	22,931.9	1.19	2.60	2.22	1.17
X	All other States	2,463.9	2,434.9	1.01	6,120.7	5,206.6	1.18	2.48	2.14	1.16

Table D. **Cost Per Million Btu's of Purchased Fuels and Electric Energy by State; Ranked by 1977 Cost: 1977 and 1976**

Rank	State	Cost per million Btu's (dollars)		1977/1976 relative	Rank	State	Cost per million Btu's (dollars)		1977/1976 relative
		1977	1976				1977	1976	
1	Louisiana	1.34	1.05	1.27	26	Tennessee	2.64	2.35	1.12
2	Wyoming	1.39	1.23	1.13	27	Alabama	2.68	2.20	1.22
3	Montana	1.68	1.43	1.17	28	Maine	2.70	2.26	1.20
4	Utah	1.75	1.54	1.14	29	Wisconsin	2.72	2.37	1.15
5	North Dakota	1.79	1.61	1.11	30	South Carolina	2.79	2.45	1.14
6	Colorado	1.79	1.61	1.11	31	Virginia	2.82	2.37	1.19
7	Washington	1.80	1.63	1.10	32	Ohio	2.84	2.38	1.19
8	Oklahoma	1.98	1.55	1.28	33	Georgia	2.87	2.49	1.15
9	Texas	1.99	1.71	1.17	34	Illinois	2.88	2.48	1.16
10	Nevada	2.02	2.01	1.00	35	Florida	2.89	2.54	1.13
11	Nebraska	2.02	1.75	1.16	36	Pennsylvania	2.91	2.40	1.21
12	Kansas	2.05	1.59	1.30	37	Maryland	2.92	2.68	1.09
13	Arkansas	2.16	1.72	1.25	38	Michigan	2.98	2.71	1.10
14	Idaho	2.18	1.86	1.17	39	Kentucky	3.09	2.67	1.16
15	West Virginia	2.23	2.00	1.12	40	North Carolina	3.14	2.81	1.12
16	Mississippi	2.23	1.85	1.21	41	New York	3.15	2.73	1.15
17	Arizona	2.25	1.96	1.15	42	California	3.21	2.53	1.27
18	Iowa	2.28	1.88	1.21	43	New Hampshire	3.32	2.96	1.12
19	Oregon	2.31	2.04	1.13	44	Delaware	3.32	2.81	1.18
20	Alaska	2.32	2.19	1.06	45	Hawaii	3.33	2.91	1.14
21	New Mexico	2.33	1.82	1.29	46	New Jersey	3.46	3.06	1.13
22	South Dakota	2.44	2.36	1.03	47	Massachusetts	3.97	3.62	1.10
23	Missouri	2.46	2.09	1.17	48	Vermont	4.02	3.56	1.13
24	Indiana	2.55	2.11	1.21	49	Rhode Island	4.11	3.81	1.08
25	Minnesota	2.57	2.20	1.17	50	Connecticut	4.21	3.87	1.09
X	United States	2.58	2.20	1.17	51	District of Columbia	5.13	4.53	1.13

CHART 7 Part 1. **Purchased Fuels and Electric Energy Consumed by States: 1977**

Cost per Million British Thermal Units

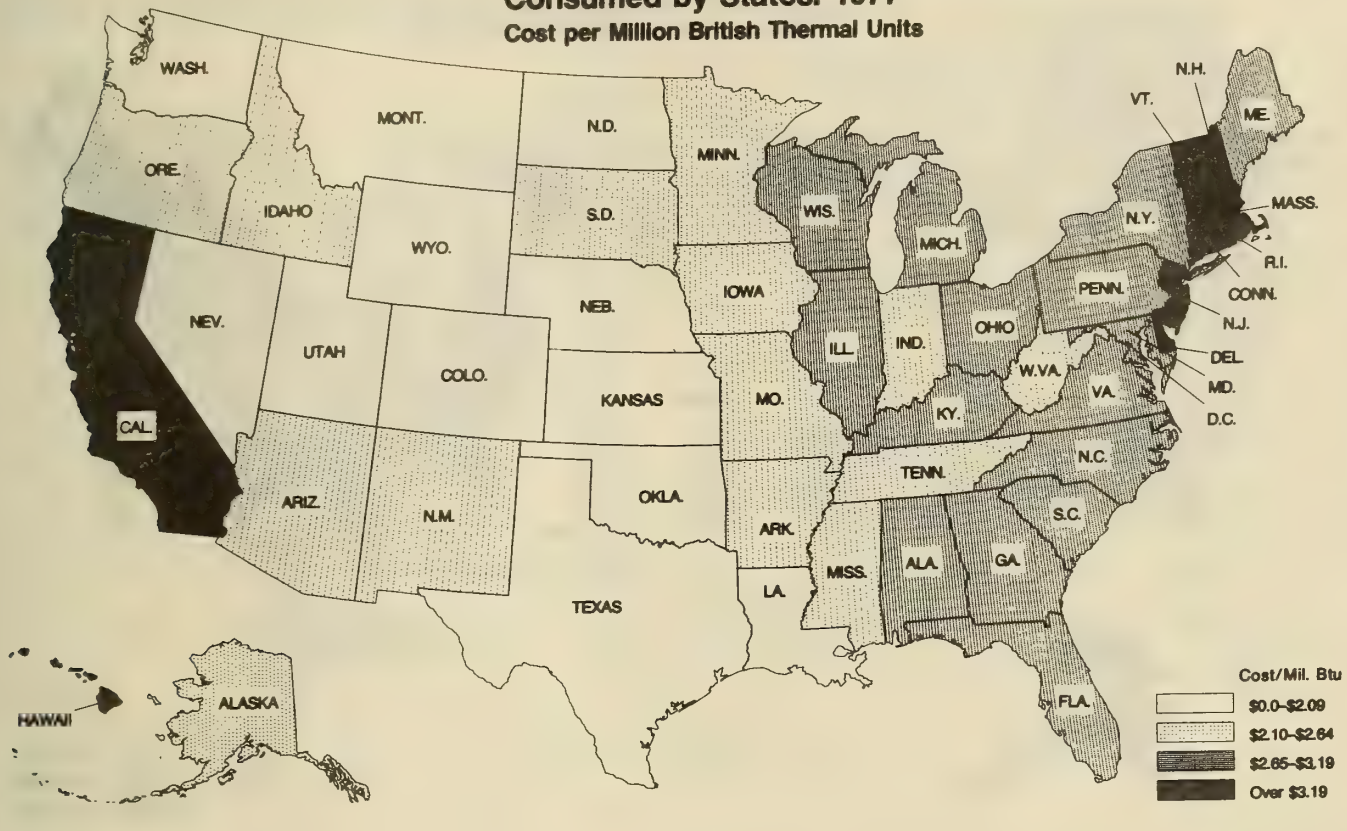


CHART 7 Part 2. **Purchased Electric Energy Consumed by States: 1977**

Cost per Million British Thermal Units

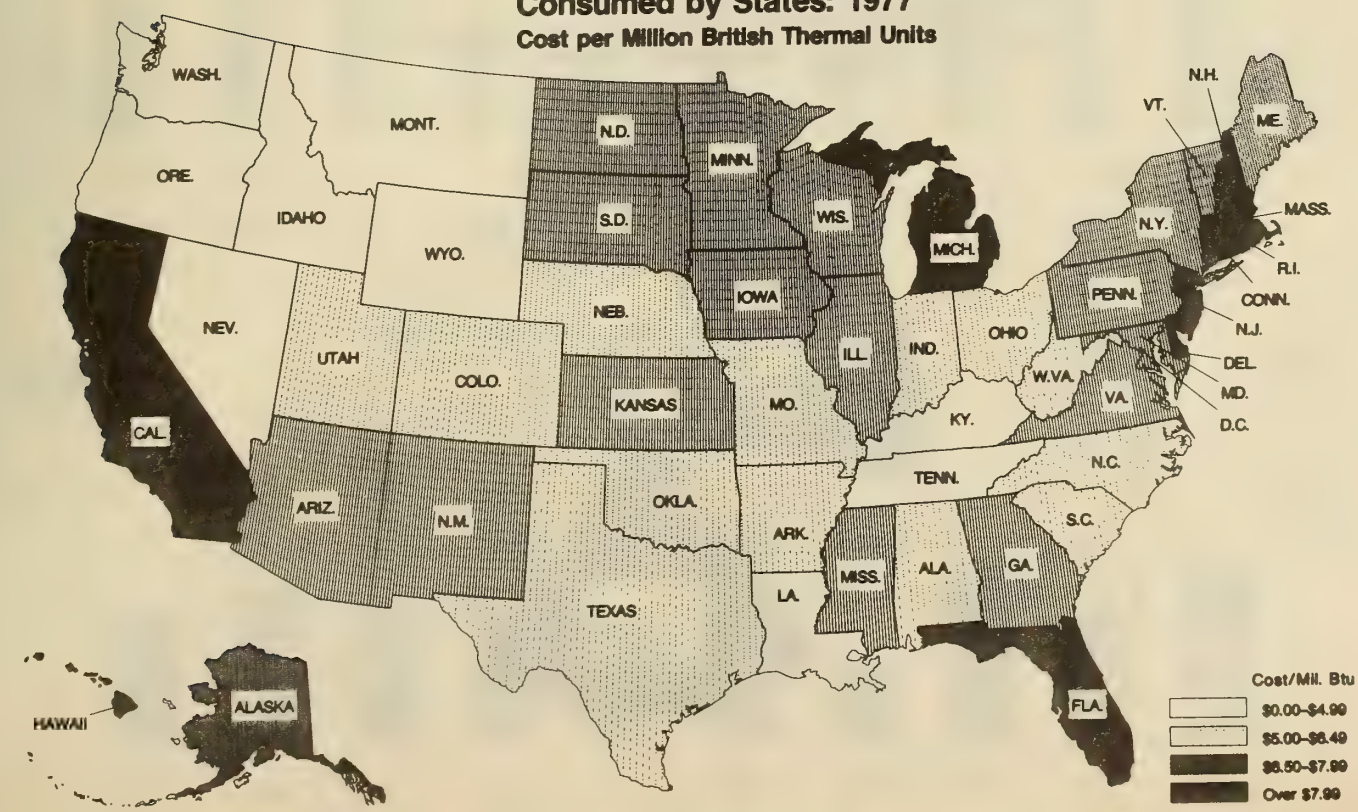


CHART 7 Part 3. **Purchased Fuels Consumed by States: 1977**

Cost per Million British Thermal Units

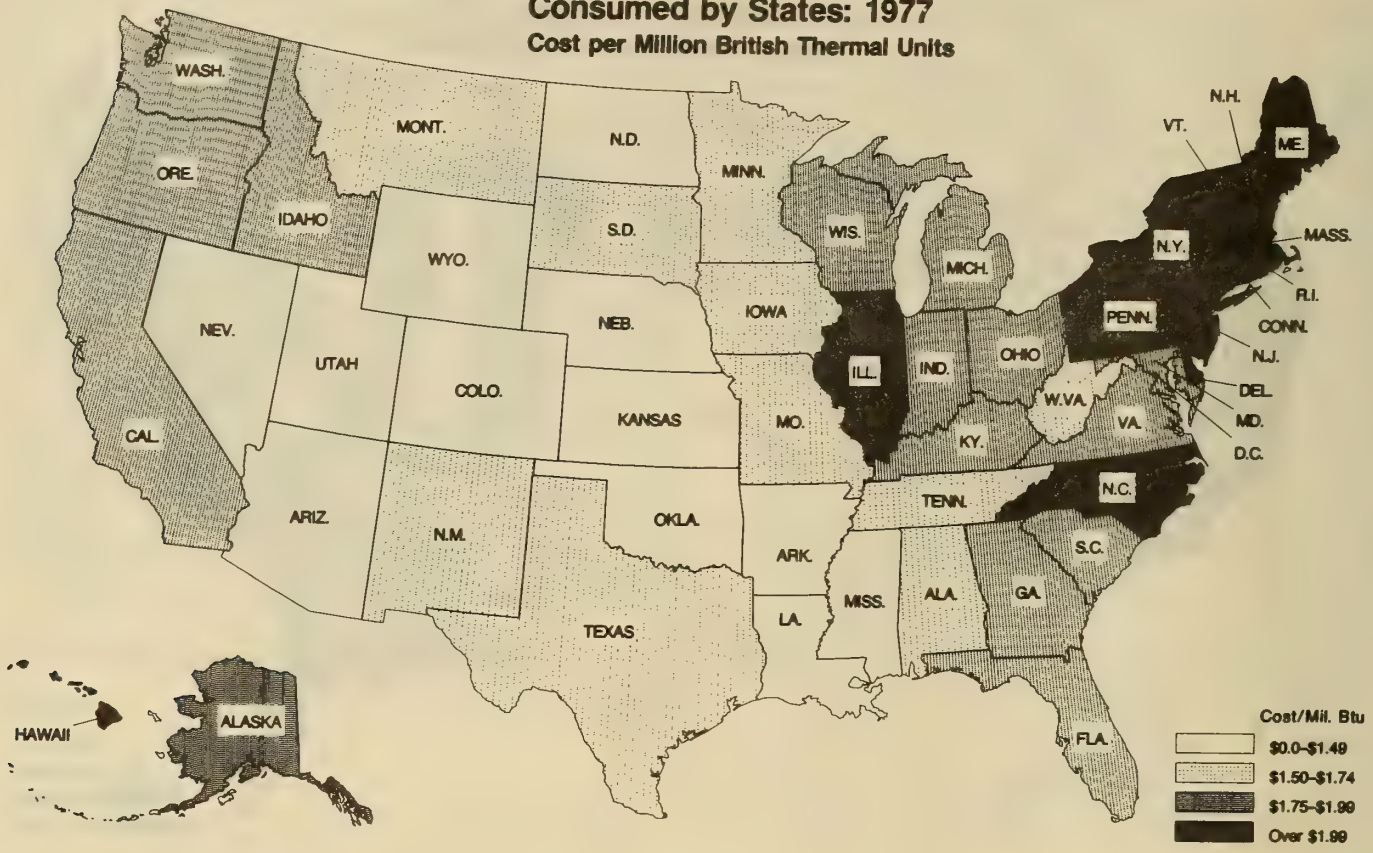


CHART 8.

Largest Energy-Consuming States as a Percentage of the Total Energy Consumption by Manufactures in the United States: 1977

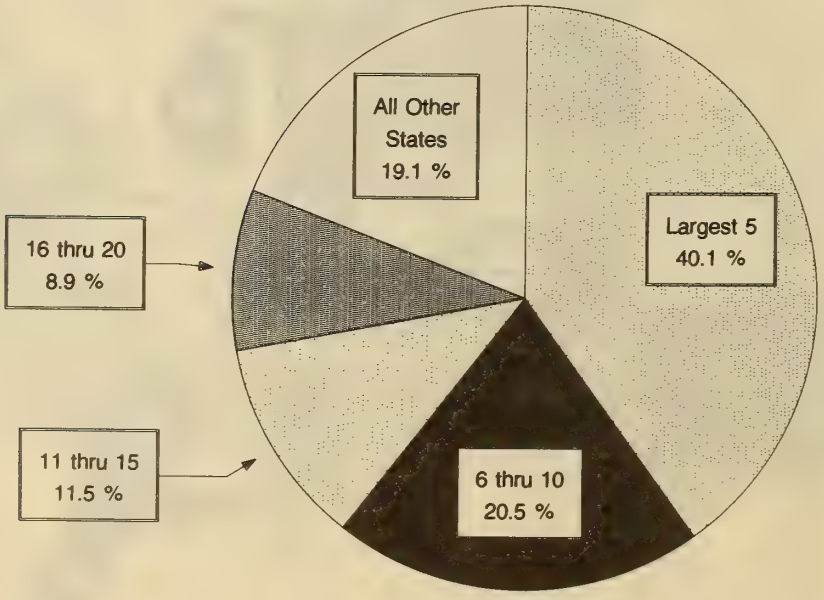
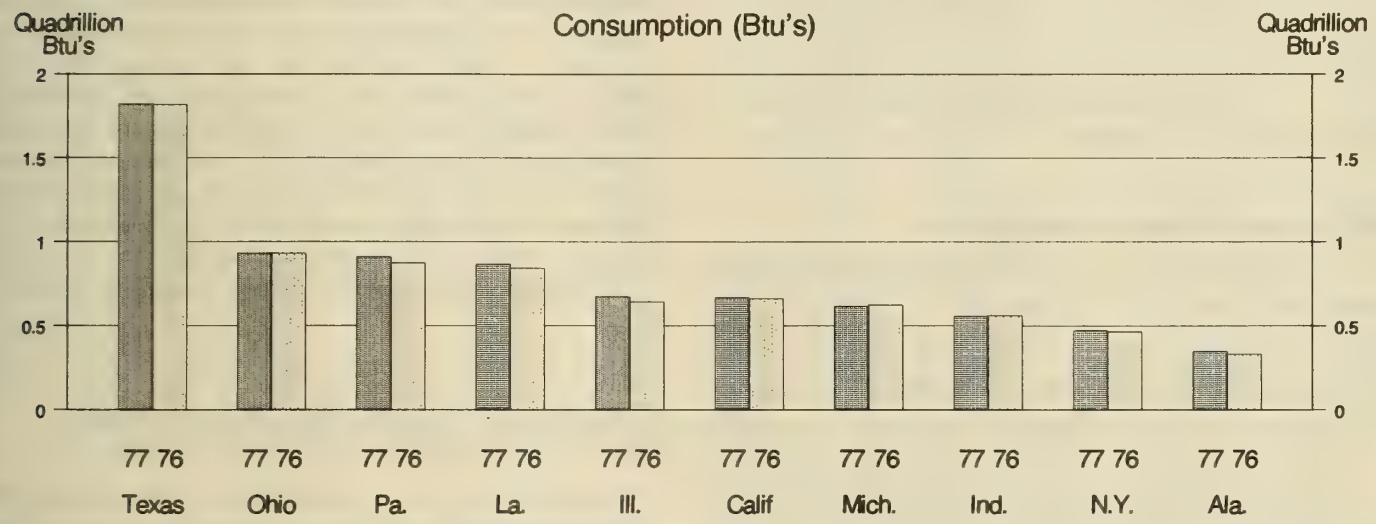
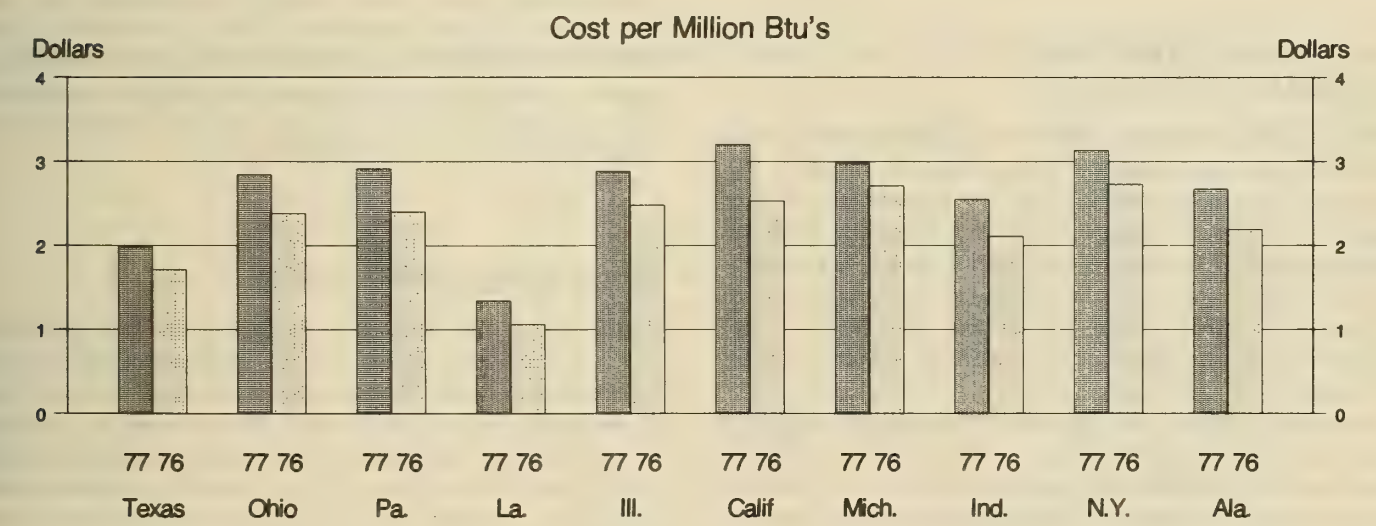


CHART 9.

Energy Consumption and Cost for the Ten Largest Energy-Consuming States: 1977 and 1976





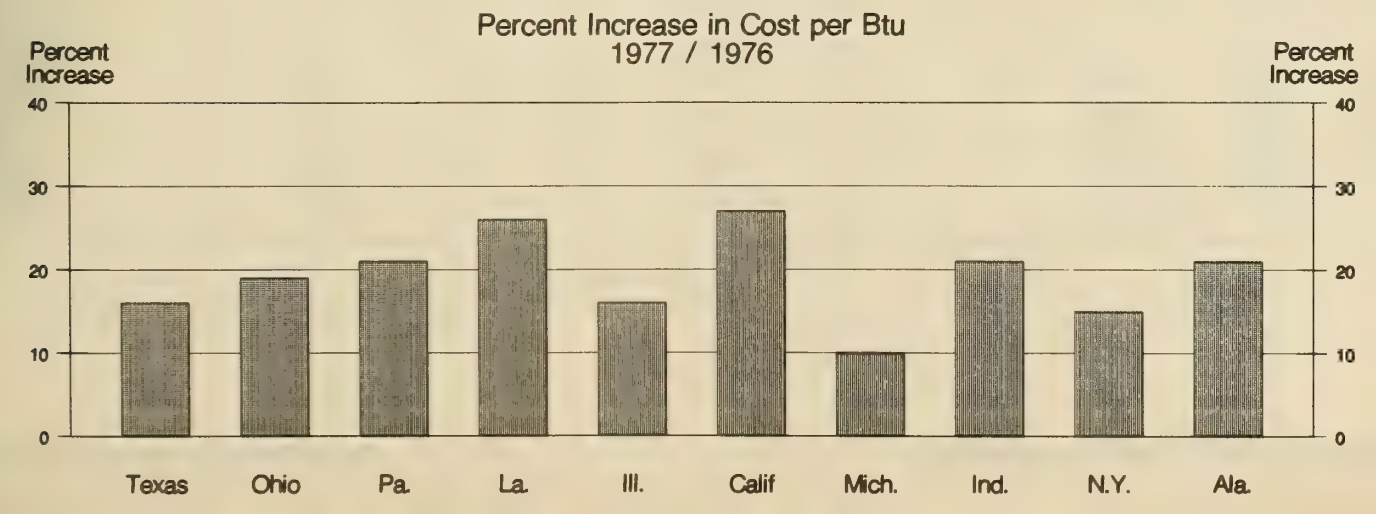


Table E. **Revisions to 1976 Coke and Breeze Statistics**

Fuel	Published 1976		Revised 1976	
	Quantity (1,000 s. tons)	Cost (mil. dol.)	Quantity (1,000 s. tons)	Cost (mil. dol.)
	All industries			
Coke and breeze.....	15,665.7	1,141.2	18,536.0	1,437.2
	Industry 3312, Blast furnaces and steel mills			
Coke and breeze.....	13,031.4	879.9	15,447.1	1,115.7

Table F. **Conversion to British Thermal Units: 1977**

Kind of energy	Unit of measure	Btu's (1,000)
Electric energy.	1,000 kWh	3,412
Coal	Short tons.	26,194
Coke	. . do.	25,993
Fuel oil:		
Distillate	Barrels (42-gal.) .	5,824
Residual	. . do.	6,285
Natural gas.	MCF (1,000 cu. ft.)	1,024
Other fuels.	Dollars	478

Note: For costs of "fuels, not specified by kind," conversion factors for 1977 were developed for each 2-digit SIC group, based on the relationship of total cost of fuels to the total kilowatt-hour equivalents for those groups, as published in M76(AS)-4.1, "Fuels and Electric Energy," 1976 Annual Survey of Manufactures.

CONVERSION TO BRITISH THERMAL UNITS (BTU'S)

Fuels consumed data were converted to British thermal units (BTU's) to provide comparable figures (table F). A Btu is the quantity of heat required to raise the temperature of one pound of water by 1 degree Fahrenheit. Btu factors reflect the energy content of the various fuels with no regard to efficiency of use. Since some fuel applications are considerably more efficient than others (none 100 percent efficient), the Btu figures must be considered as the maximum amount of available energy.

Beginning in 1976, the Btu rather than the kilowatt-hour equivalent was used as the common unit of measure for this statistical series. Several data users recommended the adoption of Btu's as the standard for energy quantification. There are 3,412 Btu's in one kilowatt-hour equivalent.

FUELS EXCLUDED FROM REPORT

Data on fuels produced and consumed in the same establishment, such as coke-oven gas or blast-furnaces gas; data on fuels used as raw materials, such as fuel oil and natural gas used to produce carbon black and crude petroleum used to produce fuels; and fuels converted to other fuel types, such as coal converted to coke, were not collected in the 1974, 1975, 1976, or 1977 surveys. As a result, significant amounts of energy materials used in manufacturing plants are not covered by this report. For example, in 1972 coke produced and consumed in SIC Industry 3312, Blast Furnaces and Steel Mills, amounted to 40.5 million short tons or 1.1 quadrillion Btu's. Inclusion of this coke would have increased the gross Btu's of fuels consumed by manufacturers by about 8 to 10 percent.

1972 AND 1977 REVISIONS TO STANDARD INDUSTRIAL CLASSIFICATION SYSTEM

A revised edition of the Standard Industrial Classification (SIC) manual was issued in 1972, the first major revision since 1957. In the 1972 version, extensive modifications were made in the manufacturing sector which affect comparability with the historic data in many industries. In 1977 a supplement to the 1972 SIC manual was issued presenting several minor additional changes to the classification system. More detailed descriptions of these changes are found in the 1972 and 1977 Census of Manufactures (MC72(1)-1 and MC77-SR-1).

CENSUS DISCLOSURE RULES

The Bureau of the Census is prohibited by law from publishing any statistics that would disclose information reported by individual companies. Additionally, quantity or cost data may be withheld if the figures do not meet publication standards on the basis of a consistency review. However, the total figures for a State, industry group, or major group include data for all component industries whether or not separate figures are shown for the individual industries comprising the total.

Table 1. Fuels and Electric Energy Used for Heat and Power: 1977 and Earlier Years

(For explanation of terms, see appendix A)

Year	Cost of purchased fuels and electric energy (million dollars)	Cost of purchased fuels (million dollars)	Electric energy: Purchased: Quantity (million kWh)	Electric energy: Purchased: Cost (million dollars)	Electric energy: Generated less sold (million kWh)
1977	33,379.6	18,864.7	663,351.0	14,515.1	63,194.2
1976[1]	28,138.5	15,959.5	640,164.6	12,179.1	63,843.9
1975[1]	23,290.7	12,977.8	596,798.0	10,312.9	63,275.0
1974[1]	19,468.3	11,003.0	616,665.1	8,465.3	80,932.3
1973[1]	13,625.5	7,012.3	612,601.5	6,613.2	84,864.7
1972	11,771.7	6,055.9	557,468.9	5,715.8	87,185.7
1971	10,432.1	5,360.6	514,612.7	5,070.6	82,828.0
1970	9,424.7	4,845.7	500,768.7	4,579.2	83,327.3
1969	8,751.4	4,456.6	497,015.7	4,294.8	83,351.7
1968	8,272.1	4,263.0	458,908.4	4,009.1	82,752.2
1967	7,691.7	3,974.9	427,465.1	3,716.8	78,355.8
1966	7,365.9	3,902.3	399,390.0	3,463.6	80,500.0
1965	6,973.4	3,727.3	373,428.0	3,246.1	80,453.0
1964	6,706.6	3,583.9	357,292.0	3,122.7	79,740.0
1963	6,369.7	3,409.0	333,512.0	2,960.7	72,949.0
1962	6,184.0	3,360.7	313,961.0	2,823.3	74,261.0
1961	5,825.3	3,192.6	298,325.0	2,632.7	68,533.0
1960	5,765.1	3,192.9	291,949.0	2,572.2	70,016.0
1959	5,544.6	3,082.7	281,301.0	2,461.9	69,291.0
1958	5,067.0	2,836.2	252,909.0	2,230.8	66,850.0

[1]Data are revised because of adjustments to estimating technique; see appendix G, Revised Method of Estimation, for explanation of changes to 1976 data. A comparable adjustment with 1972 as the base was used to revise 1973, 1974, and 1975 data.

Table 2. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power: 1977 and Selected Earlier Years

(For explanation of terms, see appendix A)

Year	Purchased fuels and electric energy: British thermal units (trillions)	Purchased fuels and electric energy: Cost (million dollars)	Purchased fuels: British thermal units (trillions)	Purchased fuels: Cost (million dollars)	Fuel oil: Distillate: Quantity (1,000 barrels)	Fuel oil: Distillate: Cost (million dollars)	Fuel oil: Residual: Quantity (1,000 barrels)	Fuel oil: Residual: Cost (million dollars)	Bituminous coal, lignite, and anthracite: Quantity (1,000 short tons)	Bituminous coal, lignite, and anthracite: Cost (million dollars)
1977	12,929.0	33,379.6	10,665.5	18,864.7	101,594.5	1,596.4	246,176.3	3,317.0	50,622.6	1,494.0
1976[1]	12,776.3	28,138.5	10,592.1	15,959.5	90,202.6	1,252.3	231,122.5	2,733.4	47,903.0	1,344.2
1975[1]	12,084.1	23,290.7	10,047.8	12,977.8	104,894.2	1,369.7	177,452.4	2,149.0	44,623.3	1,310.3
1974[1]	13,548.3	19,468.3	11,444.2	11,003.0	113,823.6	1,350.4	171,095.3	1,964.9	47,806.8	1,083.1
1971	13,008.3	10,432.1	11,252.4	5,360.6	104,940.8	453.4	140,726.4	535.9	61,392.6	658.1
1967	11,810.3	7,691.7	10,351.7	3,974.9	65,653.9	236.9	112,958.9	298.7	75,100.0	551.7
1962	9,810.5	6,184.1	8,739.2	3,360.7	44,730.0	190.9	150,885.0	432.4	89,438.0	639.5
1958	8,247.8	5,067.0	7,384.9	2,836.2	[2]166,301.0	[2]522.7	([2])	([2])	81,784.0	638.2

Year	Coke and breeze: Quantity (1,000 short tons)	Coke and breeze: Cost (million dollars)	Natural gas: Quantity (billion cu. ft.)	Natural gas: Cost (million dollars)	Other fuels (million dollars)	Fuels not specified by kind (million dollars)	Electric energy: Purchased: Quantity (million kWh)	Electric energy: Purchased: Cost (million dollars)	Electric energy: Generated less sold (million kWh)
1977	19,957.7	1,747.6	5,585.7	8,879.4	[4]1,076.1	754.3	663,351.0	14,515.1	63,194.2
1976[1]	18,536.0	1,437.2	5,858.1	7,532.2	[4]911.4	748.8	640,164.6	12,179.1	63,843.9
1975[1]	13,156.8	880.8	5,804.8	5,653.1	[4]849.5	765.4	596,798.0	10,312.9	63,275.0
1974[1]	15,215.2	744.6	6,566.4	4,360.1	[4]702.6	797.2	616,665.1	8,465.3	80,932.3
1971	13,742.8	317.6	6,454.4	2,559.9	[4]377.5	458.2	514,612.7	5,070.6	82,828.0
1967	13,562.5	248.9	[3]5,306.9	[3]1,749.1	220.2	669.4	427,465.1	3,716.8	78,355.8
1962	17,747.0	304.8	[3]4,308.1	[3]1,455.9	337.1	-	313,961.0	2,823.3	74,261.0
1958	13,585.0	271.0	[3]3,112.2	[3]900.9	147.9	355.6	252,909.0	2,230.8	66,850.0

- Represents zero.
[1]Data are revised because of adjustments to estimating technique; see appendix G, Revised Method of Estimation, for explanation of changes to 1976 data. A comparable adjustment with 1972 as the base was used to revise 1974 and 1975 data.
[2]Figures for residual fuel oil are included with distillate fuel oil.
[3]Figure includes manufactured, still, blast-furnace, and coke-oven gas.
[4]Figure includes gas, except natural gas.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ALL INDUSTRIES	12,929.0	33,379.6	10,665.5	18,864.7	101,594.5	1,596.4	246,176.3	3,317.0	50,622.6	1,494.0	1	1	1
	MAINE	88.4	238.7	78.8	174.1	609.8	10.3	11,446.5	155.5	-	-	10	1	(X)
20	FOOD AND KINDRED PRODUCTS	4.6	15.7	3.9	10.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
201	MEAT PRODUCTS	.7	2.3	.6	1.4	(D)	(D)	78.1	1.1	-	-	(X)	1	(X)
202	DAIRY PRODUCTS	.3	1.1	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	2.1	6.4	1.9	4.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	3.3	10.0	2.8	6.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
222	WEAVING MILLS, MANMADE FIBER	.4	1.2	.3	.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
223	WEAVING, FINISHING MILLS, WOOL	1.4	4.4	1.2	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.7	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.3	11.2	2.7	6.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	1.7	4.2	1.6	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.4	2.0	.2	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	66.0	163.3	60.9	131.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	52.2	126.7	48.6	104.2	(D)	(Z)	7,680.8	103.4	-	-	1	1	(X)
264	MISC. CONVERTED PAPER PRODUCTS	2.9	9.2	2.0	4.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.1	.5	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.1	.7	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.2	3.9	1.0	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	1.1	3.2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	2.0	6.9	1.6	3.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING	1.3	3.3	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.6	2.7	.4	.9	34.9	.6	(D)	(D)	-	-	24	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.6	7.2	2.4	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.0	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	2.2	.2	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.1	.4	(Z)	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	(Z)	.3	(Z)	.1	(S)	(S)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.6	2.8	.4	.9	11.5	.2	27.8	.4	-	-	1	1	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.4	1.5	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEW HAMPSHIRE	28.0	92.9	23.4	51.3	443.3	7.0	2,566.4	34.7	-	-	9	5	(X)
20	FOOD AND KINDRED PRODUCTS	1.6	5.2	1.3	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	2.1	6.9	1.8	3.9	17.1	.2	204.1	2.7	-	-	7	26	(X)
223	WEAVING, FINISHING MILLS, WOOL	.4	1.5	.3	.8	-	-	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	.2	.9	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.1	.5	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	(Z)	.2	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.0	3.6	.8	1.9	34.9	.6	22.2	.3	-	-	32	60	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.1	.5	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.2	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.2	.7	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.8	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	12.7	33.5	11.6	25.1	48.5	.7	1,817.8	24.5	-	-	1	6	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	11.1	28.6	10.3	22.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.9	2.9	(D)	(D)	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING	.6	2.8	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	.2	1.0	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	.8	2.6	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.7	6.5	1.2	2.5	24.8	.4	45.7	.6	-	-	9	1	(X)
31	LEATHER, LEATHER PRODUCTS	1.2	4.4	(D)	(D)	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.4	2.0	.3	.6	14.9	.2	6.9	.1	-	-	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.5	5.0	1.3	3.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	.4	1.6	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.3	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	.2	.8	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.1	5.2	.6	1.5	27.0	.5	37.3	.5	-	-	23	1	(X)
355	SPECIAL INDUSTRY MACHINERY	.3	1.5	.2	.5	6.7	.1	14.0	.2	-	-	1	1	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ALL INDUSTRIES	19,957.7	1,747.6	5,585.7	8,879.4	1,076.1	754.3	663,351.0	14,515.1	63,194.2	12,776.3	28,138.5	1
	MAINE	-	-	1.1	3.1	(D)	(D)	2,806.7	64.6	3,304.9	82.8	186.8	33
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(S)	199.3	5.7	(D)	4.5	13.9	(X)
201	MEAT PRODUCTS	-	-	-	-	(D)	.1	31.5	.9	-	.6	1.8	(X)
202	DAIRY PRODUCTS	-	-	(Z)	(Z)	(Z)	(S)	22.5	.7	-	.2	.9	1
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	(D)	(D)	73.1	2.2	-	2.2	6.3	(X)
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	145.4	3.6	(D)	3.0	7.9	(X)
222	WEAVING MILLS, MANMADE FIBER	-	-	(Z)	(Z)	(D)	(Z)	24.3	.6	(D)	.3	.9	1
223	WEAVING, FINISHING MILLS, WOOL	-	-	(Z)	(Z)	(Z)	(S)	65.5	1.6	-	1.3	3.5	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	-	-	-	.2	10.0	.3	.5	(Z)	.3	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	-	-	1.3	2.4	170.1	4.8	3.2	4.3	12.1	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	1.2	1.0	14.4	.4	(D)	2.0	4.5	(X)
249	MISCELLANEOUS WOOD PRODUCTS	-	-	-	-	(D)	(D)	51.5	1.5	(D)	.5	2.4	(X)
25	FURNITURE AND FIXTURES	-	-	(Z)	(Z)	(Z)	(S)	10.4	.3	-	.1	.3	14
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(S)	(S)	1,500.9	31.8	3,251.7	60.6	121.6	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(D)	(D)	1,058.1	22.5	2,675.7	49.0	95.7	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	-	-	(S)	(S)	248.2	4.9	(D)	3.2	8.4	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	-	-	(D)	(S)	(S)	(S)	-	.2	.6	(X)
27	PRINTING AND PUBLISHING	-	-	-	-	(D)	(S)	14.8	.5	-	.1	.6	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(Z)	(Z)	(Z)	(D)	67.4	1.6	(D)	1.2	3.2	56
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	(Z)	(Z)	(Z)	(Z)	(D)	(D)	(D)	1.0	2.5	56
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	(Z)	(S)	114.2	3.2	(D)	1.9	5.7	(X)
311	LEATHER TANNING AND FINISHING	-	-	-	-	(Z)	(S)	(D)	(D)	(D)	1.1	2.6	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	-	-	-	(D)	58.3	1.8	-	.5	2.2	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	-	-	(D)	(S)	68.1	1.5	-	2.7	6.4	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(D)	.2	44.7	1.0	-	.6	1.9	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(D)	(S)	53.6	1.4	-	.4	1.6	(X)
354	METALWORKING MACHINERY	-	-	(Z)	(Z)	(D)	(S)	8.6	.2	-	.1	.3	50
355	SPECIAL INDUSTRY MACHINERY	-	-	(Z)	(Z)	-	(S)	3.8	.2	-	(Z)	.3	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	.3	(D)	76.6	1.9	-	.6	2.3	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(D)	(D)	(D)	(S)	43.5	1.0	-	.4	1.2	(X)
	NEW HAMPSHIRE	-	-	1.1	2.7	3.0	3.8	1,371.3	41.7	272.4	27.2	80.5	3
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	89.8	2.5	-	1.4	4.5	(X)
22	TEXTILE MILL PRODUCTS	-	-	.2	.6	.2	.2	93.2	3.0	(D)	2.3	6.4	1
223	WEAVING, FINISHING MILLS, WOOL	-	-	-	-	(D)	(D)	23.0	.7	(D)	.4	1.3	(X)
225	KNITTING MILLS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.2	.7	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	(Z)	(Z)	(D)	10.6	.3	(Z)	.1	.4	56
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	(Z)	(Z)	(D)	5.4	.1	(Z)	(Z)	.2	93
24	LUMBER AND WOOD PRODUCTS	-	-	(Z)	(Z)	.4	.5	49.1	1.7	(D)	1.0	3.9	1
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	-	-	(D)	.1	5.6	.2	-	.1	.4	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(Z)	(Z)	(D)	(D)	2.2	.1	-	.1	.2	1
249	MISCELLANEOUS WOOD PRODUCTS	-	-	-	-	(D)	(D)	(S)	(S)	(D)	.3	1.0	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(Z)	.1	13.6	.5	-	.2	.7	(X)
251	HOUSEHOLD FURNITURE	-	-	(D)	(D)	-	.1	10.3	.4	-	.1	.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	303.8	8.3	(S)	12.5	27.6	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(Z)	(Z)	-	(D)	229.6	6.2	(D)	10.8	22.9	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.9	2.5	(X)
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(D)	.6	57.5	1.9	-	.6	2.3	(X)
275	COMMERCIAL PRINTING	-	-	-	-	-	(D)	20.8	.6	-	.3	.9	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	40.3	1.3	-	.7	2.3	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(Z)	(Z)	.8	.7	133.4	4.0	-	1.4	5.4	1
31	LEATHER, LEATHER PRODUCTS	-	-	(S)	(S)	(S)	(S)	(D)	(D)	(S)	1.2	3.6	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	(Z)	(Z)	.1	.1	36.8	1.4	(S)	.3	1.5	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(S)	63.0	1.6	(D)	1.4	4.1	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	(D)	(D)	(D)	.1	25.2	.8	(D)	.3	1.2	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	.5	40.7	1.3	-	.5	2.1	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	(D)	(D)	(D)	(D)	15.2	.5	-	.2	.7	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	.1	(D)	(D)	121.3	3.7	(S)	1.2	5.3	13
355	SPECIAL INDUSTRY MACHINERY	-	-	(D)	(D)	-	(D)	31.8	1.0	-	.3	1.4	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	NEW HAMPSHIRE--CON.													
35	MACHINERY, EXCEPT ELECTRIC--CON.													
356	GENERAL INDUSTRIAL MACHINERY	.2	1.3	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.0	5.1	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.3	1.7	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.4	2.3	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.1	.6	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	VERMONT	9.4	37.8	6.8	18.1	461.2	7.8	482.0	6.9	(D)	(D)	13	7	(X)
20	FOOD AND KINDRED PRODUCTS	1.1	3.9	.9	2.5	113.9	1.8	(D)	(D)	-	-	19	(X)	(X)
202	DAIRY PRODUCTS	.8	2.5	.7	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	3.0	.5	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.8	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	3.1	9.5	2.7	6.2	51.0	.8	271.3	3.8	-	-	66	4	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.1	.7	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	1.3	.1	.4	18.8	.3	-	-	-	-	20	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.4	2.0	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.6	1.9	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.3	1.3	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.9	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.3	1.8	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	MASSACHUSETTS	139.0	551.3	113.0	260.7	2,058.7	33.1	8,195.6	115.1	16.3	.8	5	2	8
20	FOOD AND KINDRED PRODUCTS	9.2	34.8	7.7	17.9	149.5	2.5	422.7	6.2	-	-	22	3	(X)
201	MEAT PRODUCTS	.7	3.2	.6	1.4	(D)	(D)	23.4	.4	-	-	(X)	4	(X)
202	DAIRY PRODUCTS	1.4	7.3	.9	2.2	49.4	.8	(D)	(D)	-	-	24	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	.5	1.9	.4	.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	1.2	4.9	(D)	(D)	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	2.6	7.5	2.4	5.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	.7	2.6	.6	1.2	1.5	(Z)	(D)	(D)	-	-	1	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	1.2	4.9	.9	2.2	35.7	.6	(D)	(D)	-	-	55	(X)	(X)
22	TEXTILE MILL PRODUCTS	13.4	43.2	11.9	27.0	127.1	1.9	723.1	10.3	(D)	(D)	12	5	(X)
222	WEAV'G MILLS, MANMADE FIBER	1.1	5.5	.8	1.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
223	WEAVING, FINISHING MILLS, WOOL	.8	2.9	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
224	NARROW FABRIC MILLS	.1	.6	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	2.8	7.9	2.5	5.5	4.9	.1	(D)	(D)	-	-	2	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	4.7	13.0	4.4	9.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
228	YARN AND THREAD MILLS	.4	1.9	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	3.5	11.3	3.2	7.2	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS	1.9	9.7	1.3	3.0	46.0	.7	14.6	.2	-	-	22	1	(X)
231	MEN'S AND BOYS' SUITS AND COATS	.3	1.4	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.2	.9	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.5	3.0	.3	.7	(D)	(Z)	(D)	(Z)	-	-	35	1	(X)
239	MISC. FABRICATED TEXTILE PRODS	.7	3.3	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.9	3.5	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.6	.1	.3	.5	(Z)	(D)	(Z)	-	-	98	77	(X)
25	FURNITURE AND FIXTURES	.8	3.9	.7	1.7	40.3	.7	18.6	.3	-	-	26	41	(X)
251	HOUSEHOLD FURNITURE	.6	2.9	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	24.5	78.9	21.6	49.0	181.6	2.7	2,547.1	35.0	(D)	(D)	7	4	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	15.8	45.9	14.0	29.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	2.8	15.4	2.1	7.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	2.9	15.2	2.0	4.7	63.4	1.0	29.3	.4	-	-	15	12	(X)
271	NEWSPAPERS	.7	3.7	.5	1.1	18.5	.3	7.7	.1	-	-	11	10	(X)
273	BOOKS	.4	2.4	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	1.0	5.7	.6	1.5	23.5	.4	7.9	.1	-	-	33	39	(X)
277	GREETING CARD PUBLISHING	.2	.7	.1	.3	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.3	1.2	.2	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES	.1	.5	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	16.7	51.9	14.7	30.9	136.5	2.2	1,344.5	18.5	-	-	8	2	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	2.7	10.7	2.2	4.6	42.1	.7	(D)	(D)	-	-	1	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	5.4	16.7	4.6	9.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
283	DRUGS	.2	1.1	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	1.1	3.9	.9	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	.4	1.3	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	3.4	9.2	3.2	6.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	3.4	9.0	3.3	6.8	17.3	.3	411.8	5.5	-	-	15	1	(X)
29	PETROLEUM AND COAL PRODUCTS	2.6	7.6	2.4	5.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEW HAMPSHIRE--CON.												
35	MACHINERY, EXCEPT ELECTRIC--CON.												
356	GENERAL INDUSTRIAL MACHINERY	-	-	-	-	(Z)	(Z)	31.6	1.1	(S)	.2	1.2	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	.1	.2	.2	118.2	3.7	-	.9	4.6	5
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(Z)	(Z)	(D)	(D)	42.5	1.3	-	.3	1.6	19
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	(Z)	.1	58.9	1.8	-	.5	2.3	(X)
39	MISC. MANUFACTURING INDUS.	-	-	-	-	(Z)	(Z)	(D)	(D)	-	.1	.5	(X)
	VERMONT.	-	-	(S)	(S)	(D)	(S)	757.2	19.7	28.5	9.9	35.2	(X)
20	FOOD AND KINDRED PRODUCTS.	-	-	(D)	(D)	(D)	(D)	55.0	1.3	-	1.4	4.0	(X)
202	DAIRY PRODUCTS	-	-	(D)	(D)	-	(D)	31.1	.7	-	1.1	2.8	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	-	-	(D)	.4	58.8	1.7	-	.5	2.4	(X)
25	FURNITURE AND FIXTURES	-	-	-	-	(D)	(S)	30.4	1.0	(D)	.4	1.7	(X)
26	PAPER AND ALLIED PRODUCTS.	-	-	(D)	(D)	(D)	(Z)	123.7	3.3	(D)	3.1	8.2	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(Z)	(Z)	-	(S)	12.0	.4	-	.1	.5	89
27	PRINTING AND PUBLISHING.	-	-	(D)	(D)	(D)	(D)	29.9	.9	-	.2	1.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(Z)	(Z)	(Z)	(S)	51.6	1.4	-	.4	1.6	65
32	STONE, CLAY, GLASS PRODUCTS.	-	-	-	-	(Z)	(D)	39.1	.9	-	.7	2.5	(X)
34	FABRICATED METAL PRODUCTS.	-	-	(D)	(D)	(D)	(Z)	25.6	.7	-	.3	1.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(S)	(S)	68.3	1.9	-	.6	2.8	(X)
354	METALWORKING MACHINERY	-	-	(Z)	(Z)	(S)	(D)	48.1	1.3	-	.3	1.5	1
	MASSACHUSETTS.	13.8	1.9	22.1	59.8	24.9	25.1	7,604.6	290.6	441.9	134.4	486.7	7
20	FOOD AND KINDRED PRODUCTS.	-	-	1.9	5.2	.8	3.2	429.8	16.9	(D)	9.9	35.1	11
201	MEAT PRODUCTS.	-	-	.2	.5	(D)	(D)	39.6	1.8	-	.7	3.1	15
202	DAIRY PRODUCTS	-	-	(D)	(D)	(D)	(D)	132.2	5.1	(D)	1.5	7.2	(X)
203	PRESERVED FRUITS AND VEGETABLES.	-	-	(D)	(D)	(Z)	(D)	23.0	.9	-	.5	1.6	(X)
205	BAKERY PRODUCTS.	-	-	(S)	(S)	(D)	(S)	(D)	(D)	-	1.6	5.3	(X)
206	SUGAR, CONFECTIONERY PRODUCTS.	-	-	(D)	(D)	(D)	.3	66.1	2.2	(D)	2.7	7.4	(X)
208	BEVERAGES.	-	-	.1	.4	(Z)	(D)	28.1	1.3	-	.8	2.6	29
209	MISC. FOODS, KINDRED PRODUCTS.	-	-	.4	1.0	(D)	(D)	67.8	2.6	-	1.3	5.5	27
22	TEXTILE MILL PRODUCTS.	-	-	1.7	5.0	7.0	(D)	439.9	16.2	4.7	14.7	43.4	6
222	WEAV'G MILLS, MANMADE FIBER.	-	-	(D)	(D)	(D)	(D)	88.8	3.5	-	.8	4.3	(X)
223	WEAVING, FINISHING MILLS, WOOL	-	-	(D)	(D)	(D)	(D)	35.7	1.3	-	1.1	3.5	(X)
224	NARROW FABRIC MILLS.	-	-	(Z)	(Z)	-	(D)	(D)	(D)	(D)	.1	.3	1
225	KNITTING MILLS	-	-	.3	.7	(D)	(D)	79.2	2.4	(D)	2.2	6.3	1
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	.7	1.9	(D)	(D)	92.6	3.1	(D)	5.2	12.7	5
228	YARN AND THREAD MILLS.	-	-	(D)	(D)	(D)	.1	36.8	1.4	-	.3	1.4	(X)
229	MISCELLANEOUS TEXTILE GOODS.	-	-	(S)	(S)	(S)	(S)	95.2	4.0	(D)	5.0	14.7	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.3	.8	.4	.9	188.7	6.7	(D)	1.5	7.1	32
231	MEN'S AND BOYS' SUITS AND COATS.	-	-	(Z)	.1	(D)	(Z)	26.4	.9	-	.5	1.6	40
232	MEN'S AND BOYS' FURNISHINGS.	-	-	(Z)	(Z)	-	.3	(S)	(S)	(Z)	.2	.9	1
233	WOMEN'S AND MISSES' OUTERWEAR.	-	-	(Z)	.1	(D)	(D)	62.9	2.4	-	.5	2.7	49
239	MISC. FABRICATED TEXTILE PRODS	-	-	(D)	(D)	(D)	.5	63.6	2.2	-	.4	1.5	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	(D)	.9	57.3	2.0	-	1.0	3.3	42
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(Z)	(Z)	-	.2	9.5	.3	-	.1	.5	62
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(D)	.2	52.9	2.2	(D)	1.2	4.2	(X)
251	HOUSEHOLD FURNITURE.	-	-	.1	.2	(D)	.1	39.5	1.7	(D)	1.0	3.4	43
26	PAPER AND ALLIED PRODUCTS.	-	-	(D)	(D)	3.0	.7	845.3	29.9	219.3	23.4	65.7	(X)
262	PAPERMILLS, EXC. BUILDING PAPER.	-	-	.4	.9	(D)	(S)	506.2	16.7	143.0	16.3	43.3	14
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(S)	(S)	(S)	(S)	203.6	7.7	(D)	1.8	9.0	(X)
27	PRINTING AND PUBLISHING.	-	-	.5	1.3	.6	1.3	272.6	10.5	(D)	3.0	14.6	12
271	NEWSPAPERS	-	-	.1	.4	(D)	(D)	66.2	2.6	-	.7	3.5	17
273	BOOKS.	-	-	(D)	(D)	-	(D)	40.4	1.6	-	.5	2.6	(X)
275	COMMERCIAL PRINTING.	-	-	.1	.4	(D)	(D)	107.6	4.2	-	1.0	5.1	29
277	GREETING CARD PUBLISHING	-	-	(Z)	(Z)	(D)	(D)	10.3	.5	-	.2	.7	1
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	(Z)	(D)	(D)	23.6	.7	-	.4	1.4	13
279	PRINTING TRADE SERVICES.	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.1	.5	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.9	3.8	4.6	1.8	596.3	21.1	(D)	13.5	37.8	6
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	(D)	(D)	(Z)	(D)	163.5	6.1	-	.7	3.1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	-	-	1.1	1.8	(D)	(D)	231.4	7.1	(D)	6.2	17.0	1
283	DRUGS.	-	-	(Z)	(Z)	-	.1	16.3	.7	-	.2	1.0	1
284	SOAPS, CLEANERS, TOILET GOODS.	-	-	(D)	(D)	(D)	(S)	49.2	1.9	-	1.1	3.5	(X)
285	PAINTS AND ALLIED PRODUCTS	-	-	(Z)	(Z)	-	.2	12.8	.6	-	.4	1.3	1
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	.2	.5	(D)	.2	71.4	2.4	-	1.3	3.4	8
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	.2	.5	-	.5	51.3	2.2	(D)	3.6	8.4	21
29	PETROLEUM AND COAL PRODUCTS.	-	-	(D)	(D)	(Z)	(D)	49.9	2.2	-	2.8	6.6	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		
						Distillate		Residual				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	
		A	B	C	D	E	F	G	H	I	J	F H J
	MASSACHUSETTS--CON.											
30	RUBBER, MISC. PLASTICS PROD.	9.0	45.3	6.1	13.8	86.2	1.3	438.6	6.3	(D)	(D)	8 5 (X)
306	FABRICATED RUBBER PRODUCTS, NEC.	1.9	8.0	1.5	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	5.2	30.4	3.0	6.8	57.2	.9	150.8	2.2	-	-	11 5 (X)
31	LEATHER, LEATHER PRODUCTS.	2.5	9.4	2.1	4.8	66.1	1.1	94.5	1.4	-	-	30 28 (X)
311	LEATHER TANNING AND FINISHING.	1.5	4.6	1.4	3.1	40.1	.7	64.4	.9	-	-	48 42 (X)
313	BOOT, SHOE CUT STOCK, FINDINGS	.4	1.3	.3	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
314	FOOTWEAR, EXCEPT RUBBER.	.5	2.8	.3	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
317	WOMEN'S HANDBAGS AND PURSES.	.1	.4	(Z)	(D)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS.	6.3	23.3	5.5	13.9	(S)	(S)	(S)	(S)	-	-	(X) (X) (X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.5	5.0	1.4	3.5	(S)	(S)	(S)	(S)	-	-	(X) (X) (X)
329	MISC. NONMETALLIC MINERAL PRODS.	2.8	10.0	2.4	5.4	36.0	.6	158.1	2.1	-	-	1 5 (X)
33	PRIMARY METAL INDUSTRIES	4.8	25.1	3.5	10.0	187.7	3.1	101.1	1.5	(D)	(D)	15 13 (X)
331	BLAST FURNACE, BASIC STEEL PROD.	1.1	5.4	.9	2.6	74.2	1.1	25.2	.4	(D)	(D)	7 49 (X)
332	IRON AND STEEL FOUNDRIES	.4	4.4	.2	2.0	(S)	(S)	(D)	(D)	-	-	(X) (X) (X)
335	NONFERROUS ROLLING AND DRAWING	1.8	9.8	1.2	2.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS.	11.8	46.2	9.9	23.5	334.5	5.3	294.7	4.2	-	-	8 4 (X)
341	METAL CANS, SHIPPING CONTAINERS.	.4	1.9	.3	.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
342	CUTLERY, HANDTOOLS AND HARDWARE.	3.2	10.2	2.9	6.0	73.3	1.1	133.3	1.9	-	-	6 1 (X)
343	PLUMBING, HEATING, EXCEPT ELEC	.3	.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
344	FABRICATED STRUC. METAL PRODS.	1.0	4.5	.7	1.7	24.3	.4	2.7	(Z)	-	-	20 23 (X)
345	SCREW MACHINE PROD., BOLTS, ETC.	.8	3.9	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
346	METAL FORGINGS AND STAMPINGS	3.3	12.3	2.9	7.2	(S)	(S)	(S)	(S)	-	-	(X) (X) (X)
347	METAL SERVICES, NEC.	1.0	3.9	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
348	ORDNANCE AND ACCESSORIES, NEC.	.7	3.0	.5	1.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
349	MISC. FABRICATED METAL PRODUCTS.	1.1	5.4	.8	1.9	(D)	(D)	26.6	.4	-	-	(X) 21 (X)
35	MACHINERY, EXCEPT ELECTRIC	8.1	40.2	5.8	13.7	157.7	2.5	360.9	5.1	(D)	(D)	17 5 (X)
354	METALWORKING MACHINERY	1.4	7.5	.9	2.3	53.1	.9	66.3	1.0	(D)	(D)	46 20 (X)
355	SPECIAL INDUSTRY MACHINERY	2.3	10.1	1.8	4.3	38.2	.6	173.0	2.4	-	-	14 1 (X)
356	GENERAL INDUSTRIAL MACHINERY	1.2	6.1	.9	2.3	(S)	(S)	(D)	(D)	-	-	(X) (X) (X)
357	OFFICE AND COMPUTING MACHINES.	1.5	9.2	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
358	REFRIGERATION AND SERVICE MACH	.4	1.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	8.7	45.0	6.0	13.5	49.2	.8	456.7	6.3	(D)	(D)	4 1 (X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	.5	2.0	.4	.8	-	-	37.4	.5	-	-	(X) 1 (X)
364	ELEC. LIGHTING, WIRING EQUIP	1.4	6.3	1.1	2.7	8.8	.1	24.6	.4	-	-	1 1 (X)
365	RADIO, TV RECEIVING EQUIPMENT.	.2	1.4	.1	.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
366	COMMUNICATION EQUIPMENT.	2.5	15.3	1.5	3.4	21.6	.4	129.9	1.9	-	-	4 1 (X)
367	ELECTRONIC COMPONENTS, ACCESS.	2.0	12.2	1.2	2.6	7.6	.1	80.3	1.1	(D)	(D)	24 3 (X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.4	2.4	.2	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
37	TRANSPORTATION EQUIPMENT	5.0	21.7	4.0	9.4	38.4	.7	229.1	3.3	-	-	45 1 (X)
371	MOTOR VEHICLES AND EQUIPMENT	1.3	6.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
38	INSTRUMENTS, RELATED PRODS	6.9	33.3	5.1	11.9	64.6	1.0	430.8	6.2	-	-	19 1 (X)
381	ENGINEERING, SCIENTIFIC INSTRU	.2	1.5	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
382	MEASURING, CONTROLLING DEVICES	1.8	10.4	1.2	2.8	11.6	.2	104.6	1.5	-	-	1 1 (X)
384	MEDICAL INSTRUMENTS, SUPPLIES.	.3	1.7	.2	.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
39	MISC. MANUFACTURING INDUS.	2.7	13.0	2.0	5.2	67.6	1.2	119.2	1.9	-	-	20 5 (X)
391	JEWELRY, SILVER AND PLATED WARE.	.6	2.8	.5	1.2	17.0	.3	22.7	.3	-	-	22 10 (X)
394	TOYS AND SPORTING GOODS.	1.0	4.7	.8	1.8	(D)	(D)	60.5	1.0	-	-	(X) 4 (X)
396	COSTUME JEWELRY AND NOTIONS.	.2	1.2	.2	.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
399	MISCELLANEOUS MANUFACTURES	.8	3.8	.6	1.6	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
	RHODE ISLAND	24.1	99.1	19.0	45.0	469.4	7.7	1,248.4	17.8	-	-	18 10 (X)
20	FOOD AND KINDRED PRODUCTS.	1.6	4.9	1.5	3.2	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
22	TEXTILE MILL PRODUCTS.	4.4	15.9	3.7	8.7	115.3	1.7	397.9	5.8	-	-	65 28 (X)
224	NARROW FABRIC MILLS.	.5	2.1	.4	.9	17.6	.3	17.1	.2	-	-	28 24 (X)
225	KNITTING MILLS	.6	2.0	.4	1.0	-	-	(D)	(D)	-	-	(X) (X) (X)
226	TEXTILE FINISHING, EXCEPT WOOL	2.0	5.8	1.9	4.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
228	YARN AND THREAD MILLS.	.4	2.0	.2	.5	-	-	(D)	(D)	-	-	(X) (X) (X)
229	MISCELLANEOUS TEXTILE GOODS.	.7	2.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.8	.1	.3	(D)	(D)	-	-	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS.	1.5	4.8	1.3	3.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
265	PAPERBOARD CONTAINERS AND BOXES.	.2	1.0	.1	.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
27	PRINTING AND PUBLISHING.	.5	2.4	.3	.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
275	COMMERCIAL PRINTING.	.3	1.6	.2	.5	-	-	(D)	(D)	-	-	(X) (X) (X)
28	CHEMICALS, ALLIED PRODUCTS	1.6	5.3	1.3	2.8	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
30	RUBBER, MISC. PLASTICS PROD.	1.1	5.7	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	.8	4.6	.4	.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS.	2.4	8.4	2.1	5.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	3.3	14.8	2.4	5.5	5.7	.1	131.9	2.0	-	-	1 1 (X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MASSACHUSETTS--CON.												
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.0	2.8	1.3	(D)	857.4	31.5	-	7.9	37.2	11
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.3	.7	(D)	.1	114.8	4.6	-	1.6	6.5	26
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	.5	1.7	(D)	(D)	634.0	23.6	-	4.5	24.8	15
31	LEATHER, LEATHER PRODUCTS.	-	-	(D)	(D)	(D)	1.8	110.7	4.6	-	2.5	9.0	(X)
311	LEATHER TANNING AND FINISHING.	-	-	(D)	(D)	(D)	1.3	30.4	1.5	-	1.5	4.5	(X)
313	BOOT, SHOE CUT STOCK, FINDINGS	-	-	(D)	(D)	-	.2	18.7	.6	-	.3	1.0	(X)
314	FOOTWEAR, EXCEPT RUBBER.	-	-	(Z)	(Z)	-	.2	48.3	2.1	-	.5	3.0	14
317	WOMEN'S HANDBAGS AND PURSES.	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.1	.3	1
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(S)	(S)	(S)	(S)	237.6	9.4	(D)	7.7	23.9	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(D)	(D)	(S)	(S)	41.4	1.5	-	3.3	9.2	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	(S)	(S)	(D)	(D)	107.3	4.6	(D)	2.7	8.1	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.8	2.5	.3	(D)	386.4	15.1	(D)	4.3	21.2	12
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	.4	1.2	.1	(D)	70.8	2.8	-	1.0	4.0	11
332	IRON AND STEEL FOUNDRIES	(S)	(S)	(S)	(S)	(S)	(S)	62.5	2.3	-	.3	3.5	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	.1	.5	(D)	.5	175.8	6.8	(D)	1.8	8.4	11
34	FABRICATED METAL PRODUCTS.	(D)	(D)	3.8	9.7	.4	(D)	560.1	22.7	43.9	10.7	40.0	5
341	METAL CANS, SHIPPING CONTAINERS.	-	-	.2	.8	(Z)	.1	24.0	1.0	-	.4	1.8	1
342	CUTLERY, HANDTOOLS AND HARDWARE.	-	-	1.2	2.4	.1	.5	89.7	4.2	(D)	2.2	7.9	1
343	PLUMBING, HEATING, EXCEPT ELEC	(D)	(D)	(D)	(D)	-	(S)	7.1	.3	-	.3	1.0	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	.2	.7	.1	.5	82.8	2.8	(D)	.8	3.5	28
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	(D)	(D)	(Z)	(D)	53.5	2.3	-	.7	3.2	(X)
346	METAL FORGINGS AND STAMPINGS	-	-	(S)	(S)	(S)	(S)	129.3	5.2	(D)	3.5	11.6	(X)
347	METAL SERVICES, NEC.	-	-	(D)	(D)	(D)	(D)	43.6	2.0	-	1.0	3.3	(X)
348	ORDNANCE AND ACCESSORIES, NEC.	-	-	(S)	(S)	(Z)	(S)	44.0	1.6	-	.6	2.5	(X)
349	MISC. FABRICATED METAL PRODUCTS.	-	-	.2	.6	.2	(D)	86.2	3.4	-	1.2	5.1	9
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.3	3.6	.7	(D)	676.0	26.5	84.1	7.9	37.0	16
354	METALWORKING MACHINERY	-	-	.1	.4	(Z)	(D)	133.8	5.2	(D)	1.2	6.2	17
355	SPECIAL INDUSTRY MACHINERY	-	-	.3	.9	(D)	(D)	147.7	5.8	(D)	2.4	9.1	12
356	GENERAL INDUSTRIAL MACHINERY	-	-	(D)	(D)	(D)	(S)	101.0	3.8	(D)	1.0	4.1	(X)
357	OFFICE AND COMPUTING MACHINES.	-	-	.2	.5	(Z)	.7	182.2	7.3	-	1.8	10.7	13
358	REFRIGERATION AND SERVICE MACH	-	-	.2	.5	-	.1	27.7	1.2	-	.3	1.4	64
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.3	3.6	.6	(D)	813.8	31.5	(D)	9.0	42.6	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	(Z)	.1	(D)	(D)	29.0	1.2	-	1.2	5.5	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.5	1.6	(D)	(D)	91.6	3.6	(D)	1.3	5.4	1
365	RADIO, TV RECEIVING EQUIPMENT.	-	-	(D)	(D)	-	.1	23.1	1.0	-	.2	1.0	(X)
366	COMMUNICATION EQUIPMENT.	-	-	.2	.4	.3	.5	305.5	11.9	-	2.3	13.5	2
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(D)	(D)	(D)	(D)	233.0	9.7	-	1.9	11.0	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	-	-	.1	.4	-	.1	38.3	1.7	-	.2	1.1	1
37	TRANSPORTATION EQUIPMENT	-	-	.7	2.1	(D)	(D)	297.9	12.4	(D)	4.3	18.0	1
371	MOTOR VEHICLES AND EQUIPMENT	-	-	(D)	(D)	(D)	(D)	(S)	(S)	-	1.2	5.1	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	1.4	3.5	(D)	(D)	530.7	21.4	(D)	6.2	27.6	5
381	ENGINEERING, SCIENTIFIC INSTRU	-	-	(D)	(D)	-	.2	(S)	(S)	-	.3	1.8	(X)
382	MEASURING, CONTROLLING DEVICES	-	-	.3	.9	(D)	(D)	197.6	7.6	(D)	1.1	5.9	1
384	MEDICAL INSTRUMENTS, SUPPLIES.	-	-	(D)	(D)	-	.1	24.5	1.1	(D)	.3	1.5	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.5	1.4	.5	.2	201.4	7.8	(S)	2.9	12.4	15
391	JEWELRY, SILVER AND PLATED WARE.	-	-	.1	.4	(D)	(D)	35.7	1.6	-	.7	2.9	8
394	TOYS AND SPORTING GOODS.	-	-	.2	.4	-	(D)	79.7	2.9	-	1.1	4.4	1
396	COSTUME JEWELRY AND NOTIONS.	-	-	(Z)	(Z)	-	(Z)	19.9	.8	(D)	.2	.9	1
399	MISCELLANEOUS MANUFACTURES	-	-	.2	.6	(D)	(D)	54.3	2.3	-	.9	4.0	37
	RHODE ISLAND	-	-	4.6	12.3	(D)	(D)	1,486.2	54.1	20.6	23.2	88.4	8
20	FOOD AND KINDRED PRODUCTS.	-	-	.5	1.1	(Z)	.7	43.9	1.7	(D)	1.8	4.8	31
22	TEXTILE MILL PRODUCTS.	-	-	.3	.8	.5	(Z)	201.1	7.1	(D)	4.5	14.9	6
224	NARROW FABRIC MILLS.	-	-	(D)	(D)	-	(D)	33.9	1.2	(D)	.5	2.1	(X)
225	KNITTING MILLS	-	-	(D)	(D)	(D)	(D)	32.2	.9	-	.8	2.5	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(D)	(D)	(D)	(D)	38.2	1.4	(D)	1.7	4.5	(X)
228	YARN AND THREAD MILLS.	-	-	(D)	(D)	-	(D)	38.5	1.5	-	.2	1.2	(X)
229	MISCELLANEOUS TEXTILE GOODS.	-	-	.1	.2	(D)	.7	(S)	(S)	(D)	.9	2.8	13
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	(Z)	-	(D)	12.1	.4	-	.2	.8	61
26	PAPER AND ALLIED PRODUCTS.	-	-	(D)	(D)	(Z)	(S)	43.9	1.7	(D)	1.5	4.1	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	(D)	(D)	-	.1	19.0	.7	-	.2	.9	(X)
27	PRINTING AND PUBLISHING.	-	-	(D)	(D)	-	.1	47.5	1.7	(D)	.4	1.8	(X)
275	COMMERCIAL PRINTING.	-	-	(D)	(D)	-	(D)	28.6	1.1	(D)	.2	.9	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	.4	67.0	2.5	-	1.4	4.1	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	.2	126.1	4.2	-	1.1	5.5	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	(D)	(D)	(D)	.2	114.1	3.7	-	.8	4.3	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(D)	(D)	(D)	(S)	87.9	3.0	-	2.4	6.8	(X)
33	PRIMARY METAL INDUSTRIES	-	-	.5	1.4	(D)	(D)	251.1	9.3	-	3.9	16.9	12

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	RHODE ISLAND--CON.													
33	PRIMARY METAL INDUSTRIES--CON.													
335	NONFERROUS ROLLING AND DRAWING	1.6	8.0	1.1	2.5	(D)	(D)	79.3	1.2	-	-	(X)	1	(X)
34	FABRICATED METAL PRODUCTS	2.8	11.9	2.2	4.8	16.0	.3	56.1	.8	-	-	25	6	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	.2	.8	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	.2	.8	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
347	METAL SERVICES, NEC.	.7	2.5	.5	1.2	1.0	(Z)	(D)	(D)	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.5	4.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.4	2.2	.3	.7	-	-	3.9	(Z)	-	-	(X)	1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	4.7	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.4	2.0	.2	.5	-	-	27.4	.4	-	-	(X)	1	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.3	1.3	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.8	3.4	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	.4	1.5	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	2.0	9.6	(S)	(S)	60.1	1.0	48.5	.7	-	-	20	11	(X)
394	TOYS AND SPORTING GOODS	.1	.7	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS	.9	4.2	.7	1.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
	CONNECTICUT	87.1	366.9	67.5	169.9	2,029.1	32.8	5,396.2	78.5	(D)	(D)	7	2	(X)
20	FOOD AND KINDRED PRODUCTS	2.4	10.3	1.8	4.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	.5	2.7	.4	.9	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.8	3.2	.6	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	.2	1.0	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	5.4	18.4	4.8	12.0	297.8	4.6	362.8	5.3	-	-	27	5	(X)
222	WEAV'G MILLS, MANMADE FIBER	.6	1.8	.5	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	.9	3.0	.8	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	2.0	6.5	1.8	4.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
228	YARN AND THREAD MILLS	.9	3.0	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	1.0	3.4	.9	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS	.7	3.4	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.2	1.1	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.5	2.3	.4	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	.2	.7	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	8.0	24.5	7.0	16.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	2.2	7.5	1.8	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
263	PAPERBOARD MILLS	4.6	12.2	4.3	9.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.5	2.0	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.8	2.8	.6	1.4	28.2	.4	17.6	.3	-	-	11	1	(X)
27	PRINTING AND PUBLISHING	1.5	7.9	1.0	2.4	26.2	.5	18.0	.3	-	-	9	12	(X)
271	NEWSPAPERS	.2	1.5	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
272	PERIODICALS	(Z)	.1	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	1.0	4.6	.7	1.6	17.9	.3	(D)	(D)	-	-	8	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.1	.6	(Z)	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	11.8	34.2	10.3	22.5	129.0	2.0	1,230.9	17.3	-	-	5	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	1.6	5.3	1.3	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	.3	1.4	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	.5	1.5	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	.6	3.9	.5	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS	.6	3.7	.5	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	3.5	16.3	2.4	5.7	87.7	1.4	134.2	2.0	-	-	23	3	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	.6	2.9	.4	1.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	2.1	9.5	1.4	2.9	27.8	.4	21.2	.3	-	-	5	14	(X)
32	STONE, CLAY, GLASS PRODUCTS	3.7	11.9	3.3	8.5	103.8	1.7	263.5	4.0	-	-	31	10	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	.8	2.3	.8	1.7	51.0	.8	-	-	-	-	50	(X)	(X)
33	PRIMARY METAL INDUSTRIES	12.3	63.2	9.2	26.7	174.9	2.8	325.9	4.9	(D)	(D)	13	5	(X)
331	BLAST FURNACE, BASIC STEEL PROD.	4.4	21.8	3.4	10.1	68.9	1.1	61.4	1.0	(D)	(D)	1	1	(X)
332	IRON AND STEEL FOUNDRIES	.6	5.0	.4	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	5.5	29.7	3.9	10.2	40.7	.6	197.7	3.0	-	-	14	1	(X)
336	NONFERROUS FOUNDRIES	.5	2.3	.4	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
339	MISC. PRIMARY METAL PRODUCTS	1.1	3.9	1.0	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	8.3	39.9	6.2	17.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	2.1	9.7	1.6	4.2	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	1.1	5.2	.8	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	1.2	5.3	1.0	2.5	46.8	.8	(D)	(D)	-	-	22	(X)	(X)
347	METAL SERVICES, NEC.	.9	4.0	.7	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
348	ORDNANCE AND ACCESSORIES, NEC.	1.2	5.9	.8	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.9	5.3	.6	2.0	29.6	.5	59.5	.9	-	-	63	46	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	RHODE ISLAND--CON.												
33	PRIMARY METAL INDUSTRIES--CON.												
335	NONFERROUS ROLLING AND DRAWING	-	-	.2	.5	(D)	(D)	153.4	5.5	-	1.6	7.6	1
34	FABRICATED METAL PRODUCTS	-	-	.3	.9	1.9	.9	189.6	7.1	(D)	1.7	8.0	63
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	(Z)	(Z)	(Z)	.1	10.0	.4	-	.2	.8	67
346	METAL FORGINGS AND STAMPINGS	-	-	(D)	(D)	-	(Z)	9.2	.4	(D)	.2	.6	(X)
347	METAL SERVICES, NEC	-	-	(D)	(D)	(Z)	(D)	49.0	1.3	-	.5	2.1	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.7	(Z)	(D)	(S)	(S)	-	.7	3.9	28
354	METALWORKING MACHINERY	-	-	(D)	(D)	-	(D)	39.0	1.5	-	.4	2.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(Z)	.1	97.4	3.5	(D)	.8	3.7	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	(Z)	(Z)	(D)	(D)	40.2	1.5	-	.3	1.3	1
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(D)	(D)	-	.1	32.8	1.0	-	.2	1.0	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.2	-	(D)	63.9	2.2	-	.5	2.3	17
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	(D)	(D)	-	(D)	32.7	1.0	-	.4	1.5	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.4	1.3	.3	.5	(S)	(S)	-	1.8	8.3	16
394	TOYS AND SPORTING GOODS	-	-	-	-	(Z)	(D)	(D)	(D)	-	.1	.9	(X)
396	COSTUME JEWELRY AND NOTIONS	-	-	(S)	(S)	(S)	(S)	61.5	2.3	-	.7	3.5	(X)
	CONNECTICUT	(D)	(D)	14.6	42.0	6.4	(D)	5,735.4	197.0	123.0	85.3	330.4	3
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	179.8	5.5	(D)	2.5	10.5	(X)
202	DAIRY PRODUCTS	-	-	(S)	(S)	(D)	(S)	51.4	1.8	(D)	.6	3.3	(X)
205	BAKERY PRODUCTS	-	-	.2	.6	(Z)	(D)	58.9	1.6	-	.9	3.3	1
208	BEVERAGES	-	-	(S)	(S)	(D)	(S)	19.6	.5	-	.2	.9	(X)
22	TEXTILE MILL PRODUCTS	-	-	.6	1.8	(D)	(D)	187.2	6.3	(D)	5.5	17.2	2
222	WEAV'G MILLS, MANMADE FIBER	-	-	(Z)	(Z)	-	(Z)	15.1	.5	-	.6	1.7	1
225	KNITTING MILLS	-	-	-	-	-	(D)	33.1	1.1	-	.5	.9	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(D)	(D)	(D)	.1	57.9	2.1	(D)	2.5	8.4	(X)
228	YARN AND THREAD MILLS	-	-	(D)	(D)	-	.1	42.2	1.3	-	.7	2.3	(X)
229	MISCELLANEOUS TEXTILE GOODS	-	-	.3	.9	(D)	(D)	32.3	1.1	-	1.1	3.6	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	-	.3	50.0	2.1	-	.7	3.1	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	(Z)	-	(D)	18.7	.8	-	.2	1.2	60
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(D)	(S)	33.9	1.2	-	.5	2.0	(X)
251	HOUSEHOLD FURNITURE	-	-	(Z)	(Z)	-	(S)	10.6	.3	-	.2	.9	1
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	275.6	8.5	88.1	7.5	21.9	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(Z)	(D)	106.7	3.1	(D)	2.1	6.6	(X)
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(S)	89.5	2.7	(D)	4.2	10.8	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(Z)	(Z)	(Z)	.2	42.5	1.3	-	.5	2.0	1
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	(S)	(S)	36.9	1.5	-	.7	2.5	(X)
27	PRINTING AND PUBLISHING	-	-	.2	.6	(D)	(D)	158.4	5.6	-	1.8	8.4	7
271	NEWSPAPERS	-	-	(Z)	(Z)	-	.1	30.9	1.1	-	.3	1.3	33
272	PERIODICALS	-	-	(Z)	(Z)	-	(Z)	(S)	(S)	(D)	(Z)	.2	84
275	COMMERCIAL PRINTING	-	-	.1	.5	(D)	(D)	90.2	3.0	-	1.2	5.1	7
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	-	(Z)	13.9	.5	-	.1	.6	5
28	CHEMICALS, ALLIED PRODUCTS	-	-	.4	1.0	(D)	(D)	438.5	11.7	(D)	11.3	29.8	10
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(Z)	(Z)	(Z)	(D)	83.6	2.2	-	1.5	4.6	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	(D)	(D)	-	(Z)	33.4	.9	-	.5	1.6	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	18.8	.6	-	.4	1.2	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(S)	(S)	(Z)	(S)	18.1	1.1	(D)	(S)	(S)	(X)
295	PAVING AND ROOFING MATERIALS	-	-	(S)	(S)	(Z)	(S)	16.3	1.0	(D)	(S)	(S)	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.9	.3	1.0	311.2	10.6	-	3.1	14.2	4
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	(D)	(D)	(D)	(S)	46.6	1.7	-	.5	2.1	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	(D)	(D)	(D)	(D)	201.5	6.5	-	1.9	8.8	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.9	2.4	(D)	(D)	104.7	3.4	(D)	4.7	14.3	15
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(Z)	(Z)	(D)	(D)	14.0	.6	-	1.0	3.3	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	4.0	11.8	(D)	.8	914.6	36.5	(D)	12.2	55.5	3
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	1.5	4.1	(D)	(D)	312.1	11.7	-	4.4	19.4	1
332	IRON AND STEEL FOUNDRIES	(D)	(D)	(S)	(S)	(D)	(S)	61.0	2.3	-	.8	4.8	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	1.9	5.7	.5	.4	457.6	19.5	(D)	5.5	25.8	6
336	NONFERROUS FOUNDRIES	-	-	(D)	(D)	(Z)	(Z)	32.0	1.2	-	.6	2.1	(X)
339	MISC. PRIMARY METAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	48.4	1.7	-	.6	2.1	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	612.2	22.9	(D)	8.2	34.6	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	(S)	(S)	(D)	(S)	159.7	5.5	-	2.1	8.8	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	.4	1.2	(D)	.1	82.5	3.0	(Z)	1.0	4.3	10
346	METAL FORGINGS AND STAMPINGS	-	-	.4	1.2	(D)	(Z)	78.1	2.7	-	1.1	4.3	42
347	METAL SERVICES, NEC	-	-	.2	.4	(D)	(D)	47.1	2.1	-	.9	3.4	34
348	ORDNANCE AND ACCESSORIES, NEC	-	-	.1	.5	(Z)	.2	99.6	3.7	(D)	1.2	5.7	1
349	MISC. FABRICATED METAL PRODUCTS	-	-	.3	1.0	(D)	(D)	85.7	3.3	-	1.1	5.6	40

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	CONNECTICUT--CON.													
35	MACHINERY, EXCEPT ELECTRIC	7.4	36.0	5.2	13.3	174.9	2.9	260.8	4.0	-	-	11	1	(X)
354	METALWORKING MACHINERY	1.5	8.0	1.0	2.7	(D)	(D)	58.4	.9	-	-	(X)	5	(X)
355	SPECIAL INDUSTRY MACHINERY	.7	3.6	.5	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	3.2	14.3	2.4	5.9	31.7	.5	141.4	2.2	-	-	29	1	(X)
357	OFFICE AND COMPUTING MACHINES	.6	3.6	.3	.9	30.7	.5	(D)	(D)	-	-	9	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	.2	1.0	.1	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.5	2.8	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	79	(X)
36	ELECTRIC, ELECTRONIC EQUIP	4.0	20.5	2.6	6.3	117.7	1.9	120.5	1.8	-	-	5	4	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.5	2.4	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	.3	1.6	.2	.5	13.7	.2	(D)	(D)	-	-	12	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.6	3.7	.4	.9	8.6	.1	16.5	.3	-	-	24	1	(X)
366	COMMUNICATION EQUIPMENT	.5	2.8	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS	1.1	5.0	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.5	2.6	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	12.0	51.5	8.6	20.7	106.8	1.8	914.5	13.2	-	-	3	1	(X)
371	MOTOR VEHICLES AND EQUIPMENT	1.6	6.4	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	8.9	37.6	6.4	15.5	34.7	.5	723.7	10.5	-	-	9	1	(X)
38	INSTRUMENTS, RELATED PRODS	1.8	9.4	1.2	3.0	40.9	.7	56.7	.8	-	-	1	1	(X)
382	MEASURING, CONTROLLING DEVICES	.5	2.7	.3	.8	10.8	.2	11.3	.2	-	-	1	1	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	.5	2.7	.4	.9	16.6	.3	12.0	.2	-	-	1	1	(X)
387	WATCHES, CLOCKS, AND WATCHCASES	.3	1.4	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS	2.5	11.3	1.9	4.7	88.9	1.4	131.5	2.0	-	-	2	7	(X)
394	TOYS AND SPORTING GOODS	.2	1.0	.2	.4	(D)	(Z)	(D)	(D)	-	-	9	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS	.9	3.9	.7	1.8	(D)	(D)	72.8	1.1	-	-	(X)	13	(X)
	NEW YORK	466.9	1,470.6	361.8	742.6	5,970.7	97.0	14,049.0	199.3	2,491.2	81.7	3	2	1
20	FOOD AND KINDRED PRODUCTS	38.5	131.7	31.0	69.7	946.4	15.3	1,602.0	23.8	(D)	(D)	10	3	(X)
201	MEAT PRODUCTS	2.1	8.6	1.5	3.2	39.3	.6	37.2	.5	-	-	19	10	(X)
202	DAIRY PRODUCTS	7.7	27.1	5.8	13.8	219.7	3.7	460.8	6.8	-	-	35	8	(X)
203	PRESERVED FRUITS AND VEGETABLES	6.1	18.6	5.1	11.0	154.0	2.4	220.7	3.2	-	-	4	1	(X)
204	GRAIN MILL PRODUCTS	2.7	10.4	1.7	3.9	38.9	.6	80.5	1.2	-	-	5	7	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	6.2	19.3	5.6	13.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
208	BEVERAGES	6.0	21.3	4.7	10.2	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	3.0	11.9	2.4	5.4	99.4	1.7	69.1	1.1	-	-	13	1	(X)
22	TEXTILE MILL PRODUCTS	10.6	37.8	8.9	18.9	147.9	2.4	311.5	4.5	(D)	(D)	23	13	(X)
223	WEAVING, FINISHING MILLS, WOOL	.3	1.0	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
224	NARROW FABRIC MILLS	.2	.8	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
225	KNITTING MILLS	5.2	18.7	4.2	8.7	76.2	1.2	92.0	1.3	(D)	(D)	19	14	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	2.5	7.4	2.3	5.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	2.0	7.5	1.6	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS	9.2	50.7	5.9	11.9	67.1	1.1	46.6	.7	(D)	(D)	32	30	(X)
231	MEN'S AND BOYS' SUITS AND COATS	1.1	4.8	.9	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.8	3.5	.5	1.0	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	4.2	25.2	2.6	5.0	17.5	.3	15.0	.2	(D)	(D)	49	87	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.4	2.4	.2	.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
236	CHILDREN'S OUTERWEAR	.3	2.0	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES	.6	3.1	.3	.6	(D)	(D)	(D)	(Z)	-	-	(X)	78	(X)
239	MISC. FABRICATED TEXTILE PRODS	1.6	8.1	1.0	2.2	29.8	.5	(D)	(D)	(D)	(D)	64	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.0	11.6	2.2	4.9	90.3	1.5	15.0	.2	(D)	(D)	19	59	(X)
242	SAWMILLS AND PLANING MILLS	.7	3.0	.5	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS	.6	2.5	.3	.8	17.5	.3	(D)	(D)	-	-	31	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.4	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	1.1	4.3	.9	1.9	23.6	.4	-	-	(D)	(D)	39	(X)	(X)
25	FURNITURE AND FIXTURES	2.6	11.3	2.0	4.7	101.8	1.8	34.6	.6	(D)	(D)	23	22	(X)
251	HOUSEHOLD FURNITURE	1.2	4.9	.8	2.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
252	OFFICE FURNITURE	.5	2.0	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	.6	2.9	.4	1.1	28.1	.5	2.5	(Z)	-	-	40	1	(X)
26	PAPER AND ALLIED PRODUCTS	44.8	124.5	38.0	75.6	363.0	5.6	3,501.6	47.2	213.6	8.0	4	4	1
262	PAPERMILLS, EXC. BUILDING PAPER	28.5	73.2	24.9	49.8	210.0	3.2	2,842.6	37.9	158.9	5.8	1	3	1
263	PAPERBOARD MILLS	4.7	11.2	4.4	8.3	-	-	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	4.4	15.0	3.4	6.9	(D)	(D)	108.8	1.5	-	-	(X)	4	(X)
27	PRINTING AND PUBLISHING	10.9	59.1	6.3	14.4	212.0	3.6	76.3	1.2	(D)	(D)	25	12	(X)
271	NEWSPAPERS	3.0	15.3	2.1	4.8	32.2	.7	(D)	(D)	-	-	14	(X)	(X)
272	PERIODICALS	.5	3.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
273	BOOKS	1.2	5.8	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
274	MISCELLANEOUS PUBLISHING	.2	1.7	.1	.2	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	93
275	COMMERCIAL PRINTING	4.8	24.3	2.5	5.8	129.8	2.0	30.8	.5	-	-	44	28	(X)
278	BLANKBOOKS AND BOOKBINDING	.3	2.3	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES	.5	4.2	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	66.4	155.3	56.1	101.5	828.8	13.3	2,750.7	38.1	696.2	22.4	5	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	24.2	44.9	20.3	32.9	527.0	8.1	256.2	3.8	(D)	(D)	5	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	5.3	13.6	4.7	9.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
283	DRUGS	7.8	29.4	6.2	13.5	37.1	.7	498.8	7.4	-	-	19	1	(X)
285	PAINTS AND ALLIED PRODUCTS	2.0	5.8	1.7	3.5	32.3	.5	67.2	.9	-	-	15	1	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	15.4	33.7	12.3	23.0	56.5	1.0	1,115.1	15.5	(D)	(D)	9	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	CONNECTICUT--CON.												
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.8	5.1	(D)	(D)	651.2	22.7	(D)	7.4	31.7	5
354	METALWORKING MACHINERY	-	-	.3	1.0	-	(D)	144.1	5.3	-	1.6	7.2	16
355	SPECIAL INDUSTRY MACHINERY	-	-	.1	.2	(Z)	.1	58.5	2.3	-	.7	3.2	27
356	GENERAL INDUSTRIAL MACHINERY	-	-	.9	2.6	.2	.4	257.2	8.3	-	3.0	12.2	2
357	OFFICE AND COMPUTING MACHINES	-	-	(D)	(D)	-	(Z)	71.4	2.7	-	.6	3.5	(X)
358	REFRIGERATION AND SERVICE MACH	-	-	(D)	(D)	(Z)	(D)	15.4	.6	-	.3	1.2	(X)
359	MISC. MACHINERY, EXC. ELEC	-	-	(D)	(D)	(D)	.2	55.0	2.0	-	.5	2.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.4	1.2	.3	1.1	400.6	14.2	(Z)	3.8	18.2	6
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	(Z)	.1	(D)	.1	50.9	1.7	-	.5	2.5	1
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	(D)	(D)	-	.1	32.7	1.1	-	.1	.6	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.1	.3	(D)	(D)	73.0	2.8	(Z)	.8	4.1	20
366	COMMUNICATION EQUIPMENT	-	-	(Z)	.1	(Z)	.1	58.4	2.1	-	.5	2.7	31
367	ELECTRONIC COMPONENTS, ACCESS	-	-	(D)	(D)	(Z)	.8	95.2	3.3	-	1.0	4.2	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	(Z)	(Z)	-	(Z)	51.8	1.9	-	.4	1.9	8
37	TRANSPORTATION EQUIPMENT	-	-	1.6	4.7	.4	.6	993.9	30.7	(D)	10.9	43.7	2
371	MOTOR VEHICLES AND EQUIPMENT	-	-	(D)	(D)	-	.4	(D)	(D)	-	.4	1.6	(X)
372	AIRCRAFT AND PARTS	-	-	(D)	(D)	(D)	(D)	723.9	22.1	(D)	8.8	34.7	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.3	1.0	(S)	(S)	192.7	6.4	-	2.2	10.5	20
382	MEASURING, CONTROLLING DEVICES	-	-	.1	.2	-	.2	48.5	1.8	-	.5	2.6	3
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	.1	.2	(Z)	.2	55.8	1.8	-	.7	3.3	1
387	WATCHES, CLOCKS, AND WATCHCASES	-	-	(D)	(D)	(Z)	(D)	30.8	1.0	-	.4	1.9	(X)
39	MISC. MANUFACTURING INDUS	-	-	.3	.9	.1	.4	186.0	6.5	(D)	2.7	10.8	3
394	TOYS AND SPORTING GOODS	-	-	(D)	(D)	(Z)	(D)	13.4	.5	-	.3	1.1	(X)
396	COSTUME JEWELRY AND NOTIONS	-	-	.1	.4	(Z)	(D)	66.0	2.1	-	1.0	3.7	1
	NEW YORK	(D)	(D)	85.5	180.5	36.9	(D)	30,792.6	728.0	1,865.5	464.2	1,267.5	2
20	FOOD AND KINDRED PRODUCTS	-	-	7.6	17.0	(D)	6.9	2,189.4	62.0	76.6	38.4	117.8	6
201	MEAT PRODUCTS	-	-	.3	.7	.4	1.0	161.1	5.4	-	2.1	7.5	16
202	DAIRY PRODUCTS	-	-	1.5	3.2	(Z)	.1	556.2	13.3	(D)	7.6	23.5	12
203	PRESERVED FRUITS AND VEGETABLES	-	-	.8	1.8	(D)	(D)	279.6	7.6	-	5.6	15.4	2
204	GRAIN MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	276.8	6.5	(D)	2.7	8.9	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	1.2	2.7	(Z)	.6	178.2	6.0	(D)	6.2	17.2	3
208	BEVERAGES	-	-	(S)	(S)	(S)	(S)	395.3	11.1	-	5.4	18.1	(X)
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.4	.9	(Z)	1.7	183.6	6.4	(D)	3.9	13.1	18
22	TEXTILE MILL PRODUCTS	-	-	1.3	3.0	(D)	8.1	503.3	18.9	(D)	11.3	37.4	13
223	WEAVING, FINISHING MILLS, WOOL	-	-	(D)	(D)	(D)	(D)	13.8	.5	-	.5	1.3	(X)
224	NARROW FABRIC MILLS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.2	.9	1
225	KNITTING MILLS	-	-	.6	1.3	(D)	4.7	272.3	9.9	-	4.8	15.8	22
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(D)	(D)	(D)	(D)	57.7	2.2	-	2.2	6.3	(X)
229	MISCELLANEOUS TEXTILE GOODS	-	-	.2	.5	(Z)	1.3	117.6	4.2	(D)	2.3	7.5	16
23	APPAREL, OTH. TEXTILE PRODS	-	-	.8	1.8	(D)	6.8	961.1	38.8	.5	10.2	45.2	47
231	MEN'S AND BOYS' SUITS AND COATS	-	-	.1	.3	(D)	.9	59.0	3.0	-	1.2	4.6	1
232	MEN'S AND BOYS' FURNISHINGS	-	-	(Z)	(Z)	(D)	(D)	70.5	2.5	-	.9	3.5	1
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.5	1.1	(D)	2.4	465.7	20.2	(D)	4.1	20.6	72
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(D)	(D)	-	.4	49.1	1.9	-	.4	2.2	(X)
236	CHILDREN'S OUTERWEAR	-	-	-	-	-	.4	38.0	1.6	(D)	.4	1.9	(X)
238	MISC. APPAREL AND ACCESSORIES	-	-	(Z)	(Z)	-	(D)	81.6	2.5	-	.7	3.2	98
239	MISC. FABRICATED TEXTILE PRODS	-	-	.1	.3	.2	1.2	156.7	5.9	-	2.1	7.6	41
24	LUMBER AND WOOD PRODUCTS	-	-	.4	.9	.3	(D)	252.6	6.7	(D)	3.5	11.1	35
242	SAWMILLS AND PLANING MILLS	-	-	(Z)	.1	.3	.4	61.0	1.8	-	1.1	3.5	34
243	MILLWORK, PLYWOOD, STRUC. MEMBS	-	-	.1	.3	(Z)	(D)	86.9	1.8	(D)	.7	2.4	37
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(Z)	(Z)	(D)	(Z)	7.7	.2	-	.1	.4	26
249	MISCELLANEOUS WOOD PRODUCTS	-	-	.2	.5	(D)	.9	82.7	2.4	(D)	1.1	3.5	55
25	FURNITURE AND FIXTURES	-	-	.5	1.1	(D)	1.0	203.3	6.6	(S)	2.9	10.2	10
251	HOUSEHOLD FURNITURE	-	-	(D)	(D)	.2	.3	91.6	2.8	(S)	1.2	4.4	(X)
252	OFFICE FURNITURE	-	-	.1	.2	-	.3	37.6	1.2	-	.4	1.6	9
254	PARTITIONS AND FIXTURES	-	-	.1	.3	(D)	(D)	52.8	1.8	-	.9	3.1	29
26	PAPER AND ALLIED PRODUCTS	-	-	2.8	5.5	1.6	7.8	1,980.0	48.9	645.1	48.2	115.6	3
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(D)	.6	1,050.4	23.4	609.3	28.5	64.4	(X)
263	PAPERBOARD MILLS	-	-	(D)	(D)	-	1.7	98.4	2.9	(S)	8.6	17.6	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.8	1.6	(D)	2.4	273.7	8.2	(D)	4.0	12.2	9
27	PRINTING AND PUBLISHING	-	-	1.8	4.2	3.4	(D)	1,356.3	44.7	(D)	11.1	50.9	15
271	NEWSPAPERS	-	-	.5	1.1	2.4	(D)	270.7	10.4	(D)	2.8	14.4	5
272	PERIODICALS	-	-	(Z)	(Z)	(D)	(D)	62.7	3.3	-	.8	4.3	1
273	BOOKS	-	-	.1	.2	(D)	.5	134.1	4.2	-	.9	3.8	24
274	MISCELLANEOUS PUBLISHING	-	-	(Z)	(Z)	-	(D)	48.7	1.4	-	.2	1.1	1
275	COMMERCIAL PRINTING	-	-	1.1	2.5	.6	.2	680.2	18.6	(D)	5.1	20.3	24
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	(Z)	-	(D)	43.2	1.8	-	.4	2.0	41
279	PRINTING TRADE SERVICES	-	-	(Z)	.1	(D)	(D)	80.0	3.7	(D)	.6	3.2	53
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	9.8	18.9	3.6	(D)	3,014.2	53.8	354.2	67.5	137.9	12
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	2.3	4.5	(D)	(D)	1,133.6	12.1	(D)	24.2	40.1	3
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(D)	(D)	(D)	.4	165.8	4.3	-	4.3	10.0	(X)
283	DRUGS	-	-	1.3	2.6	(D)	(D)	463.5	15.9	-	7.9	24.7	1
285	PAINTS AND ALLIED PRODUCTS	-	-	.3	.7	(D)	(D)	68.8	2.3	-	2.0	5.1	3
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	.6	1.4	(D)	2.6	913.4	10.7	(D)	16.7	32.7	2

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	NEW YORK--CON.													
28	CHEMICALS, ALLIED PRODUCTS--CON.													
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	4.6	8.8	4.4	6.6	27.7	.5	20.2	.3	(D)	(D)	21	1	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	6.1	20.4	4.7	8.8	227.3	3.5	25.1	.3	-	-	14	17	(X)
295	PAVING AND ROOFING MATERIALS . . .	4.7	12.9	4.3	7.8	180.4	2.9	(D)	(D)	-	-	17	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	11.4	45.0	7.8	16.3	100.1	1.7	323.5	4.6	(D)	(D)	26	14	(X)
306	FABRICATED RUBBER PRODUCTS, NEC. .	1.2	3.0	.9	1.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	8.4	36.7	5.4	11.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	(D)	(D)	(D)	(D)	43.5	.7	(D)	(D)	(D)	(D)	31	(X)	(X)
311	LEATHER TANNING AND FINISHING. . .	1.4	3.7	1.2	2.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.4	1.8	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
315	LEATHER GLOVES AND MITTENS	(Z)	.2	(Z)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
316	LUGGAGE.	.2	.8	.1	.2	1.0	(Z)	-	-	-	-	56	(X)	(X)
317	WOMEN'S HANDBAGS AND PURSES. . . .	.3	2.1	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	44.9	106.0	39.1	62.5	536.0	8.6	589.0	8.3	637.2	17.0	5	8	1
322	GLASS, PRESSED OR BLOWN.	8.6	24.6	7.3	14.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
323	PRODUCTS OF PURCHASED GLASS. . . .	1.2	3.6	1.0	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
324	CEMENT, HYDRAULIC.	18.7	31.3	17.2	18.9	(D)	(D)	(D)	(D)	596.5	15.6	(X)	(X)	1
326	POTTERY AND RELATED PRODUCTS . . .	1.7	4.6	1.6	3.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	6.4	17.2	5.7	11.7	302.2	4.9	14.4	.2	(D)	(D)	7	9	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	6.7	20.7	4.7	9.3	98.0	1.6	(D)	(D)	(D)	(D)	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	95.5	261.5	65.9	155.7	847.6	13.7	1,910.4	27.6	24.7	.9	3	1	4
331	BLAST FURNACE, BASIC STEEL PROD. .	50.9	140.5	44.2	107.5	444.0	7.2	1,122.9	15.9	(D)	(D)	1	1	(X)
332	IRON AND STEEL FOUNDRIES	4.2	15.0	3.2	7.3	25.4	.4	(D)	(D)	(D)	(Z)	7	(X)	87
333	PRIMARY NONFERROUS METALS.	21.8	42.0	3.5	8.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
334	SECONDARY NONFERROUS METALS. . . .	2.1	6.7	2.0	4.7	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
335	NONFERROUS ROLLING AND DRAWING . .	12.0	43.8	9.4	20.3	228.6	3.6	394.8	5.7	(D)	(D)	3	1	(X)
34	FABRICATED METAL PRODUCTS. . . .	16.8	67.1	12.6	27.5	280.7	4.7	297.8	4.4	(D)	(D)	12	12	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	1.1	3.6	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	3.3	12.1	2.6	5.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC . .	.3	1.5	.2	.8	10.4	.2	(D)	(D)	-	-	47	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	3.2	11.8	2.4	5.1	46.9	.8	6.6	.1	-	-	24	16	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	.7	3.5	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	3.4	14.7	2.5	5.7	96.2	1.6	49.9	.7	-	-	23	2	(X)
347	METAL SERVICES, NEC.	2.2	8.6	1.9	3.8	15.1	.3	(D)	(D)	-	-	54	(X)	(X)
348	ORDNANCE AND ACCESSORIES, NEC. . .	.5	2.3	.3	.8	.2	(Z)	(D)	(D)	-	-	1	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	1.9	9.0	1.4	3.0	54.7	.9	13.2	.2	-	-	36	22	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	23.7	91.6	17.3	37.8	355.8	6.0	855.4	12.6	46.2	1.7	5	4	1
353	CONSTRUCTION, RELATED MACHINERY. .	.9	3.7	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	2.6	10.0	1.9	3.6	15.9	.3	48.8	.7	(D)	(D)	7	7	(X)
355	SPECIAL INDUSTRY MACHINERY	1.7	7.1	1.2	3.0	65.5	1.2	12.8	.2	(D)	(D)	12	5	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	3.8	14.8	2.7	6.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
357	OFFICE AND COMPUTING MACHINES. . .	2.4	12.7	1.6	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	5.5	18.0	4.2	9.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	2.6	10.5	1.5	2.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	24.5	100.5	16.2	35.9	251.0	4.3	567.1	8.5	-	-	7	1	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.4	1.5	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	9.3	26.5	6.1	13.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.4	1.6	.2	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	2.7	11.7	2.1	4.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	.8	2.8	.6	1.3	10.3	.2	(D)	(D)	-	-	62	(X)	(X)
366	COMMUNICATION EQUIPMENT.	3.4	17.4	2.2	4.9	73.5	1.2	49.3	.7	-	-	9	4	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	6.5	33.6	3.9	8.8	43.1	.8	301.9	4.6	-	-	9	1	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	1.0	5.3	.7	1.4	5.5	.1	(D)	(D)	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	19.0	86.3	14.1	38.0	391.0	6.2	330.1	4.9	(D)	(D)	3	1	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	13.3	57.5	10.1	28.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	3.8	19.8	2.6	6.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	.8	4.7	.6	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	30.3	69.4	27.5	44.8	85.9	1.4	(D)	(D)	(D)	(D)	13	(X)	(X)
381	ENGINEERING, SCIENTIFIC INSTRU . .	.3	1.2	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	.8	3.7	.6	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
383	OPTICAL INSTRUMENTS AND LENSES . .	.4	1.9	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	1.1	4.6	.8	1.7	10.8	.2	(D)	(D)	-	-	50	(X)	(X)
385	OPHTHALMIC GOODS	1.0	4.0	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	26.5	52.6	24.7	38.8	55.8	.9	(D)	(D)	(D)	(D)	14	(X)	(X)
387	WATCHES, CLOCKS, AND WATCHCASES. .	.2	1.4	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	6.2	31.2	4.2	9.5	94.4	1.6	123.1	1.9	(D)	(D)	10	25	(X)
391	JEWELRY, SILVER AND PLATED WARE. .	1.2	5.6	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
393	MUSICAL INSTRUMENTS.	.2	1.1	.2	.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	1.7	9.8	1.0	2.3	31.4	.5	(D)	(D)	-	-	6	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.4	1.9	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS. . . .	.7	4.4	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	2.0	8.4	1.5	3.1	24.4	.4	(D)	(D)	-	-	22	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Reivsed 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEW YORK--CON.												
28	CHEMICALS, ALLIED PRODUCTS--CON.												
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	-	-	.3	.6	(D)	1.3	79.6	2.3	(D)	4.2	7.5	19
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	.1	.2	(D)	(D)	389.7	11.6	(D)	7.6	19.5	23
295	PAVING AND ROOFING MATERIALS . . .	-	-	.1	.2	(D)	4.5	(S)	(S)	(D)	6.1	13.6	1
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	2.3	5.0	.6	(D)	1,044.0	28.7	(D)	11.2	36.5	7
306	FABRICATED RUBBER PRODUCTS, NEC. .	-	-	(D)	(D)	(D)	(D)	(S)	(S)	-	1.2	1.9	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	1.1	2.5	.5	(D)	882.0	25.2	-	8.3	30.9	13
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	.3	.7	.3	.4	(D)	(D)	(D)	(D)	(D)	22
311	LEATHER TANNING AND FINISHING. . .	-	-	(D)	(D)	(D)	(D)	42.8	1.2	-	1.2	3.0	(X)
314	FOOTWEAR, EXCEPT RUBBER.	-	-	(Z)	.1	(D)	(D)	24.5	1.1	(D)	.5	1.9	23
315	LEATHER GLOVES AND MITTENS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	(Z)	.1	1
316	LUGGAGE.	-	-	(D)	(D)	(Z)	(D)	12.0	.6	-	.2	.9	(X)
317	WOMEN'S HANDBAGS AND PURSES. . . .	-	-	(D)	(D)	-	(D)	38.3	1.8	(D)	.6	2.5	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	11.1	21.9	(D)	(D)	1,695.8	43.5	(D)	44.7	92.8	3
322	GLASS, PRESSED OR BLOWN.	-	-	5.7	11.0	(D)	(D)	358.5	9.7	-	8.4	18.6	5
323	PRODUCTS OF PURCHASED GLASS. . . .	-	-	(D)	(D)	(D)	(D)	52.8	1.9	-	2.0	5.1	(X)
324	CEMENT, HYDRAULIC.	-	-	-	-	(Z)	(D)	418.8	12.4	-	16.4	25.7	(X)
326	POTTERY AND RELATED PRODUCTS . . .	-	-	1.2	2.4	(D)	(D)	46.6	1.4	-	1.6	4.0	1
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	1.6	3.1	(D)	2.2	187.5	5.6	-	7.9	18.2	11
329	MISC. NONMETALLIC MINERAL PRODS. .	-	-	2.0	4.2	.2	.8	595.8	11.4	(D)	6.8	17.8	7
33	PRIMARY METAL INDUSTRIES	(D)	(D)	21.7	46.8	7.6	(D)	8,691.6	105.8	11.8	80.4	189.7	1
331	BLAST FURNACE, BASIC STEEL PROD. .	(D)	(D)	12.4	26.9	(D)	(D)	1,965.8	33.0	11.8	39.7	94.5	1
332	IRON AND STEEL FOUNDRIES	(D)	(D)	1.8	3.8	(D)	.4	300.8	7.7	-	4.4	13.1	5
333	PRIMARY NONFERROUS METALS.	-	-	.9	2.1	(D)	.4	5,367.6	33.9	-	18.1	28.2	1
334	SECONDARY NONFERROUS METALS. . . .	(D)	(D)	(D)	(D)	(D)	.7	50.7	2.1	-	2.1	6.4	(X)
335	NONFERROUS ROLLING AND DRAWING . .	-	-	4.1	8.4	1.3	(D)	778.2	23.5	-	11.9	35.8	2
34	FABRICATED METAL PRODUCTS. . . .	(D)	(D)	4.8	10.4	(D)	5.9	1,221.7	39.6	(D)	17.2	56.0	9
341	METAL CANS, SHIPPING CONTAINERS. .	-	-	.4	.8	.4	(Z)	62.1	1.8	-	1.0	2.9	5
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	(D)	(D)	(S)	(S)	199.9	6.6	-	3.2	9.0	(X)
343	PLUMBING, HEATING, EXCEPT ELEC . .	(D)	(D)	.1	.1	-	(Z)	22.6	.7	(D)	.6	2.2	11
344	FABRICATED STRUC. METAL PRODS. . .	-	-	1.0	2.3	.1	1.7	243.1	6.6	-	3.1	10.1	9
345	SCREW MACHINE PROD., BOLTS, ETC. .	-	-	.2	.4	(D)	(D)	73.7	2.5	-	.7	2.9	20
346	METAL FORGINGS AND STAMPINGS . . .	-	-	1.2	2.8	.3	.3	284.2	9.1	-	3.1	10.4	26
347	METAL SERVICES, NEC.	-	-	.5	1.2	(D)	(D)	110.1	4.7	-	2.8	8.5	44
348	ORDNANCE AND ACCESSORIES, NEC. . .	-	-	(D)	(D)	-	(Z)	54.8	1.6	-	.5	1.7	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	.4	.8	(Z)	1.0	171.2	6.0	(D)	2.3	8.4	9
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	5.8	12.2	(D)	4.2	1,866.5	53.8	(D)	25.6	83.0	3
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	.2	.5	(D)	.2	57.7	2.1	-	.7	2.7	9
354	METALWORKING MACHINERY	-	-	(D)	(D)	(Z)	.9	206.9	6.4	(D)	2.9	10.1	(X)
355	SPECIAL INDUSTRY MACHINERY	(D)	(D)	.5	1.0	(D)	.4	134.0	4.1	-	1.9	6.8	17
356	GENERAL INDUSTRIAL MACHINERY . . .	(D)	(D)	1.4	3.0	.3	.8	318.8	8.4	-	4.4	14.1	3
357	OFFICE AND COMPUTING MACHINES. . .	-	-	(D)	(D)	(Z)	.3	241.4	9.3	-	2.9	11.2	(X)
358	REFRIGERATION AND SERVICE MACH . .	-	-	1.3	2.6	(D)	.8	387.7	9.0	-	5.7	15.0	1
359	MISC. MACHINERY, EXC. ELEC	-	-	.4	.8	-	.9	308.6	7.8	-	2.9	10.3	22
36	ELECTRIC, ELECTRONIC EQUIP . . .	(D)	(D)	6.0	12.9	6.4	(D)	2,432.7	64.6	(D)	24.8	90.8	1
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	-	-	.1	.2	(Z)	.3	32.9	.9	-	.3	.9	2
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	(S)	(S)	(S)	(S)	921.5	13.0	-	8.1	22.0	(X)
363	HOUSEHOLD APPLIANCES	-	-	(S)	(S)	-	(S)	34.2	1.0	(S)	.8	2.9	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	(D)	(D)	(S)	(S)	(D)	(S)	191.5	6.9	(D)	2.7	10.4	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	-	-	.1	.3	(D)	(D)	37.7	1.5	-	1.0	3.8	17
366	COMMUNICATION EQUIPMENT.	-	-	.6	1.3	(D)	(D)	357.0	12.5	-	4.1	17.4	1
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	1.0	2.0	1.0	.3	760.1	24.9	-	6.9	30.0	2
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	-	-	.4	.8	(D)	(D)	97.8	3.9	-	.9	3.2	1
37	TRANSPORTATION EQUIPMENT	(D)	(D)	5.1	11.2	.1	(D)	1,441.5	48.2	-	18.3	68.5	2
371	MOTOR VEHICLES AND EQUIPMENT . . .	(D)	(D)	4.3	9.2	(D)	.6	952.8	29.0	-	13.1	47.1	3
372	AIRCRAFT AND PARTS	-	-	.6	1.5	(Z)	.1	363.3	13.4	-	3.7	16.7	7
373	SHIP, BOAT BUILDING, REPAIRING . .	-	-	(D)	(D)	(D)	(D)	45.3	3.2	-	.7	2.3	(X)
38	INSTRUMENTS, RELATED PRODS . . .	-	-	2.3	4.8	2.3	(D)	835.4	24.6	(D)	31.8	67.5	9
381	ENGINEERING, SCIENTIFIC INSTRU . .	-	-	(D)	(D)	(D)	.2	18.1	.7	-	.2	1.0	(X)
382	MEASURING, CONTROLLING DEVICES . .	-	-	.1	.2	(D)	.4	62.8	2.4	-	.8	3.5	37
383	OPTICAL INSTRUMENTS AND LENSES . .	-	-	(D)	(D)	(D)	(D)	40.5	1.3	-	.4	1.5	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	-	-	.3	.8	(D)	.1	96.4	2.9	(D)	1.1	4.4	51
385	OPHTHALMIC GOODS	-	-	(D)	(D)	(D)	.3	64.8	2.3	-	1.0	3.6	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	-	-	1.6	3.2	(D)	1.1	523.8	13.7	(D)	28.0	52.2	1
387	WATCHES, CLOCKS, AND WATCHCASES. .	-	-	(Z)	(Z)	-	(D)	29.0	1.2	-	.2	1.3	28
39	MISC. MANUFACTURING INDUS. . . .	-	-	1.0	2.2	(D)	3.4	578.7	21.7	-	6.5	27.8	7
391	JEWELRY, SILVER AND PLATED WARE. .	-	-	.3	.6	(D)	(D)	119.6	3.9	-	1.4	5.2	10
393	MUSICAL INSTRUMENTS.	-	-	(D)	(D)	-	(D)	5.6	.5	-	.3	.9	(X)
394	TOYS AND SPORTING GOODS.	-	-	.3	.6	(D)	1.0	195.1	7.5	-	1.6	8.0	13
395	PENS, OFFICE AND ART GOODS	-	-	(D)	(D)	(Z)	(S)	44.1	1.4	-	.4	1.5	(X)
396	COSTUME JEWELRY AND NOTIONS. . . .	-	-	.1	.2	(D)	(D)	67.8	3.3	-	.9	4.3	36
399	MISCELLANEOUS MANUFACTURES	-	-	.4	.7	(D)	(D)	146.5	5.3	-	2.0	7.9	8

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F	H	J
		A	B	C	D	E	F	G	H	I	J			
	NEW JERSEY	324.3	1,123.1	271.5	616.3	5,813.8	93.3	18,517.2	276.4	6.6	.3	3	2	58
20	FOOD AND KINDRED PRODUCTS	23.7	85.9	19.9	47.2	602.4	9.6	1,631.8	24.6	-	-	8	9	(X)
201	MEAT PRODUCTS	1.3	4.4	1.0	2.1	14.4	.2	43.2	.6	-	-	14	1	(X)
202	DAIRY PRODUCTS	1.1	5.6	.8	1.8	51.5	.8	27.8	.5	-	-	30	19	(X)
203	PRESERVED FRUITS AND VEGETABLES	3.8	13.5	3.3	7.6	84.8	1.3	383.0	5.7	-	-	42	1	(X)
204	GRAIN MILL PRODUCTS	.4	1.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	3.1	11.0	2.6	6.3	49.0	.8	56.9	.9	-	-	4	1	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	1.2	5.1	.8	1.7	15.2	.2	(D)	(D)	-	-	1	(X)	(X)
207	FATS AND OILS	2.5	9.0	2.4	6.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	5.0	16.8	4.3	9.8	89.1	1.5	317.4	4.7	-	-	1	6	(X)
209	MISC. FOODS, KINDRED PRODUCTS	5.2	18.7	4.4	10.6	147.3	2.4	359.0	5.6	-	-	3	1	(X)
22	TEXTILE MILL PRODUCTS	9.8	28.9	8.6	18.4	190.9	3.0	235.3	3.4	-	-	19	14	(X)
225	KNITTING MILLS	2.1	5.1	2.0	3.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	5.4	15.2	4.8	10.4	120.6	1.9	148.0	2.1	-	-	28	21	(X)
229	MISCELLANEOUS TEXTILE GOODS	1.5	5.4	1.2	2.6	29.0	.4	(D)	(D)	-	-	1	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	3.0	13.4	2.1	4.5	62.3	1.1	21.1	.3	-	-	24	8	(X)
231	MEN'S AND BOYS' SUITS AND COATS	.2	1.1	.2	.5	16.5	.3	(D)	(D)	-	-	22	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.2	.9	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	1.1	5.2	.7	1.4	7.2	.1	6.2	.1	-	-	43	29	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
236	CHILDREN'S OUTERWEAR	.2	.9	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	1.0	3.9	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.0	3.8	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.4	1.6	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.4	1.6	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.0	4.4	.8	1.8	15.5	.3	12.1	.2	-	-	16	5	(X)
251	HOUSEHOLD FURNITURE	.4	1.6	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
252	OFFICE FURNITURE	.2	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	.3	1.2	.2	.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
26	PAPER AND ALLIED PRODUCTS	26.2	90.0	22.7	54.2	213.0	3.4	2,763.5	42.7	-	-	10	1	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	7.5	25.0	6.7	16.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
263	PAPERBOARD MILLS	8.9	25.9	8.3	19.2	-	-	(S)	(S)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	3.7	16.5	2.7	5.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	3.0	13.6	2.2	5.7	119.1	2.0	189.3	2.9	-	-	16	10	(X)
27	PRINTING AND PUBLISHING	3.7	18.7	2.4	5.7	74.9	1.3	50.9	.8	-	-	21	7	(X)
271	NEWSPAPERS	.5	3.2	.3	.7	19.2	.3	5.5	.1	-	-	9	20	(X)
273	BOOKS	.3	1.9	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
274	MISCELLANEOUS PUBLISHING	.2	.9	.2	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	1.8	8.2	1.2	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.1	.6	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.4	2.3	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	96.9	316.3	83.4	188.0	1,704.3	26.4	6,141.9	90.6	(D)	(D)	4	3	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	11.7	48.4	8.9	20.3	208.6	3.2	784.9	11.8	-	-	2	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	10.5	36.1	8.8	19.5	128.8	2.1	894.2	13.1	(D)	(Z)	9	1	1
283	DRUGS	15.3	55.6	12.6	29.3	311.8	4.8	1,424.9	20.7	-	-	3	1	(X)
284	SOAPS, CLEANERS, TOILET GOODS	6.2	22.8	5.3	12.7	152.2	2.4	485.1	7.2	(D)	(D)	9	12	(X)
285	PAINTS AND ALLIED PRODUCTS	2.0	7.0	1.7	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	46.6	131.6	42.1	94.2	692.4	10.5	2,255.0	33.3	(D)	(D)	4	6	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	4.3	13.3	3.9	7.8	97.9	1.6	(D)	(D)	-	-	37	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	39.9	99.5	36.9	72.9	256.2	4.0	(D)	(D)	-	-	25	(X)	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	.4	1.8	.3	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	12.3	59.3	8.4	19.4	222.9	3.7	590.5	9.0	-	-	16	19	(X)
306	FABRICATED RUBBER PRODUCTS, NEC	1.2	5.4	.8	2.3	53.7	.9	58.1	.9	-	-	54	17	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	9.8	48.5	6.5	14.6	136.7	2.2	440.0	6.8	-	-	15	25	(X)
31	LEATHER, LEATHER PRODUCTS	.7	3.1	.6	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING	.5	1.6	.4	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
316	LUGGAGE	.1	.4	.1	.2	(S)	(S)	-	-	-	-	(X)	(X)	(X)
317	WOMEN'S HANDBAGS AND PURSES	.1	.6	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	42.5	129.6	37.9	88.0	1,293.9	21.3	1,676.1	24.1	-	-	2	1	(X)
322	GLASS, PRESSED OR BLOWN	23.7	71.5	21.4	50.5	853.4	14.3	972.4	13.9	-	-	1	1	(X)
326	POTTERY AND RELATED PRODUCTS	1.6	4.6	1.5	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	3.4	8.9	3.1	6.3	135.4	2.2	(D)	(D)	-	-	16	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	10.0	34.4	8.4	20.7	211.6	3.3	447.0	6.4	-	-	3	1	(X)
33	PRIMARY METAL INDUSTRIES	18.3	71.6	14.9	37.6	205.7	3.3	250.9	3.9	(D)	(Z)	2	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	1.8	7.8	1.4	3.1	19.5	.3	(D)	(D)	(Z)	(Z)	15	(X)	1
334	SECONDARY NONFERROUS METALS	1.4	4.2	1.2	2.7	49.2	.8	(D)	(D)	(D)	(D)	1	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	4.7	20.6	3.4	8.3	83.8	1.3	184.4	2.8	-	-	1	1	(X)
339	MISC. PRIMARY METAL PRODUCTS	2.2	8.4	1.9	4.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	14.0	56.4	9.9	23.0	227.8	3.9	281.9	4.3	(D)	(Z)	13	14	1
341	METAL CANS, SHIPPING CONTAINERS	3.3	13.6	2.7	6.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	1.5	7.1	1.1	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	2.4	9.5	1.9	4.3	53.7	1.0	38.3	.6	(D)	(Z)	32	3	1
345	SCREW MACHINE PROD., BOLTS, ETC.	.7	3.2	.5	1.2	32.2	.5	-	-	-	-	23	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	1.5	6.5	1.2	3.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEW JERSEY	71.5	8.9	58.9	126.0	59.8	51.6	15,459.6	506.8	(D)	323.2	990.4	2
20	FOOD AND KINDRED PRODUCTS	-	-	3.8	8.5	(D)	(D)	1,102.0	38.8	-	24.6	78.6	9
201	MEAT PRODUCTS	-	-	(D)	(D)	(D)	.9	71.3	2.3	-	1.7	5.1	(X)
202	DAIRY PRODUCTS	-	-	(D)	(D)	-	(D)	102.7	3.9	-	1.1	4.6	(X)
203	PRESERVED FRUITS AND VEGETABLES	-	-	.2	.3	.1	.3	167.3	5.9	-	4.1	13.0	3
204	GRAIN MILL PRODUCTS	-	-	(D)	(D)	-	(Z)	35.4	1.2	-	.5	1.9	(X)
205	BAKERY PRODUCTS	-	-	1.0	2.5	(D)	(D)	127.6	4.7	-	3.3	10.1	20
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	.2	.4	(D)	(D)	111.1	3.4	-	1.3	4.7	10
207	FATS AND OILS	-	-	.6	1.1	(D)	(D)	45.5	2.4	-	1.7	6.1	41
208	BEVERAGES	-	-	1.1	2.4	(D)	(D)	203.9	7.0	-	5.1	14.9	4
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.6	1.4	.2	1.0	237.1	8.0	-	5.8	18.3	1
22	TEXTILE MILL PRODUCTS	-	-	1.0	2.6	1.0	8.4	355.2	10.5	-	10.0	25.6	18
225	KNITTING MILLS	-	-	.1	.3	(D)	2.6	43.0	1.1	-	1.8	3.6	10
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(D)	(D)	(D)	4.4	166.1	4.8	-	6.4	16.7	(X)
229	MISCELLANEOUS TEXTILE GOODS	-	-	.1	.3	(D)	1.4	71.9	2.8	-	1.3	4.4	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.7	1.3	.3	1.4	276.5	9.0	(S)	2.9	12.4	44
231	MEN'S AND BOYS' SUITS AND COATS	-	-	(D)	(D)	-	.1	14.2	.6	-	.2	1.0	(X)
232	MEN'S AND BOYS' FURNISHINGS	-	-	-	-	-	(D)	19.5	.7	-	.2	1.0	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(D)	(D)	(D)	1.1	109.6	3.7	-	1.0	4.9	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(Z)	11.9	.5	-	.2	.9	6
236	CHILDREN'S OUTERWEAR	-	-	(D)	(D)	(Z)	(S)	23.9	.6	-	.2	.8	(X)
239	MISC. FABRICATED TEXTILE PRODS	-	-	.5	1.1	.2	(D)	82.1	2.3	(D)	.7	3.0	53
24	LUMBER AND WOOD PRODUCTS	-	-	.4	.9	(D)	(D)	59.6	2.1	(D)	.9	3.2	43
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	(D)	(D)	28.3	.9	(D)	.4	1.4	(X)
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(D)	(D)	(D)	(S)	20.6	.9	-	.3	1.0	(X)
25	FURNITURE AND FIXTURES	-	-	.3	.7	(D)	(D)	71.3	2.6	(D)	1.1	4.2	23
251	HOUSEHOLD FURNITURE	-	-	.1	.1	(D)	(D)	26.8	1.0	-	.5	1.9	25
252	OFFICE FURNITURE	-	-	(D)	(D)	(D)	.1	13.6	.6	-	.3	.9	(X)
254	PARTITIONS AND FIXTURES	-	-	(D)	(D)	-	(D)	18.8	.6	(D)	.2	.8	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	1.5	3.5	(D)	(D)	1,041.7	35.8	196.2	28.6	79.8	9
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(D)	(D)	251.4	8.1	(D)	10.6	28.1	(X)
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(S)	186.0	6.6	(D)	9.3	23.6	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.6	1.5	.9	1.3	313.1	10.8	(D)	2.9	8.8	4
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.2	.6	(D)	(D)	217.7	7.9	(D)	2.9	11.4	6
27	PRINTING AND PUBLISHING	-	-	.5	1.3	.1	2.2	366.6	13.0	-	3.0	14.7	15
271	NEWSPAPERS	-	-	.1	.1	(D)	(D)	66.1	2.6	-	.5	2.9	23
273	BOOKS	-	-	(Z)	(Z)	-	.4	37.7	1.4	-	.2	.8	59
274	MISCELLANEOUS PUBLISHING	-	-	(D)	(D)	-	.1	9.2	.4	-	.1	.7	(X)
275	COMMERCIAL PRINTING	-	-	.2	.6	(D)	(D)	162.4	5.4	-	1.6	6.9	10
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	-	.1	10.6	.4	-	.2	.7	1
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	.1	-	.2	41.4	1.6	-	.4	1.8	11
28	CHEMICALS, ALLIED PRODUCTS	-	-	10.5	23.8	41.2	(D)	3,945.2	128.3	107.7	90.7	268.1	3
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	1.6	3.8	.1	1.4	807.6	28.1	(D)	11.9	42.0	2
282	PLASTICS MATERIALS, SYNTHETICS	-	-	.7	1.4	1.5	1.4	502.9	16.6	(D)	9.8	32.1	3
283	DRUGS	-	-	1.7	3.6	(Z)	.2	798.8	26.3	(D)	14.9	49.4	3
284	SOAPS, CLEANERS, TOILET GOODS	-	-	1.4	2.9	(D)	(D)	266.2	10.2	(D)	5.4	18.9	4
285	PAINTS AND ALLIED PRODUCTS	-	-	.1	.2	(D)	1.0	105.8	3.6	(D)	1.9	5.8	8
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	4.2	10.2	38.9	(D)	1,294.4	37.4	(D)	43.6	107.6	3
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	(D)	(D)	(D)	1.5	145.2	5.5	-	2.5	9.4	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	.6	.8	879.9	26.7	(D)	40.2	87.7	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	(D)	(D)	-	(S)	23.5	.8	-	.4	1.3	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.1	2.6	(D)	(D)	1,148.0	39.9	(D)	11.3	48.9	7
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.2	.5	(D)	(D)	98.3	3.1	-	1.0	4.1	22
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.8	1.8	.3	3.5	956.6	34.0	(D)	8.9	40.2	7
31	LEATHER, LEATHER PRODUCTS	-	-	(Z)	(Z)	(D)	.2	41.8	1.6	-	.6	2.6	52
311	LEATHER TANNING AND FINISHING	-	-	-	-	(D)	.1	13.5	.6	-	.4	1.5	(X)
316	LUGGAGE	-	-	(Z)	(Z)	(Z)	(S)	6.7	.2	-	.1	.5	1
317	WOMEN'S HANDBAGS AND PURSES	-	-	(D)	(D)	-	.1	13.6	.5	-	.1	.6	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	(D)	(D)	(D)	5.4	1,345.4	41.6	(D)	45.9	120.2	(X)
322	GLASS, PRESSED OR BLOWN	-	-	9.2	20.8	1.1	.5	679.7	21.0	(S)	24.3	63.3	1
326	POTTERY AND RELATED PRODUCTS	-	-	.6	1.4	(D)	(D)	47.4	1.4	-	1.4	4.2	18
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(D)	(D)	(D)	1.7	70.0	2.6	(D)	5.0	10.5	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	3.3	8.9	.2	(D)	453.2	13.7	(D)	11.5	33.1	1
33	PRIMARY METAL INDUSTRIES	63.6	8.1	4.7	11.4	3.6	7.2	995.7	34.1	(D)	19.9	69.7	12
331	BLAST FURNACE, BASIC STEEL PROD.	-	-	.4	1.0	(D)	(D)	126.5	4.7	-	1.7	6.3	5
334	SECONDARY NONFERROUS METALS	(D)	(D)	.4	.8	-	.6	40.7	1.4	-	2.0	5.4	1
335	NONFERROUS ROLLING AND DRAWING	-	-	1.4	3.5	.6	(Z)	383.3	12.3	(D)	4.6	18.4	6
339	MISC. PRIMARY METAL PRODUCTS	-	-	(S)	(S)	(D)	(S)	109.7	4.2	-	2.3	7.7	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	3.8	9.5	1.0	(D)	1,216.5	33.4	(D)	12.2	47.2	5
341	METAL CANS, SHIPPING CONTAINERS	-	-	1.5	3.8	.3	.7	192.5	7.4	(Z)	3.5	12.9	1
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	.2	.4	(Z)	.7	129.8	4.7	-	1.2	5.8	1
344	FABRICATED STRUC. METAL PRODS.	(D)	(D)	.7	1.5	(D)	.9	161.5	5.3	(S)	1.9	6.4	4
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	.1	.4	(D)	(D)	51.3	2.0	-	.8	3.3	18
346	METAL FORGINGS AND STAMPINGS	-	-	(S)	(S)	(D)	(S)	104.3	3.5	-	1.3	4.6	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	NEW JERSEY--CON.													
34	FABRICATED METAL PRODUCTS--CON.													
347	METAL SERVICES, NEC.	2.3	4.8	1.1	2.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	2.0	10.6	1.4	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	8.9	42.1	6.4	15.3	138.1	2.2	301.5	5.0	-	-	8	4	(X)
353	CONSTRUCTION, RELATED MACHINERY.	.5	2.5	.4	1.0	32.0	.4	(D)	(D)	-	-	1	(X)	(X)
354	METALWORKING MACHINERY	.9	4.5	.5	1.2	11.5	.2	7.8	.1	-	-	34	15	(X)
355	SPECIAL INDUSTRY MACHINERY	1.0	5.3	.7	1.7	33.0	.5	13.6	.3	-	-	14	40	(X)
356	GENERAL INDUSTRIAL MACHINERY	2.9	12.8	2.2	5.2	30.4	.5	104.2	1.6	-	-	18	1	(X)
357	OFFICE AND COMPUTING MACHINES.	.7	3.9	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	1.3	5.3	1.0	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.8	3.5	.5	1.2	12.0	.2	(D)	(D)	-	-	35	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	10.1	46.8	6.8	15.8	312.1	5.0	199.3	3.1	(D)	(D)	2	4	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.5	2.8	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	.3	1.5	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.9	3.8	.6	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	1.5	6.7	1.1	2.5	32.5	.5	25.7	.4	(D)	(D)	3	1	(X)
365	RADIO, TV RECEIVING EQUIPMENT.	1.2	4.3	1.1	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	2.8	12.5	1.5	3.6	26.7	.4	114.2	1.8	-	-	1	1	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	1.6	8.5	.9	2.1	45.6	.8	(D)	(D)	-	-	7	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	1.5	6.7	1.0	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	5.4	23.6	4.2	9.9	43.3	.7	(D)	(D)	-	-	27	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	4.4	18.6	3.5	8.2	20.0	.3	(D)	(D)	-	-	58	(X)	(X)
372	AIRCRAFT AND PARTS	.3	1.9	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	.6	2.7	.5	1.1	(D)	(D)	35.4	.6	-	-	(X)	7	(X)
38	INSTRUMENTS, RELATED PRODS	3.6	16.1	2.6	6.0	67.8	1.1	59.0	.9	-	-	17	1	(X)
381	ENGINEERING, SCIENTIFIC INSTRU	.5	2.3	.4	.8	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
382	MEASURING, CONTROLLING DEVICES	.4	2.2	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES.	1.1	6.1	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES.	1.4	4.6	1.2	2.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
387	WATCHES, CLOCKS, AND WATCHCASES.	.1	.3	(Z)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	3.1	13.4	2.3	5.6	92.6	1.6	47.8	.7	-	-	20	33	(X)
394	TOYS AND SPORTING GOODS.	.8	3.4	.5	1.2	15.2	.3	(D)	(D)	-	-	9	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.4	1.8	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS.	.2	.9	.1	.3	(D)	(Z)	(D)	(Z)	-	-	1	34	(X)
399	MISCELLANEOUS MANUFACTURES	1.6	6.3	1.2	3.0	62.7	1.1	(D)	(D)	-	-	29	(X)	(X)
	PENNSYLVANIA	908.5	2,641.0	787.0	1,680.1	10,696.7	173.7	21,856.0	310.9	4,862.5	131.5	3	2	2
20	FOOD AND KINDRED PRODUCTS.	40.3	134.1	33.9	77.1	1,106.2	18.0	2,038.4	29.4	(D)	(D)	9	2	(X)
201	MEAT PRODUCTS.	4.1	15.9	3.2	7.3	103.6	1.8	149.0	2.3	(D)	(D)	11	8	(X)
202	DAIRY PRODUCTS	4.1	15.5	3.2	7.7	200.4	3.4	156.8	2.1	(D)	(D)	43	10	(X)
203	PRESERVED FRUITS AND VEGETABLES.	5.8	18.1	4.9	10.6	180.1	2.9	130.0	1.9	(D)	(D)	5	1	(X)
204	GRAIN MILL PRODUCTS.	4.4	15.4	3.6	8.4	139.3	2.1	361.2	5.2	-	-	10	1	(X)
205	BAKERY PRODUCTS.	4.2	14.6	3.5	8.5	95.2	1.5	54.8	.9	-	-	6	16	(X)
206	SUGAR, CONFECTIONERY PRODUCTS.	9.0	28.1	8.0	18.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
207	FATS AND OILS.	1.8	4.3	1.7	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES.	4.1	12.7	3.5	7.5	139.0	2.2	124.4	1.8	(D)	(D)	14	5	(X)
209	MISC. FOODS, KINDRED PRODUCTS.	2.8	9.5	2.3	5.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
21	TOBACCO PRODUCTS	.7	2.6	.5	1.3	51.5	.7	(D)	(D)	-	-	1	(X)	(X)
212	CIGARS	.2	1.1	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
214	TOBACCO STEMMING AND REDRYING.	.4	1.4	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	13.2	46.1	10.4	24.2	466.0	7.3	573.1	8.3	(D)	(D)	18	11	(X)
222	WEAVING MILLS, MANMADE FIBER.	1.1	4.5	.7	1.8	45.5	.8	(D)	(D)	(D)	(D)	6	(X)	(X)
224	NARROW FABRIC MILLS.	.5	1.7	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	5.9	19.5	4.6	10.7	280.3	4.2	180.0	2.6	(D)	(D)	29	10	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	1.3	4.6	1.2	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
227	FLOOR COVERING MILLS	1.7	5.0	1.5	3.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
228	YARN AND THREAD MILLS.	.9	4.5	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS.	1.5	5.3	1.3	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	6.6	27.6	4.7	10.3	127.2	2.1	127.0	1.8	12.2	.5	13	19	38
231	MEN'S AND BOYS' SUITS AND COATS.	1.3	5.3	1.0	2.2	12.8	.2	26.6	.4	(D)	(D)	1	5	(X)
232	MEN'S AND BOYS' FURNISHINGS.	1.1	5.1	.8	1.7	40.9	.7	10.0	.1	4.8	.2	29	29	17
233	WOMEN'S AND MISSES' OUTERWEAR.	2.4	10.2	1.7	3.7	51.2	.9	31.4	.5	(D)	(D)	22	27	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.4	2.0	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
235	HATS, CAPS, AND MILLINERY.	.2	.7	.2	.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
236	CHILDREN'S OUTERWEAR	.4	1.5	.3	.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
238	MISC. APPAREL AND ACCESSORIES.	.1	.6	.1	.2	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	64	(X)
239	MISC. FABRICATED TEXTILE PRODS	.6	2.2	.5	1.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	5.5	20.5	4.2	10.2	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	1.3	5.4	.8	2.5	(S)	(S)	(D)	(D)	(D)	(Z)	(X)	(X)	91
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.0	3.7	.8	1.6	33.8	.6	(D)	(D)	(D)	(D)	31	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.5	2.0	.4	1.0	16.7	.3	-	-	-	-	7	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS.	2.3	7.4	1.9	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	2.9	11.3	2.2	5.1	62.8	1.0	51.3	.8	3.1	.1	17	9	5
251	HOUSEHOLD FURNITURE.	1.2	4.7	.9	2.1	29.9	.5	10.5	.2	(D)	(D)	20	17	(X)
252	OFFICE FURNITURE	.7	2.8	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976 – Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEW JERSEY--CON.												
34	FABRICATED METAL PRODUCTS--CON.												
347	METAL SERVICES, NEC.	-	-	.2	.6	(D)	(D)	(S)	(S)	-	1.2	4.1	47
349	MISC. FABRICATED METAL PRODUCTS.	-	-	.5	1.2	(D)	.7	190.4	7.4	(D)	2.1	9.3	12
35	MACHINERY, EXCEPT ELECTRIC	-	-	2.1	5.3	(D)	(D)	726.4	26.8	(D)	10.4	41.7	7
353	CONSTRUCTION, RELATED MACHINERY.	-	-	.2	.4	(Z)	(D)	36.7	1.5	-	.5	2.3	57
354	METALWORKING MACHINERY	-	-	.1	.3	-	.5	92.6	3.4	(D)	.9	4.2	33
355	SPECIAL INDUSTRY MACHINERY	-	-	.2	.6	(D)	(D)	93.3	3.5	-	1.6	6.1	31
356	GENERAL INDUSTRIAL MACHINERY	-	-	1.0	2.5	.1	.4	205.7	7.6	(D)	3.1	11.7	3
357	OFFICE AND COMPUTING MACHINES.	-	-	.1	.2	(Z)	.4	(D)	(D)	-	.6	2.9	23
358	REFRIGERATION AND SERVICE MACH	-	-	.4	1.0	(D)	.5	80.8	3.0	(D)	1.2	4.6	1
359	MISC. MACHINERY, EXC. ELEC	-	-	.1	.2	(D)	.4	71.8	2.3	(D)	.6	3.3	43
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.7	4.0	1.1	2.6	978.3	31.0	(D)	9.2	39.8	8
361	ELECTRIC DISTRIBUTING EQUIPMENT.	-	-	.1	.3	(Z)	.2	50.0	2.0	-	.5	2.4	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	(D)	(D)	(Z)	(D)	25.4	1.1	-	.4	2.0	(X)
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	(Z)	(D)	65.9	2.2	-	.8	3.0	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.3	.8	(D)	.5	108.1	4.2	(Z)	1.4	5.9	4
365	RADIO, TV RECEIVING EQUIPMENT.	-	-	(D)	(D)	(D)	.9	56.0	1.9	-	1.1	3.3	(X)
366	COMMUNICATION EQUIPMENT.	-	-	.6	1.4	(D)	(D)	364.0	8.9	(D)	2.6	12.2	22
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	.2	.5	(D)	.5	184.8	6.4	-	1.1	5.6	14
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	-	-	.1	.4	(D)	.2	124.0	4.3	-	1.4	5.5	1
37	TRANSPORTATION EQUIPMENT	-	-	1.4	3.2	(D)	.8	368.1	13.7	(D)	5.7	21.5	3
371	MOTOR VEHICLES AND EQUIPMENT	-	-	1.2	2.9	(D)	.5	274.1	10.4	(D)	4.3	15.8	1
372	AIRCRAFT AND PARTS	-	-	(D)	(D)	(Z)	.1	44.4	1.4	-	.3	1.5	(X)
373	SHIP, BOAT BUILDING, REPAIRING	-	-	.1	.2	(D)	.2	42.9	1.5	(D)	1.0	3.9	41
38	INSTRUMENTS, RELATED PRODS	-	-	.8	1.9	1.8	.2	300.8	10.1	(D)	3.3	13.9	29
381	ENGINEERING, SCIENTIFIC INSTRU	-	-	(D)	(D)	-	(D)	38.3	1.5	-	.6	2.6	(X)
382	MEASURING, CONTROLLING DEVICES	-	-	(S)	(S)	-	(S)	60.7	1.6	-	.1	.9	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES.	-	-	.4	1.0	(D)	(D)	122.5	4.3	(D)	1.1	5.4	19
386	PHOTOGRAPHIC EQUIP., SUPPLIES.	-	-	(D)	(Z)	(D)	(D)	63.9	2.1	-	1.3	4.2	1
387	WATCHES, CLOCKS, AND WATCHCASES.	-	-	(D)	(D)	(Z)	(Z)	(D)	(D)	-	.1	.3	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.7	1.7	.4	1.2	238.7	7.8	(D)	2.6	10.2	8
394	TOYS AND SPORTING GOODS.	-	-	.1	.2	(D)	(D)	68.8	2.2	-	.7	2.7	23
395	PENS, OFFICE AND ART GOODS	-	-	.1	.2	-	.2	33.0	1.1	-	.3	1.0	24
396	COSTUME JEWELRY AND NOTIONS.	-	-	(D)	(D)	-	(D)	13.1	.6	-	.2	.9	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	(D)	(D)	.3	.3	100.9	3.3	(D)	1.1	4.2	(X)
	PENNSYLVANIA	(D)	(D)	243.8	479.4	98.8	(D)	35,595.6	960.9	2,226.2	873.1	2,093.2	1
20	FOOD AND KINDRED PRODUCTS.	-	-	7.5	17.5	(D)	8.0	1,871.6	57.1	(D)	39.8	119.5	6
201	MEAT PRODUCTS.	-	-	.5	1.3	.4	(D)	281.7	8.6	-	3.7	12.9	11
202	DAIRY PRODUCTS	-	-	.9	2.0	(D)	(Z)	267.7	7.9	-	4.5	14.6	16
203	PRESERVED FRUITS AND VEGETABLES.	-	-	1.3	2.8	(D)	2.0	254.1	7.5	(D)	5.7	15.6	5
204	GRAIN MILL PRODUCTS.	-	-	.3	.6	(D)	(D)	228.8	6.9	-	5.1	14.6	19
205	BAKERY PRODUCTS.	-	-	1.9	4.6	1.3	.1	190.9	6.1	-	3.7	12.2	15
206	SUGAR, CONFECTIONERY PRODUCTS.	-	-	(D)	(D)	(D)	(S)	291.9	9.7	(D)	8.9	26.4	(X)
207	FATS AND OILS.	-	-	(D)	(D)	-	(D)	(S)	(S)	-	1.7	3.9	(X)
208	BEVERAGES.	-	-	.5	1.1	.5	(D)	176.2	5.3	-	3.8	10.9	15
209	MISC. FOODS, KINDRED PRODUCTS.	-	-	.6	1.6	.2	.6	(S)	(S)	-	2.6	8.4	11
21	TOBACCO PRODUCTS	-	-	.1	.3	-	(D)	41.8	1.4	-	.7	2.7	20
212	CIGARS	-	-	(D)	(D)	-	(D)	25.3	.7	-	.3	1.2	(X)
214	TOBACCO STEMMING AND REDRYING.	-	-	(D)	(D)	-	(D)	15.3	.6	-	.3	1.4	(X)
22	TEXTILE MILL PRODUCTS.	-	-	1.9	4.5	1.8	(D)	802.8	22.0	(D)	13.4	44.1	8
222	WEAVING MILLS, MANMADE FIBER.	-	-	.1	.2	(D)	.2	107.1	2.7	-	1.1	3.9	8
224	NARROW FABRIC MILLS.	-	-	(Z)	(Z)	(D)	(D)	32.1	1.0	-	.5	1.8	64
225	KNITTING MILLS	-	-	.9	2.2	.8	(D)	364.2	8.8	-	5.6	18.7	9
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(S)	(S)	(D)	(S)	45.4	1.7	-	1.2	3.4	(X)
227	FLOOR COVERING MILLS	-	-	(D)	(D)	(D)	(Z)	58.2	1.7	(D)	1.7	4.1	(X)
228	YARN AND THREAD MILLS.	-	-	.1	.2	(D)	.1	108.1	3.3	-	1.4	6.0	25
229	MISCELLANEOUS TEXTILE GOODS.	-	-	.3	.7	(D)	(D)	73.8	2.3	-	1.6	4.9	14
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.5	1.1	.6	4.0	529.8	17.3	(S)	6.5	24.7	14
231	MEN'S AND BOYS' SUITS AND COATS.	-	-	.1	.3	.4	(D)	86.4	3.1	(D)	1.1	4.4	13
232	MEN'S AND BOYS' FURNISHINGS.	-	-	.1	.2	(D)	.4	97.4	3.4	-	1.1	4.7	29
233	WOMEN'S AND MISSES' OUTERWEAR.	-	-	.1	.2	(D)	1.9	211.9	6.5	(D)	2.3	8.7	23
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	.1	(Z)	(D)	45.7	1.5	(D)	.4	1.7	24
235	HATS, CAPS, AND MILLINERY.	-	-	(D)	(Z)	-	(D)	6.8	.3	-	.2	.7	1
236	CHILDREN'S OUTERWEAR	-	-	(Z)	(Z)	-	.4	29.0	.9	-	.4	1.3	61
238	MISC. APPAREL AND ACCESSORIES.	-	-	(Z)	(Z)	(D)	.1	10.1	.4	(D)	.1	.3	58
239	MISC. FABRICATED TEXTILE PRODS	-	-	.1	.3	-	(D)	42.2	1.2	-	.8	2.9	43
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	402.8	10.3	(D)	5.7	18.4	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(S)	(S)	(S)	(S)	145.9	2.9	(Z)	1.5	5.5	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.1	.3	.4	.1	64.8	2.0	-	.9	3.2	11
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	(D)	(D)	.1	(D)	29.8	1.0	-	.5	1.9	(X)
249	MISCELLANEOUS WOOD PRODUCTS.	-	-	.8	1.5	(D)	(D)	138.2	3.6	-	2.0	5.5	13
25	FURNITURE AND FIXTURES	-	-	.7	1.8	.3	1.1	193.3	6.3	-	2.9	9.9	9
251	HOUSEHOLD FURNITURE.	-	-	.3	.6	(D)	.7	82.0	2.7	-	1.4	4.3	18
252	OFFICE FURNITURE	-	-	.2	.5	-	(D)	41.3	1.4	-	.8	2.7	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	PENNSYLVANIA--CON.													
25	FURNITURE AND FIXTURES--CON.													
254	PARTITIONS AND FIXTURES.	.7	3.0	.5	1.3	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	.1	.5	(D)	(D)	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
26	PAPER AND ALLIED PRODUCTS.	54.6	133.1	48.0	83.7	603.5	9.6	2,964.0	42.0	680.6	16.6	5	4	1
262	PAPERMILLS, EXC. BUILDING PAPER.	37.7	77.9	33.7	50.5	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
263	PAPERBOARD MILLS	8.5	23.3	7.8	17.8	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	3.4	13.3	2.4	5.6	103.9	1.8	99.4	1.5	(D)	(D)	16	1	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	3.5	14.0	2.7	6.7	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
266	BUILDING PAPER AND BOARD MILLS	1.6	4.7	1.4	3.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	5.9	28.9	3.6	8.4	93.3	1.6	(D)	(D)	(D)	(D)	11	(X)	(X)
271	NEWSPAPERS	1.1	5.7	.7	1.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
272	PERIODICALS.	.1	.8	(Z)	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
273	BOOKS.	.4	2.1	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	3.2	14.6	2.1	4.9	53.4	.9	19.6	.3	(D)	(D)	15	18	(X)
276	MANIFOLD BUSINESS FORMS.	.4	2.4	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	61.9	155.4	52.6	88.7	715.9	11.4	2,556.6	35.5	713.2	16.8	.9	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	15.3	48.1	10.4	18.0	299.4	4.6	156.6	2.3	(D)	(D)	17	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	9.2	20.0	8.1	11.7	16.3	.3	356.5	5.3	(D)	(D)	4	3	(X)
283	DRUGS.	6.7	20.1	5.5	9.3	46.0	.8	315.4	4.5	(D)	(D)	8	1	(X)
284	SOAPS, CLEANERS, TOILET GOODS.	1.8	5.6	1.6	3.9	79.6	1.2	(D)	(D)	-	-	18	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	1.2	4.0	1.1	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	24.0	48.0	22.7	37.3	158.1	2.6	1,574.6	21.1	(D)	(D)	1	1	(X)
287	AGRICULTURAL CHEMICALS	.9	2.6	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	2.6	7.0	2.4	4.5	87.7	1.4	(D)	(D)	(D)	(D)	33	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	30.3	83.2	25.5	43.9	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
291	PETROLEUM REFINING	27.1	68.5	22.7	33.2	(D)	(D)	(D)	(D)	146.8	3.9	(X)	(X)	10
295	PAVING AND ROOFING MATERIALS	2.2	11.9	1.9	8.8	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	1.0	2.8	.9	1.9	42.8	.7	(D)	(D)	(D)	(D)	28	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	14.7	59.7	10.6	23.1	393.8	6.2	554.0	8.1	(D)	(D)	5	4	(X)
301	TIRES AND INNER TUBES.	4.8	17.4	3.8	8.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
302	RUBBER AND PLASTICS FOOTWEAR	.1	.4	(Z)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	8.3	37.2	5.5	12.4	182.0	2.9	281.1	4.1	-	-	6	8	(X)
31	LEATHER, LEATHER PRODUCTS.	2.3	7.0	1.8	2.9	47.4	.8	18.9	.3	30.0	.6	20	3	27
311	LEATHER TANNING AND FINISHING.	1.2	2.1	1.1	1.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.8	3.9	.5	1.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
317	WOMEN'S HANDBAGS AND PURSES.	.1	.3	(D)	(D)	(D)	(Z)	-	-	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	105.6	223.4	95.4	155.5	1,307.6	21.3	1,068.6	14.5	1,359.3	36.4	5	17	4
322	GLASS, PRESSED OR BLOWN.	22.5	54.8	19.8	38.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
323	PRODUCTS OF PURCHASED GLASS.	2.5	6.8	1.9	3.0	(D)	(D)	38.1	.7	-	-	(X)	8	(X)
324	CEMENT, HYDRAULIC.	33.7	55.1	30.6	34.1	(D)	(D)	(D)	(D)	1,066.3	28.3	(X)	(X)	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	12.8	24.6	12.2	19.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	11.2	30.9	9.3	20.0	145.1	2.4	178.5	2.6	(D)	(D)	10	11	(X)
33	PRIMARY METAL INDUSTRIES	467.1	1,340.7	420.4	986.6	2,762.2	44.8	9,320.3	132.9	1,475.0	44.2	1	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	418.4	1,207.2	377.8	904.4	2,118.6	34.4	9,133.2	130.2	981.1	30.1	1	1	1
332	IRON AND STEEL FOUNDRIES	13.8	50.8	11.1	26.7	231.4	3.7	41.9	.6	(D)	(D)	1	1	(X)
333	PRIMARY NONFERROUS METALS.	20.2	31.7	19.7	28.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
334	SECONDARY NONFERROUS METALS.	2.5	7.7	2.2	5.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	8.8	31.1	6.8	15.6	189.8	3.1	46.9	.7	(D)	(D)	1	6	(X)
34	FABRICATED METAL PRODUCTS.	31.2	113.8	25.4	60.0	921.1	15.2	438.4	6.6	18.8	.7	10	8	8
341	METAL CANS, SHIPPING CONTAINERS.	2.2	7.6	1.8	4.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE.	1.2	5.1	.9	2.4	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	1.2	5.0	1.0	3.0	19.5	.3	(D)	(D)	(D)	(Z)	1	(X)	1
344	FABRICATED STRUC. METAL PRODS.	7.0	26.0	5.6	12.4	187.2	3.1	94.6	1.4	(D)	(Z)	10	9	1
345	SCREW MACHINE PROD., BOLTS, ETC.	3.0	10.6	2.4	5.8	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
346	METAL FORGINGS AND STAMPINGS	7.5	24.8	6.2	13.4	198.3	3.2	95.3	1.4	(D)	(Z)	13	17	61
347	METAL SERVICES, NEC.	1.9	7.5	1.4	4.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
348	ORDNANCE AND ACCESSORIES, NEC.	.8	2.8	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	6.5	24.4	5.3	13.1	232.1	3.7	5.5	.1	9.1	.4	19	20	7
35	MACHINERY, EXCEPT ELECTRIC	20.8	89.4	14.6	34.0	437.4	7.5	525.6	7.4	19.7	.8	7	4	18
353	CONSTRUCTION, RELATED MACHINERY.	4.0	16.8	2.8	6.1	68.6	1.2	28.8	.5	(D)	(D)	9	27	(X)
354	METALWORKING MACHINERY	3.6	14.9	(D)	(D)	67.5	1.1	60.0	.9	(D)	(Z)	13	19	87
355	SPECIAL INDUSTRY MACHINERY	1.2	6.4	.8	2.4	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	5.0	20.1	3.6	8.4	(D)	(D)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
357	OFFICE AND COMPUTING MACHINES.	.7	4.3	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	1.7	6.9	1.2	2.8	40.1	.8	(D)	(D)	-	-	16	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.5	6.5	1.0	2.0	8.9	.1	3.3	(Z)	(D)	(Z)	12	1	41
36	ELECTRIC, ELECTRONIC EQUIP	19.5	77.4	13.3	28.3	353.8	5.8	311.0	4.4	82.6	2.7	12	1	1
361	ELECTRIC DISTRIBUTING EQUIPMENT.	3.9	12.4	3.1	5.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	4.0	13.8	2.8	5.6	41.0	.7	8.1	.1	(D)	(Z)	5	21	1
363	HOUSEHOLD APPLIANCES	.8	3.5	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	2.0	9.1	1.5	3.9	107.7	1.7	15.6	.2	-	-	40	1	(X)
365	RADIO, TV RECEIVING EQUIPMENT.	.8	2.4	.7	1.2	-	-	(D)	(D)	(D)	(D)	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	.8	3.1	.6	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	5.4	24.4	2.9	6.1	22.3	.4	186.7	2.6	(D)	(D)	1	1	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	1.9	8.7	1.3	3.6	27.9	.5	(D)	(D)	-	-	1	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	PENNSYLVANIA--CON.												
25	FURNITURE AND FIXTURES--CON.												
254	PARTITIONS AND FIXTURES.	-	-	(S)	(S)	(D)	(S)	56.4	1.7	-	.5	2.2	(X)
259	MISC. FURNITURE AND FIXTURES	-	-	(Z)	(Z)	(Z)	(D)	(D)	(D)	-	.1	.5	1
26	PAPER AND ALLIED PRODUCTS.	-	-	7.4	14.6	.9	.1	1,935.9	49.4	615.3	55.2	114.7	3
262	PAPERMILLS, EXC. BUILDING PAPER.	-	-	(S)	(S)	(D)	(S)	1,165.6	27.5	522.4	37.9	65.9	(X)
263	PAPERBOARD MILLS	-	-	(D)	(D)	-	(D)	203.1	5.5	(D)	8.8	20.7	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.6	1.4	(D)	(D)	268.5	7.7	(D)	3.0	10.9	6
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	(S)	(S)	(D)	(S)	241.7	7.3	-	3.8	13.3	(X)
266	BUILDING PAPER AND BOARD MILLS	-	-	(D)	(D)	(Z)	(S)	57.0	1.5	-	1.6	3.9	(X)
27	PRINTING AND PUBLISHING.	-	-	1.2	2.8	2.5	(D)	657.4	20.5	(D)	5.9	25.2	11
271	NEWSPAPERS	-	-	(S)	(S)	(D)	(S)	130.6	4.2	(D)	1.1	5.1	(X)
272	PERIODICALS.	-	-	(D)	(D)	(D)	(Z)	23.9	.7	-	.3	1.3	(X)
273	BOOKS.	-	-	(Z)	.1	(Z)	(D)	49.6	1.5	(Z)	.5	2.3	39
275	COMMERCIAL PRINTING.	-	-	.7	1.7	(D)	(D)	315.6	9.7	(D)	3.2	12.7	14
276	MANIFOLD BUSINESS FORMS.	-	-	.1	.1	-	.1	59.9	1.9	-	.4	1.9	7
28	CHEMICALS, ALLIED PRODUCTS	(Z)	(Z)	6.9	13.7	6.8	4.5	2,722.1	66.7	187.8	63.7	139.2	3
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	1.9	3.9	3.0	(D)	1,451.9	30.1	(Z)	15.6	41.7	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	.7	1.5	(D)	(D)	323.2	8.2	(D)	19.4	30.1	7
283	DRUGS.	(Z)	(Z)	.2	.4	(D)	.3	355.1	10.9	(D)	6.3	17.2	2
284	SOAPS, CLEANERS, TOILET GOODS.	-	-	.4	1.1	-	(D)	58.6	1.8	-	1.7	4.8	21
285	PAINTS AND ALLIED PRODUCTS	-	-	.2	.5	(D)	(D)	51.1	1.8	-	1.2	3.3	26
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	2.6	4.8	(D)	1.3	378.7	10.6	(D)	16.3	34.0	1
287	AGRICULTURAL CHEMICALS	-	-	.2	.4	(D)	.1	28.1	.8	-	.4	1.3	5
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	.6	1.1	.1	.7	75.4	2.5	-	2.9	6.9	27
29	PETROLEUM AND COAL PRODUCTS.	(D)	(D)	(S)	(S)	(S)	(S)	1,421.7	39.3	(D)	36.1	76.1	(X)
291	PETROLEUM REFINING	-	-	17.3	26.6	(D)	(D)	1,298.9	35.2	(D)	32.4	63.0	1
295	PAVING AND ROOFING MATERIALS	(D)	(D)	(S)	(S)	(D)	(S)	97.7	3.2	-	2.5	10.5	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	.2	.5	(Z)	(D)	25.1	.9	-	1.2	2.6	5
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.9	4.0	1.0	(D)	1,215.7	36.6	(D)	15.9	51.1	6
301	TIRES AND INNER TUBES.	-	-	.4	.7	(D)	(Z)	306.5	9.2	-	4.0	12.6	3
302	RUBBER AND PLASTICS FOOTWEAR	-	-	(Z)	(Z)	-	(Z)	(D)	(D)	-	.1	.4	1
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	1.0	2.4	(D)	(D)	827.8	24.9	(D)	10.2	33.6	9
31	LEATHER, LEATHER PRODUCTS.	-	-	.1	.3	(Z)	1.0	140.2	4.1	(D)	2.1	5.4	15
311	LEATHER TANNING AND FINISHING.	-	-	(D)	(D)	-	.2	28.2	.7	(D)	1.2	1.3	(X)
314	FOOTWEAR, EXCEPT RUBBER.	-	-	(D)	(D)	(Z)	.4	96.1	2.9	-	.7	3.3	(X)
317	WOMEN'S HANDBAGS AND PURSES.	-	-	(Z)	(Z)	-	.2	(D)	(D)	-	.1	.3	1
32	STONE, CLAY, GLASS PRODUCTS.	63.0	2.4	33.2	64.7	6.2	10.1	2,996.4	68.0	(D)	110.1	196.9	2
322	GLASS, PRESSED OR BLOWN.	-	-	16.1	30.2	1.0	1.1	777.8	16.5	-	23.0	42.9	1
323	PRODUCTS OF PURCHASED GLASS.	-	-	1.4	1.9	.1	(D)	166.2	3.8	(D)	2.7	5.8	5
324	CEMENT, HYDRAULIC.	(D)	(D)	.1	.1	(D)	(D)	911.9	21.0	(D)	37.3	54.4	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	(D)	(D)	(D)	(D)	(S)	(S)	183.9	5.2	-	14.7	24.3	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	5.2	11.3	.8	1.3	562.1	10.9	-	10.5	25.9	5
33	PRIMARY METAL INDUSTRIES	(D)	(D)	135.0	261.0	(D)	5.5	13,707.2	354.2	1,196.4	420.0	952.0	1
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	120.3	229.6	(D)	.7	11,882.0	302.8	(D)	371.4	832.5	1
332	IRON AND STEEL FOUNDRIES	58.4	7.6	5.5	10.8	.7	(D)	803.5	24.1	(D)	13.3	41.7	5
333	PRIMARY NONFERROUS METALS.	(D)	(D)	(D)	(D)	(D)	.1	145.7	3.4	(D)	20.7	33.6	(X)
334	SECONDARY NONFERROUS METALS.	(D)	(D)	(D)	(D)	(D)	1.2	74.2	2.4	-	2.0	6.3	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	4.1	9.7	.6	(D)	591.4	15.5	-	8.1	24.7	1
34	FABRICATED METAL PRODUCTS.	32.7	4.0	11.9	26.0	4.5	2.9	1,715.5	53.9	(D)	28.9	91.7	3
341	METAL CANS, SHIPPING CONTAINERS.	-	-	.9	2.3	(D)	.1	104.8	3.4	-	2.1	6.4	3
342	CUTLERY, HANDTOOLS AND HARDWARE.	-	-	(S)	(S)	(D)	(S)	79.0	2.7	-	1.2	4.0	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	(D)	(D)	.2	.5	(D)	(D)	56.7	2.0	-	1.4	4.6	14
344	FABRICATED STRUC. METAL PRODS.	(D)	(Z)	2.5	5.4	1.5	1.1	398.4	13.5	(D)	6.2	19.9	6
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	1.1	2.7	.2	.3	158.0	4.8	-	1.7	5.7	2
346	METAL FORGINGS AND STAMPINGS	-	-	3.2	6.5	(D)	(D)	378.9	11.4	-	6.9	21.3	3
347	METAL SERVICES, NEC.	-	-	(S)	(S)	(D)	(S)	122.0	3.4	-	1.8	5.5	(X)
348	ORDNANCE AND ACCESSORIES, NEC.	-	-	.3	.8	(D)	(D)	43.5	1.4	(D)	1.1	3.3	1
349	MISC. FABRICATED METAL PRODUCTS.	(D)	(D)	2.2	4.6	(D)	.2	374.4	11.3	(S)	6.5	20.8	5
35	MACHINERY, EXCEPT ELECTRIC	10.6	1.4	(S)	(S)	2.9	(D)	1,811.4	55.4	(D)	20.7	75.4	(X)
353	CONSTRUCTION, RELATED MACHINERY.	(D)	(D)	1.2	2.7	.8	(D)	362.2	10.6	-	3.9	14.2	3
354	METALWORKING MACHINERY	(D)	(D)	1.7	3.5	.1	(D)	(D)	(D)	-	4.5	13.7	3
355	SPECIAL INDUSTRY MACHINERY	(D)	(D)	(S)	(S)	(S)	(S)	112.4	4.0	-	1.1	5.2	(X)
356	GENERAL INDUSTRIAL MACHINERY	(S)	(S)	(S)	(S)	(S)	(S)	406.0	11.7	-	4.3	16.3	(X)
357	OFFICE AND COMPUTING MACHINES.	-	-	.2	.4	(D)	(Z)	125.6	3.8	(D)	.6	3.3	8
358	REFRIGERATION AND SERVICE MACH	-	-	.2	.6	(D)	(D)	134.5	4.1	-	1.7	6.0	6
359	MISC. MACHINERY, EXC. ELEC	-	-	.4	.9	.2	.7	137.2	4.5	(D)	1.5	6.0	19
36	ELECTRIC, ELECTRONIC EQUIP	(D)	(D)	5.4	12.0	(D)	1.4	1,814.9	49.1	(D)	20.0	69.2	2
361	ELECTRIC DISTRIBUTING EQUIPMENT.	-	-	.5	1.0	(D)	.1	231.4	6.9	-	3.6	11.4	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	2.1	4.1	.3	.3	365.0	8.2	-	4.1	12.1	2
363	HOUSEHOLD APPLIANCES	-	-	.2	.5	(Z)	.2	72.7	2.3	-	1.2	4.0	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.7	2.0	(D)	(D)	164.1	5.2	-	2.3	8.7	10
365	RADIO, TV RECEIVING EQUIPMENT.	-	-	(D)	(D)	(D)	(D)	40.4	1.2	-	.7	2.0	(X)
366	COMMUNICATION EQUIPMENT.	-	-	(D)	(D)	(Z)	(S)	58.5	2.0	-	.9	3.6	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	1.0	2.2	.2	(D)	716.4	18.3	(S)	5.4	21.0	3
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	(D)	(D)	.6	1.6	(D)	.2	166.3	5.1	(D)	1.7	6.4	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	PENNSYLVANIA--CON.													
37	TRANSPORTATION EQUIPMENT	16.6	51.5	13.6	23.3	213.8	3.6	380.8	5.6	198.1	3.7	5	1	3
371	MOTOR VEHICLES AND EQUIPMENT	4.9	17.9	3.9	8.4	61.3	1.0	146.4	2.1	(D)	(D)	18	1	(X)
372	AIRCRAFT AND PARTS	2.3	9.2	1.7	3.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	.8	3.6	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
374	RAILROAD EQUIPMENT	7.2	14.0	6.6	7.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC.	.4	2.1	.3	.8	10.4	.2	(D)	(D)	-	-	29	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	3.4	15.7	2.1	4.7	60.0	.9	43.8	.7	-	-	4	1	(X)
381	ENGINEERING, SCIENTIFIC INSTRU	.2	1.0	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES	1.4	7.3	.8	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
383	OPTICAL INSTRUMENTS AND LENSES	.1	.7	(Z)	.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	1.1	4.6	.8	1.7	27.6	.4	(D)	(D)	-	-	1	(X)	(X)
39	MISC. MANUFACTURING INDUS.	5.5	19.2	4.2	9.0	123.6	2.1	178.3	2.4	(D)	(D)	11	1	(X)
394	TOYS AND SPORTING GOODS	.5	2.0	.4	.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.5	1.8	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS	.4	1.5	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	4.0	13.3	3.1	6.5	85.2	1.4	139.8	1.9	(D)	(D)	15	1	(X)
	OHIO	930.9	2,647.2	721.8	1,439.0	8,867.3	142.3	8,553.0	124.1	5,971.9	177.9	2	6	2
20	FOOD AND KINDRED PRODUCTS	36.2	104.1	30.6	59.5	954.8	15.4	486.1	7.2	235.9	7.7	6	1	1
201	MEAT PRODUCTS	3.6	11.9	2.8	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	5.0	15.1	4.1	7.8	98.5	1.6	26.2	.4	19.7	.7	13	1	1
203	PRESERVED FRUITS AND VEGETABLES	4.9	13.7	4.2	8.0	49.9	.8	(D)	(D)	(D)	(D)	1	(X)	(X)
204	GRAIN MILL PRODUCTS	5.9	18.6	4.9	10.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
205	BAKERY PRODUCTS	3.1	9.8	2.6	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	2.0	5.0	1.9	3.8	50.2	.8	-	-	(D)	(D)	1	(X)	(X)
207	FATS AND OILS	5.2	10.7	4.7	7.2	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
208	BEVERAGES	4.6	13.3	4.0	7.9	(D)	(D)	163.8	2.3	22.9	.7	(X)	1	1
209	MISC. FOODS, KINDRED PRODUCTS	1.8	6.1	1.5	3.1	53.4	.9	-	-	-	-	3	(X)	(X)
22	TEXTILE MILL PRODUCTS	3.1	8.6	2.7	4.7	60.9	1.0	(D)	(D)	(D)	(D)	2	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	2.3	6.0	2.0	3.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.3	4.9	.9	1.9	(D)	(D)	(D)	(Z)	-	-	(X)	15	(X)
231	MEN'S AND BOYS' SUITS AND COATS	.3	1.0	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
232	MEN'S AND BOYS' FURNISHINGS	.1	.3	.1	.1	(D)	(Z)	-	-	-	-	71	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.2	.9	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	.6	2.1	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	24	(X)
24	LUMBER AND WOOD PRODUCTS	2.6	8.4	2.0	3.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.7	2.4	.5	1.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.6	2.0	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.6	.1	.3	(D)	(Z)	(D)	(D)	-	-	91	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.8	2.1	.6	1.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	2.9	9.4	2.3	4.5	10.7	.2	(D)	(D)	4.9	.2	2	(X)	1
253	PUBLIC BLDG., RELATED FURNITURE	.1	.6	.1	.2	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	52.5	105.9	47.7	69.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	27.2	41.0	25.5	29.1	156.8	2.5	(D)	(D)	857.9	22.6	3	(X)	2
263	PAPERBOARD MILLS	18.0	39.1	16.3	27.9	597.9	9.6	(D)	(D)	424.6	13.7	1	(X)	15
264	MISC. CONVERTED PAPER PRODUCTS	2.4	9.3	1.8	4.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	4.3	14.3	3.5	6.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	6.3	25.5	4.1	8.1	28.6	.5	(D)	(D)	(D)	(D)	8	(X)	(X)
271	NEWSPAPERS	1.0	4.7	.6	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
272	PERIODICALS	.1	.6	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
273	BOOKS	.4	1.6	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	3.8	13.6	2.6	5.0	10.7	.2	(D)	(D)	(D)	(D)	10	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.4	2.0	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.1	.4	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES	.2	.9	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	141.7	391.7	72.0	118.7	1,462.0	23.5	502.0	7.2	1,138.8	32.3	2	6	1
281	INDUSTRIAL INORGANIC CHEMICALS	79.1	251.5	16.3	26.9	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	10.9	31.0	9.0	17.2	(D)	(D)	(D)	(D)	71.4	1.8	(X)	(X)	1
283	DRUGS	.5	1.8	.3	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	4.6	11.8	4.0	6.1	41.6	.7	(D)	(D)	(D)	(D)	3	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	1.9	6.1	1.6	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	14.8	33.9	13.1	22.6	(S)	(S)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	19.5	35.6	18.2	28.6	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	10.4	20.1	9.6	13.6	46.5	.8	(D)	(D)	(D)	(D)	7	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	23.3	65.7	18.6	36.2	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
291	PETROLEUM REFINING	17.4	49.1	13.2	23.7	-	-	(D)	(D)	(D)	(D)	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS	5.7	15.3	5.3	11.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	44.0	132.2	34.0	58.1	495.8	8.1	1,145.2	16.5	489.9	12.1	2	1	1
301	TIRES AND INNER TUBES	18.3	39.6	16.0	23.9	(D)	(D)	(D)	(D)	328.1	7.2	(X)	(X)	1
304	RUBBER, PLASTICS HOSE, BELTING	3.3	9.0	2.6	3.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	9.0	28.1	7.0	13.5	129.3	2.2	(D)	(D)	76.4	2.4	6	(X)	1
307	MISCELLANEOUS PLASTICS PRODUCTS	13.3	55.2	8.4	17.0	212.0	3.4	(D)	(D)	(D)	(D)	3	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	.2	.9	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	PENNSYLVANIA--CON.												
37	TRANSPORTATION EQUIPMENT	(D)	(D)	2.9	6.9	2.3	(D)	886.2	28.2	(D)	16.1	43.6	3
371	MOTOR VEHICLES AND EQUIPMENT	-	-	1.2	2.9	.9	(D)	297.3	9.5	-	4.3	13.8	5
372	AIRCRAFT AND PARTS	-	-	.3	.7	.4	(D)	171.0	5.4	-	2.0	7.7	8
373	SHIP, BOAT BUILDING, REPAIRING	(D)	(Z)	(D)	(D)	(D)	(Z)	75.7	2.4	-	.9	3.5	(X)
374	RAILROAD EQUIPMENT	(D)	(Z)	1.0	2.1	(D)	.2	194.8	6.1	(D)	7.4	12.6	1
379	TRANSPORTATION EQUIPMENT, NEC.	-	-	.1	.3	(Z)	(D)	40.7	1.3	-	.4	1.8	23
38	INSTRUMENTS, RELATED PRODS	-	-	.9	2.1	(D)	(D)	359.4	11.0	(D)	3.5	14.5	4
381	ENGINEERING, SCIENTIFIC INSTRU	-	-	(D)	(D)	(Z)	(D)	24.1	.8	(D)	.5	1.8	(X)
382	MEASURING, CONTROLLING DEVICES	-	-	.4	1.0	(Z)	.1	178.8	5.4	-	1.5	6.5	6
383	OPTICAL INSTRUMENTS AND LENSES	-	-	(Z)	(Z)	-	(Z)	22.2	.6	-	.1	.4	1
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	.3	.8	(Z)	(D)	95.2	2.9	(D)	1.0	3.9	4
39	MISC. MANUFACTURING INDUS.	-	-	.8	2.0	.5	(D)	369.5	10.3	(S)	6.1	18.9	4
394	TOYS AND SPORTING GOODS	-	-	(S)	(S)	(S)	(S)	32.7	1.1	-	1.3	4.0	(X)
395	PENS, OFFICE AND ART GOODS	-	-	.1	.2	(Z)	(D)	31.1	1.0	-	.5	1.7	24
396	COSTUME JEWELRY AND NOTIONS	-	-	(D)	(D)	-	.1	32.2	.9	-	.3	1.1	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	.5	1.2	.2	(D)	261.6	6.9	(D)	3.9	11.6	5
	OHIO	4,121.7	326.7	296.2	571.0	62.1	34.8	61,278.5	1,208.3	2,382.7	930.8	2,215.8	1
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	11.9	22.5	3.0	(D)	1,624.9	44.6	(S)	35.2	89.3	6
201	MEAT PRODUCTS	-	-	1.4	2.6	.7	.7	233.8	6.2	(D)	3.7	10.4	5
202	DAIRY PRODUCTS	-	-	2.0	3.6	(D)	(D)	275.0	7.4	(D)	5.1	14.8	17
203	PRESERVED FRUITS AND VEGETABLES	-	-	1.6	3.0	.2	(Z)	196.9	5.7	(D)	4.9	11.7	16
204	GRAIN MILL PRODUCTS	-	-	1.5	2.2	.5	.7	301.5	8.1	(D)	5.0	14.7	28
205	BAKERY PRODUCTS	-	-	1.7	3.6	.7	.5	136.8	4.1	-	3.2	8.0	7
206	SUGAR, CONFECTIONERY PRODUCTS	(D)	(D)	.6	1.1	(D)	.1	45.6	1.2	-	2.5	5.2	2
207	FATS AND OILS	-	-	(S)	(S)	(Z)	(S)	126.1	3.6	(D)	5.0	9.0	(X)
208	BEVERAGES	-	-	1.0	1.9	(D)	.6	193.8	5.4	(D)	4.0	10.5	12
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(D)	(D)	(D)	.1	115.3	3.0	-	1.8	5.0	(X)
22	TEXTILE MILL PRODUCTS	-	-	1.2	2.3	(D)	.2	130.7	3.9	(Z)	3.0	7.1	14
229	MISCELLANEOUS TEXTILE GOODS	-	-	(D)	(D)	.2	(D)	92.2	2.7	-	2.2	5.0	(X)
23	APPAREL, OTH. TEXTILE PRODS	-	-	.6	1.2	(D)	.3	106.2	3.1	-	1.3	4.4	11
231	MEN'S AND BOYS' SUITS AND COATS	-	-	.1	.2	-	(D)	16.1	.5	-	.3	1.1	1
232	MEN'S AND BOYS' FURNISHINGS	-	-	(Z)	.1	-	.1	6.3	.1	-	.1	.3	37
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(D)	(D)	-	(D)	29.2	.6	-	.2	.8	(X)
239	MISC. FABRICATED TEXTILE PRODS	-	-	.3	.5	(D)	.2	42.2	1.3	-	.5	1.5	15
24	LUMBER AND WOOD PRODUCTS	-	-	.6	1.2	1.1	.7	177.0	4.5	(D)	3.3	9.2	21
242	SAWMILLS AND PLANING MILLS	-	-	.1	.1	(D)	.2	70.9	1.4	(D)	1.6	4.5	59
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.3	.6	(D)	(D)	43.6	1.2	-	.6	1.8	40
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(D)	(D)	.1	(D)	10.2	.3	-	.2	.6	(X)
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	31.7	1.0	-	1.0	2.4	(X)
25	FURNITURE AND FIXTURES	-	-	1.7	3.3	.4	(D)	171.7	5.0	(D)	2.9	7.8	8
253	PUBLIC BLDG., RELATED FURNITURE	-	-	(D)	(D)	-	(S)	(S)	.3	-	.2	.6	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	1,430.0	36.5	765.5	50.2	87.6	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	1.1	1.8	(D)	(D)	475.1	12.0	614.5	25.4	35.9	1
263	PAPERBOARD MILLS	-	-	1.7	3.8	(D)	(D)	493.9	11.2	(S)	17.9	32.8	4
264	MISC. CONVERTED PAPER PRODUCTS	-	-	1.0	2.2	(D)	.4	190.2	5.3	(S)	2.2	6.4	7
265	PAPERBOARD CONTAINERS AND BOXES	-	-	1.6	3.2	.1	(D)	247.6	7.4	-	4.2	11.1	8
27	PRINTING AND PUBLISHING	-	-	2.2	4.3	1.2	1.5	625.1	17.4	(D)	6.1	21.8	8
271	NEWSPAPERS	-	-	.2	.4	.5	(D)	112.8	3.6	-	1.0	4.2	18
272	PERIODICALS	-	-	(D)	(D)	-	(D)	14.7	.5	-	.1	.4	(X)
273	BOOKS	-	-	.2	.3	(Z)	.1	40.4	1.1	-	.4	1.2	4
275	COMMERCIAL PRINTING	-	-	1.5	2.9	.4	.8	330.1	8.6	(D)	3.7	12.1	10
276	MANIFOLD BUSINESS FORMS	-	-	.1	.3	(D)	-	54.6	1.5	-	.3	1.5	6
278	BLANKBOOKS AND BOOKBINDING	-	-	(D)	(D)	-	(D)	10.9	.3	-	(Z)	.2	(X)
279	PRINTING TRADE SERVICES	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.3	.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	24.0	45.1	7.4	(D)	20,412.1	273.0	407.9	140.8	312.7	2
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	(S)	(S)	(D)	(S)	18,407.2	224.6	(D)	83.8	201.8	(X)
282	PLASTICS MATERIALS, SYNTHETICS	-	-	1.7	3.5	3.9	.4	579.3	13.8	-	12.9	29.4	1
283	DRUGS	-	-	.1	.2	-	(D)	37.5	1.1	-	.6	1.6	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.9	2.0	(D)	.1	187.1	5.7	(D)	4.7	9.9	8
285	PAINTS AND ALLIED PRODUCTS	-	-	.5	.9	(D)	.9	96.0	3.1	(D)	1.9	5.3	11
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	(S)	(S)	(D)	(S)	495.0	11.3	-	11.9	24.7	(X)
287	AGRICULTURAL CHEMICALS	-	-	9.9	17.8	(D)	.3	371.4	6.9	-	14.2	22.0	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	2.6	4.9	.2	(D)	238.5	6.5	(D)	10.8	17.9	3
29	PETROLEUM AND COAL PRODUCTS	-	-	(S)	(S)	(D)	(S)	1,365.9	29.5	(D)	22.4	52.2	(X)
291	PETROLEUM REFINING	-	-	(D)	(D)	-	.1	1,234.4	25.4	(D)	18.5	42.5	(X)
295	PAVING AND ROOFING MATERIALS	-	-	(D)	(D)	(D)	(S)	121.0	3.6	(D)	4.0	9.5	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	7.5	15.4	1.1	4.9	2,941.4	74.1	(D)	44.3	110.7	4
301	TIRES AND INNER TUBES	-	-	1.5	3.0	.3	.1	683.7	15.8	(D)	19.0	34.6	1
304	RUBBER, PLASTICS HOSE, BELTING	-	-	.6	1.2	(D)	(D)	223.0	5.4	-	3.9	7.6	4
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	2.2	4.6	(D)	(D)	578.0	14.6	(D)	8.5	22.4	11
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	3.2	6.6	.7	(D)	1,451.0	38.2	(D)	12.9	45.8	3
31	LEATHER, LEATHER PRODUCTS	-	-	(S)	(S)	(D)	(S)	17.3	.5	-	.3	.9	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	OHIO--CON.													
31	LEATHER, LEATHER PRODUCTS--CON.													
314	FOOTWEAR, EXCEPT RUBBER.	.1	.5	.1	.1	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	97.9	213.6	89.8	154.9	623.4	10.1	1,159.5	15.8	962.3	27.7	8	46	6
322	GLASS, PRESSED OR BLOWN.	20.8	51.0	18.9	36.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
323	PRODUCTS OF PURCHASED GLASS. . . .	1.1	4.2	.6	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
324	CEMENT, HYDRAULIC.	12.4	16.0	11.5	10.2	(D)	(D)	-	-	423.0	9.8	(X)	(X)	1
325	STRUCTURAL CLAY PRODUCTS	15.3	31.1	14.6	25.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS . . .	4.7	10.8	4.3	8.0	38.1	.6	-	-	(D)	(D)	1	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	17.0	34.8	16.2	28.8	168.5	2.8	(D)	(D)	307.4	10.8	28	(X)	16
329	MISC. NONMETALLIC MINERAL PRODS. .	18.0	42.9	15.7	27.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	363.5	1,035.7	301.9	695.7	2,359.5	37.1	3,696.2	54.9	1,052.7	33.6	1	1	1
331	BLAST FURNACE, BASIC STEEL PROD. .	295.0	798.9	256.7	573.0	1,957.0	30.6	3,619.3	53.6	1,010.1	32.1	1	1	1
332	IRON AND STEEL FOUNDRIES	30.0	128.0	23.8	80.5	143.5	2.3	(D)	(D)	(D)	(D)	3	(X)	(X)
334	SECONDARY NONFERROUS METALS. . . .	4.0	9.3	3.8	7.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	9.0	26.2	7.0	13.6	70.2	1.1	(D)	(D)	(D)	(D)	1	(X)	(X)
336	NONFERROUS FOUNDRIES	6.5	19.6	5.4	10.6	33.3	.6	(D)	(D)	(D)	(D)	9	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	51.2	168.3	39.6	75.9	514.4	8.3	343.2	5.1	185.2	6.0	3	7	2
341	METAL CANS, SHIPPING CONTAINERS. .	2.6	8.7	2.0	4.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	4.1	12.7	3.2	5.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	8.1	25.8	6.5	12.6	64.1	1.1	(D)	(D)	-	-	13	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	3.2	11.1	2.4	4.7	11.8	.2	(D)	(Z)	(D)	(Z)	10	1	98
346	METAL FORGINGS AND STAMPINGS . . .	21.4	67.8	16.9	31.9	241.5	3.9	211.3	3.1	109.2	3.5	6	4	1
347	METAL SERVICES, NEC.	4.4	13.3	3.5	6.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	5.2	21.3	3.4	6.8	67.2	1.1	(D)	(D)	(D)	(D)	5	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	35.7	132.4	25.6	50.4	442.1	7.5	140.6	2.0	112.7	4.3	11	1	1
353	CONSTRUCTION, RELATED MACHINERY. .	6.0	20.1	4.6	8.7	85.4	1.4	(D)	(D)	36.1	1.3	1	(X)	1
354	METALWORKING MACHINERY	6.5	27.0	4.5	8.4	40.4	.7	(D)	(D)	36.8	1.4	13	(X)	1
355	SPECIAL INDUSTRY MACHINERY	2.3	10.0	1.5	3.2	36.7	.6	(D)	(D)	(D)	(Z)	1	(X)	1
356	GENERAL INDUSTRIAL MACHINERY . . .	9.8	32.9	7.5	14.7	56.9	1.0	99.0	1.3	(D)	(D)	3	1	(X)
357	OFFICE AND COMPUTING MACHINES. . .	1.4	5.3	1.0	2.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	4.9	18.6	3.3	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	2.8	11.8	1.8	3.8	54.0	1.1	(D)	(D)	-	-	73	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	23.3	79.2	17.5	34.8	279.0	4.4	75.0	1.2	76.1	2.6	2	1	1
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.5	2.1	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	4.9	18.0	3.5	7.2	78.2	1.3	(D)	(Z)	(D)	(D)	1	1	(X)
363	HOUSEHOLD APPLIANCES	9.9	28.0	8.3	16.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	3.8	13.4	2.8	5.2	29.8	.5	17.7	.3	(D)	(D)	3	1	(X)
366	COMMUNICATION EQUIPMENT.	.9	4.0	.5	1.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	1.4	5.9	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	1.8	7.6	1.1	2.3	31.4	.5	-	-	(D)	(D)	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	41.3	148.4	29.0	56.1	336.0	5.3	409.2	5.9	328.5	12.1	1	1	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	33.9	119.6	24.0	45.9	197.5	3.0	(D)	(D)	298.4	11.1	1	(X)	1
372	AIRCRAFT AND PARTS	5.8	23.1	3.9	8.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
374	RAILROAD EQUIPMENT	.9	2.8	.7	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	.2	.9	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.3	3.5	1.1	2.1	20.9	.4	(D)	(D)	-	-	4	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	1.1	5.4	.6	1.3	18.4	.3	(D)	(D)	-	-	1	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.5	1.6	.3	.6	(D)	(Z)	(D)	(D)	-	-	31	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	2.6	8.7	2.0	3.6	29.2	.5	(D)	(D)	19.3	.4	13	(X)	1
394	TOYS AND SPORTING GOODS.	.8	3.2	.6	1.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
395	PENS, OFFICE AND ART GOODS	.3	.7	.2	.3	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	1.2	3.3	1.0	1.5	7.3	.1	-	-	(D)	(D)	50	(X)	(X)
	INDIANA.	555.7	1,418.4	468.2	852.0	4,672.1	72.3	14,883.1	191.7	2,683.8	75.4	2	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	29.4	69.2	25.5	42.5	476.0	7.3	445.7	6.1	226.4	7.6	4	12	1
201	MEAT PRODUCTS.	2.8	7.8	2.2	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	2.0	6.3	1.5	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	2.6	6.5	2.3	4.4	118.8	1.9	(D)	(Z)	(D)	(D)	7	1	(X)
204	GRAIN MILL PRODUCTS.	11.6	24.6	10.2	15.9	111.5	1.7	255.9	3.3	(D)	(D)	1	1	(X)
205	BAKERY PRODUCTS.	.9	2.6	.8	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS.	4.4	9.7	4.1	7.0	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
208	BEVERAGES.	3.7	7.6	3.4	5.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.8	2.7	.7	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.3	1.3	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.8	2.6	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
231	MEN'S AND BOYS' SUITS AND COATS. .	(Z)	.2	(Z)	.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	.2	.8	.1	.3	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.1	.2	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	.4	1.2	.3	.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.8	12.3	3.0	5.6	32.5	.5	(D)	(D)	10.0	.4	10	(X)	11
242	SAWMILLS AND PLANING MILLS	.7	2.2	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	1.7	5.3	1.3	2.3	6.3	.1	(D)	(D)	9.5	.4	10	(X)	11
244	WOOD CONTAINERS.	.2	.6	.2	.3	(D)	(Z)	(D)	(Z)	(D)	(D)	64	87	(X)
245	WOOD BUILDINGS AND MOBILE HOMES. .	.6	1.9	.5	.9	10.1	.2	-	-	-	-	10	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	OHIO--CON.												
31	LEATHER, LEATHER PRODUCTS--CON.												
314	FOOTWEAR, EXCEPT RUBBER.	-	-	(Z)	(Z)	-	(D)	8.6	.3	-	.1	.6	1
32	STONE, CLAY, GLASS PRODUCTS. . .	25.3	1.8	47.4	91.1	5.7	2.6	2,390.2	58.7	(D)	101.3	186.6	5
322	GLASS, PRESSED OR BLOWN.	-	-	14.8	28.2	2.1	.1	573.4	14.1	(S)	21.2	43.5	1
323	PRODUCTS OF PURCHASED GLASS. . .	-	-	.3	.7	(D)	.3	126.3	3.1	-	.9	3.2	5
324	CEMENT, HYDRAULIC.	(D)	(D)	(D)	(D)	(D)	(Z)	251.2	5.8	(D)	13.1	15.4	(X)
325	STRUCTURAL CLAY PRODUCTS	-	-	12.0	22.2	(D)	2.6	194.5	5.2	(Z)	15.9	28.2	18
326	POTTERY AND RELATED PRODUCTS . .	-	-	2.4	4.8	1.0	(D)	115.8	2.8	-	4.3	8.6	2
327	CONCRETE, GYPSUM, PLASTER PRODS.	(Z)	(Z)	4.0	7.6	.4	(D)	218.0	6.1	(D)	17.9	31.6	7
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	(S)	(S)	(D)	(S)	666.4	15.5	(S)	18.6	38.0	(X)
33	PRIMARY METAL INDUSTRIES	4,085.0	323.8	118.1	225.7	15.3	5.5	18,047.0	339.9	(D)	365.8	876.1	2
331	BLAST FURNACE, BASIC STEEL PROD.	3,668.4	267.9	92.6	176.5	9.8	2.4	11,218.2	225.8	1,194.3	301.6	681.7	1
332	IRON AND STEEL FOUNDRIES	415.2	55.7	9.6	18.0	1.4	2.2	1,818.7	47.5	(D)	29.5	103.5	2
334	SECONDARY NONFERROUS METALS. . .	-	-	2.7	5.2	(D)	(D)	43.7	1.5	-	3.5	6.8	9
335	NONFERROUS ROLLING AND DRAWING .	-	-	5.6	10.7	.9	(D)	571.0	12.6	-	8.2	20.1	2
336	NONFERROUS FOUNDRIES	(D)	(D)	3.5	7.1	.1	2.0	332.9	9.0	-	6.7	16.8	10
34	FABRICATED METAL PRODUCTS. . . .	(D)	(D)	21.9	42.1	(D)	6.6	3,379.8	92.4	(D)	49.2	136.0	3
341	METAL CANS, SHIPPING CONTAINERS.	-	-	1.0	1.9	(D)	.4	162.4	4.7	-	2.8	7.8	2
342	CUTLERY, HANDTOOLS AND HARDWARE.	-	-	1.3	2.4	(D)	.2	262.4	7.3	-	4.1	11.3	10
344	FABRICATED STRUC. METAL PRODS. .	(Z)	(Z)	4.6	8.6	1.2	(D)	480.2	13.2	-	8.7	23.4	4
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	1.9	3.8	.2	.5	225.7	6.4	-	3.5	10.2	8
346	METAL FORGINGS AND STAMPINGS . .	-	-	8.4	16.1	3.2	2.1	1,331.7	35.9	-	19.9	51.4	6
347	METAL SERVICES, NEC.	-	-	1.6	3.1	(D)	1.8	264.7	7.1	-	2.5	7.4	16
349	MISC. FABRICATED METAL PRODUCTS.	-	-	2.3	4.5	.4	(D)	528.3	14.4	(D)	5.3	18.0	8
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	13.7	26.6	4.7	(D)	2,950.7	82.0	(D)	40.1	120.9	3
353	CONSTRUCTION, RELATED MACHINERY.	(D)	(Z)	2.0	3.8	(D)	1.6	408.5	11.4	-	5.9	16.3	4
354	METALWORKING MACHINERY	-	-	1.9	3.8	(D)	1.8	601.7	18.6	(D)	8.9	30.4	6
355	SPECIAL INDUSTRY MACHINERY . . .	-	-	1.2	2.3	.1	(D)	232.8	6.8	-	1.9	7.0	19
356	GENERAL INDUSTRIAL MACHINERY . .	-	-	4.7	9.1	1.4	(D)	667.4	18.3	-	9.6	26.7	2
357	OFFICE AND COMPUTING MACHINES. .	-	-	.4	.8	(Z)	(Z)	111.7	3.0	(D)	1.8	4.6	5
358	REFRIGERATION AND SERVICE MACH .	-	-	1.4	2.8	(D)	.8	475.1	12.0	-	7.5	19.9	2
359	MISC. MACHINERY, EXC. ELEC . . .	-	-	1.3	2.2	(D)	(D)	283.7	8.0	(D)	2.7	10.8	17
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	8.9	17.8	(D)	(D)	1,685.6	44.3	(D)	20.2	59.9	1
361	ELECTRIC DISTRIBUTING EQUIPMENT.	-	-	.2	.5	(D)	.1	(D)	(D)	-	.5	1.7	6
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	2.2	4.5	.6	(D)	390.5	10.7	(D)	4.8	14.7	1
363	HOUSEHOLD APPLIANCES	-	-	3.5	7.0	6.7	(D)	476.5	11.6	(Z)	7.1	17.4	1
364	ELEC. LIGHTING, WIRING EQUIP . .	-	-	1.7	3.4	(D)	(D)	303.5	8.2	-	4.0	11.6	5
366	COMMUNICATION EQUIPMENT.	-	-	.1	.2	(D)	.1	103.7	2.8	-	.7	3.2	1
367	ELECTRONIC COMPONENTS, ACCESS. .	-	-	.3	.6	(D)	(D)	176.4	4.2	-	1.3	5.2	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	-	-	.8	1.5	(D)	(D)	186.5	5.2	-	1.7	5.7	5
37	TRANSPORTATION EQUIPMENT	-	-	12.8	27.3	3.6	1.9	3,614.6	92.2	(S)	41.0	123.3	1
371	MOTOR VEHICLES AND EQUIPMENT . .	-	-	10.9	23.6	3.4	(D)	2,916.8	73.7	(D)	32.7	97.0	1
372	AIRCRAFT AND PARTS	-	-	1.2	2.4	(D)	(D)	580.6	15.1	-	6.3	20.2	1
374	RAILROAD EQUIPMENT	-	-	.5	1.0	(Z)	(D)	52.6	1.5	-	.9	2.4	1
379	TRANSPORTATION EQUIPMENT, NEC. .	-	-	(D)	(D)	-	.1	14.6	.5	-	.6	1.7	(X)
38	INSTRUMENTS, RELATED PRODS . . .	-	-	.6	1.1	(Z)	(D)	40.2	1.4	(D)	.8	1.8	16
382	MEASURING, CONTROLLING DEVICES .	-	-	.4	.6	(Z)	(D)	135.3	4.1	(D)	.9	3.9	5
384	MEDICAL INSTRUMENTS, SUPPLIES. .	-	-	(D)	(D)	(Z)	(D)	33.0	1.0	-	.3	1.3	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	1.3	2.5	.1	(D)	166.1	5.1	(D)	2.6	7.2	14
394	TOYS AND SPORTING GOODS.	-	-	.5	1.1	-	(D)	52.0	1.8	(D)	.7	2.4	15
395	PENS, OFFICE AND ART GOODS . . .	-	-	(D)	(D)	-	.1	9.9	.3	-	.3	.6	(X)
399	MISCELLANEOUS MANUFACTURES . . .	-	-	.6	1.2	.1	(D)	67.0	1.9	-	1.3	3.0	25
	INDIANA.	2,014.6	164.6	190.4	289.5	37.2	21.3	25,632.6	566.4	2,825.4	559.9	1,181.6	1
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	11.9	17.9	2.2	1.3	1,144.9	26.7	(D)	29.8	57.4	3
201	MEAT PRODUCTS.	-	-	1.3	2.1	(D)	(D)	163.0	3.7	-	2.3	6.0	13
202	DAIRY PRODUCTS	-	-	.7	1.2	(D)	.5	150.3	3.6	-	1.9	5.1	15
203	PRESERVED FRUITS AND VEGETABLES.	-	-	.7	1.1	(D)	.6	77.8	2.0	-	3.0	5.7	3
204	GRAIN MILL PRODUCTS.	-	-	5.6	7.8	(D)	(Z)	404.9	8.7	(D)	11.2	17.9	2
205	BAKERY PRODUCTS.	-	-	.6	1.0	(D)	.2	48.3	1.3	-	1.0	2.6	13
207	FATS AND OILS.	-	-	(S)	(S)	(D)	(S)	114.2	2.7	(D)	4.3	8.1	(X)
208	BEVERAGES.	-	-	.9	1.5	(Z)	(D)	99.8	2.5	-	4.5	7.7	2
209	MISC. FOODS, KINDRED PRODUCTS. .	-	-	(D)	(D)	(D)	(S)	55.5	1.5	-	1.2	3.1	(X)
22	TEXTILE MILL PRODUCTS.	-	-	.2	.3	(Z)	(Z)	(S)	(S)	-	.1	.7	17
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	.5	.8	(Z)	.2	56.7	(D)	-	.6	2.1	13
231	MEN'S AND BOYS' SUITS AND COATS.	-	-	(D)	(D)	-	(Z)	3.3	.1	-	(Z)	.1	(X)
232	MEN'S AND BOYS' FURNISHINGS. . .	-	-	(D)	(D)	-	(Z)	16.7	.5	-	.2	.5	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. .	-	-	(D)	(D)	-	(D)	6.8	.2	-	.1	.3	(X)
239	MISC. FABRICATED TEXTILE PRODS .	-	-	(D)	(D)	(Z)	.1	24.4	.6	-	.3	.8	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	1.2	2.1	(D)	1.6	255.8	6.6	-	4.1	10.9	10
242	SAWMILLS AND PLANING MILLS . . .	-	-	.1	.1	(D)	(D)	47.5	1.1	-	.8	2.2	66
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.5	.8	(D)	.7	121.8	3.0	-	1.6	4.7	10
244	WOOD CONTAINERS.	-	-	.1	.2	(D)	(D)	(S)	(S)	-	.1	.3	63
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	.4	.7	(D)	(D)	40.7	1.1	-	.6	1.5	12

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	INDIANA--CON.													
24	LUMBER AND WOOD PRODUCTS--CON.													
249	MISCELLANEOUS WOOD PRODUCTS. . . .	.6	2.0	.5	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	4.0	12.2	3.1	5.4	70.7	1.2	73.9	1.0	32.8	.9	3	1	14
251	HOUSEHOLD FURNITURE.	2.9	9.1	2.2	3.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE. .	.1	.2	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES.	.3	.9	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	10.5	26.5	8.6	13.6	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
263	PAPERBOARD MILLS	6.5	14.0	5.6	7.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	1.9	5.8	1.3	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	1.7	5.4	1.4	2.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	2.5	10.2	1.6	2.9	17.8	.3	47.7	.6	(D)	(D)	31	22	(X)
271	NEWSPAPERS	.4	2.1	.2	.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	1.1	4.0	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.1	.5	(Z)	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING . . .	(Z)	.3	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	41.2	111.6	31.1	48.3	567.8	8.1	637.1	8.5	250.5	6.5	1	7	1
281	INDUSTRIAL INORGANIC CHEMICALS . .	11.5	44.0	6.2	8.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
283	DRUGS.	10.3	28.0	8.1	15.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	.4	.9	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	4.2	8.3	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	1.0	2.7	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	7.8	19.6	6.5	10.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	5.6	15.0	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS . . .	1.9	4.0	1.8	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	13.2	38.2	9.9	15.3	143.9	2.2	206.9	2.7	114.3	3.0	6	1	1
306	FABRICATED RUBBER PRODUCTS, NEC. .	4.6	12.3	3.7	6.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	6.6	20.4	4.6	6.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.2	.7	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	52.1	99.6	47.7	71.3	1,127.9	17.8	308.4	3.9	758.5	19.2	8	9	1
322	GLASS, PRESSED OR BLOWN.	14.9	33.8	13.4	24.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
324	CEMENT, HYDRAULIC.	17.2	23.5	15.7	14.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	2.6	4.6	2.5	3.8	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
327	CONCRETE, GYPSUM, PLASTER PRODS. .	10.1	19.3	9.6	15.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	6.3	15.5	5.4	10.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	298.3	744.2	261.3	517.8	908.8	13.8	11,804.0	150.7	(D)	(D)	2	1	(X)
331	BLAST FURNACE, BASIC STEEL PROD. .	248.7	591.1	230.4	454.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	8.4	34.8	6.5	20.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
334	SECONDARY NONFERROUS METALS. . . .	3.6	7.0	3.4	5.8	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	20.5	52.9	16.5	29.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	21.2	60.5	17.1	29.9	281.1	4.5	68.9	1.0	69.5	2.0	4	1	19
341	METAL CANS, SHIPPING CONTAINERS. .	1.5	4.4	1.2	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	1.1	3.0	.9	1.4	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC . .	1.3	4.0	1.1	2.2	22.2	.4	(D)	(D)	-	-	15	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	2.9	8.8	2.3	4.0	23.6	.4	14.2	.2	(D)	(D)	9	3	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	.6	2.1	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	6.2	17.4	4.9	8.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
347	METAL SERVICES, NEC.	3.5	8.3	3.0	5.3	16.0	.3	(D)	(D)	(D)	(Z)	42	(X)	1
348	ORDNANCE AND ACCESSORIES, NEC. . .	.4	1.5	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	3.5	10.8	2.8	4.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	15.1	48.0	11.0	19.3	254.4	4.1	113.0	1.6	63.2	1.9	3	1	2
352	FARM AND GARDEN MACHINERY.	1.5	3.9	1.3	2.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	1.6	4.7	1.2	1.9	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	16	(X)
354	METALWORKING MACHINERY	1.3	5.1	.8	1.6	11.0	.2	-	-	(D)	(D)	22	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.8	2.6	.5	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	3.8	12.7	2.6	4.5	45.4	.7	(D)	(D)	13.0	.4	4	(X)	1
358	REFRIGERATION AND SERVICE MACH . .	2.2	5.5	1.8	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.3	4.6	.9	1.5	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	21.7	64.4	15.4	23.9	245.5	3.9	98.2	1.4	269.7	7.8	4	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS. .	2.0	7.1	1.3	2.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	3.2	8.2	2.3	2.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	2.9	10.0	2.0	4.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	1.5	4.8	1.0	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	1.6	5.9	1.0	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	6.5	18.0	4.8	6.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	31.0	88.4	23.7	40.5	359.7	5.4	694.2	9.2	131.2	4.1	1	1	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	22.1	60.7	17.1	28.6	93.2	1.4	551.8	7.5	(D)	(D)	1	1	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	.3	1.0	.2	.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
374	RAILROAD EQUIPMENT	.8	2.5	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	2.6	7.7	2.1	3.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.3	4.8	.9	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	.2	1.2	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.2	1.1	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	INDIANA--CON.												
24	LUMBER AND WOOD PRODUCTS--CON.												
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	(S)	(S)	(D)	(S)	35.1	1.1	-	.7	1.8	(X)
25	FURNITURE AND FIXTURES	-	-	1.2	1.8	(D)	(D)	262.9	6.8	(D)	3.1	8.3	7
251	HOUSEHOLD FURNITURE.	-	-	.7	1.1	(D)	(D)	212.0	5.3	(D)	2.1	5.8	5
253	PUBLIC BLDG., RELATED FURNITURE. .	-	-	(D)	(D)	(Z)	(D)	3.1	.1	-	.1	.2	(X)
254	PARTITIONS AND FIXTURES.	-	-	(S)	(S)	(Z)	(S)	14.7	.4	-	.3	.7	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	(S)	(S)	(S)	(S)	536.1	12.9	(D)	10.4	23.0	(X)
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(S)	274.6	6.2	(D)	6.9	13.9	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	-	-	(S)	(S)	(S)	(S)	149.0	3.6	-	1.5	3.8	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	(D)	(D)	(D)	(S)	91.9	2.5	-	1.4	4.1	(X)
27	PRINTING AND PUBLISHING.	-	-	.9	1.6	(D)	.3	271.1	7.3	-	2.7	9.3	11
271	NEWSPAPERS	-	-	.1	.2	(D)	(Z)	61.1	1.8	-	.4	1.8	27
275	COMMERCIAL PRINTING.	-	-	.4	.7	-	.2	98.4	2.6	-	1.2	4.2	24
276	MANIFOLD BUSINESS FORMS.	-	-	(Z)	.1	-	(D)	16.6	.4	-	.1	.4	1
278	BLANKBOOKS AND BOOKBINDING	-	-	(D)	(D)	(Z)	(S)	9.1	.2	-	(Z)	.2	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	13.4	18.2	6.8	.3	2,978.8	63.4	(D)	38.4	86.9	8
281	INDUSTRIAL INORGANIC CHEMICALS . .	-	-	5.5	7.7	.2	(D)	1,563.9	35.1	-	11.8	34.7	1
283	DRUGS.	-	-	(S)	(S)	(S)	(S)	647.8	12.8	(D)	10.1	22.6	(X)
285	PAINTS AND ALLIED PRODUCTS	-	-	.1	.2	-	(D)	14.6	.4	-	.3	.7	21
286	INDUSTRIAL ORGANIC CHEMICALS . . .	-	-	(D)	(D)	(D)	(S)	116.3	2.5	(D)	2.7	5.1	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	-	-	.1	.2	(Z)	.3	29.2	.7	-	.8	1.9	37
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	2.6	4.0	(D)	(D)	371.8	8.9	(D)	8.2	16.2	4
291	PETROLEUM REFINING	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.3	12.5	(X)
295	PAVING AND ROOFING MATERIALS . . .	-	-	.6	.8	(D)	(D)	30.8	.8	-	1.6	3.1	16
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	4.0	6.1	.3	.9	965.3	22.8	(D)	12.3	30.4	8
306	FABRICATED RUBBER PRODUCTS, NEC. .	-	-	1.9	3.2	(Z)	.1	264.1	6.2	-	4.6	10.2	12
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	1.8	2.5	.3	(D)	589.3	14.2	(D)	6.1	16.2	13
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	(D)	(D)	-	(D)	(D)	(D)	(D)	.2	.6	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	17.8	26.8	1.8	(D)	1,291.5	28.3	-	51.5	81.7	4
322	GLASS, PRESSED OR BLOWN.	-	-	7.8	11.7	.4	(Z)	431.0	9.0	-	14.8	27.6	1
324	CEMENT, HYDRAULIC.	-	-	(D)	(D)	(D)	(Z)	424.8	8.8	-	17.0	20.7	(X)
325	STRUCTURAL CLAY PRODUCTS	-	-	1.4	1.4	(D)	(D)	31.5	.8	-	2.4	3.6	43
327	CONCRETE, GYPSUM, PLASTER PRODS. .	(Z)	(Z)	2.4	3.6	.7	(D)	128.6	3.6	-	10.7	16.3	9
329	MISC. NONMETALLIC MINERAL PRODS. .	(D)	(D)	3.5	5.6	.2	(D)	240.8	5.1	-	5.7	11.1	2
33	PRIMARY METAL INDUSTRIES	1,986.4	161.3	101.6	154.0	11.2	(D)	10,849.2	226.4	2,142.7	308.3	632.7	1
331	BLAST FURNACE, BASIC STEEL PROD. .	(D)	(D)	82.9	124.5	6.8	6.9	5,386.4	137.0	(S)	257.8	507.1	1
332	IRON AND STEEL FOUNDRIES	109.2	14.5	3.1	4.7	.8	(D)	551.3	14.3	-	8.1	27.4	8
334	SECONDARY NONFERROUS METALS. . . .	(D)	(D)	(S)	(S)	(S)	(S)	73.8	1.3	-	2.8	4.9	(X)
335	NONFERROUS ROLLING AND DRAWING . .	-	-	9.9	15.9	3.3	(D)	1,174.2	22.9	(D)	19.5	40.5	2
34	FABRICATED METAL PRODUCTS. . . .	(D)	(D)	10.3	16.3	3.8	(D)	1,189.9	30.6	(D)	19.9	47.0	4
341	METAL CANS, SHIPPING CONTAINERS. .	-	-	(D)	(D)	.7	(D)	(S)	(S)	-	1.0	2.5	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	(S)	(S)	(D)	(S)	61.6	1.6	-	1.2	2.8	(X)
343	PLUMBING, HEATING, EXCEPT ELEC . .	(D)	(D)	.8	1.1	(D)	(D)	62.3	1.7	-	1.6	3.9	21
344	FABRICATED STRUC. METAL PRODS. . .	(D)	(Z)	(S)	(S)	(D)	(S)	172.8	4.8	(Z)	3.5	9.0	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	-	-	.4	.6	(D)	.1	(D)	(D)	-	.6	1.6	19
346	METAL FORGINGS AND STAMPINGS . . .	-	-	2.8	4.3	(D)	(D)	383.6	9.4	-	5.8	12.5	5
347	METAL SERVICES, NEC.	-	-	1.7	2.7	(D)	(D)	140.9	3.0	(D)	2.8	5.8	16
348	ORDNANCE AND ACCESSORIES, NEC. . .	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.4	1.0	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	(D)	(D)	2.2	3.5	(D)	.5	214.2	6.0	-	3.1	7.7	3
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	5.4	8.6	1.5	1.6	1,211.6	28.7	(S)	14.1	38.4	3
352	FARM AND GARDEN MACHINERY.	-	-	.7	1.0	(D)	.4	65.0	1.8	-	1.5	3.2	2
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	(D)	(D)	(D)	.3	114.5	2.8	-	1.4	3.7	(X)
354	METALWORKING MACHINERY	-	-	.3	.6	(D)	.5	126.5	3.5	-	1.1	3.9	13
355	SPECIAL INDUSTRY MACHINERY	-	-	.3	.4	-	.3	73.0	1.8	-	.8	2.5	6
356	GENERAL INDUSTRIAL MACHINERY . . .	-	-	1.6	2.6	.7	(Z)	351.4	8.1	-	3.6	9.7	3
358	REFRIGERATION AND SERVICE MACH . .	-	-	.9	1.4	(D)	.1	121.0	2.7	-	2.0	4.5	2
359	MISC. MACHINERY, EXC. ELEC	-	-	(S)	(S)	(S)	(S)	128.9	3.1	(D)	1.2	3.6	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	4.5	7.4	3.1	.3	1,848.5	40.5	(D)	22.1	53.7	2
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	.6	1.1	(D)	.2	188.6	4.6	-	2.2	6.1	1
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	(S)	(S)	(D)	(S)	267.4	5.3	-	3.2	6.5	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	-	-	.7	1.3	(Z)	.1	265.7	5.6	-	2.6	7.7	1
366	COMMUNICATION EQUIPMENT.	-	-	(D)	(D)	(Z)	.1	163.7	3.7	-	1.6	4.1	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	(D)	(D)	.3	(Z)	176.7	4.1	(D)	2.9	7.6	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	-	-	(D)	(D)	1.2	.1	501.8	11.4	(D)	6.2	13.8	(X)
37	TRANSPORTATION EQUIPMENT	(Z)	(Z)	11.8	18.5	1.7	1.6	2,149.5	47.9	(D)	31.6	75.0	3
371	MOTOR VEHICLES AND EQUIPMENT . . .	(Z)	(Z)	8.9	13.8	1.4	(D)	1,464.0	32.1	-	22.0	49.9	2
373	SHIP, BOAT BUILDING, REPAIRING . .	-	-	(D)	(D)	(Z)	.1	23.6	.6	-	.2	.7	(X)
374	RAILROAD EQUIPMENT	-	-	(D)	(D)	(Z)	(Z)	47.1	1.4	-	.8	1.9	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	-	-	(S)	(S)	(S)	(S)	129.7	3.9	(D)	2.8	6.8	(X)
38	INSTRUMENTS, RELATED PRODS . . .	-	-	.5	.8	(Z)	.2	110.1	3.0	-	1.4	4.2	9
382	MEASURING, CONTROLLING DEVICES . .	-	-	(D)	(D)	-	.1	32.2	.9	-	.3	1.0	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	-	-	(D)	(D)	-	(D)	25.5	.9	-	.2	.9	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F	H	J
		A	B	C	D	E	F	G	H	I	J			
	INDIANA--CON.													
39	MISC. MANUFACTURING INDUS.	1.1	4.0	.8	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
393	MUSICAL INSTRUMENTS.	.2	.9	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	.2	.7	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.6	1.9	.4	.7	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	ILLINOIS	672.6	1,935.6	568.0	1,159.6	3,654.8	59.1	6,029.4	86.4	2,782.9	84.8	3	2	1
20	FOOD AND KINDRED PRODUCTS.	88.2	219.2	78.1	141.8	825.3	13.5	1,131.0	16.7	595.3	19.7	3	3	1
201	MEAT PRODUCTS.	5.5	18.1	4.4	9.0	94.3	1.6	57.3	.9	-	-	4	1	(X)
202	DAIRY PRODUCTS	4.0	11.9	3.3	5.9	10.9	.2	23.0	.4	(D)	(D)	1	33	(X)
203	PRESERVED FRUITS AND VEGETABLES.	5.6	16.5	4.7	9.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	34.0	63.1	31.4	45.2	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
205	BAKERY PRODUCTS.	4.4	13.0	3.7	7.6	12.8	.3	57.7	.9	-	-	25	9	(X)
206	SUGAR, CONFECTIONERY PRODUCTS.	4.6	15.3	3.6	7.2	53.1	.9	103.4	1.5	(D)	(D)	1	1	(X)
207	FATS AND OILS.	20.6	52.8	18.6	39.8	295.2	4.9	522.2	7.5	(D)	(D)	1	4	(X)
208	BEVERAGES.	5.9	16.5	5.2	10.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS.	3.7	11.8	3.1	6.8	31.1	.5	56.0	.8	(D)	(D)	80	4	(X)
22	TEXTILE MILL PRODUCTS.	1.4	4.0	1.3	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS.	.7	2.2	.6	1.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.3	5.1	.9	1.9	(S)	(S)	(D)	(Z)	(D)	(Z)	(X)	1	16
232	MEN'S AND BOYS' FURNISHINGS.	.1	.4	.1	.1	-	-	-	-	(D)	(D)	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR.	.3	1.3	.2	.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	.3	(Z)	(Z)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES.	.2	.5	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	2.7	9.0	2.1	4.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.2	1.1	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.4	.1	.2	(D,	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS.	1.4	4.3	1.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	3.9	13.0	3.2	6.3	25.1	.4	43.4	.6	(D)	(D)	60	3	(X)
251	HOUSEHOLD FURNITURE.	1.5	5.4	1.2	2.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE.	.1	.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES.	1.2	3.9	1.0	1.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	.6	2.0	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	25.9	64.7	22.4	37.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
263	PAPERBOARD MILLS	9.7	15.9	9.1	11.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	4.0	14.9	2.8	5.7	27.8	.4	67.1	1.0	(D)	(D)	33	1	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	5.9	20.0	4.7	9.9	40.9	.7	52.2	.8	(D)	(D)	9	6	(X)
266	BUILDING PAPER AND BOARD MILLS	3.9	8.3	3.7	6.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	11.6	47.6	8.3	17.1	174.9	2.8	14.9	.2	(D)	(D)	10	27	(X)
271	NEWSPAPERS	1.3	5.8	.8	1.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
272	PERIODICALS.	.4	1.9	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
273	BOOKS.	.4	1.6	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	7.8	29.1	5.9	12.2	140.3	2.3	(D)	(D)	(D)	(D)	8	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.4	1.9	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.6	2.4	.4	.9	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	95.6	215.7	83.7	134.5	268.4	4.3	921.2	13.3	954.5	26.7	9	13	1
281	INDUSTRIAL INORGANIC CHEMICALS	15.5	40.7	12.4	21.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	16.5	44.5	13.8	26.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
283	DRUGS.	4.9	14.8	3.8	7.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS.	7.4	19.1	6.5	12.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	2.8	8.6	2.3	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	31.3	52.2	28.9	36.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	9.3	17.6	8.9	14.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	7.9	18.2	7.1	11.6	24.0	.4	74.2	1.1	(D)	(D)	22	8	(X)
29	PETROLEUM AND COAL PRODUCTS.	29.8	84.1	21.2	33.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	22.9	69.0	14.7	21.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
295	PAVING AND ROOFING MATERIALS	4.8	10.3	4.6	8.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	2.1	4.8	1.9	3.6	54.1	.8	(D)	(D)	-	-	18	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	18.5	66.5	13.0	25.1	236.1	3.6	210.3	3.1	(D)	(D)	3	7	(X)
301	TIRES AND INNER TUBES.	4.1	12.2	2.9	5.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	.9	3.2	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	12.6	48.1	8.8	16.8	157.4	2.5	81.1	1.2	(D)	(D)	1	17	(X)
31	LEATHER, LEATHER PRODUCTS.	.7	2.6	.6	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING.	.4	1.3	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	53.7	110.2	49.7	81.3	210.1	3.4	51.6	.8	549.1	17.3	8	1	1
322	GLASS, PRESSED OR BLOWN.	18.0	41.0	16.4	29.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
323	PRODUCTS OF PURCHASED GLASS.	.7	2.3	.6	1.0	-	-	-	-	-	-	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	2.5	4.7	2.4	3.8	-	-	(D)	(D)	-	-	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS	1.2	3.0	1.1	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	13.2	23.3	12.9	21.1	70.0	1.2	(D)	(Z)	(D)	(D)	22	1	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	4.3	12.6	3.4	6.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	207.8	658.2	180.8	474.9	424.6	6.8	2,504.4	34.4	(D)	(D)	11	1	(X)
331	BLAST FURNACE, BASIC STEEL PROD.	162.6	509.2	146.1	399.8	214.7	3.4	2,345.8	33.3	(D)	(D)	1	1	(X)
332	IRON AND STEEL FOUNDRIES	15.4	68.5	10.6	31.5	60.6	1.0	(D)	(D)	(D)	(D)	1	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	INDIANA--CON.												
39	MISC. MANUFACTURING INDUS.	-	-	.5	.8	(Z)	.3	92.6	2.6	-	1.0	3.1	14
393	MUSICAL INSTRUMENTS.	-	-	(D)	(D)	(Z)	.1	19.8	.6	-	.2	.7	(X)
394	TOYS AND SPORTING GOODS.	-	-	(D)	(D)	-	(D)	19.0	.5	-	.2	.6	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	(S)	(S)	-	(D)	40.7	1.2	-	.5	1.4	(X)
	ILLINOIS	2,623.8	257.3	320.5	598.5	36.9	36.6	30,650.1	776.0	997.0	642.1	1,594.9	2
20	FOOD AND KINDRED PRODUCTS.	-	-	45.4	83.7	7.1	1.1	2,961.3	77.4	(D)	85.5	186.5	2
201	MEAT PRODUCTS.	-	-	2.5	4.8	1.2	.6	322.9	9.1	(D)	5.7	16.5	3
202	DAIRY PRODUCTS	-	-	(D)	(D)	.4	(D)	203.6	6.0	-	4.5	12.4	(X)
203	PRESERVED FRUITS AND VEGETABLES.	-	-	2.8	5.6	.1	(D)	256.3	6.6	(D)	4.6	12.5	7
204	GRAIN MILL PRODUCTS.	-	-	(S)	(S)	(S)	(S)	756.3	18.0	(D)	32.3	51.5	(X)
205	BAKERY PRODUCTS.	-	-	3.1	6.3	(D)	(D)	200.5	5.4	-	4.2	10.6	9
206	SUGAR, CONFECTIONERY PRODUCTS.	-	-	2.3	4.3	(D)	.4	286.4	8.1	-	5.1	14.2	7
207	FATS AND OILS.	-	-	11.4	23.7	3.2	.3	577.4	13.1	(D)	19.8	43.9	2
208	BEVERAGES.	-	-	3.8	7.1	.6	(D)	205.2	6.2	(D)	5.1	13.2	11
209	MISC. FOODS, KINDRED PRODUCTS.	-	-	2.3	4.9	.8	(D)	152.6	5.0	-	4.2	11.6	7
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	(D)	(D)	46.7	1.6	-	1.3	3.5	(X)
229	MISCELLANEOUS TEXTILE GOODS.	-	-	(D)	(D)	(D)	(D)	27.3	1.0	-	.6	1.7	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(S)	(S)	(D)	(S)	110.7	3.3	-	1.0	3.6	(X)
232	MEN'S AND BOYS' FURNISHINGS.	-	-	(Z)	(Z)	(D)	.1	8.5	.3	-	.2	.7	46
233	WOMEN'S AND MISSES' OUTERWEAR.	-	-	.2	.3	(Z)	(Z)	29.7	.9	-	.2	1.0	33
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(D)	5.6	.2	-	.1	.2	1
238	MISC. APPAREL AND ACCESSORIES.	-	-	.1	.1	-	(D)	10.9	.3	-	.2	.5	2
24	LUMBER AND WOOD PRODUCTS	-	-	1.1	2.2	.4	.4	166.4	4.3	-	2.8	7.1	17
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	(D)	(D)	18.8	.6	-	.1	.7	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	(D)	(D)	(D)	(Z)	7.3	.2	-	.1	.4	(X)
249	MISCELLANEOUS WOOD PRODUCTS.	-	-	.4	.9	(D)	(D)	81.1	1.8	-	1.4	3.9	22
25	FURNITURE AND FIXTURES	-	-	2.3	4.5	(D)	.6	196.2	6.7	(D)	3.2	9.6	7
251	HOUSEHOLD FURNITURE.	-	-	.7	1.3	(D)	(S)	80.0	3.0	(D)	1.4	4.6	8
253	PUBLIC BLDG., RELATED FURNITURE.	-	-	(D)	(D)	-	(D)	6.7	.3	-	.1	.3	(X)
254	PARTITIONS AND FIXTURES.	-	-	(S)	(S)	(D)	(S)	55.5	2.0	-	.8	2.1	(X)
259	MISC. FURNITURE AND FIXTURES	-	-	(D)	(D)	-	.1	27.0	.9	-	.4	1.3	(X)
26	PAPER AND ALLIED PRODUCTS.	-	-	(S)	(S)	(S)	(S)	1,024.0	27.4	123.4	26.0	58.2	(X)
263	PAPERBOARD MILLS	-	-	2.4	4.2	-	(D)	166.9	4.0	113.7	6.5	9.7	33
264	MISC. CONVERTED PAPER PRODUCTS	-	-	2.5	4.9	(D)	(D)	350.6	9.2	(D)	4.3	13.8	15
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	3.4	7.4	.2	.9	335.7	10.0	(D)	6.0	17.7	4
266	BUILDING PAPER AND BOARD MILLS	-	-	(D)	(D)	(D)	(D)	80.3	2.0	(D)	6.9	12.1	(X)
27	PRINTING AND PUBLISHING.	-	-	5.2	10.5	(D)	3.3	963.5	30.6	(D)	11.5	42.0	3
271	NEWSPAPERS	-	-	.6	1.2	(D)	.1	141.2	4.2	(D)	1.0	4.6	12
272	PERIODICALS.	-	-	.1	.2	-	(D)	34.9	1.4	-	.6	2.4	7
273	BOOKS.	-	-	.2	.4	-	.1	31.9	1.0	-	.3	1.4	22
275	COMMERCIAL PRINTING.	-	-	3.8	7.8	(D)	2.0	556.3	16.8	(D)	7.8	25.6	4
276	MANIFOLD BUSINESS FORMS.	-	-	(D)	(D)	-	.2	50.6	1.4	-	.4	1.4	(X)
278	BLANKBOOKS AND BOOKBINDING	-	-	.1	.2	(Z)	(D)	40.5	1.5	-	.6	2.4	1
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	44.8	80.9	5.6	(D)	3,472.8	81.2	(S)	94.4	173.9	8
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	6.9	12.7	(D)	.9	912.0	19.7	-	15.1	33.2	5
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(S)	(S)	(D)	(S)	803.9	18.3	(D)	15.0	32.6	(X)
283	DRUGS.	-	-	(S)	(S)	(D)	(S)	307.7	7.4	-	4.6	12.0	(X)
284	SOAPS, CLEANERS, TOILET GOODS.	-	-	4.6	8.6	(D)	.4	247.7	6.6	(D)	7.1	16.3	2
285	PAINTS AND ALLIED PRODUCTS	-	-	1.3	2.5	(D)	(D)	131.7	4.1	-	2.5	7.2	11
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	8.8	16.4	(D)	1.0	713.3	15.4	(D)	29.2	41.4	2
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(Z)	(S)	129.8	3.1	-	12.1	14.5	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	3.6	6.8	-	(D)	226.6	6.7	(D)	8.8	16.8	4
29	PETROLEUM AND COAL PRODUCTS.	-	-	(D)	(D)	(D)	(D)	2,527.9	50.9	(D)	25.6	67.3	(X)
291	PETROLEUM REFINING	-	-	(D)	(D)	(D)	(D)	2,408.3	47.6	(D)	18.6	54.5	(X)
295	PAVING AND ROOFING MATERIALS	-	-	2.6	4.8	(D)	2.1	75.4	2.2	-	5.2	9.1	4
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	1.1	1.8	(Z)	(D)	44.2	1.2	-	1.8	3.7	3
30	RUBBER, MISC. PLASTICS PROD.	-	-	8.2	15.2	(D)	2.1	1,595.1	41.3	(D)	14.7	49.8	8
301	TIRES AND INNER TUBES.	-	-	1.8	3.3	-	(Z)	353.7	6.6	-	3.4	9.2	1
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.3	.6	(D)	.5	45.3	1.7	(D)	.8	2.5	33
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	5.8	10.8	(D)	1.6	1,115.8	31.3	(D)	9.6	35.4	11
31	LEATHER, LEATHER PRODUCTS.	-	-	.3	.7	-	(D)	32.1	1.3	-	.7	2.4	7
311	LEATHER TANNING AND FINISHING.	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.4	1.0	(X)
32	STONE, CLAY, GLASS PRODUCTS.	(D)	(D)	28.8	51.9	(D)	3.5	1,164.0	28.9	(D)	54.7	92.5	3
322	GLASS, PRESSED OR BLOWN.	-	-	(S)	(S)	(D)	(S)	470.6	11.2	(S)	20.3	34.2	(X)
323	PRODUCTS OF PURCHASED GLASS.	-	-	.4	.8	(Z)	.2	41.6	1.3	-	4.4	6.7	12
325	STRUCTURAL CLAY PRODUCTS	-	-	1.6	2.6	(Z)	(D)	24.9	.8	-	2.3	3.9	38
326	POTTERY AND RELATED PRODUCTS	-	-	.8	1.4	(D)	(D)	31.2	.9	-	1.1	2.2	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	2.0	4.2	3.0	(D)	77.2	2.2	(D)	12.4	19.9	10
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	(S)	(S)	(D)	(S)	240.8	6.0	(D)	5.4	12.6	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	6.4	6.0	7,905.8	183.4	(D)	194.4	530.9	(X)
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	(D)	(D)	4.1	2.4	4,857.4	109.4	(D)	154.3	420.4	(X)
332	IRON AND STEEL FOUNDRIES	135.7	18.5	5.7	10.2	.6	(D)	1,412.9	37.1	-	13.1	46.4	3

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ILLINOIS--CON.													
33	PRIMARY METAL INDUSTRIES--CON.													
334	SECONDARY NONFERROUS METALS. . . .	5.5	11.6	5.1	8.7	52.0	.8	(D)	(D)	-	-	5	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	16.4	44.8	13.1	23.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
336	NONFERROUS FOUNDRIES	3.6	10.9	3.1	5.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
339	MISC. PRIMARY METAL PRODUCTS . . .	2.5	7.0	2.1	4.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	41.7	133.2	34.0	67.9	442.1	7.3	259.6	3.9	-	-	8	3	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	3.5	11.1	2.9	6.1	29.2	.5	7.7	.1	-	-	1	1	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	3.0	10.2	2.3	4.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	3.6	13.0	2.7	5.1	37.9	.7	(D)	(D)	-	-	15	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	4.3	14.7	3.4	6.6	17.7	.3	(D)	(D)	-	-	1	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	13.6	42.4	11.3	24.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
347	METAL SERVICES, NEC.	5.7	15.8	5.0	9.0	6.8	.1	(D)	(D)	-	-	45	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	5.8	19.4	4.7	9.0	15.6	.3	(D)	(D)	-	-	9	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	46.5	151.3	35.5	63.3	321.3	5.1	209.3	3.2	249.8	7.4	3	4	1
351	ENGINES AND TURBINES	5.1	17.0	3.6	6.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
352	FARM AND GARDEN MACHINERY.	9.1	23.2	8.0	14.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	15.3	48.1	11.6	18.7	101.0	1.6	74.5	1.0	148.7	4.2	2	4	1
354	METALWORKING MACHINERY	4.8	17.1	3.1	5.7	26.9	.4	17.8	.3	-	-	15	34	(X)
355	SPECIAL INDUSTRY MACHINERY	1.6	6.3	1.3	2.6	13.7	.2	19.6	.3	(D)	(D)	28	6	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	5.2	18.6	3.9	7.5	46.0	.8	12.4	.2	(D)	(D)	1	4	(X)
357	OFFICE AND COMPUTING MACHINES. . .	1.2	4.4	.9	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	2.2	7.8	1.7	3.4	10.0	.2	(D)	(D)	(D)	(D)	40	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.9	8.7	1.4	2.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	22.9	77.1	17.6	33.5	130.9	2.1	119.2	1.8	22.8	.8	11	2	1
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	1.3	5.0	.9	1.9	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	1.1	4.5	.8	1.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	5.5	16.4	4.6	8.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	2.5	10.3	1.7	3.2	17.4	.3	7.5	.1	-	-	27	1	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	1.8	6.8	1.3	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	6.6	17.8	5.7	10.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	2.8	11.5	1.8	3.6	22.3	.4	10.5	.2	(D)	(D)	55	1	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	1.3	4.8	.9	1.7	8.8	.1	(D)	(D)	-	-	39	(X)	(X)
37	TRANSPORTATION EQUIPMENT	12.2	42.8	9.4	21.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	7.0	25.2	5.4	12.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	.7	3.0	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
374	RAILROAD EQUIPMENT	3.6	11.2	2.9	6.1	156.8	2.5	(D)	(D)	(D)	(D)	4	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	4.7	17.5	3.4	6.5	56.0	.9	22.0	.3	-	-	10	1	(X)
381	ENGINEERING, SCIENTIFIC INSTRU . .	.3	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	1.7	7.0	1.2	2.2	5.6	.1	(D)	(D)	-	-	1	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	1.2	3.8	.9	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
385	OPHTHALMIC GOODS	.1	.3	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	1.0	3.6	.7	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	3.5	13.3	2.6	5.4	52.3	.9	39.7	.6	-	-	16	25	(X)
393	MUSICAL INSTRUMENTS.	.2	1.1	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	1.2	4.6	.9	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.3	1.0	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	1.6	6.0	1.2	2.5	27.5	.5	8.7	.1	-	-	30	24	(X)
	MICHIGAN	615.2	1,836.0	516.6	1,002.9	1,990.9	31.7	5,828.2	79.8	4,554.3	148.1	4	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	25.9	75.1	22.3	43.6	186.3	2.9	596.5	8.3	89.6	3.7	9	5	1
201	MEAT PRODUCTS.	2.5	8.0	2.0	3.8	13.9	.2	(D)	(D)	-	-	3	(X)	(X)
202	DAIRY PRODUCTS	3.5	11.2	2.8	5.6	35.9	.6	68.9	1.0	-	-	41	22	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	3.6	12.3	3.0	6.1	(D)	(D)	35.4	.5	-	-	(X)	45	(X)
204	GRAIN MILL PRODUCTS.	4.6	13.4	3.9	7.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
205	BAKERY PRODUCTS.	2.3	6.7	2.0	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES.	2.8	8.7	2.5	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.6	2.4	.5	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS. . . .	.5	2.1	.4	.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	2.1	8.6	1.6	3.1	15.4	.3	(D)	(D)	(D)	(D)	9	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	(Z)	.2	(Z)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	2.0	7.9	1.5	2.9	13.8	.2	(D)	(D)	(D)	(D)	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	6.0	17.2	5.1	9.4	110.4	2.0	-	-	(D)	(D)	34	(X)	(X)
241	LOGGING CAMPS, LOG CONTRACTORS . .	.4	.9	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.8	4.0	.6	1.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.5	1.7	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
244	WOOD CONTAINERS.	.4	1.1	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES. .	.2	.6	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	3.7	8.8	3.3	5.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	3.5	12.6	2.8	5.2	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
251	HOUSEHOLD FURNITURE.	.9	3.0	.7	1.3	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
252	OFFICE FURNITURE	1.2	4.5	.9	1.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE. .	.7	2.2	.6	1.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES.	.5	2.0	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES . . .	.2	.9	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ILLINOIS--CON.												
33	PRIMARY METAL INDUSTRIES--CON.												
334	SECONDARY NONFERROUS METALS. . . .	(D)	(D)	3.1	5.0	(D)	1.0	109.9	2.9	-	4.1	8.3	3
335	NONFERROUS ROLLING AND DRAWING . .	-	-	(D)	(D)	.4	.1	962.6	21.2	(D)	15.1	34.1	(X)
336	NONFERROUS FOUNDRIES	-	-	2.3	4.4	(Z)	(D)	143.9	5.1	-	3.1	8.5	17
339	MISC. PRIMARY METAL PRODUCTS . . .	-	-	1.8	3.1	(D)	(D)	111.5	2.9	-	2.5	6.1	32
34	FABRICATED METAL PRODUCTS. . . .	-	-	26.7	52.0	(D)	(D)	2,262.5	65.3	(D)	41.7	114.5	4
341	METAL CANS, SHIPPING CONTAINERS. .	-	-	2.4	5.2	(Z)	.3	180.5	5.1	(S)	3.4	9.5	1
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	(S)	(S)	(S)	(S)	195.3	5.6	-	3.0	8.6	(X)
344	FABRICATED STRUC. METAL PRODS. . .	-	-	1.9	3.2	.6	(D)	272.4	7.9	(S)	4.1	13.0	11
345	SCREW MACHINE PROD., BOLTS, ETC. .	-	-	2.9	5.7	-	(D)	277.5	8.1	-	4.3	12.6	5
346	METAL FORGINGS AND STAMPINGS . . .	-	-	(S)	(S)	(S)	(D)	673.6	18.2	-	13.3	33.0	(X)
347	METAL SERVICES, NEC.	-	-	4.3	7.8	(D)	.9	211.3	6.8	-	4.9	12.7	14
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	3.2	6.4	.1	(D)	336.4	10.4	-	6.6	19.3	6
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	20.7	38.3	(D)	5.5	3,227.2	88.0	(D)	42.5	124.3	2
351	ENGINES AND TURBINES	-	-	2.3	4.4	(D)	(Z)	427.1	10.6	-	4.8	14.3	1
352	FARM AND GARDEN MACHINERY. . . .	(D)	(D)	4.5	8.0	1.9	.5	322.7	8.8	(D)	8.1	17.7	1
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	6.1	11.2	.3	.4	1,100.5	29.4	(D)	14.3	39.4	2
354	METALWORKING MACHINERY	-	-	2.0	3.7	.1	1.2	502.8	11.4	(D)	4.1	15.3	8
355	SPECIAL INDUSTRY MACHINERY	-	-	.8	1.6	(D)	.4	103.8	3.7	-	2.0	6.7	10
356	GENERAL INDUSTRIAL MACHINERY . . .	(D)	(D)	2.6	4.9	(D)	1.1	374.5	11.1	(D)	4.4	14.2	6
357	OFFICE AND COMPUTING MACHINES. . .	-	-	.6	1.3	-	.3	90.4	2.7	-	.9	3.2	4
358	REFRIGERATION AND SERVICE MACH . .	-	-	.9	1.8	.4	.7	140.2	4.4	(D)	2.0	6.2	6
359	MISC. MACHINERY, EXC. ELEC	(D)	(D)	.7	1.4	(D)	.9	165.2	5.9	-	1.9	7.3	18
36	ELECTRIC, ELECTRONIC EQUIP . . .	(D)	(D)	13.9	26.3	(D)	1.1	1,553.6	43.5	(D)	22.6	66.3	4
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	-	-	(S)	(S)	-	(D)	109.4	3.1	-	1.1	4.3	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	(S)	(S)	(D)	(S)	98.8	3.1	-	1.1	3.9	(X)
363	HOUSEHOLD APPLIANCES	(D)	(D)	3.8	7.0	(D)	(D)	269.2	7.5	(D)	5.8	14.8	2
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	1.1	2.0	(D)	(D)	245.0	7.0	(D)	2.7	9.6	3
365	RADIO, TV RECEIVING EQUIPMENT. . .	-	-	.9	1.5	(D)	.4	157.0	4.4	-	1.7	5.7	4
366	COMMUNICATION EQUIPMENT.	-	-	4.7	9.0	(D)	(D)	289.6	7.4	(D)	6.3	14.2	1
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	1.8	3.4	-	(D)	285.0	7.9	-	2.7	10.0	21
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	-	-	(D)	(D)	-	.5	99.6	3.1	-	1.1	3.8	(X)
37	TRANSPORTATION EQUIPMENT	(D)	(D)	4.5	9.4	.5	.9	820.2	21.7	(D)	11.0	34.1	2
371	MOTOR VEHICLES AND EQUIPMENT . . .	(D)	(D)	3.3	6.8	.4	(D)	475.9	12.5	(D)	6.4	19.7	2
372	AIRCRAFT AND PARTS	-	-	.2	.4	-	(D)	97.6	2.3	-	.7	2.6	9
374	RAILROAD EQUIPMENT	-	-	.6	1.4	(Z)	(D)	191.5	5.2	(D)	3.5	9.7	9
38	INSTRUMENTS, RELATED PRODS . . .	-	-	2.2	4.0	(D)	(D)	366.3	11.0	-	4.9	16.8	3
381	ENGINEERING, SCIENTIFIC INSTRU . .	-	-	(D)	(D)	(Z)	(D)	23.9	.7	-	.2	.9	(X)
382	MEASURING, CONTROLLING DEVICES . .	-	-	.8	1.5	(Z)	(D)	160.7	4.7	-	1.9	6.7	2
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	-	-	.7	1.2	-	(D)	72.1	2.3	-	1.2	3.8	4
385	OPHTHALMIC GOODS	-	-	(D)	(D)	-	(D)	6.6	.2	-	.1	.3	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	-	-	.4	.9	(D)	.2	67.1	2.1	-	1.2	3.8	9
39	MISC. MANUFACTURING INDUS. . . .	-	-	1.7	3.1	.5	.2	246.0	8.0	(D)	3.3	11.4	10
393	MUSICAL INSTRUMENTS.	-	-	(Z)	(Z)	(Z)	(D)	17.5	.7	-	.3	1.1	1
394	TOYS AND SPORTING GOODS.	-	-	.6	1.1	.3	(D)	91.7	2.8	-	1.3	4.1	15
395	PENS, OFFICE AND ART GOODS	-	-	(S)	(S)	(D)	(S)	(D)	(D)	(D)	.2	.9	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	.8	1.5	(D)	(D)	105.5	3.5	(D)	1.2	4.5	18
	MICHIGAN	1,939.5	193.5	239.8	448.8	55.9	45.1	28,895.7	833.1	2,574.6	622.7	1,686.9	1
20	FOOD AND KINDRED PRODUCTS. . . .	7.2	.8	11.6	22.0	3.0	2.9	1,046.2	31.5	43.4	25.8	67.6	6
201	MEAT PRODUCTS.	-	-	1.0	2.0	(D)	1.3	128.9	4.2	(S)	3.4	10.1	3
202	DAIRY PRODUCTS	-	-	1.8	3.5	(D)	(D)	206.9	5.6	-	2.9	8.5	11
203	PRESERVED FRUITS AND VEGETABLES. .	(D)	(Z)	2.5	4.9	.2	(D)	179.1	6.1	-	3.5	9.2	15
204	GRAIN MILL PRODUCTS.	-	-	1.2	2.3	(D)	(D)	200.3	5.6	(D)	4.6	12.2	5
205	BAKERY PRODUCTS.	-	-	1.2	2.4	(D)	1.0	90.4	2.8	-	2.5	6.6	7
208	BEVERAGES.	-	-	.8	1.6	(D)	.3	116.3	3.7	-	2.4	6.8	7
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	(D)	49.3	1.6	-	1.0	3.0	(X)
229	MISCELLANEOUS TEXTILE GOODS. . . .	-	-	.3	.5	-	(D)	44.5	1.4	-	.8	2.4	1
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	1.0	2.0	(D)	(D)	161.3	5.6	-	1.9	6.7	9
232	MEN'S AND BOYS' FURNISHINGS. . . .	-	-	(D)	(D)	-	-	(D)	(D)	-	(Z)	.2	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	-	-	.9	1.7	(D)	(D)	145.9	5.0	-	1.6	5.9	7
24	LUMBER AND WOOD PRODUCTS	-	-	1.6	2.9	.6	(D)	265.6	7.8	(D)	6.1	15.7	26
241	LOGGING CAMPS, LOG CONTRACTORS . .	-	-	-	-	(Z)	(D)	(S)	(S)	-	.6	1.4	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	(S)	(S)	76.4	2.3	(S)	1.5	4.1	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	.1	.2	(D)	(D)	41.3	1.1	-	.3	1.1	23
244	WOOD CONTAINERS.	-	-	.5	.9	-	(D)	16.4	.6	-	(Z)	.4	80
245	WOOD BUILDINGS AND MOBILE HOMES. .	-	-	(D)	(D)	-	(D)	8.6	.3	(D)	.2	.6	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	.8	1.5	(D)	.6	121.0	3.5	(D)	3.5	8.2	6
25	FURNITURE AND FIXTURES	-	-	2.3	4.3	(Z)	(D)	220.5	7.4	-	3.8	11.2	9
251	HOUSEHOLD FURNITURE.	-	-	.4	.7	-	(D)	46.9	1.8	-	.8	2.5	8
252	OFFICE FURNITURE	-	-	.8	1.4	(Z)	(D)	94.8	2.9	-	1.2	3.3	5
253	PUBLIC BLDG., RELATED FURNITURE. .	-	-	.7	1.2	-	(D)	32.8	1.2	-	.8	1.9	28
254	PARTITIONS AND FIXTURES.	-	-	.4	.8	-	(D)	30.1	1.1	-	.7	2.2	19
259	MISC. FURNITURE AND FIXTURES . . .	-	-	.1	.2	-	(D)	16.0	.5	-	.5	1.2	5

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MICHIGAN--CON.													
26	PAPER AND ALLIED PRODUCTS. . . .	57.9	128.9	53.5	93.2	127.9	1.9	1,702.3	24.1	619.0	20.4	8	1	5
262	PAPERMILLS, EXC. BUILDING PAPER. .	32.2	69.9	30.0	52.5	75.3	1.0	(D)	(D)	308.2	10.0	11	(X)	7
263	PAPERBOARD MILLS	20.8	43.2	19.5	32.7	(D)	(D)	728.8	10.3	(D)	(D)	(X)	1	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	1.9	6.8	1.5	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	3.0	9.1	2.6	5.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	3.3	13.6	2.2	4.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	1.0	4.2	.7	1.4	(D)	(Z)	-	-	-	-	82	(X)	(X)
273	BOOKS.	.3	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	1.2	5.1	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.2	.7	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.2	.6	.1	.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES.	.2	.7	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	71.4	160.2	63.3	104.2	89.4	1.4	1,274.6	16.1	891.0	30.9	2	1	2
281	INDUSTRIAL INORGANIC CHEMICALS . .	23.0	55.2	19.5	33.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS . .	10.4	20.5	9.9	16.3	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	1.3	4.3	1.0	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	22.8	48.1	20.5	32.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	.2	.6	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	8.0	14.3	7.7	11.7	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	8.3	21.4	7.0	11.9	67.0	1.0	(D)	(D)	-	-	34	(X)	(X)
291	PETROLEUM REFINING	5.9	16.3	4.8	7.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
299	MISC. PETROLEUM, COAL PRODUCTS . .	.5	1.6	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	11.2	45.1	7.9	15.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	7.0	30.8	4.6	8.8	15.4	.2	(D)	(D)	(D)	(D)	4	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.9	2.3	.8	1.3	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.1	.4	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	59.0	108.7	55.1	76.9	260.0	4.4	(D)	(D)	1,133.6	30.0	20	(X)	1
323	PRODUCTS OF PURCHASED GLASS. . . .	1.8	5.3	1.6	3.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
324	CEMENT, HYDRAULIC.	29.6	41.4	27.9	28.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS . . .	.7	2.2	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	9.2	19.4	8.7	15.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	8.4	19.9	7.6	13.3	50.3	1.0	(D)	(D)	(D)	(D)	67	(X)	(X)
33	PRIMARY METAL INDUSTRIES	171.8	552.2	148.1	352.7	(D)	(D)	(D)	(D)	704.2	22.0	(X)	(X)	1
331	BLAST FURNACE, BASIC STEEL PROD. .	112.2	313.8	101.1	221.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	39.7	179.9	30.5	101.1	39.7	.6	(D)	(D)	(D)	(D)	1	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	5.6	19.7	4.3	8.3	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
336	NONFERROUS FOUNDRIES	4.8	14.4	4.0	7.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
339	MISC. PRIMARY METAL PRODUCTS . . .	5.6	14.4	4.8	8.9	(D)	(Z)	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	39.2	140.2	29.9	58.0	281.3	4.5	186.5	2.6	87.1	3.6	7	4	1
342	CUTLERY, HANDTOOLS AND HARDWARE. .	4.0	14.7	2.9	5.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC . .	.4	1.3	.3	.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	2.8	7.2	2.4	4.4	5.3	.1	(D)	(D)	-	-	39	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC. .	2.6	10.9	1.9	3.9	12.9	.3	-	-	-	-	52	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	21.2	77.3	15.8	31.1	220.0	3.4	71.6	1.0	(D)	(D)	4	6	(X)
347	METAL SERVICES, NEC.	4.5	14.9	3.7	7.1	22.6	.4	(D)	(D)	-	-	43	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	3.6	13.4	2.8	5.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	25.9	99.9	19.3	38.3	246.3	4.0	142.0	2.1	-	-	2	3	(X)
351	ENGINES AND TURBINES	3.7	13.6	2.9	5.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
352	FARM AND GARDEN MACHINERY.	1.5	5.7	1.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	3.2	10.8	2.6	5.4	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	7.8	32.4	5.6	10.8	22.6	.3	(D)	(Z)	-	-	10	8	(X)
355	SPECIAL INDUSTRY MACHINERY	1.0	3.9	.8	1.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	3.2	12.4	2.4	4.9	6.9	.1	20.3	.3	-	-	1	1	(X)
357	OFFICE AND COMPUTING MACHINES. . .	.3	1.5	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	2.0	6.9	1.6	3.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
359	MISC. MACHINERY, EXC. ELEC	3.1	12.7	2.2	4.0	11.5	.2	(D)	(D)	-	-	30	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	6.5	23.9	4.8	8.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.2	.5	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	1.3	4.8	1.1	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	2.1	6.2	1.7	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	.3	1.2	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	.2	.5	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	.2	.9	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	2.1	9.1	1.3	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	118.8	412.7	90.0	171.8	194.1	3.1	888.3	12.8	941.2	34.1	1	2	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	116.6	405.3	88.3	168.8	189.4	3.0	868.2	12.5	(D)	(D)	1	2	(X)
372	AIRCRAFT AND PARTS	.4	1.8	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	.2	.8	.2	.4	2.5	(Z)	-	-	-	-	1	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	.8	2.2	.7	1.3	-	-	(D)	(D)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.4	5.4	1.1	1.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
381	ENGINEERING, SCIENTIFIC INSTRU . .	.4	1.5	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	.2	1.3	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.2	.9	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	1.5	5.5	1.1	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	.7	2.8	.5	1.0	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MICHIGAN--CON.												
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	21.9	40.0	5.2	1.6	1,271.4	35.7	1,256.1	55.1	107.2	1
262	PAPERMILLS, EXC. BUILDING PAPER. .	-	-	13.0	23.6	4.9	(D)	651.8	17.4	880.7	30.0	57.1	2
263	PAPERBOARD MILLS	-	-	7.0	12.5	(Z)	(D)	382.9	10.5	(D)	19.9	36.1	1
264	MISC. CONVERTED PAPER PRODUCTS . .	-	-	.7	1.3	(D)	.4	120.8	4.0	(D)	2.3	6.1	9
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	1.2	2.5	(D)	(D)	115.8	3.9	(D)	2.9	7.9	5
27	PRINTING AND PUBLISHING.	-	-	1.5	3.0	(D)	.5	310.9	9.1	(Z)	3.5	14.1	22
271	NEWSPAPERS	-	-	.2	.5	(D)	(D)	88.6	2.8	-	1.2	4.7	3
273	BOOKS.	-	-	(D)	(D)	-	(D)	32.7	.7	-	.2	.7	(X)
275	COMMERCIAL PRINTING.	-	-	(D)	(D)	(D)	(S)	118.7	3.4	(D)	1.3	5.8	(X)
276	MANIFOLD BUSINESS FORMS.	-	-	.1	.1	(Z)	.1	14.6	.5	-	.2	.6	1
278	BLANKBOOKS AND BOOKBINDING . . .	-	-	(D)	(D)	-	(D)	7.5	.4	-	.2	.6	(X)
279	PRINTING TRADE SERVICES.	-	-	.1	.2	-	(Z)	19.5	.5	-	.2	.6	59
28	CHEMICALS, ALLIED PRODUCTS . . .	(D)	(D)	25.8	45.7	9.0	(D)	2,359.0	56.1	678.6	71.3	146.5	2
281	INDUSTRIAL INORGANIC CHEMICALS . .	(D)	(D)	11.1	18.3	(D)	(D)	1,023.4	22.1	(D)	19.3	44.6	1
282	PLASTICS MATERIALS, SYNTHETICS . .	-	-	(S)	(S)	(D)	(S)	171.1	4.2	-	11.9	20.6	(X)
285	PAINTS AND ALLIED PRODUCTS	-	-	.7	1.2	-	(D)	80.8	2.6	-	1.3	3.7	8
286	INDUSTRIAL ORGANIC CHEMICALS . . .	-	-	7.0	12.8	(D)	.6	650.9	15.2	(D)	26.4	51.0	1
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	-	(S)	9.0	.3	-	.1	.6	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	-	-	(D)	(D)	2.8	(D)	94.5	2.6	(D)	7.0	11.6	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	4.4	7.6	-	(D)	361.8	9.6	-	7.2	17.0	2
291	PETROLEUM REFINING	-	-	(D)	(D)	-	(D)	323.2	8.3	-	5.0	12.9	(X)
299	MISC. PETROLEUM, COAL PRODUCTS . .	-	-	.5	.8	-	(D)	13.1	.5	-	.3	.9	7
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	5.1	9.9	.4	3.1	958.6	29.9	(D)	9.8	34.6	7
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	2.8	5.7	.4	2.4	700.2	22.0	(D)	6.2	23.9	11
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	(D)	(D)	-	(D)	33.9	1.0	(S)	.9	2.1	(X)
314	FOOTWEAR, EXCEPT RUBBER.	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.1	.4	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	16.9	31.4	(D)	6.9	1,132.1	31.9	(D)	57.9	96.7	3
323	PRODUCTS OF PURCHASED GLASS. . . .	-	-	1.2	2.3	(D)	.3	71.4	2.3	-	1.6	4.2	2
324	CEMENT, HYDRAULIC.	(D)	(D)	(D)	(D)	(D)	.1	488.1	12.5	(D)	30.3	41.0	(X)
326	POTTERY AND RELATED PRODUCTS . . .	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.7	1.9	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	2.9	6.0	.8	3.0	130.6	4.0	(D)	9.8	17.1	12
329	MISC. NONMETALLIC MINERAL PRODS. .	-	-	5.7	9.9	(D)	(D)	239.2	6.7	-	7.3	15.5	2
33	PRIMARY METAL INDUSTRIES	1,844.9	181.3	64.7	118.0	4.7	12.1	6,938.8	199.6	(D)	179.9	545.9	1
331	BLAST FURNACE, BASIC STEEL PROD. .	(D)	(D)	42.8	76.3	(D)	(D)	3,259.7	92.6	(D)	123.3	342.8	1
332	IRON AND STEEL FOUNDRIES	529.2	69.1	13.3	25.5	(D)	(D)	2,687.0	78.8	-	37.7	152.8	3
335	NONFERROUS ROLLING AND DRAWING . .	-	-	3.4	6.5	.9	.3	372.4	11.4	(D)	5.0	15.8	1
336	NONFERROUS FOUNDRIES	-	-	2.7	5.3	.1	1.9	219.2	6.8	-	4.1	10.6	11
339	MISC. PRIMARY METAL PRODUCTS . . .	-	-	(D)	(D)	(D)	(D)	232.8	5.6	-	5.8	13.9	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	19.7	38.3	4.5	4.5	2,716.3	82.2	(D)	42.6	132.1	5
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	1.4	2.9	(D)	.4	315.5	9.2	-	4.6	13.6	7
343	PLUMBING, HEATING, EXCEPT ELEC . .	-	-	(D)	(D)	(Z)	(D)	29.4	.8	-	.6	1.4	(X)
344	FABRICATED STRUC. METAL PRODS. . .	-	-	1.9	3.4	(D)	(D)	102.0	2.8	(D)	2.4	5.7	11
345	SCREW MACHINE PROD., BOLTS, ETC. .	-	-	1.4	2.8	(Z)	.8	200.9	7.1	(D)	2.5	9.1	7
346	METAL FORGINGS AND STAMPINGS . . .	-	-	10.1	19.7	4.0	(D)	1,590.4	46.1	(S)	22.8	74.6	6
347	METAL SERVICES, NEC.	-	-	2.8	5.4	(D)	(D)	217.7	7.8	(S)	4.6	13.0	21
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	1.9	3.7	(D)	.8	250.9	8.1	-	3.8	12.2	6
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	12.3	23.8	3.2	(D)	1,929.8	61.6	(S)	26.0	89.3	4
351	ENGINES AND TURBINES	-	-	1.9	3.4	(D)	(D)	252.0	7.7	-	3.3	10.8	1
352	FARM AND GARDEN MACHINERY. . . .	-	-	.7	1.5	-	(D)	100.8	3.2	-	1.5	4.9	6
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	(S)	(S)	(S)	(S)	169.6	5.4	(D)	3.4	9.1	(X)
354	METALWORKING MACHINERY	-	-	3.0	6.0	1.6	2.9	661.8	21.6	(S)	7.6	27.6	9
355	SPECIAL INDUSTRY MACHINERY	-	-	.3	.7	-	(D)	65.3	2.3	-	1.0	3.6	8
356	GENERAL INDUSTRIAL MACHINERY . . .	(D)	(D)	1.7	3.6	(D)	.8	227.4	7.6	-	2.8	10.3	6
357	OFFICE AND COMPUTING MACHINES. . .	-	-	(D)	(D)	-	(Z)	42.5	1.1	-	.5	2.1	(X)
358	REFRIGERATION AND SERVICE MACH . .	-	-	1.3	2.3	(D)	(D)	124.1	3.9	-	2.4	7.3	7
359	MISC. MACHINERY, EXC. ELEC	-	-	1.6	2.9	(D)	.5	286.2	8.7	(D)	3.4	13.6	15
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	3.9	7.4	(Z)	.9	497.0	15.0	(S)	6.1	19.6	4
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	-	-	.1	.2	-	(D)	9.3	.3	-	.2	.6	36
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	.8	1.6	(Z)	(D)	76.6	2.7	-	1.2	4.1	11
363	HOUSEHOLD APPLIANCES	-	-	1.6	3.0	(Z)	(D)	110.0	3.1	(Z)	1.9	5.3	3
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	(D)	(D)	-	(D)	21.5	.8	-	.2	.9	(X)
365	RADIO, TV RECEIVING EQUIPMENT. . .	-	-	(D)	(D)	-	(D)	9.0	.3	-	.2	.5	(X)
366	COMMUNICATION EQUIPMENT.	-	-	(D)	(D)	-	(D)	18.4	.7	-	.2	.7	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	-	-	1.0	1.9	(Z)	.1	239.2	6.7	-	2.0	7.2	6
37	TRANSPORTATION EQUIPMENT	85.6	11.3	44.6	88.1	21.2	1.2	8,432.2	240.8	(S)	121.3	368.1	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	85.6	11.3	44.0	87.0	(D)	(D)	8,288.3	236.5	(S)	118.8	360.8	1
372	AIRCRAFT AND PARTS	-	-	(D)	(D)	-	(D)	52.6	1.2	-	.4	1.5	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	-	-	.1	.1	(D)	(D)	16.5	.4	-	.2	.4	18
379	TRANSPORTATION EQUIPMENT, NEC. . .	-	-	.2	.3	(D)	.1	26.9	1.0	-	1.1	2.9	5
38	INSTRUMENTS, RELATED PRODS . . .	-	-	.9	1.6	(D)	(D)	104.6	3.5	-	1.2	4.9	11
381	ENGINEERING, SCIENTIFIC INSTRU . .	-	-	.2	.4	-	(D)	32.2	1.0	-	.4	1.8	1
382	MEASURING, CONTROLLING DEVICES . .	-	-	.2	.4	(D)	(Z)	24.2	.9	-	.2	1.1	23
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	-	-	(D)	(D)	-	(D)	19.8	.6	-	.1	.7	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	.8	1.5	(D)	.3	106.4	3.3	(D)	1.4	4.6	6
394	TOYS AND SPORTING GOODS.	-	-	.4	.8	(D)	(Z)	60.5	1.8	(Z)	.7	2.4	4

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MICHIGAN--CON.													
39	MISC. MANUFACTURING INDUS--CON.													
399	MISCELLANEOUS MANUFACTURES	.5	1.8	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	WISCONSIN	252.7	687.4	212.6	388.5	1,880.0	30.1	2,346.5	32.7	1,796.9	61.6	4	3	1
20	FOOD AND KINDRED PRODUCTS	42.8	112.3	37.7	73.9	423.4	6.8	418.6	6.0	38.2	1.9	7	7	4
201	MEAT PRODUCTS	4.8	14.0	4.1	8.5	51.2	.9	30.2	.4	(D)	(D)	3	30	(X)
202	DAIRY PRODUCTS	16.6	42.4	14.9	28.9	237.8	3.8	156.2	2.3	(D)	(D)	11	17	(X)
203	PRESERVED FRUITS AND VEGETABLES	5.1	13.3	4.5	8.5	61.1	1.0	26.2	.4	(D)	(D)	8	3	(X)
204	GRAIN MILL PRODUCTS	1.2	4.2	.9	1.8	16.7	.3	(D)	(Z)	-	-	14	7	(X)
205	BAKERY PRODUCTS	1.3	3.2	1.1	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	10.8	27.5	9.6	19.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	1.7	4.5	1.5	3.0	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
22	TEXTILE MILL PRODUCTS	1.0	3.5	.8	1.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	.3	1.3	.3	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.4	1.2	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.1	.3	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	4.1	15.6	3.1	6.7	82.8	1.5	39.2	.6	(D)	(D)	37	19	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	.4	1.0	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.7	3.2	.5	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.4	5.2	1.0	1.9	6.7	.1	(D)	(D)	(D)	(D)	53	(X)	(X)
244	WOOD CONTAINERS	.2	1.0	.2	.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.3	1.0	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	1.2	4.3	.9	1.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.3	4.6	1.0	2.1	3.9	.1	(D)	(D)	-	-	44	(X)	(X)
251	HOUSEHOLD FURNITURE	.7	2.3	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE	.1	.5	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	.2	.7	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	96.0	207.2	85.0	134.9	375.2	5.8	1,227.8	16.9	1,619.5	54.8	3	1	1
262	PAPERMILLS, EXC. BUILDING PAPER	73.9	159.1	65.8	107.0	278.6	4.3	1,129.4	15.5	1,243.7	44.1	3	1	1
264	MISC. CONVERTED PAPER PRODUCTS	4.3	13.9	3.1	5.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	1.8	5.9	1.4	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	3.2	12.9	2.2	4.3	12.1	.2	(D)	(D)	(D)	(Z)	33	(X)	62
271	NEWSPAPERS	.4	2.0	.3	.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	95
273	BOOKS	.7	2.6	.5	.9	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
275	COMMERCIAL PRINTING	1.7	6.6	1.2	2.3	7.4	.1	-	-	(D)	(Z)	44	(X)	1
276	MANIFOLD BUSINESS FORMS	.2	.8	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	(Z)	.3	(D)	(D)	(D)	(Z)	-	-	-	-	73	(X)	(X)
279	PRINTING TRADE SERVICES	.1	.4	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	6.6	20.7	5.1	10.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	.5	1.4	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
283	DRUGS	.2	.7	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	1.5	4.1	1.2	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	.5	1.3	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	1.6	4.5	1.6	3.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	5.0	17.9	3.5	6.3	23.2	.4	4.2	.1	(D)	(D)	37	1	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	.4	1.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	3.0	12.4	1.9	3.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	2.6	7.7	2.2	4.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING	2.1	5.6	1.9	3.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.3	1.3	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	8.8	19.0	8.1	13.5	106.2	1.9	(D)	(D)	(D)	(D)	35	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	1.5	4.2	1.3	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	19.2	68.6	14.9	35.5	76.6	1.1	54.4	.8	-	-	3	69	(X)
331	BLAST FURNACE, BASIC STEEL PROD.	2.5	6.6	2.2	4.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
332	IRON AND STEEL FOUNDRIES	11.0	44.9	7.9	21.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	1.3	4.2	1.0	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
336	NONFERROUS FOUNDRIES	2.8	8.6	2.3	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	17.2	51.4	14.2	27.8	170.3	2.7	198.5	2.7	(D)	(D)	10	6	(X)
341	METAL CANS, SHIPPING CONTAINERS	2.3	6.5	1.8	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	.8	2.9	.5	1.1	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	1.6	5.3	1.1	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	2.6	7.6	2.2	4.0	18.8	.3	(D)	(D)	(D)	(D)	26	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	7.6	20.0	6.7	12.8	(S)	(S)	(D)	(D)	(D)	(Z)	(X)	(X)	58
347	METAL SERVICES, NEC.	.7	2.8	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.7	3.0	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	22.5	72.5	17.6	34.3	244.1	4.0	112.3	1.6	(D)	(D)	5	1	(X)
351	ENGINES AND TURBINES	6.5	19.5	5.3	10.8	72.2	1.2	(D)	(D)	(D)	(D)	1	(X)	(X)
352	FARM AND GARDEN MACHINERY	3.6	10.4	2.9	5.5	34.7	.6	(D)	(Z)	-	-	15	1	(X)
353	CONSTRUCTION, RELATED MACHINERY	4.4	14.7	3.4	7.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	1.1	4.5	.7	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	1.7	6.3	1.2	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	2.7	8.5	2.1	3.8	16.7	.3	(D)	(D)	(D)	(Z)	44	(X)	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MICHIGAN--CON.												
39	MISC. MANUFACTURING INDUS--CON.												
399	MISCELLANEOUS MANUFACTURES	-	-	.2	.3	(Z)	(D)	32.1	1.0	-	.4	1.5	21
	WISCONSIN	91.7	12.0	106.9	198.9	30.4	22.8	11,773.3	298.9	1,711.7	252.4	599.1	2
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	26.5	50.6	5.3	(D)	1,489.9	38.5	(S)	41.0	94.1	2
201	MEAT PRODUCTS	-	-	2.4	4.8	.4	(D)	210.7	5.5	(D)	4.6	11.3	6
202	DAIRY PRODUCTS	-	-	10.4	19.2	(D)	1.3	497.1	13.5	(S)	15.1	34.2	3
203	PRESERVED FRUITS AND VEGETABLES	-	-	3.3	5.9	.4	(D)	160.1	4.8	-	4.5	10.8	5
204	GRAIN MILL PRODUCTS	-	-	.5	1.0	(Z)	.4	102.7	2.5	(D)	1.9	4.8	3
205	BAKERY PRODUCTS	-	-	.8	1.5	.4	.1	50.7	1.1	-	1.1	2.7	20
208	BEVERAGES	(D)	(D)	7.6	15.2	.9	(D)	347.0	8.1	(D)	11.3	24.2	3
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	62.0	1.6	(D)	1.4	3.2	(X)
22	TEXTILE MILL PRODUCTS	-	-	.5	1.1	(D)	(D)	69.8	2.0	-	1.1	3.0	5
225	KNITTING MILLS	-	-	.1	.3	(D)	.1	23.5	.8	-	.4	1.1	2
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	(Z)	(D)	22.7	.7	-	.5	1.6	(X)
232	MEN'S AND BOYS' FURNISHINGS	-	-	(D)	(D)	(Z)	(D)	5.8	.2	-	.1	.2	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	1.5	3.0	(D)	.6	306.7	8.9	(D)	4.3	13.6	8
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	(Z)	(D)	1.5	(Z)	-	.3	.8	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	.5	(D)	55.1	1.8	-	.5	2.2	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.8	1.5	(Z)	.1	125.7	3.3	-	1.5	4.4	13
244	WOOD CONTAINERS	-	-	.1	.2	(D)	(D)	(S)	(S)	(D)	.2	.6	42
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.3	-	(D)	20.7	.6	-	.3	.9	9
249	MISCELLANEOUS WOOD PRODUCTS	-	-	.5	.8	(D)	.3	86.3	2.6	-	1.4	4.6	8
25	FURNITURE AND FIXTURES	-	-	.9	1.7	.3	(D)	78.0	2.6	(D)	1.4	4.1	14
251	HOUSEHOLD FURNITURE	-	-	(D)	(D)	(D)	(S)	38.7	1.3	(D)	.9	2.5	(X)
253	PUBLIC BLDG., RELATED FURNITURE	-	-	(D)	(D)	(D)	(D)	9.4	.3	-	.2	.5	(X)
259	MISC. FURNITURE AND FIXTURES	-	-	.2	.3	(Z)	(D)	12.6	.5	-	.2	.6	11
26	PAPER AND ALLIED PRODUCTS	-	-	25.4	44.6	9.1	(D)	3,238.4	72.3	1,633.4	99.4	189.5	1
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	20.1	35.1	7.4	.6	2,379.7	52.0	1,384.9	77.9	147.2	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	1.4	2.5	1.2	(D)	337.6	8.1	(D)	3.8	10.9	1
265	PAPERBOARD CONTAINERS AND BOXES	-	-	1.0	2.0	(D)	.2	103.6	3.0	-	1.8	5.0	5
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(D)	(D)	298.3	8.6	(S)	3.1	10.4	(X)
271	NEWSPAPERS	-	-	(S)	(S)	(D)	(D)	47.9	1.4	-	.5	1.8	(X)
273	BOOKS	-	-	(D)	(D)	(D)	(S)	61.4	1.7	-	.6	2.0	(X)
275	COMMERCIAL PRINTING	-	-	.9	1.7	(D)	(D)	148.5	4.3	(S)	1.7	5.4	16
276	MANIFOLD BUSINESS FORMS	-	-	(S)	(S)	(S)	-	22.0	.6	-	.2	.7	(X)
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	(Z)	(Z)	(D)	(D)	(D)	-	.1	.2	32
279	PRINTING TRADE SERVICES	-	-	.1	.2	-	(D)	(D)	(D)	-	(Z)	.1	18
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	441.9	10.7	(D)	6.0	17.0	(X)
282	PLASTICS MATERIALS, SYNTHETICS	-	-	.3	.6	-	(D)	23.6	.6	-	.6	1.5	1
283	DRUGS	-	-	.1	.1	(Z)	(D)	14.5	.4	-	.2	.6	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.6	1.2	(D)	(D)	85.3	1.9	-	1.4	3.3	4
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	.1	.3	(D)	(D)	18.0	.5	(S)	.4	1.0	24
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	(S)	(S)	(Z)	(S)	25.2	.8	-	1.6	3.9	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.6	3.0	.3	(D)	433.5	11.6	(D)	4.3	14.3	11
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.1	.2	(Z)	(D)	30.4	1.0	-	.2	.7	1
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	1.4	2.7	.3	(D)	311.2	8.8	-	2.6	10.1	12
31	LEATHER, LEATHER PRODUCTS	-	-	1.3	2.7	(D)	.5	102.9	3.1	(D)	2.6	7.0	10
311	LEATHER TANNING AND FINISHING	-	-	(D)	(D)	(D)	.1	57.2	1.7	(D)	2.1	5.0	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	(D)	(D)	-	.1	28.1	.9	-	.3	1.3	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	3.1	4.6	1.1	5.2	198.1	5.6	(D)	7.8	15.7	11
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	(D)	(D)	(D)	(D)	59.5	1.7	-	1.2	2.7	(X)
33	PRIMARY METAL INDUSTRIES	77.5	10.2	9.6	18.9	3.3	1.3	1,276.2	33.0	(D)	18.5	58.3	8
331	BLAST FURNACE, BASIC STEEL PROD.	-	-	1.7	3.4	(D)	(D)	87.5	2.1	(D)	2.3	4.8	2
332	IRON AND STEEL FOUNDRIES	77.5	10.2	3.9	7.7	1.3	2.2	895.1	23.2	-	10.9	39.8	2
335	NONFERROUS ROLLING AND DRAWING	-	-	(D)	(D)	(D)	.1	87.8	2.1	(S)	1.3	3.9	(X)
336	NONFERROUS FOUNDRIES	-	-	(D)	(D)	.2	(D)	148.2	4.2	-	2.5	6.1	(X)
34	FABRICATED METAL PRODUCTS	-	-	10.0	19.1	1.8	(D)	875.4	23.6	(D)	18.0	43.9	4
341	METAL CANS, SHIPPING CONTAINERS	-	-	1.7	3.2	(D)	(Z)	149.9	3.1	-	2.4	5.6	1
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	.4	.8	(D)	(D)	64.8	1.8	-	.8	2.5	4
343	PLUMBING, HEATING, EXCEPT ELEC	-	-	.2	.4	(D)	(D)	121.8	2.9	(D)	1.5	4.6	1
344	FABRICATED STRUC. METAL PRODS.	-	-	1.4	2.5	(D)	.8	125.3	3.6	-	2.0	5.6	8
346	METAL FORGINGS AND STAMPINGS	-	-	(S)	(S)	(S)	(S)	256.2	7.2	(S)	8.6	17.4	(X)
347	METAL SERVICES, NEC	-	-	.5	1.2	(D)	(D)	38.2	1.3	-	.8	2.2	53
349	MISC. FABRICATED METAL PRODUCTS	-	-	.3	.7	-	(D)	57.6	2.0	-	.9	3.0	20
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	10.9	20.1	3.4	2.7	1,417.4	38.1	(S)	21.1	61.8	2
351	ENGINES AND TURBINES	(D)	(D)	2.9	5.2	1.7	(D)	339.9	8.7	(D)	5.9	16.4	1
352	FARM AND GARDEN MACHINERY	(D)	(D)	2.1	3.7	.5	(D)	208.3	4.9	(S)	2.9	7.7	4
353	CONSTRUCTION, RELATED MACHINERY	-	-	2.5	5.0	(D)	.2	279.8	7.7	(D)	4.4	12.0	4
354	METALWORKING MACHINERY	-	-	.5	1.0	(D)	.2	106.3	3.1	-	1.0	3.9	11
355	SPECIAL INDUSTRY MACHINERY	-	-	.5	.9	(D)	(D)	132.2	4.0	-	1.7	5.7	10
356	GENERAL INDUSTRIAL MACHINERY	-	-	1.5	2.6	.4	(D)	181.1	4.7	(S)	2.7	8.0	7

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	WISCONSIN--CON.													
35	MACHINERY, EXCEPT ELECTRIC--CON.													
358	REFRIGERATION AND SERVICE MACH . .	1.6	4.3	1.3	2.1	9.0	.1	(D)	(Z)	(D)	(D)	1	1	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	8.6	29.8	6.2	12.1	113.5	1.8	(D)	(D)	(D)	(D)	2	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.9	2.9	.7	1.2	-	-	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	3.9	13.8	2.9	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	2.0	6.3	1.5	3.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	.4	1.4	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	.2	.9	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	.8	3.1	.5	.9	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	9.6	29.3	7.7	15.0	(D)	(D)	36.0	.5	(D)	(D)	(X)	8	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	9.1	27.2	7.3	14.2	135.9	2.1	(D)	(D)	(D)	(D)	1	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	.3	1.2	.2	.4	3.9	.1	(D)	(D)	-	-	1	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	.1	.4	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.0	3.8	.7	1.3	8.6	.1	-	-	-	-	27	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	.2	.7	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	.1	.3	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	1.5	5.2	1.2	2.2	6.3	.1	(D)	(D)	(D)	(D)	14	(X)	(X)
394	TOYS AND SPORTING GOODS.	.3	1.0	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	1.0	3.4	.9	1.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
	MINNESOTA.	140.2	360.0	117.7	194.2	1,008.5	16.2	3,770.9	48.3	533.9	12.8	17	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	40.4	79.9	36.5	48.7	271.6	4.3	548.5	7.6	407.6	6.8	8	2	1
201	MEAT PRODUCTS.	6.3	14.7	5.5	8.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	9.1	21.2	8.2	13.9	82.7	1.3	201.0	2.7	(D)	(D)	13	5	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	2.7	6.9	2.3	3.3	38.7	.6	17.1	.3	(D)	(Z)	20	1	53
204	GRAIN MILL PRODUCTS.	1.5	6.6	.8	1.5	14.9	.3	8.6	.1	-	-	8	1	(X)
205	BAKERY PRODUCTS.	.6	1.6	.5	.9	(S)	(S)	(D)	(Z)	-	-	(X)	1	(X)
206	SUGAR, CONFECTIONERY PRODUCTS. . .	10.3	7.1	10.2	6.3	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	65	(X)
207	FATS AND OILS.	4.8	11.0	4.2	6.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
208	BEVERAGES.	4.7	9.3	4.4	6.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.6	1.6	.5	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.6	1.8	.5	.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	90
24	LUMBER AND WOOD PRODUCTS	6.3	18.6	5.1	10.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.5	2.1	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
244	WOOD CONTAINERS.	.1	.3	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	4.7	13.0	3.8	7.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.5	1.5	.4	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES.	.2	.6	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	24.4	59.6	21.0	35.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER. .	17.2	43.4	14.6	25.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	.8	2.9	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	2.6	9.9	1.8	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.6	2.1	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
275	COMMERCIAL PRINTING.	1.5	5.7	1.1	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES.	.1	.3	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	5.8	12.7	4.9	7.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS. . .	.3	1.2	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	17.6	39.4	16.2	31.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	2.2	9.6	1.3	2.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	1.9	8.5	1.0	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.4	1.1	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	10.2	27.1	8.9	16.9	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	5.0	13.4	4.3	8.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	6.2	20.2	4.3	7.5	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
332	IRON AND STEEL FOUNDRIES	1.2	5.8	.8	2.4	(Z)	(Z)	-	-	(D)	(Z)	1	(X)	1
336	NONFERROUS FOUNDRIES	1.4	3.0	1.2	1.8	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	7.3	20.8	5.4	9.4	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	.8	2.3	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.5	1.7	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	1.3	4.0	1.0	1.7	27.5	.4	(D)	(D)	-	-	37	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	.6	1.9	.4	.7	(D)	(Z)	(D)	(Z)	-	-	43	1	(X)
348	ORDNANCE AND ACCESSORIES, NEC. . .	1.7	5.2	1.3	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	1.0	1.7	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	8.4	29.5	6.0	10.4	70.7	1.2	49.5	.7	(D)	(D)	6	21	(X)
352	FARM AND GARDEN MACHINERY. . . .	.7	2.2	.6	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	1.8	4.6	1.6	2.7	22.8	.4	(D)	(D)	(D)	(D)	14	(X)	(X)
354	METALWORKING MACHINERY	.5	2.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	.9	2.9	.7	.9	7.3	.1	-	-	-	-	29	(X)	(X)
357	OFFICE AND COMPUTING MACHINES. . .	2.1	9.3	1.1	1.9	15.1	.3	(D)	(D)	-	-	1	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	1.0	3.6	.8	1.5	13.5	.2	(D)	(Z)	-	-	1	28	(X)
359	MISC. MACHINERY, EXC. ELEC	.9	3.4	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	WISCONSIN--CON.												
35	MACHINERY, EXCEPT ELECTRIC--CON.												
358	REFRIGERATION AND SERVICE MACH . .	(D)	(D)	.5	.9	.1	(D)	85.3	2.2	-	1.6	4.1	5
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	3.6	6.9	(D)	1.5	696.8	17.7	(D)	8.5	25.3	2
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	-	-	(D)	(D)	(D)	(D)	56.0	1.7	-	.8	2.6	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	1.8	3.6	(D)	.3	312.2	8.0	(D)	4.3	12.0	2
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	(D)	(D)	135.2	3.3	(D)	1.8	5.5	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.3	1.1	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	.1	.1	(Z)	(Z)	34.0	.7	-	.1	.3	17
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	-	-	.4	.7	(D)	(D)	79.8	2.1	-	1.0	3.4	1
37	TRANSPORTATION EQUIPMENT	-	-	4.2	8.6	(D)	.8	560.6	14.3	(D)	10.7	27.0	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	-	-	4.1	8.3	(D)	(D)	522.9	13.0	(D)	9.9	24.0	1
373	SHIP, BOAT BUILDING, REPAIRING . .	-	-	(D)	(D)	(D)	(D)	21.9	.8	-	.3	1.5	(X)
379	TRANSPORTATION EQUIPMENT, NEC. . .	-	-	.1	.1	(D)	(D)	5.7	.2	-	.1	.4	9
38	INSTRUMENTS, RELATED PRODS . . .	-	-	.5	1.0	(D)	(D)	86.3	2.5	-	1.2	4.0	11
382	MEASURING, CONTROLLING DEVICES . .	-	-	.1	.2	-	(D)	23.9	.5	-	.2	.8	46
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	-	-	(Z)	.1	(D)	-	3.0	.1	-	.1	.3	31
39	MISC. MANUFACTURING INDUS. . . .	-	-	.5	1.0	(D)	.8	96.5	2.9	-	1.6	5.1	5
394	TOYS AND SPORTING GOODS.	-	-	.1	.2	-	(D)	18.5	.6	-	.3	.9	19
399	MISCELLANEOUS MANUFACTURES	-	-	.4	.7	(D)	(D)	57.4	1.7	-	1.2	3.5	3
	MINNESOTA.	23.0	2.8	61.4	91.3	19.6	3.2	6,618.0	165.8	399.1	138.3	304.0	4
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	16.4	22.4	4.2	3.3	1,154.6	31.2	97.8	42.6	73.2	3
201	MEAT PRODUCTS.	-	-	3.4	4.6	.6	.3	216.8	5.9	(D)	6.2	13.1	1
202	DAIRY PRODUCTS	-	-	4.8	6.9	1.7	(D)	276.1	7.3	(S)	10.3	21.5	5
203	PRESERVED FRUITS AND VEGETABLES. .	-	-	1.7	2.1	(D)	(D)	121.8	3.5	-	2.5	5.8	14
204	GRAIN MILL PRODUCTS.	-	-	.5	.8	.1	.2	189.2	5.1	-	1.7	6.0	22
205	BAKERY PRODUCTS.	-	-	(S)	(S)	-	(S)	25.9	.7	-	.7	1.5	(X)
206	SUGAR, CONFECTIONERY PRODUCTS. . .	-	-	(D)	(D)	(Z)	(D)	34.2	.8	(D)	11.3	6.2	(X)
207	FATS AND OILS.	-	-	2.5	3.3	(D)	(D)	172.4	4.4	-	4.8	9.6	1
208	BEVERAGES.	-	-	2.8	3.6	1.4	(D)	91.8	2.6	(D)	4.5	7.6	10
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	(D)	(D)	(Z)	(D)	26.4	.8	-	.7	1.9	(X)
22	TEXTILE MILL PRODUCTS.	-	-	.2	.2	(D)	(D)	29.7	.9	-	.5	1.5	42
24	LUMBER AND WOOD PRODUCTS	-	-	2.3	4.2	4.7	.1	366.6	8.5	-	6.3	16.0	4
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	.1	.2	(D)	(D)	56.1	1.6	-	.5	1.9	30
244	WOOD CONTAINERS.	-	-	(Z)	(Z)	(D)	(S)	5.3	.2	-	.1	.3	84
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	2.0	3.8	(D)	(D)	273.2	5.6	-	4.8	11.2	3
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(Z)	(D)	36.8	.9	-	.4	1.2	(X)
254	PARTITIONS AND FIXTURES.	-	-	(D)	(D)	-	(D)	12.0	.3	-	.1	.4	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	14.5	24.2	.5	.4	1,013.0	23.7	277.6	25.4	50.4	1
262	PAPERMILLS, EXC. BUILDING PAPER. .	-	-	10.8	18.9	(D)	(D)	791.0	17.9	(D)	18.3	36.5	1
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	.3	.6	(D)	(D)	56.9	1.8	-	.8	2.4	1
27	PRINTING AND PUBLISHING.	-	-	.9	1.4	.9	.7	230.8	6.6	-	2.5	8.5	11
271	NEWSPAPERS	-	-	.2	.3	(D)	(D)	43.8	1.3	-	.6	1.8	38
275	COMMERCIAL PRINTING.	-	-	.6	1.0	(D)	(D)	131.1	3.8	-	1.5	5.0	11
279	PRINTING TRADE SERVICES.	-	-	(Z)	(Z)	-	.1	8.5	.2	-	.1	.2	73
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	3.0	3.9	.3	.9	239.4	5.5	-	5.0	9.9	33
284	SOAPS, CLEANERS, TOILET GOODS. . .	-	-	.1	.2	(D)	(D)	23.0	.7	-	.3	1.1	30
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	1.6	2.4	(D)	(D)	406.5	8.3	-	17.0	31.3	19
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	.6	.9	(D)	1.0	258.9	7.3	-	2.0	8.7	15
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	.4	.6	.1	1.0	237.3	6.7	-	1.8	8.1	15
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	.2	.3	-	(D)	17.0	.5	-	.4	.9	3
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	(S)	(S)	(S)	(S)	394.2	10.2	(S)	8.7	18.0	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	(D)	(D)	(S)	(S)	(D)	(S)	190.6	5.4	-	4.3	8.6	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	3.4	4.9	1.1	(D)	552.8	12.7	(D)	6.5	18.6	22
332	IRON AND STEEL FOUNDRIES	(D)	(D)	.4	.6	(D)	(D)	110.8	3.4	-	1.1	4.9	31
336	NONFERROUS FOUNDRIES	-	-	1.2	1.7	(D)	(D)	53.5	1.3	(D)	1.4	2.5	28
34	FABRICATED METAL PRODUCTS. . . .	-	-	(S)	(S)	(S)	(S)	554.0	11.4	(S)	6.5	18.1	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	-	-	.4	.6	(D)	(D)	37.5	1.1	-	.8	2.0	1
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	(D)	(D)	(D)	.3	29.8	1.0	-	.6	1.7	(X)
344	FABRICATED STRUC. METAL PRODS. . .	-	-	.7	1.0	.2	.1	72.0	2.3	-	1.0	3.3	30
346	METAL FORGINGS AND STAMPINGS . . .	-	-	.3	.4	(D)	(D)	38.5	1.2	-	.6	1.7	22
348	ORDNANCE AND ACCESSORIES, NEC. . .	-	-	.5	.8	(D)	(D)	111.2	2.8	(S)	2.3	6.3	1
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	.2	.3	.1	(D)	186.3	1.0	-	.5	1.6	14
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	3.2	4.5	(D)	1.4	698.5	19.2	-	7.7	25.0	6
352	FARM AND GARDEN MACHINERY.	-	-	.3	.4	(D)	.1	39.2	1.2	-	.7	1.9	26
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	.7	.8	.9	(D)	75.3	2.0	-	1.6	3.9	4
354	METALWORKING MACHINERY	-	-	.1	.2	(D)	(D)	48.1	1.3	-	.5	1.7	32
356	GENERAL INDUSTRIAL MACHINERY . . .	-	-	.5	.6	(D)	(D)	62.3	2.0	-	.6	2.3	19
357	OFFICE AND COMPUTING MACHINES. . .	-	-	.7	1.1	(D)	(D)	303.6	7.4	-	2.0	7.6	2
358	REFRIGERATION AND SERVICE MACH . .	(D)	(D)	.5	.8	.2	(D)	65.4	2.1	-	1.2	3.4	19
359	MISC. MACHINERY, EXC. ELEC	-	-	.2	.4	(D)	.5	76.3	2.3	-	.8	3.0	22

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MINNESOTA--CON.													
36	ELECTRIC, ELECTRONIC EQUIP	3.6	14.2	2.4	4.6	32.8	.5	(D)	(D)	-	-	6	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	.6	2.3	.5	1.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.4	1.4	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	.6	2.4	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.6	2.8	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.6	2.1	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.7	4.6	1.4	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	.9	2.5	.8	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	.3	.7	.3	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
38	INSTRUMENTS, RELATED PRODS	1.1	4.8	.6	1.2	20.0	.3	-	-	-	-	1	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.8	2.8	.5	.9	3.8	(Z)	-	-	-	-	27	(X)	(X)
394	TOYS AND SPORTING GOODS.	.5	1.9	.4	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.2	.7	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	IOWA	176.1	401.3	152.7	230.8	2,170.0	32.6	759.9	10.1	1,286.2	35.6	2	3	1
20	FOOD AND KINDRED PRODUCTS.	60.6	129.6	54.1	79.7	1,214.8	17.8	265.9	3.6	587.2	15.7	1	1	1
201	MEAT PRODUCTS.	12.9	31.0	11.1	17.1	183.7	2.8	(D)	(D)	(D)	(D)	1	(X)	(X)
202	DAIRY PRODUCTS	3.9	9.5	3.4	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	34.2	66.0	31.1	42.6	788.9	11.5	70.1	.7	478.2	12.0	1	1	1
205	BAKERY PRODUCTS.	.5	1.3	.4	.7	1.8	(Z)	(D)	(D)	-	-	1	(X)	(X)
207	FATS AND OILS.	6.6	15.4	5.9	9.7	139.8	2.1	(D)	(D)	-	-	6	(X)	(X)
208	BEVERAGES.	1.2	2.1	1.1	1.6	(D)	(Z)	(D)	(D)	(D)	(D)	61	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.8	.1	.2	-	-	(D)	(Z)	-	-	(X)	89	(X)
232	MEN'S AND BOYS' FURNISHINGS.	.1	.3	(Z)	.1	-	-	(D)	(Z)	-	-	(X)	89	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.2	.6	1.0	(D)	(Z)	(D)	(D)	(D)	(Z)	1	(X)	95
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.3	1.1	.2	.4	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.4	.1	.2	-	-	-	-	(D)	(Z)	(X)	(X)	95
25	FURNITURE AND FIXTURES	.4	1.2	.4	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE.	.1	.4	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	3.6	9.0	3.0	4.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.7	2.2	.5	.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	.6	2.2	.5	.9	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING.	1.5	5.3	1.0	1.5	10.8	.2	-	-	-	-	8	(X)	(X)
271	NEWSPAPERS	.4	1.3	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	.8	2.7	.6	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.1	.4	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	30.5	60.2	27.0	39.5	412.1	6.2	(D)	(D)	-	-	1	(X)	(X)
283	DRUGS.	.5	1.2	.4	.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
284	SOAPS, CLEANERS, TOILET GOODS.	.3	1.0	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	20.0	34.8	18.4	26.0	381.2	5.7	-	-	-	-	1	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	8.3	19.9	6.9	10.0	32.4	.5	216.6	3.0	(D)	(D)	5	1	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	4.4	9.2	3.7	4.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS.	.2	.4	.2	.2	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	29.0	45.7	27.3	34.2	139.3	2.3	(D)	(D)	(D)	(D)	14	(X)	(X)
324	CEMENT, HYDRAULIC.	19.5	28.5	18.3	20.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	2.6	3.5	2.5	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	6.6	12.8	6.2	10.2	97.1	1.7	(D)	(D)	-	-	19	(X)	(X)
33	PRIMARY METAL INDUSTRIES	12.5	36.8	9.6	19.5	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	2.6	11.3	2.0	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	4.2	14.3	3.3	6.4	80.6	1.3	(D)	(D)	-	-	1	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE.	.1	.5	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	.8	2.7	.6	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	.1	.5	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	.9	4.1	.6	1.1	10.9	.2	(D)	(D)	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	17.6	53.2	14.3	25.1	81.9	1.3	(D)	(D)	105.6	2.8	11	(X)	1
351	ENGINES AND TURBINES	.5	2.8	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
352	FARM AND GARDEN MACHINERY.	9.6	27.6	8.1	14.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY.	5.8	15.8	4.8	7.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
354	METALWORKING MACHINERY	.2	.9	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.3	1.1	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.5	2.2	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	.4	1.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	3.5	12.7	2.4	3.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	2.1	6.8	1.6	2.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.1	.6	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.3	1.3	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.6	4.7	1.3	2.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	1.4	4.3	1.2	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MINNESOTA--CON.												
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.3	2.2	.6	(D)	340.3	9.6	(S)	3.0	9.9	8
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	.2	.3	(D)	(D)	47.5	1.4	-	.7	2.2	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.2	.3	(D)	.2	23.3	.8	-	.3	1.2	44
366	COMMUNICATION EQUIPMENT	-	-	.2	.3	(Z)	(D)	68.6	1.8	-	.3	.9	8
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	.1	.2	(Z)	.3	83.0	2.4	-	.4	1.7	41
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	.3	.4	(Z)	(D)	48.2	1.4	-	.5	1.5	1
37	TRANSPORTATION EQUIPMENT	-	-	.8	1.1	.3	.4	73.0	2.2	(D)	1.6	4.2	4
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.4	.6	(D)	.1	32.4	1.1	(D)	1.0	2.5	7
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(D)	(D)	(D)	(D)	10.1	.3	-	.2	.6	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.3	.5	(D)	(D)	129.9	3.6	-	1.1	4.3	2
39	MISC. MANUFACTURING INDUS.	-	-	.3	.5	(D)	(D)	71.0	1.9	(D)	.8	2.6	15
394	TOYS AND SPORTING GOODS	-	-	.2	.4	(D)	(D)	49.7	1.2	(D)	.6	1.8	13
399	MISCELLANEOUS MANUFACTURES	-	-	.1	.1	-	(D)	16.2	.5	-	.2	.6	56
	IOWA	117.8	12.4	82.8	112.6	23.1	4.4	6,857.4	170.5	443.3	175.7	330.7	2
20	FOOD AND KINDRED PRODUCTS	-	-	25.0	34.4	4.5	3.8	1,890.2	49.9	185.2	62.0	110.0	1
201	MEAT PRODUCTS	-	-	6.3	8.7	1.2	(D)	538.4	13.9	(D)	12.7	26.0	1
202	DAIRY PRODUCTS	-	-	2.0	2.9	1.0	.7	130.7	3.8	-	3.5	7.5	7
204	GRAIN MILL PRODUCTS	-	-	12.4	16.9	(D)	(D)	914.4	23.4	(D)	36.8	57.7	1
205	BAKERY PRODUCTS	-	-	.4	.6	(D)	(D)	20.8	.6	-	.5	1.3	15
207	FATS AND OILS	-	-	3.5	4.6	(D)	(D)	202.2	5.7	-	6.0	12.4	4
208	BEVERAGES	-	-	.1	.1	(D)	(D)	17.3	.5	-	1.2	2.2	33
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.1	(Z)	.1	31.5	.5	-	.2	.6	27
232	MEN'S AND BOYS' FURNISHINGS	-	-	(Z)	.1	-	-	18.6	.2	-	(Z)	(Z)	46
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.5	(D)	.5	43.2	1.1	-	.8	2.0	15
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.2	.2	-	(D)	28.4	.7	-	.3	1.0	8
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.1	(D)	(D)	4.7	.2	-	.2	.3	15
25	FURNITURE AND FIXTURES	-	-	.3	.4	(D)	.1	22.2	.6	-	.5	1.2	14
251	HOUSEHOLD FURNITURE	-	-	(D)	(D)	(D)	(Z)	5.9	.2	-	.2	.4	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	2.1	3.2	.4	(D)	160.2	4.1	(D)	3.6	7.4	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.4	.6	(Z)	(D)	60.9	1.5	-	1.2	2.7	4
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	(Z)	(D)	38.6	1.3	-	.6	1.8	(X)
27	PRINTING AND PUBLISHING	-	-	.8	1.2	(D)	(D)	154.3	3.9	(S)	1.7	5.3	13
271	NEWSPAPERS	-	-	.2	.2	(Z)	(D)	38.2	1.0	-	.3	1.2	32
275	COMMERCIAL PRINTING	-	-	.5	.8	-	(D)	77.7	1.8	-	.5	1.3	15
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	-	.1	11.3	.3	-	.1	.4	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	20.6	26.1	6.8	(S)	1,025.1	20.7	-	30.9	49.5	1
283	DRUGS	-	-	(D)	(D)	-	(Z)	25.3	.5	-	.5	1.1	(X)
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.2	.3	(Z)	(Z)	(D)	(D)	-	.3	.8	5
287	AGRICULTURAL CHEMICALS	-	-	15.7	20.1	(Z)	.2	445.1	8.7	-	21.1	29.6	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	2.3	3.3	(D)	.1	421.6	9.9	(D)	8.4	17.3	12
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.6	1.0	.1	.1	195.1	4.9	(D)	4.7	9.1	38
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.3	.5	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	11.7	14.0	3.8	(D)	490.9	11.6	(D)	28.8	37.9	13
324	CEMENT, HYDRAULIC	(D)	(D)	5.1	6.1	(D)	-	338.2	7.8	(D)	19.5	24.3	1
325	STRUCTURAL CLAY PRODUCTS	-	-	(S)	(S)	(S)	(D)	21.9	.7	-	3.1	3.2	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	3.3	4.3	3.2	(D)	111.8	2.7	-	5.8	9.5	4
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(S)	(S)	851.4	17.3	-	10.5	25.0	(X)
332	IRON AND STEEL FOUNDRIES	(D)	(D)	(S)	(S)	(D)	(S)	162.3	4.7	-	2.2	8.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	1.4	2.3	.5	(D)	263.4	8.0	-	4.2	11.8	8
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	(D)	(D)	(Z)	(D)	11.2	.3	-	.2	.6	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	.4	.6	(D)	.2	53.8	1.6	-	1.0	3.0	13
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	.1	.1	(Z)	(Z)	8.9	.4	-	.1	.2	30
349	MISC. FABRICATED METAL PRODUCTS	-	-	.4	.7	(Z)	(D)	111.3	3.1	-	1.0	3.8	1
35	MACHINERY, EXCEPT ELECTRIC	44.2	6.0	8.5	12.3	1.9	(D)	973.8	28.1	(D)	17.4	41.9	3
351	ENGINES AND TURBINES	-	-	.1	.2	(Z)	(D)	81.4	2.4	-	.4	1.9	1
352	FARM AND GARDEN MACHINERY	(D)	(D)	4.4	6.6	1.3	.3	436.6	12.7	(D)	9.9	22.5	5
353	CONSTRUCTION, RELATED MACHINERY	(D)	(D)	3.1	4.3	.3	.1	292.0	8.1	(D)	5.5	11.6	2
354	METALWORKING MACHINERY	-	-	.1	.1	-	(D)	19.3	.6	-	.2	.9	24
355	SPECIAL INDUSTRY MACHINERY	-	-	(D)	(D)	(Z)	(D)	23.2	.8	-	.2	.8	(X)
356	GENERAL INDUSTRIAL MACHINERY	-	-	.2	.2	.1	(D)	59.6	1.6	-	.5	1.8	15
358	REFRIGERATION AND SERVICE MACH	-	-	.1	.2	(D)	(D)	29.4	1.0	-	.4	1.4	3
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.5	2.3	.7	(Z)	327.5	8.8	(D)	3.7	11.5	6
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	.5	(D)	161.8	4.2	-	2.2	5.9	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(Z)	(Z)	(Z)	.1	14.6	.5	-	.2	.7	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.3	1.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	.6	.8	1.2	(D)	83.5	2.6	-	1.5	4.4	11
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.5	.7	1.2	(D)	77.9	2.3	-	1.4	4.1	7

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	IOWA--CON.													
38	INSTRUMENTS, RELATED PRODS	.3	1.1	.2	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.8	2.3	.6	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	.5	1.0	.4	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
399	MISCELLANEOUS MANUFACTURES	.2	.6	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
	MISSOURI	197.4	484.7	160.1	255.9	1,775.5	27.7	1,356.4	18.3	1,785.6	49.3	5	2	3
20	FOOD AND KINDRED PRODUCTS.	25.5	64.4	21.7	35.1	131.4	2.2	385.9	5.3	(D)	(D)	3	1	(X)
202	DAIRY PRODUCTS	3.4	9.1	2.9	4.5	(D)	(D)	90.7	1.3	-	-	(X)	3	(X)
204	GRAIN MILL PRODUCTS.	6.8	17.0	5.7	8.8	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	62
205	BAKERY PRODUCTS.	1.5	4.1	1.3	2.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS.	.4	1.1	(D)	(D)	(D)	(Z)	-	-	-	-	1	(X)	(X)
207	FATS AND OILS.	2.2	5.2	2.0	3.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
208	BEVERAGES.	4.4	10.2	3.9	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS.	1.3	3.6	1.1	1.6	8.5	.1	-	-	(D)	(D)	7	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.2	.6	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.4	5.3	1.0	1.7	4.0	.1	4.6	.1	1.5	.1	9	47	43
231	MEN'S AND BOYS' SUITS AND COATS.	.1	.2	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS.	.6	2.1	.3	.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	64	(X)
233	WOMEN'S AND MISSES' OUTERWEAR.	.2	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.2	(Z)	.1	(D)	(Z)	-	-	-	-	63	(X)	(X)
235	HATS, CAPS, AND MILLINERY.	.2	.6	.2	.3	-	-	(D)	(Z)	(D)	(D)	(X)	54	(X)
239	MISC. FABRICATED TEXTILE PRODS	.2	.9	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.4	5.4	1.0	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.6	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
244	WOOD CONTAINERS.	.2	1.1	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	(Z)	.1	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.3	3.8	1.1	1.8	(D)	(D)	(D)	(Z)	-	-	(X)	33	(X)
251	HOUSEHOLD FURNITURE.	.5	1.6	.4	.7	(D)	(D)	(D)	(Z)	-	-	(X)	33	(X)
259	MISC. FURNITURE AND FIXTURES	.3	1.0	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	3.9	11.3	3.0	4.8	11.3	.2	65.2	.9	-	-	25	1	(X)
264	MISC. CONVERTED PAPER PRODUCTS	1.0	4.0	.6	1.1	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	1.6	4.9	1.2	2.0	10.1	.2	26.4	.4	-	-	28	1	(X)
27	PRINTING AND PUBLISHING.	2.5	10.6	1.4	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.4	1.9	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
272	PERIODICALS.	.1	.4	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
273	BOOKS.	.3	1.2	(S)	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
275	COMMERCIAL PRINTING.	1.0	4.0	.6	1.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.1	.3	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.1	.5	.1	.2	-	-	(D)	(Z)	-	-	(X)	80	(X)
279	PRINTING TRADE SERVICES.	.2	.7	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	28.4	62.8	25.0	40.5	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	6.9	14.4	6.3	10.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
283	DRUGS.	2.1	5.7	1.8	3.0	16.8	.3	(D)	(D)	(D)	(D)	1	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS.	1.7	5.2	1.4	2.6	19.0	.3	(D)	(D)	-	-	1	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	4.4	9.6	3.9	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	7.8	16.2	6.9	10.7	37.5	.6	(D)	(D)	(D)	(D)	1	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	4.6	9.4	3.9	5.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	5.7	9.6	5.4	7.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	3.2	12.0	2.0	3.3	34.1	.5	(D)	(D)	(D)	(D)	8	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	2.2	9.3	1.2	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS.	.8	3.6	.5	.9	(D)	(D)	(D)	(D)	1.0	(Z)	(X)	(X)	1
314	FOOTWEAR, EXCEPT RUBBER.	.4	2.3	.2	.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
317	WOMEN'S HANDBAGS AND PURSES.	.1	.3	(Z)	.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	56.9	93.2	53.5	72.3	847.6	13.2	(D)	(D)	1,392.7	38.0	7	(X)	4
324	CEMENT, HYDRAULIC.	28.9	38.3	26.9	26.9	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	6.9	16.8	6.6	14.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	15.5	24.4	14.9	21.1	(S)	(S)	-	-	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	2.4	6.3	2.2	4.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	31.0	91.8	18.7	39.8	276.4	4.1	(D)	(D)	-	-	1	(X)	(X)
332	IRON AND STEEL FOUNDRIES	1.8	7.4	1.3	2.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
333	PRIMARY NONFERROUS METALS.	16.2	46.9	7.8	21.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	1.0	3.2	.7	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
336	NONFERROUS FOUNDRIES	1.0	2.4	.9	1.2	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	10.1	28.4	7.9	12.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS.	1.8	4.9	1.5	2.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE.	.3	1.1	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	2.0	6.8	1.4	2.4	(D)	(D)	(D)	(Z)	-	-	(X)	93	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	.1	.5	.1	.2	(D)	(Z)	-	-	-	-	71	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	.7	2.6	.5	1.0	-	-	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	IOWA--CON.												
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	(Z)	(S)	27.6	.9	-	.3	1.0	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.6	.7	.1	(D)	60.9	1.5	-	.8	2.5	25
394	TOYS AND SPORTING GOODS	-	-	(S)	(S)	(D)	(S)	20.0	.6	-	.4	1.3	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	.1	.2	(D)	(D)	18.7	.4	-	.2	.5	61
	MISSOURI	163.0	16.7	70.3	110.8	17.3	15.9	10,944.4	228.7	313.1	188.8	395.3	2
20	FOOD AND KINDRED PRODUCTS	-	-	13.4	19.8	(D)	5.0	1,124.8	29.3	(D)	24.8	54.2	2
202	DAIRY PRODUCTS	-	-	1.7	2.1	.3	(D)	174.4	4.6	(S)	3.4	7.3	8
204	GRAIN MILL PRODUCTS	-	-	3.4	4.2	(D)	(D)	315.9	8.2	(D)	6.7	14.3	2
205	BAKERY PRODUCTS	-	-	.9	1.6	(D)	.4	76.0	1.9	-	1.4	3.1	5
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	.3	.5	(D)	(D)	(D)	(D)	-	.5	1.5	23
207	FATS AND OILS	-	-	(S)	(S)	(D)	(S)	72.8	1.9	-	2.8	5.8	(X)
208	BEVERAGES	-	-	2.8	5.3	(D)	(D)	139.3	3.6	(D)	4.5	8.8	3
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.7	1.1	(D)	(D)	68.6	1.9	(D)	1.1	2.6	12
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(Z)	.1	7.3	.2	-	.2	.6	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.5	.7	.2	.7	122.9	3.6	-	1.3	4.3	13
231	MEN'S AND BOYS' SUITS AND COATS	-	-	(Z)	(Z)	-	(Z)	5.4	.1	-	(Z)	.1	1
232	MEN'S AND BOYS' FURNISHINGS	-	-	.1	.2	.1	(D)	61.8	1.5	-	.5	1.7	1
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.1	.1	(Z)	.1	19.9	.7	-	.3	1.1	29
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(Z)	4.6	.1	-	(Z)	.1	1
235	HATS, CAPS, AND MILLINERY	-	-	(D)	(D)	(Z)	(D)	9.4	.3	-	.2	.6	(X)
239	MISC. FABRICATED TEXTILE PRODS	-	-	(D)	(D)	(Z)	(D)	15.9	.6	-	.2	.6	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.4	.5	2.2	(D)	124.8	3.0	(S)	1.7	5.5	25
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.2	.6	(X)
244	WOOD CONTAINERS	-	-	(Z)	(Z)	(D)	(D)	32.5	.7	(S)	.1	.6	94
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(D)	(D)	-	(D)	4.0	.1	-	.1	.2	(X)
25	FURNITURE AND FIXTURES	-	-	.7	1.1	(D)	.6	66.6	2.0	-	1.1	3.1	16
251	HOUSEHOLD FURNITURE	-	-	.2	.3	(D)	.3	36.6	1.0	-	.6	1.9	20
259	MISC. FURNITURE AND FIXTURES	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.2	.4	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	1.8	2.6	.1	1.0	251.5	6.5	(D)	3.8	9.6	11
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.3	.5	(Z)	(D)	112.6	2.9	-	.9	3.4	7
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.7	1.1	(Z)	.4	110.8	2.9	-	1.5	4.4	25
27	PRINTING AND PUBLISHING	-	-	1.0	1.6	.3	(D)	315.2	8.2	(D)	2.2	9.0	21
271	NEWSPAPERS	-	-	.1	.1	(D)	(Z)	53.9	1.6	-	.4	1.7	14
272	PERIODICALS	-	-	(S)	(S)	-	(S)	8.5	.3	-	.2	.5	(X)
273	BOOKS	-	-	(S)	(S)	(Z)	(S)	44.6	1.0	-	.1	.6	(X)
275	COMMERCIAL PRINTING	-	-	.5	.8	(D)	(D)	103.9	3.0	(D)	.9	3.9	40
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	(D)	(D)	(D)	(D)	-	.1	.3	29
278	BLANKBOOKS AND BOOKBINDING	-	-	(D)	(D)	-	(D)	15.6	.4	-	.2	.6	(X)
279	PRINTING TRADE SERVICES	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.1	.5	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	12.3	21.6	2.6	2.0	1,012.0	22.3	(D)	28.2	52.0	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	3.9	8.0	(D)	(Z)	183.4	3.5	(D)	7.1	12.6	1
283	DRUGS	-	-	1.3	2.2	(Z)	(D)	100.1	2.6	-	2.1	4.5	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	1.1	2.1	(Z)	(D)	94.1	2.6	(D)	1.6	4.0	4
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	(D)	(D)	(D)	(D)	130.7	3.0	(D)	4.0	7.6	(X)
287	AGRICULTURAL CHEMICALS	-	-	.9	1.5	1.6	.2	255.8	5.4	(D)	7.6	13.4	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	3.0	3.7	(D)	.3	206.1	4.0	-	4.7	7.6	1
29	PETROLEUM AND COAL PRODUCTS	-	-	3.3	3.9	-	(D)	99.5	2.4	(D)	5.0	7.1	2
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.2	1.8	.1	(D)	357.0	8.7	(S)	3.0	10.4	8
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.7	1.1	.1	(D)	293.9	7.2	(S)	2.1	8.1	13
31	LEATHER, LEATHER PRODUCTS	-	-	.3	.5	.1	.1	89.3	2.8	-	.8	3.3	48
314	FOOTWEAR, EXCEPT RUBBER	-	-	.1	.2	.1	.1	61.0	1.9	-	.5	2.2	1
317	WOMEN'S HANDBAGS AND PURSES	-	-	(Z)	(Z)	(Z)	(Z)	8.4	.3	-	.1	.3	63
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	8.5	14.4	2.3	(D)	991.4	20.9	(S)	57.6	83.2	6
324	CEMENT, HYDRAULIC	(D)	(D)	(D)	(D)	(Z)	(S)	601.5	11.4	-	30.0	35.8	(X)
325	STRUCTURAL CLAY PRODUCTS	(D)	(Z)	1.4	1.8	.2	(D)	94.8	2.6	-	6.8	14.7	9
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(S)	(S)	(D)	(S)	160.6	3.4	-	16.1	23.5	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	1.4	2.4	(D)	(D)	68.5	1.9	-	2.0	4.4	33
33	PRIMARY METAL INDUSTRIES	(D)	(D)	9.4	13.9	(D)	.3	3,605.0	52.0	(D)	26.0	65.1	7
332	IRON AND STEEL FOUNDRIES	(D)	(D)	.9	1.8	.1	(D)	143.4	4.6	-	2.1	6.6	21
333	PRIMARY NONFERROUS METALS	(D)	(D)	(D)	(D)	(D)	(D)	2,454.1	25.1	-	11.5	29.1	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	.6	1.0	.2	(D)	74.0	2.0	(D)	.9	2.5	1
336	NONFERROUS FOUNDRIES	-	-	.9	1.3	(D)	(D)	49.0	1.2	-	1.0	1.6	37
34	FABRICATED METAL PRODUCTS	(D)	(D)	5.7	8.8	.3	(D)	632.0	15.6	(S)	10.1	22.9	4
341	METAL CANS, SHIPPING CONTAINERS	-	-	1.4	2.5	.1	(D)	87.5	2.3	-	2.4	3.7	1
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	.1	.2	(Z)	.2	22.0	.7	-	.2	.8	20
344	FABRICATED STRUC. METAL PRODS.	(D)	(D)	.9	1.5	.1	(D)	174.5	4.4	-	1.7	5.4	10
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	(D)	(D)	(Z)	.1	11.2	.4	-	.2	.5	(X)
349	MISC. FABRICATED METAL PRODUCTS	-	-	.3	.7	(D)	(D)	57.7	1.6	-	.6	1.8	12

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MISSOURI--CON.													
35	MACHINERY, EXCEPT ELECTRIC	4.8	17.3	3.3	5.7	12.0	.2	(D)	(D)	-	-	13	(X)	(X)
352	FARM AND GARDEN MACHINERY	.4	1.2	.3	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.4	1.2	.3	.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
354	METALWORKING MACHINERY	.6	2.4	.4	.6	-	-	-	-	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.2	.9	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.5	2.0	.3	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	1.3	4.6	1.0	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.2	4.8	.8	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	4.9	17.6	3.1	5.0	32.8	.5	(D)	(D)	-	-	1	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.5	2.2	.3	.6	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	.6	2.3	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	1.1	3.6	.9	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT	.3	1.5	.2	.3	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
367	ELECTRONIC COMPONENTS, ACCESS	.9	3.3	.5	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.5	2.0	.4	.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	13.9	42.1	10.2	17.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	10.8	29.1	8.4	14.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.6	2.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	.3	1.2	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS	.8	2.7	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS	.2	.7	(S)	(S)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	NORTH DAKOTA	13.5	24.1	12.2	14.6	162.4	2.6	290.5	3.5	(D)	(D)	36	5	(X)
20	FOOD AND KINDRED PRODUCTS	8.7	13.1	8.0	8.4	36.7	.6	(D)	(D)	(D)	(D)	35	(X)	(X)
202	DAIRY PRODUCTS	.6	1.7	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	.5	1.2	.4	.8	-	-	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.1	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	SOUTH DAKOTA	8.7	21.2	7.5	12.5	85.2	1.4	141.3	1.9	-	-	27	4	(X)
20	FOOD AND KINDRED PRODUCTS	3.6	9.4	3.0	5.5	53.0	.9	121.4	1.6	-	-	41	5	(X)
201	MEAT PRODUCTS	1.7	4.0	1.4	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.0	2.9	.9	2.1	49.0	.8	(D)	(D)	-	-	43	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.5	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.1	.4	.1	.1	-	-	(D)	(Z)	-	-	(X)	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
352	FARM AND GARDEN MACHINERY	.1	.3	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	NEBRASKA	57.4	116.2	49.0	63.6	475.5	7.0	139.9	2.0	288.4	6.4	3	3	1
20	FOOD AND KINDRED PRODUCTS	22.6	42.8	20.0	25.9	285.7	4.1	56.0	.8	(D)	(D)	1	4	(X)
201	MEAT PRODUCTS	5.1	13.1	4.0	6.7	159.0	2.4	29.1	.4	-	-	1	7	(X)
202	DAIRY PRODUCTS	1.0	2.4	.8	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS	7.5	13.8	6.6	8.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.3	.6	.3	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	.2	.5	.2	.3	-	-	(D)	(Z)	-	-	(X)	1	(X)
23	APPAREL, OTH. TEXTILE PRODS	.1	.4	.1	.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.3	.7	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.2	.5	.2	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING	.7	2.1	.4	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.2	.6	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	13.5	23.5	11.8	14.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
283	DRUGS	.3	.8	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	12.5	21.2	11.0	13.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD	1.3	3.4	1.0	1.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	9.0	13.5	8.5	10.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS	1.6	3.1	1.5	2.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.0	9.0	2.1	3.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.3	3.8	1.0	1.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS	.6	1.8	(S)	(S)	-	-	(D)	(Z)	-	-	(X)	1	(X)
349	MISC. FABRICATED METAL PRODUCTS	.2	.7	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.3	7.1	1.6	2.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
352	FARM AND GARDEN MACHINERY	1.6	4.3	1.2	2.0	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.3	1.1	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.8	2.7	.5	.7	15.6	.2	-	-	-	-	1	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.6	2.1	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MISSOURI--CON.												
35	MACHINERY, EXCEPT ELECTRIC	-	-	2.2	3.5	.9	(D)	426.4	11.6	-	4.7	15.1	6
352	FARM AND GARDEN MACHINERY	-	-	.2	.3	(D)	(D)	25.8	.7	-	.4	.9	17
353	CONSTRUCTION, RELATED MACHINERY	-	-	.3	.4	(Z)	(D)	21.2	.7	-	.4	1.0	32
354	METALWORKING MACHINERY	-	-	.2	.3	(D)	(D)	70.5	1.7	-	.6	2.2	22
355	SPECIAL INDUSTRY MACHINERY	-	-	.1	.2	(Z)	.1	14.6	.6	-	.2	.7	27
356	GENERAL INDUSTRIAL MACHINERY	-	-	.2	.2	.2	.1	62.0	1.5	-	.4	1.5	23
358	REFRIGERATION AND SERVICE MACH	-	-	.6	1.0	(Z)	(D)	95.0	2.8	-	1.4	4.0	3
359	MISC. MACHINERY, EXC. ELEC	-	-	.6	1.1	.4	(D)	126.2	3.3	-	1.2	4.3	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	2.2	3.4	(D)	.2	526.0	12.6	(D)	4.3	13.1	2
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	.2	.3	(D)	.1	60.5	1.6	-	.3	.9	1
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	(S)	(S)	(S)	(S)	79.2	1.8	-	.6	1.7	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.7	1.2	(D)	(D)	74.4	2.1	-	1.1	3.0	3
366	COMMUNICATION EQUIPMENT	-	-	(D)	(D)	-	.1	46.4	1.2	(D)	.3	1.2	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	.4	.5	(Z)	(D)	118.3	2.6	-	.8	2.3	3
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	.3	.4	(D)	.1	53.9	1.5	-	.5	1.5	1
37	TRANSPORTATION EQUIPMENT	(D)	(D)	6.7	11.5	1.5	.4	1,092.7	24.4	(S)	12.9	32.9	1
371	MOTOR VEHICLES AND EQUIPMENT	(D)	(D)	5.3	9.0	1.4	.3	680.7	15.0	(S)	9.7	22.1	1
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.4	(Z)	(D)	46.6	1.3	-	.6	2.0	14
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	(D)	(D)	(Z)	(D)	25.6	.7	-	.3	1.0	(X)
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	(D)	(D)	53.3	1.4	-	.7	2.1	(X)
394	TOYS AND SPORTING GOODS	-	-	(S)	(S)	(S)	(S)	21.0	.4	-	.3	.9	(X)
	NORTH DAKOTA	(D)	(D)	2.7	3.8	1.0	.3	399.8	9.5	(D)	11.9	19.1	25
20	FOOD AND KINDRED PRODUCTS	-	-	.9	1.5	(D)	(D)	222.9	4.7	(D)	8.2	10.2	10
202	DAIRY PRODUCTS	-	-	.2	.5	-	.2	27.6	.7	-	.5	1.3	23
203	PRESERVED FRUITS AND VEGETABLES	-	-	.2	.3	-	(D)	18.5	.4	-	.5	.9	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.1	(D)	.3	46.1	1.3	-	.5	1.8	25
	SOUTH DAKOTA	(D)	(D)	2.4	3.2	(D)	(D)	355.2	8.7	(Z)	7.5	17.7	6
20	FOOD AND KINDRED PRODUCTS	-	-	1.3	1.7	(D)	(D)	159.3	3.9	-	3.5	8.4	4
201	MEAT PRODUCTS	-	-	.8	1.1	(D)	(D)	89.1	1.8	-	1.7	3.5	4
202	DAIRY PRODUCTS	-	-	.3	.4	.8	(D)	23.9	.7	-	1.1	2.8	11
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	(D)	(D)	23.1	.7	-	.4	1.2	27
27	PRINTING AND PUBLISHING	-	-	(Z)	.1	(Z)	(Z)	9.3	.3	(Z)	.1	.4	62
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.1	.2	(Z)	(D)	27.6	.6	-	.3	1.0	18
352	FARM AND GARDEN MACHINERY	-	-	(Z)	(Z)	(Z)	(D)	7.7	.2	-	.1	.4	1
	NEBRASKA	11.5	1.3	31.0	36.6	4.0	6.5	2,456.5	52.6	(D)	59.4	104.1	6
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	9.9	11.2	1.7	(D)	760.3	16.9	(D)	23.7	40.6	19
201	MEAT PRODUCTS	-	-	2.5	3.1	(D)	(D)	297.0	6.5	(D)	5.4	12.1	7
202	DAIRY PRODUCTS	-	-	(D)	(D)	-	.9	52.9	1.2	-	1.1	2.4	(X)
204	GRAIN MILL PRODUCTS	-	-	4.8	4.8	.6	(D)	256.5	5.9	-	7.6	13.0	42
205	BAKERY PRODUCTS	-	-	.3	.4	-	(D)	12.9	.3	-	.3	.5	37
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	8.3	.2	-	.2	.4	(X)
23	APPAREL, OTH. TEXTILE PRODS	-	-	(Z)	(Z)	(Z)	(Z)	8.0	.2	-	(Z)	.1	26
26	PAPER AND ALLIED PRODUCTS	-	-	.1	.1	-	(D)	15.1	.4	-	.3	.7	1
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.1	.1	-	.1	10.2	.3	-	.2	.4	1
27	PRINTING AND PUBLISHING	-	-	.5	.7	(D)	(D)	77.1	1.6	-	.3	1.4	41
271	NEWSPAPERS	-	-	.2	.2	-	(D)	15.4	.4	-	.1	.3	73
28	CHEMICALS, ALLIED PRODUCTS	-	-	10.4	11.7	(D)	.5	505.8	9.3	-	15.3	21.1	1
283	DRUGS	-	-	.1	.2	-	(D)	19.8	.5	-	.3	.8	1
287	AGRICULTURAL CHEMICALS	-	-	10.0	11.2	(Z)	(D)	449.8	8.1	-	14.2	18.8	1
30	RUBBER, MISC. PLASTICS PROD	-	-	(D)	(D)	(Z)	(D)	82.9	1.9	-	1.2	2.8	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(Z)	(S)	(S)	(S)	(S)	147.9	3.3	-	9.0	11.4	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS	-	-	1.0	1.6	(D)	(D)	17.9	.6	-	1.5	2.3	19
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.4	1.6	(D)	(D)	266.7	5.6	-	2.9	8.0	1
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	95.3	2.3	-	1.1	2.6	(X)
344	FABRICATED STRUC. METAL PRODS	-	-	(S)	(S)	(D)	(S)	43.2	1.0	-	.4	.9	(X)
349	MISC. FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	21.3	.5	-	.2	.7	(X)
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	1.1	1.6	.4	.5	197.6	4.5	-	2.3	6.3	24
352	FARM AND GARDEN MACHINERY	-	-	.6	.8	(D)	.7	94.1	2.3	-	1.6	4.0	8
356	GENERAL INDUSTRIAL MACHINERY	(D)	(D)	(D)	(D)	(Z)	(Z)	41.4	.8	-	.3	1.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.3	.4	(D)	(D)	99.2	2.0	-	.8	2.4	3
38	INSTRUMENTS, RELATED PRODS	-	-	(S)	(S)	(S)	(D)	73.4	1.5	-	.6	2.0	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	NEBRASKA--CON.													
39	MISC. MANUFACTURING INDUS.	.2	.6	.1	.2	(D)	(D)	(D)	(Z)	-	-	(X)	37	(X)
	KANSAS	130.2	267.4	112.3	140.3	280.7	4.2	1,089.0	13.7	125.7	2.8	3	1	3
20	FOOD AND KINDRED PRODUCTS.	13.8	34.0	11.3	15.1	116.3	1.7	162.8	2.1	-	-	3	1	(X)
201	MEAT PRODUCTS.	2.8	7.8	2.2	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.1	2.8	.9	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	3.7	11.6	2.8	3.8	18.7	.3	(D)	(D)	-	-	12	(X)	(X)
205	BAKERY PRODUCTS.	.5	1.5	.4	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS.	1.4	2.8	1.3	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES.	2.6	4.4	2.4	2.8	(D)	(Z)	(D)	(D)	-	-	28	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.3	1.4	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS.	.1	.6	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.5	.4	.6	-	-	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.7	.2	.2	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	2.1	5.3	1.8	2.8	8.5	.1	31.3	.4	-	-	32	1	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	.5	1.7	.4	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	1.0	4.7	.6	.9	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
271	NEWSPAPERS	.2	.8	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
273	BOOKS.	.1	.4	(Z)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	.4	1.3	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.1	.5	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	33.1	62.5	29.0	37.6	53.1	.8	529.8	6.7	(D)	(D)	1	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	9.0	23.7	6.3	8.8	27.6	.4	-	-	-	-	1	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	4.2	8.3	4.1	7.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	33.8	51.3	31.2	34.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	32.9	49.5	30.4	33.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	5.2	15.6	4.0	6.7	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	25.7	41.4	23.5	26.4	41.9	.7	(D)	(D)	(D)	(D)	1	(X)	(X)
324	CEMENT, HYDRAULIC.	13.5	18.0	12.7	12.9	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.4	4.2	2.2	3.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.9	7.5	1.3	2.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	1.1	5.1	.6	1.5	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	1.8	5.2	1.4	2.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
344	FABRICATED STRUC. METAL PRODS.	1.0	2.8	.7	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	3.5	13.1	2.4	3.8	13.7	.2	(D)	(D)	-	-	1	(X)	(X)
352	FARM AND GARDEN MACHINERY.	.9	3.4	.7	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY.	.6	2.0	.4	.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.2	.8	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.7	2.9	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.3	1.1	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.5	6.0	.9	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	5.2	15.2	3.9	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	3.4	9.9	2.5	3.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.2	1.0	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.2	1.0	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.1	.7	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
	DELAWARE	46.5	154.5	38.4	82.6	1,008.4	15.8	3,342.9	45.4	(D)	(D)	12	1	(X)
20	FOOD AND KINDRED PRODUCTS.	2.6	10.3	2.1	4.7	105.6	1.7	171.6	2.2	-	-	14	11	(X)
201	MEAT PRODUCTS.	.4	1.7	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES.	.6	2.3	.4	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	.2	.6	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.7	2.4	.6	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	1.5	5.2	1.2	2.5	17.6	.3	(D)	(D)	-	-	1	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	.2	.9	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.1	.7	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	26.7	82.2	22.9	48.4	568.7	9.0	2,485.1	33.3	(D)	(D)	20	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	5.0	19.0	3.8	8.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	11.0	35.8	9.2	20.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.9	11.6	2.2	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEBRASKA--CON.												
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	(D)	(D)	13.7	.4	-	.2	.5	(X)
	KANSAS	12.4	1.6	89.2	102.2	7.3	8.5	5,234.9	127.1	116.6	130.0	206.1	1
20	FOOD AND KINDRED PRODUCTS.	-	-	7.9	8.6	.6	2.1	709.2	18.9	(D)	12.8	25.4	4
201	MEAT PRODUCTS.	-	-	1.6	1.9	(D)	(D)	169.3	4.6	(D)	2.7	5.9	3
202	DAIRY PRODUCTS	-	-	.7	.9	(D)	.3	54.5	1.5	-	.8	2.2	17
204	GRAIN MILL PRODUCTS.	-	-	1.6	1.7	(D)	(D)	281.8	7.7	-	3.0	8.6	14
205	BAKERY PRODUCTS.	-	-	(S)	(S)	(D)	(S)	32.1	.9	-	.5	1.1	(X)
207	FATS AND OILS.	-	-	(D)	(D)	(D)	(S)	40.8	1.1	-	1.8	2.5	(X)
208	BEVERAGES.	-	-	1.7	1.6	-	(D)	61.5	1.6	-	2.1	2.4	5
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.1	-	.2	38.2	1.1	(Z)	.3	1.0	22
232	MEN'S AND BOYS' FURNISHINGS.	-	-	.1	.1	-	(Z)	20.1	.5	(Z)	.1	.3	27
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.3	(D)	(D)	28.8	.9	-	.4	1.1	26
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	.1	.1	-	(Z)	8.0	.3	-	.1	.3	1
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(Z)	(D)	17.4	.5	(D)	.2	.5	(X)
26	PAPER AND ALLIED PRODUCTS.	-	-	1.5	2.1	(D)	(D)	85.1	2.5	(D)	2.8	5.5	1
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	(D)	(D)	(S)	(S)	35.0	1.1	(S)	.5	1.3	(X)
27	PRINTING AND PUBLISHING.	-	-	.4	.6	(Z)	.3	135.5	3.8	-	1.0	4.1	21
271	NEWSPAPERS	-	-	(Z)	(Z)	(Z)	.1	21.9	.7	-	.2	.8	36
273	BOOKS.	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.1	.3	(X)
275	COMMERCIAL PRINTING.	-	-	(D)	(D)	-	(D)	41.5	.9	-	.4	1.3	(X)
276	MANIFOLD BUSINESS FORMS.	-	-	(D)	(D)	-	(D)	13.2	.4	-	.1	.4	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	1,197.0	24.9	41.6	31.3	44.9	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	5.3	7.2	(D)	(D)	777.7	14.9	(D)	8.7	17.7	1
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	(S)	(S)	-	(S)	44.9	1.3	(D)	3.6	4.3	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	29.0	32.3	(D)	(D)	757.7	16.6	-	37.0	40.0	1
291	PETROLEUM REFINING	-	-	28.6	31.9	-	(D)	735.0	15.9	-	36.0	38.5	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	.5	358.5	8.9	-	4.7	12.0	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	16.8	17.6	1.4	2.2	641.3	15.1	(D)	24.9	31.6	3
324	CEMENT, HYDRAULIC.	-	-	9.1	9.3	(D)	(D)	217.2	5.2	(D)	12.9	13.7	5
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	1.0	1.2	(D)	(D)	42.8	1.2	-	2.4	3.5	5
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.2	1.5	(D)	(D)	172.4	4.9	(S)	1.7	5.6	26
332	IRON AND STEEL FOUNDRIES	(D)	(D)	.6	.7	(D)	(D)	128.7	3.6	(S)	1.3	4.6	20
34	FABRICATED METAL PRODUCTS.	-	-	.9	1.2	.2	(D)	129.7	3.1	(Z)	2.0	4.9	23
344	FABRICATED STRUC. METAL PRODS.	-	-	.4	.6	-	(D)	92.4	1.8	-	.8	2.1	18
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	2.0	2.7	.3	(D)	339.2	9.3	-	3.6	11.2	16
352	FARM AND GARDEN MACHINERY.	(D)	(D)	.4	.6	(Z)	.4	79.2	2.2	-	.8	2.6	19
353	CONSTRUCTION, RELATED MACHINERY.	-	-	.4	.5	(D)	(D)	58.9	1.4	-	.5	1.3	22
355	SPECIAL INDUSTRY MACHINERY	-	-	.1	.1	-	(Z)	24.0	.7	-	.2	.8	35
356	GENERAL INDUSTRIAL MACHINERY	(D)	(D)	.3	.4	(D)	.1	67.2	1.9	-	.6	2.2	1
359	MISC. MACHINERY, EXC. ELEC	-	-	.3	.4	(D)	(D)	22.9	.7	-	.7	2.0	37
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.8	1.0	(Z)	(D)	173.3	4.7	-	1.5	4.3	3
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	.4	393.2	10.2	-	5.5	12.6	(X)
372	AIRCRAFT AND PARTS	-	-	2.3	2.9	(D)	(D)	255.8	6.7	-	3.6	8.2	1
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.1	(D)	(D)	29.4	.8	(D)	.2	.8	22
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	-	(D)	28.6	.8	-	.2	.8	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	(D)	(D)	-	(D)	20.0	.6	-	.2	.6	(X)
	DELAWARE	(Z)	(Z)	6.2	10.4	11.1	(D)	2,383.8	72.0	113.7	46.3	130.1	2
20	FOOD AND KINDRED PRODUCTS.	-	-	.1	.1	.6	.1	146.3	5.6	-	2.4	9.0	21
201	MEAT PRODUCTS.	-	-	(Z)	(Z)	(D)	(D)	22.3	.9	-	.4	2.0	(X)
203	PRESERVED FRUITS AND VEGETABLES.	-	-	(D)	(D)	-	(S)	36.6	1.2	-	.5	1.9	(X)
204	GRAIN MILL PRODUCTS.	-	-	-	-	(S)	(S)	7.9	.3	-	.2	.6	(X)
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	(D)	19.8	.8	(D)	.9	2.8	(X)
26	PAPER AND ALLIED PRODUCTS.	-	-	.1	.2	.5	(D)	76.9	2.7	(D)	1.4	4.5	16
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	(S)	(S)	(Z)	(S)	14.1	.5	-	.2	.8	(X)
27	PRINTING AND PUBLISHING.	-	-	(Z)	(Z)	-	(D)	14.3	.5	-	.1	.6	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.7	5.4	(D)	(D)	1,137.2	33.8	(D)	26.4	65.4	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	(D)	(D)	-	(D)	365.4	10.6	(D)	7.0	24.0	(X)
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(D)	(D)	(D)	(D)	544.5	15.5	(D)	8.9	20.4	(X)
33	PRIMARY METAL INDUSTRIES	(Z)	(Z)	(D)	(D)	(D)	(D)	209.7	6.6	-	2.7	9.7	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	DELAWARE--CON.													
34	FABRICATED METAL PRODUCTS. . . .	.3	1.2	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.2	1.3	.1	.3	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	1.1	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MARYLAND	136.9	400.0	109.1	216.5	2,602.7	41.9	5,958.4	85.7	750.1	17.5	5	2	1
20	FOOD AND KINDRED PRODUCTS. . . .	13.0	42.8	11.0	24.2	241.6	4.1	652.2	9.8	(D)	(D)	7	7	(X)
201	MEAT PRODUCTS.	1.5	5.8	1.2	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.4	6.4	1.0	2.6	53.3	.9	(D)	(D)	-	-	19	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	1.1	3.9	.9	2.2	17.0	.3	(D)	(D)	-	-	43	(X)	(X)
204	GRAIN MILL PRODUCTS.	.9	3.1	.7	1.6	24.5	.4	(D)	(D)	-	-	26	(X)	(X)
208	BEVERAGES.	2.6	8.3	2.3	4.7	82.6	1.4	70.0	1.1	(D)	(D)	2	1	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	1.1	4.4	.9	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.4	1.4	.4	.8	21.2	.3	(D)	(D)	-	-	7	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.9	3.7	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.1	.7	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES. . .	.3	1.2	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.8	4.0	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.2	1.2	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.2	1.1	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.4	.3	.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	79	(X)
251	HOUSEHOLD FURNITURE.	.1	.6	.1	.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	14.4	26.4	13.3	17.7	243.1	3.9	295.0	4.4	(D)	(D)	8	18	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	1.5	6.4	1.1	2.5	(D)	(D)	48.5	.8	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING.	1.8	8.6	1.1	2.2	20.2	.3	9.5	.2	-	-	24	1	(X)
271	NEWSPAPERS	.2	1.1	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
273	BOOKS.	.2	.9	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	1.0	4.6	.6	1.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS.	.1	.8	.1	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	17.7	53.1	14.9	34.5	593.5	9.5	970.0	14.3	-	-	1	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS . .	8.3	23.8	6.9	16.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS . .	3.1	10.0	2.5	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS. . .	1.5	4.9	1.3	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.9	2.4	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	2.5	5.6	2.4	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS . . .	1.7	3.6	1.6	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	3.9	12.0	3.0	4.8	80.1	1.3	73.8	1.1	(D)	(D)	7	3	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	1.3	6.0	.8	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.2	.8	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	(Z)	.2	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	19.1	42.0	17.4	28.7	630.7	10.3	43.2	.7	313.6	7.7	8	8	1
324	CEMENT, HYDRAULIC.	8.8	12.1	8.1	7.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	1.1	3.2	1.0	2.5	(D)	(D)	(D)	(Z)	-	-	(X)	70	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	3.4	10.3	3.1	7.3	295.3	4.9	9.8	.1	-	-	15	34	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	2.6	8.2	2.3	5.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	47.7	143.4	33.8	72.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	3.5	12.4	2.7	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	1.6	5.8	1.3	2.8	10.4	.2	(D)	(D)	-	-	8	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.6	2.5	.4	.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	3.2	12.2	2.2	4.9	22.8	.4	(D)	(D)	-	-	1	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.3	1.5	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	.4	1.5	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.8	13.0	1.7	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	.5	1.1	.4	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	1.6	8.6	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	3.7	13.9	2.8	7.0	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	1.3	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.5	1.9	.4	.8	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
	DISTRICT OF COLUMBIA	1.5	7.7	.9	2.0	15.9	.3	58.0	.9	-	-	26	16	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.3	1.3	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.9	5.1	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	.2	1.2	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	DELAWARE--CON.												
34	FABRICATED METAL PRODUCTS	-	-	(Z)	.1	(D)	(D)	26.0	.7	-	.1	.5	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(D)	(D)	26.4	1.0	-	.3	1.3	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	(Z)	(Z)	(D)	(D)	(D)	(D)	-	.1	.7	1
	MARYLAND	10.1	.9	28.3	56.2	9.9	4.3	8,143.3	183.5	765.7	133.2	356.4	3
20	FOOD AND KINDRED PRODUCTS	-	-	3.5	7.0	(D)	1.5	580.0	18.6	(D)	13.1	38.5	3
201	MEAT PRODUCTS	-	-	.2	.4	.2	.1	95.4	3.0	-	1.6	5.4	20
202	DAIRY PRODUCTS	-	-	.3	.6	(D)	(D)	115.7	3.7	-	1.5	5.9	10
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	.2	(D)	51.9	1.7	-	1.1	3.5	(X)
204	GRAIN MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	56.7	1.5	-	.3	1.0	(X)
208	BEVERAGES	-	-	.3	.7	(D)	(D)	111.1	3.6	-	2.7	8.0	5
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.3	.6	(D)	(D)	72.5	2.7	-	1.1	4.3	4
22	TEXTILE MILL PRODUCTS	-	-	.2	.3	(D)	(D)	14.0	.5	-	.3	1.0	12
23	APPAREL, OTH. TEXTILE PRODS	-	-	.3	.6	(D)	(D)	63.5	2.3	-	.7	3.1	45
232	MEN'S AND BOYS' FURNISHINGS	-	-	(Z)	(Z)	-	.1	10.0	.3	-	.1	.5	32
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	(Z)	(D)	.1	14.5	.5	-	.1	.6	1
238	MISC. APPAREL AND ACCESSORIES	-	-	.1	.1	-	(D)	18.9	.7	-	.2	.8	1
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	60.4	2.3	-	.6	3.2	(X)
242	SAWMILLS AND PLANING MILLS	-	-	-	-	-	(D)	15.7	.7	-	(Z)	.5	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(Z)	(Z)	(D)	(D)	(D)	(D)	-	.2	1.0	1
25	FURNITURE AND FIXTURES	-	-	(Z)	.1	(D)	(D)	25.2	.9	-	.3	1.3	41
251	HOUSEHOLD FURNITURE	-	-	(Z)	(Z)	-	(D)	9.3	.3	-	.2	.6	1
26	PAPER AND ALLIED PRODUCTS	-	-	1.2	2.3	(D)	(D)	325.8	8.7	(D)	13.1	22.0	26
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	(D)	.2	122.7	3.9	-	1.2	5.4	(X)
27	PRINTING AND PUBLISHING	-	-	.4	.7	.4	.7	207.3	6.3	(D)	1.5	7.3	24
271	NEWSPAPERS	-	-	(Z)	(Z)	(D)	(D)	22.0	.8	-	.2	1.1	1
273	BOOKS	-	-	(D)	(D)	(D)	(D)	30.1	.7	(D)	.2	.9	(X)
275	COMMERCIAL PRINTING	-	-	(S)	(S)	(D)	(S)	109.2	3.3	-	.8	3.5	(X)
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	-	(Z)	(D)	(D)	-	.1	.8	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	4.4	9.2	(D)	(D)	823.0	18.7	(D)	19.8	52.8	5
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	(S)	(S)	-	(S)	437.7	7.5	-	8.8	22.0	(X)
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(D)	(D)	(D)	.1	164.6	4.3	(D)	2.5	7.2	(X)
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.4	.9	(D)	(D)	60.7	1.7	-	4.5	12.5	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	(D)	(D)	(D)	.1	20.1	.7	-	.8	2.0	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(D)	1.5	36.4	1.1	-	2.6	5.2	(X)
295	PAVING AND ROOFING MATERIALS	-	-	(D)	(D)	(D)	1.5	25.7	.8	-	1.8	3.1	(X)
30	RUBBER, MISC. PLASTICS PROD	-	-	.3	.6	(Z)	(D)	266.3	7.2	(D)	4.0	12.8	12
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	(D)	(D)	(Z)	(D)	136.3	4.1	-	1.3	6.1	(X)
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	(D)	.1	11.8	.3	(D)	.2	.8	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	(D)	(D)	-	(Z)	2.8	.1	(D)	(Z)	.2	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	.6	(D)	504.8	13.2	(D)	19.8	37.2	(X)
324	CEMENT, HYDRAULIC	-	-	-	-	(Z)	(S)	202.5	4.3	-	8.8	11.6	(X)
325	STRUCTURAL CLAY PRODUCTS	-	-	1.4	2.9	(D)	(D)	18.6	.6	-	1.1	2.5	30
327	CONCRETE, GYPSUM, PLASTER PRODS	-	-	(D)	(D)	(D)	1.2	89.9	3.0	-	2.7	7.4	(X)
329	MISC. NONMETALLIC MINERAL PRODS	-	-	1.1	2.1	(D)	(D)	107.4	2.9	-	3.4	7.4	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	9.7	18.5	(D)	(D)	4,076.7	70.7	(D)	43.3	119.3	1
34	FABRICATED METAL PRODUCTS	-	-	1.3	2.7	.8	(D)	225.1	6.7	-	3.8	12.2	11
341	METAL CANS, SHIPPING CONTAINERS	-	-	.8	1.7	(D)	(D)	99.6	3.0	-	1.9	5.4	1
344	FABRICATED STRUC. METAL PRODS	-	-	.1	.2	.1	.3	40.8	1.5	-	.6	2.4	29
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.7	1.6	1.0	(D)	288.0	7.4	-	3.3	11.5	4
355	SPECIAL INDUSTRY MACHINERY	-	-	.1	.1	(D)	(D)	30.9	1.0	-	.6	2.1	8
358	REFRIGERATION AND SERVICE MACH	-	-	.1	.3	(D)	(D)	24.8	.8	-	.5	1.6	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.8	1.3	(D)	(D)	320.0	9.7	-	2.7	12.2	2
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	(D)	(D)	(Z)	(D)	20.9	.7	-	.2	.9	(X)
366	COMMUNICATION EQUIPMENT	-	-	.4	.7	(Z)	(D)	(D)	(D)	-	1.5	7.8	2
37	TRANSPORTATION EQUIPMENT	(D)	(D)	.6	1.6	1.6	(D)	248.7	6.9	(D)	3.6	13.4	1
38	INSTRUMENTS, RELATED PRODS	-	-	(Z)	.1	-	.1	34.9	1.1	-	.2	1.2	13
39	MISC. MANUFACTURING INDUS	-	-	(S)	(S)	-	(S)	31.5	1.1	-	.4	1.5	(X)
	DISTRICT OF COLUMBIA	-	-	.3	.6	.1	.2	173.2	5.7	(D)	1.9	8.6	22
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(S)	16.6	.8	-	.3	1.1	(X)
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(Z)	(D)	137.1	4.2	-	.9	4.5	(X)
275	COMMERCIAL PRINTING	-	-	(Z)	(Z)	-	(D)	36.4	.9	-	.3	1.1	83

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**--Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	VIRGINIA	219.9	620.3	185.8	357.4	4,431.9	68.8	9,903.5	130.3	2,122.4	68.4	5	1	1
20	FOOD AND KINDRED PRODUCTS	15.9	52.0	12.8	26.9	488.1	7.5	542.0	7.3	(D)	(D)	15	17	(X)
201	MEAT PRODUCTS	3.4	12.4	2.5	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.0	4.2	.7	1.6	26.0	.5	15.0	.2	(D)	(D)	13	1	(X)
203	PRESERVED FRUITS AND VEGETABLES	1.1	3.8	.9	1.8	27.8	.5	67.4	.9	-	-	44	1	(X)
204	GRAIN MILL PRODUCTS	.5	2.1	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	1.7	5.8	1.4	3.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	85
209	MISC. FOODS, KINDRED PRODUCTS	1.1	4.0	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
21	TOBACCO PRODUCTS	6.0	22.8	4.5	9.6	14.4	.2	436.5	6.1	33.1	1.3	1	1	1
22	TEXTILE MILL PRODUCTS	18.6	56.3	14.2	26.9	304.1	4.9	514.9	7.5	192.8	7.2	1	2	1
221	WEAVING MILLS, COTTON	1.1	3.9	.6	1.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
222	WEAVING MILLS, MANMADE FIBER	7.2	19.5	5.4	7.9	(D)	(D)	23.7	.4	(D)	(D)	(X)	1	(X)
225	KNITTING MILLS	2.9	9.6	2.2	5.2	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	5.2	14.4	4.6	9.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
228	YARN AND THREAD MILLS	.9	4.4	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	2.1	8.7	1.4	2.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.4	2.0	.2	.5	9.7	.2	(D)	(D)	(D)	(D)	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.5	2.2	.3	.6	11.0	.2	13.9	.2	-	-	38	2	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	(D)	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
236	CHILDREN'S OUTERWEAR	.1	.9	.1	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	.8	2.2	.7	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	7.3	27.2	5.3	12.8	361.8	6.1	136.5	1.8	(D)	(D)	20	21	(X)
242	SAWMILLS AND PLANING MILLS	2.0	7.7	1.3	3.3	131.8	2.2	-	-	-	-	43	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	(D)	(D)	(D)	(D)	42.9	.6	(D)	(D)	(D)	(D)	75	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	3.2	11.6	2.5	5.8	145.1	2.4	120.5	1.5	(D)	(D)	5	23	(X)
25	FURNITURE AND FIXTURES	3.1	13.2	2.2	4.5	(D)	(D)	33.5	.5	30.6	1.3	(X)	6	1
251	HOUSEHOLD FURNITURE	2.8	11.9	2.0	4.0	(D)	(D)	33.5	.5	30.6	1.3	(X)	6	1
26	PAPER AND ALLIED PRODUCTS	43.3	93.4	40.0	68.2	629.8	8.4	2,593.9	32.6	656.3	21.7	1	1	1
263	PAPERBOARD MILLS	32.7	65.1	30.6	50.6	(D)	(D)	(D)	(D)	528.1	16.7	(X)	(X)	1
264	MISC. CONVERTED PAPER PRODUCTS	.4	1.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	1.0	3.6	.8	1.8	43.3	.7	9.2	.1	-	-	1	1	(X)
27	PRINTING AND PUBLISHING	1.5	7.4	.8	1.7	29.6	.5	16.7	.2	(D)	(D)	38	5	(X)
271	NEWSPAPERS	.3	1.8	.1	.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
273	BOOKS	.2	1.1	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	.8	3.3	.5	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.1	(D)	.1	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	67.6	154.8	60.8	107.0	1,236.6	19.0	3,788.4	50.1	931.3	28.2	1	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	3.8	11.1	2.7	5.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	41.2	86.1	37.4	59.3	326.9	5.0	2,250.2	29.5	770.3	22.4	1	1	1
285	PAINTS AND ALLIED PRODUCTS	.1	.4	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	.3	1.5	.3	.8	19.4	.3	-	-	-	-	49	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	10.4	29.0	8.8	18.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	16.4	40.4	14.9	28.9	708.4	11.8	204.5	2.8	263.7	8.1	21	13	4
325	STRUCTURAL CLAY PRODUCTS	1.4	5.4	1.3	4.2	(S)	(S)	-	-	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	8.7	19.1	8.1	14.9	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	1.9	5.9	1.6	3.9	126.3	2.2	(D)	(D)	-	-	2	(X)	(X)
33	PRIMARY METAL INDUSTRIES	11.9	44.5	9.8	28.6	193.0	3.1	(D)	(D)	(D)	(D)	1	(X)	(X)
332	IRON AND STEEL FOUNDRIES	6.0	25.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	2.7	9.8	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.8	10.7	1.9	3.7	21.9	.4	(D)	(D)	-	-	50	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS	.5	1.5	.4	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	1.0	4.5	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.5	2.3	.4	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.3	10.6	1.4	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.6	2.6	.4	.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.2	1.1	.1	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	.5	2.2	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.2	.9	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.9	14.9	1.5	3.4	78.3	1.3	16.2	.2	(D)	(D)	5	1	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.3	1.3	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	.3	1.7	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT	1.4	7.6	.7	1.6	60.6	1.0	-	-	-	-	1	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS	.1	.9	(Z)	(D)	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	5.7	23.8	4.1	8.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.5	2.4	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.2	.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	V
	VIRGINIA	103.7	14.0	27.8	53.4	14.1	8.5	9,985.2	262.9	1,859.4	214.3	508.9	4
20	FOOD AND KINDRED PRODUCTS	-	-	2.9	5.7	(D)	4.9	909.9	25.1	(D)	14.4	43.4	5
201	MEAT PRODUCTS	-	-	.5	1.1	(D)	.1	280.5	6.7	-	3.1	10.0	[illegible]
202	DAIRY PRODUCTS	-	-	.3	.7	(D)	.1	83.2	2.6	(D)	1.0	3.6	1
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	(D)	(D)	71.4	2.0	-	1.1	3.3	(X)
204	GRAIN MILL PRODUCTS	-	-	(Z)	.1	-	.2	56.4	1.6	-	.7	2.9	18
205	BAKERY PRODUCTS	-	-	.6	1.3	.4	(D)	(D)	(D)	-	(D)	(D)	5
208	BEVERAGES	-	-	.3	.6	(D)	.1	94.2	2.8	-	1.7	4.8	[illegible]6
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.3	.7	(D)	.4	94.2	2.4	-	1.0	3.2	5
21	TOBACCO PRODUCTS	-	-	.7	1.9	(D)	(D)	432.1	13.1	(D)	6.3	19.1	[illegible]
22	TEXTILE MILL PRODUCTS	-	-	3.5	6.1	.9	.2	1,278.0	29.4	(D)	19.8	53.9	10
221	WEAVING MILLS, COTTON	-	-	-	-	-	(D)	118.1	2.5	(D)	1.1	3.6	(X)
222	WEAV'G MILLS, MANMADE FIBER	-	-	1.2	1.7	(D)	.1	529.7	11.7	(D)	6.8	16.2	1
225	KNITTING MILLS	-	-	(D)	(D)	(D)	(S)	195.4	4.5	-	3.1	9.7	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	1.7	3.2	(D)	(D)	179.5	4.6	-	5.2	12.1	17
228	YARN AND THREAD MILLS	-	-	(D)	(D)	(D)	(D)	166.5	3.8	-	2.4	8.3	(X)
23	APPAREL, OTH. TEXTILE PRODS	-	-	.4	.9	(Z)	.7	188.5	5.8	(D)	1.6	5.9	6
232	MEN'S AND BOYS' FURNISHINGS	-	-	(D)	(D)	(Z)	.2	51.8	1.6	-	.2	1.2	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	.1	(Z)	.1	57.0	1.6	(S)	.4	1.8	1
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	(D)	.1	(D)	6
236	CHILDREN'S OUTERWEAR	-	-	(Z)	(Z)	-	.1	22.7	.7	-	(Z)	.1	1
239	MISC. FABRICATED TEXTILE PRODS	-	-	(D)	(D)	(D)	.1	28.2	1.0	-	.6	1.6	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	1.1	2.4	2.3	(D)	577.0	14.4	-	7.7	22.5	[illegible]
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	(D)	.3	197.7	4.4	-	2.1	7.1	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.4	.8	.1	(D)	80.9	2.7	-	(D)	(D)	25
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.1	(Z)	(D)	(D)	(D)	-	(D)	(D)	18
249	MISCELLANEOUS WOOD PRODUCTS	-	-	.6	1.3	.4	(D)	224.2	5.8	-	2.8	8.2	2
25	FURNITURE AND FIXTURES	-	-	.3	.6	(D)	.3	276.7	8.7	(D)	2.8	11.2	17
251	HOUSEHOLD FURNITURE	-	-	.2	.3	(D)	(D)	255.1	7.9	(D)	2.5	10.1	23
26	PAPER AND ALLIED PRODUCTS	-	-	1.6	3.2	2.1	.2	976.6	25.3	1,098.2	45.2	81.7	5
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(Z)	591.1	14.5	(D)	34.2	58.2	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.1	.2	.1	(Z)	35.8	1.2	-	.3	.8	19
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	(D)	(S)	54.9	1.8	(S)	.9	2.8	(X)
27	PRINTING AND PUBLISHING	-	-	.4	.6	(D)	.2	192.3	5.8	-	1.6	6.8	13
271	NEWSPAPERS	-	-	(Z)	(Z)	-	.2	41.9	1.5	-	.3	1.5	1
273	BOOKS	-	-	(Z)	(Z)	(D)	(D)	28.3	.9	-	.2	.8	57
275	COMMERCIAL PRINTING	-	-	.3	.4	(D)	.1	88.0	2.4	-	1.0	3.7	12
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.1	(D)	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	4.3	7.8	(D)	(D)	1,983.6	47.8	614.8	65.2	120.9	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	1.2	2.3	(Z)	.2	302.2	5.8	(D)	2.7	7.7	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	1.1	2.2	(D)	(D)	1,115.9	26.8	(D)	39.8	67.5	1
285	PAINTS AND ALLIED PRODUCTS	-	-	(Z)	(Z)	(Z)	(D)	6.1	.2	-	.1	.3	1
287	AGRICULTURAL CHEMICALS	-	-	.1	.3	(D)	(D)	24.9	.7	-	.2	.7	19
30	RUBBER, MISC. PLASTICS PROD	-	-	1.0	2.0	.3	(D)	465.1	10.8	(D)	9.9	23.8	4
32	STONE, CLAY, GLASS PRODUCTS	-	-	5.2	9.8	(D)	(D)	445.0	11.5	-	16.7	33.5	18
325	STRUCTURAL CLAY PRODUCTS	-	-	(S)	(S)	(D)	(S)	36.0	1.2	-	2.0	4.6	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS	-	-	(S)	(S)	(D)	(S)	152.6	4.2	-	9.5	18.2	(X)
329	MISC. NONMETALLIC MINERAL PRODS	-	-	.4	.8	(D)	(D)	76.0	2.0	-	1.2	3.0	14
33	PRIMARY METAL INDUSTRIES	(D)	(D)	3.4	6.9	.7	(D)	618.4	15.9	-	9.1	31.7	3
332	IRON AND STEEL FOUNDRIES	(D)	(D)	1.4	2.9	(D)	(D)	(D)	(D)	-	4.8	18.2	6
335	NONFERROUS ROLLING AND DRAWING	-	-	1.5	3.1	(D)	(D)	(D)	(D)	-	2.4	7.5	1
34	FABRICATED METAL PRODUCTS	(Z)	(Z)	.9	1.7	(D)	(D)	242.1	7.0	-	2.6	9.6	6
341	METAL CANS, SHIPPING CONTAINERS	-	-	.3	.5	(D)	(Z)	37.7	.9	-	.5	1.2	1
344	FABRICATED STRUC. METAL PRODS	(Z)	(Z)	(D)	(D)	.3	.3	81.3	2.9	-	1.0	4.3	(X)
349	MISC. FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	49.1	1.6	-	.4	1.7	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.8	1.4	.2	.6	253.8	7.9	-	2.2	8.6	[illegible]
353	CONSTRUCTION, RELATED MACHINERY	-	-	(D)	(D)	.2	.2	56.7	1.8	-	.5	1.7	(X)
355	SPECIAL INDUSTRY MACHINERY	-	-	(Z)	.1	(Z)	(D)	(D)	(D)	-	.2	.9	6
358	REFRIGERATION AND SERVICE MACH	-	-	(D)	(D)	-	.2	62.9	1.6	-	.3	1.2	(X)
359	MISC. MACHINERY, EXC. ELEC	-	-	(D)	(D)	-	(D)	17.8	.7	-	.3	1.2	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.8	1.6	.2	(D)	402.5	11.5	-	3.1	13.2	4
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	(D)	(D)	(D)	(D)	31.9	.9	-	.3	.9	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	.1	.2	(Z)	(Z)	47.2	1.3	-	.4	1.5	3
366	COMMUNICATION EQUIPMENT	-	-	(D)	(D)	(Z)	.1	210.1	6.1	-	1.5	7.1	(X)
367	ELECTRONIC COMPONENTS, ACCESS	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.1	.6	(X)
37	TRANSPORTATION EQUIPMENT	(D)	(D)	.4	.8	1.6	.1	481.7	15.0	(D)	4.2	15.6	4
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.3	.7	(D)	.1	(D)	(D)	-	(D)	(D)	4
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	(D)	(D)	47.3	1.5	-	.4	1.3	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.2	.6	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	WEST VIRGINIA	193.7	432.0	160.1	253.0	1,148.9	19.2	3,694.1	47.7	2,604.1	77.8	3	2	1
20	FOOD AND KINDRED PRODUCTS	1.4	4.3	1.1	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
201	MEAT PRODUCTS	.3	(D)	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	(D)	(D)	.4	.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	1.1	.1	.3	(D)	(Z)	(D)	(D)	(Z)	(Z)	1	(X)	1
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.4	.1	.2	-	-	-	-	(Z)	(Z)	(X)	(X)	1
24	LUMBER AND WOOD PRODUCTS	1.3	4.7	1.0	2.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.5	2.5	.4	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.1	(D)	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.2	.4	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.4	1.4	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.2	(D)	(S)	(S)	(D)	(Z)	-	-	-	-	.1	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	95.8	191.2	82.7	117.9	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	16.4	33.7	12.2	10.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	14.4	26.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	63.7	128.3	56.6	87.3	(D)	(D)	(D)	(D)	1,124.4	37.1	(X)	(X)	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	1.1	2.7	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	4.7	10.3	4.4	8.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.3	1.2	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	(D)	(D)	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
32	STONE, CLAY, GLASS PRODUCTS	24.4	49.7	22.4	36.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
322	GLASS, PRESSED OR BLOWN	10.5	22.5	9.5	16.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS	1.4	3.4	1.3	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.0	2.0	.9	1.5	(D)	(D)	(Z)	(Z)	-	-	(X)	1	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	2.1	4.7	1.8	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	56.2	139.3	41.2	71.3	(D)	(D)	(D)	(D)	469.6	13.6	(X)	(X)	1
331	BLAST FURNACE, BASIC STEEL PROD.	39.9	90.6	33.8	55.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	.3	1.9	(S)	(S)	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.0	6.6	1.5	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	.6	1.5	.5	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.4	1.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.8	2.8	.6	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.5	1.7	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.8	9.1	1.9	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	NORTH CAROLINA	304.3	955.9	227.9	471.0	5,744.7	91.3	15,323.3	213.3	1,590.7	53.8	4	1	1
20	FOOD AND KINDRED PRODUCTS	12.7	42.7	9.9	22.8	273.6	4.4	717.8	10.4	-	-	9	4	(X)
201	MEAT PRODUCTS	2.1	9.1	1.4	3.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.0	3.8	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS	1.2	4.4	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	1.8	5.3	1.5	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS	3.2	8.5	2.9	6.3	20.1	.3	257.9	3.7	-	-	1	1	(X)
208	BEVERAGES	1.6	5.6	1.2	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
21	TOBACCO PRODUCTS	8.9	22.6	7.3	12.2	80.8	1.2	276.2	3.8	(D)	(D)	1	3	(X)
22	TEXTILE MILL PRODUCTS	88.4	313.4	58.1	126.4	1,812.6	28.9	3,865.7	56.6	390.5	14.1	9	2	1
221	WEAVING MILLS, COTTON	12.5	41.7	8.1	15.2	158.2	2.4	444.7	6.4	136.3	4.4	3	1	1
222	WEAV'G MILLS, MANMADE FIBER	14.0	50.1	8.8	18.1	231.2	3.5	513.3	7.5	90.7	3.4	1	1	1
225	KNITTING MILLS	23.9	79.5	18.2	42.7	587.4	9.4	1,551.4	23.2	(D)	(D)	11	5	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	15.0	37.5	13.6	28.9	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
227	FLOOR COVERING MILLS	(D)	(D)	(D)	(D)	44.9	.7	(D)	(D)	-	-	1	(X)	(X)
228	YARN AND THREAD MILLS	19.1	90.5	6.9	15.9	342.3	5.3	418.1	6.4	21.0	.9	2	3	6
229	MISCELLANEOUS TEXTILE GOODS	2.2	7.9	1.6	3.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	3.7	16.4	2.2	4.9	156.7	2.4	51.2	.7	(D)	(D)	59	55	(X)
232	MEN'S AND BOYS' FURNISHINGS	.9	3.9	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES	.1	.4	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	1.4	5.3	1.0	1.8	8.2	.1	38.0	.6	(D)	(D)	6	74	(X)
24	LUMBER AND WOOD PRODUCTS	10.1	36.2	7.7	18.3	405.4	6.9	300.7	4.2	(D)	(D)	15	15	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	1.5	3.4	1.4	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	3.1	12.6	2.1	5.8	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	2.1	7.5	1.6	3.7	49.0	.8	26.3	.4	(D)	(D)	1	1	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.7	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	3.1	11.4	2.2	5.3	107.4	1.8	179.9	2.5	-	-	7	15	(X)
25	FURNITURE AND FIXTURES	7.5	31.1	4.7	10.9	322.3	5.3	65.8	1.1	36.6	1.6	7	8	4
251	HOUSEHOLD FURNITURE	6.7	27.8	4.2	9.7	(D)	(D)	(D)	(D)	32.6	1.4	(X)	(X)	3

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Reivsed 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	WEST VIRGINIA.	(D)	(D)	48.6	84.6	16.7	(D)	9,838.3	178.9	1,915.5	202.8	405.0	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.2	.5	(D)	.7	84.4	2.1	-	1.3	3.7	11
201	MEAT PRODUCTS.	-	-	-	-	-	(D)	(D)	(D)	-	.1	(D)	(X)
205	BAKERY PRODUCTS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.4	1.1	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	(D)	(D)	(D)	.1	26.1	.8	-	.2	.7	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	-	-	(D)	(D)	(D)	(Z)	(S)	(S)	-	.1	.3	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.3	.4	.6	83.0	2.1	-	1.4	4.5	79
242	SAWMILLS AND PLANING MILLS	-	-	(Z)	(Z)	.4	(D)	55.9	1.4	-	.7	2.6	1
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	.1	.2	(Z)	(D)	25.8	.7	(S)	(D)	(D)	30
264	MISC. CONVERTED PAPER PRODUCTS . .	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.1	(D)	1
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	.1	.1	(Z)	(D)	(D)	(D)	-	.2	.4	36
27	PRINTING AND PUBLISHING.	-	-	(S)	(S)	(D)	(S)	34.5	.9	-	.5	1.8	(X)
271	NEWSPAPERS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.2	(D)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	(S)	(S)	(S)	(S)	3,831.0	73.2	(D)	98.1	179.1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS . .	-	-	1.0	1.6	-	(D)	1,237.1	22.8	(D)	20.2	41.4	1
282	PLASTICS MATERIALS, SYNTHETICS . .	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	14.0	23.7	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	-	-	13.4	20.9	(D)	(D)	2,103.7	41.0	(D)	62.8	111.1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	-	-	(D)	(D)	-	(Z)	(D)	(D)	-	1.0	2.5	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	1.5	2.8	(D)	(D)	99.6	2.0	(S)	5.9	11.5	6
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	(D)	(D)	(Z)	(D)	32.4	.9	-	.2	.9	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	(Z)	.1	-	(D)	(D)	(D)	-	.1	(D)	31
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	(Z)	(Z)	(Z)	(D)	15.9	.5	(S)	(D)	(D)	1
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	14.6	25.2	1.1	1.7	594.9	12.8	(S)	25.2	44.1	5
322	GLASS, PRESSED OR BLOWN.	-	-	8.8	14.7	(D)	(D)	288.2	6.1	(S)	13.9	23.3	9
326	POTTERY AND RELATED PRODUCTS . . .	-	-	(D)	(D)	(Z)	.1	23.6	.7	-	1.3	2.5	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	(D)	(D)	(D)	1.0	15.0	.5	-	.8	1.6	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	-	-	(D)	(D)	(D)	(D)	62.7	1.2	-	1.7	3.4	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	11.4	21.8	(D)	(D)	4,387.3	68.0	(D)	60.5	132.1	1
331	BLAST FURNACE, BASIC STEEL PROD. .	-	-	5.5	10.4	(D)	(D)	1,783.2	34.8	(D)	43.1	85.5	1
332	IRON AND STEEL FOUNDRIES	(D)	(D)	.2	.5	(D)	(D)	38.8	1.0	-	1.0	3.4	45
34	FABRICATED METAL PRODUCTS. . . .	-	-	1.2	2.3	.3	.1	134.2	3.6	-	2.2	6.7	12
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	.6	1.0	(Z)	(D)	21.8	.7	-	.8	1.9	25
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	(S)	(S)	(S)	(D)	28.4	.6	-	.5	1.5	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(D)	(D)	(Z)	(D)	61.5	1.8	-	1.3	3.8	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	.1	.2	(Z)	(D)	34.4	1.1	-	.6	1.6	4
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	1.4	2.6	(D)	(Z)	274.6	5.6	-	2.7	7.7	1
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	.7	1.5	-	-	(D)	(D)	-	(D)	(D)	1
	NORTH CAROLINA	(D)	(D)	32.1	68.2	24.3	(D)	22,401.8	485.0	1,655.9	293.5	825.0	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.9	4.3	3.6	.1	806.0	19.8	-	12.4	37.2	3
201	MEAT PRODUCTS.	-	-	(S)	(S)	(S)	(S)	218.1	5.2	-	1.7	7.0	(X)
202	DAIRY PRODUCTS	-	-	.2	.3	(Z)	.3	96.4	2.4	-	.9	3.8	16
204	GRAIN MILL PRODUCTS.	-	-	(D)	(D)	(D)	.5	110.6	2.5	-	1.0	3.4	(X)
205	BAKERY PRODUCTS.	-	-	.8	2.0	(D)	(D)	87.6	2.0	-	1.8	4.7	5
207	FATS AND OILS.	-	-	.4	1.0	(D)	(D)	87.8	2.3	-	3.4	7.9	1
208	BEVERAGES.	-	-	(S)	(S)	(S)	(S)	101.2	2.6	-	1.8	5.2	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	.1	.2	(D)	.2	(D)	(D)	-	(D)	(D)	4
21	TOBACCO PRODUCTS	-	-	.1	.2	(D)	.2	451.6	10.4	(D)	8.5	21.1	10
22	TEXTILE MILL PRODUCTS.	-	-	9.4	20.0	(D)	(D)	8,861.0	187.0	80.6	87.8	284.7	3
221	WEAVING MILLS, COTTON.	-	-	.7	1.7	.2	(Z)	1,291.5	26.5	(D)	10.0	30.9	2
222	WEAV'G MILLS, MANMADE FIBER. . . .	-	-	.9	1.8	1.0	.9	1,528.5	31.9	(D)	14.5	51.1	1
225	KNITTING MILLS	-	-	3.2	6.6	(D)	1.5	1,647.8	36.7	(S)	22.6	68.1	6
226	TEXTILE FINISHING, EXCEPT WOOL . .	-	-	(S)	(S)	(S)	(S)	384.4	8.6	(D)	12.9	27.4	(X)
227	FLOOR COVERING MILLS	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	(D)	(D)	(X)
228	YARN AND THREAD MILLS.	-	-	1.4	2.8	.1	.5	3,582.9	74.5	(D)	22.7	89.6	3
229	MISCELLANEOUS TEXTILE GOODS. . . .	-	-	(D)	(D)	.2	(D)	197.1	4.5	-	2.4	8.0	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	(Z)	(Z)	.5	1.0	.2	(D)	440.8	11.5	(D)	3.0	12.5	28
232	MEN'S AND BOYS' FURNISHINGS. . . .	(Z)	(Z)	.1	.1	(Z)	(D)	98.0	2.6	(Z)	.7	2.9	17
238	MISC. APPAREL AND ACCESSORIES. . .	-	-	(Z)	(Z)	-	(D)	13.6	.3	-	.2	.5	14
239	MISC. FABRICATED TEXTILE PRODS . .	-	-	.3	.6	.1	(D)	138.4	3.6	-	1.6	5.0	45
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	4.2	2.0	724.8	18.0	(S)	11.7	35.4	(X)
241	LOGGING CAMPS, LOG CONTRACTORS . .	-	-	-	-	(D)	1.5	17.2	.4	-	1.7	3.5	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	(D)	(S)	280.0	6.9	-	4.6	14.5	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	(D)	(D)	(D)	.5	146.9	3.8	-	1.9	6.4	(X)
245	WOOD BUILDINGS AND MOBILE HOMES. .	-	-	(Z)	(Z)	.1	(D)	16.6	.4	-	.1	.4	1
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	.1	.2	(D)	(D)	250.1	6.0	-	3.2	9.8	11
25	FURNITURE AND FIXTURES	-	-	.6	1.3	.5	1.2	815.2	20.2	(D)	6.9	27.0	9
251	HOUSEHOLD FURNITURE.	-	-	.4	.8	.3	(D)	744.4	18.1	(D)	6.2	24.3	11

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	NORTH CAROLINA--CON.													
25	FURNITURE AND FIXTURES--CON.													
252	OFFICE FURNITURE	.4	1.9	.3	.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE	.2	(D)	(D)	(D)	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	56.4	122.5	52.6	95.9	(D)	(D)	(D)	(D)	665.0	20.8	(X)	(X)	1
262	PAPERMILLS, EXC. BUILDING PAPER	24.9	45.8	23.0	33.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	1.6	5.5	1.2	2.7	44.2	.8	52.2	.8	-	-	1	1	(X)
27	PRINTING AND PUBLISHING	1.2	5.5	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.5	2.2	(S)	(S)	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	.5	2.4	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.1	.4	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	49.9	147.9	39.8	82.7	597.2	9.2	3,958.7	54.5	(D)	(D)	6	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS	27.5	82.3	21.0	42.8	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
283	DRUGS	2.1	7.6	1.7	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	.5	1.5	.4	.7	8.1	.1	22.8	.3	-	-	23	1	(X)
285	PAINTS AND ALLIED PRODUCTS	(D)	(D)	(D)	(D)	14.9	.3	(D)	(D)	-	-	19	(X)	(X)
287	AGRICULTURAL CHEMICALS	6.3	15.9	5.8	12.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	.7	1.9	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.4	3.5	1.3	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS	1.1	2.9	1.0	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	7.4	29.1	4.7	10.4	70.4	1.1	520.0	7.2	-	-	4	1	(X)
301	TIRES AND INNER TUBES	3.7	13.5	2.6	5.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
306	FABRICATED RUBBER PRODUCTS, NEC	.2	.9	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	2.3	10.9	1.1	2.3	20.1	.3	43.4	.6	-	-	11	1	(X)
31	LEATHER, LEATHER PRODUCTS	.3	1.4	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.1	1.0	(Z)	.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	27.7	67.7	25.1	50.5	1,161.0	18.2	56.2	.8	(D)	(D)	10	8	(X)
322	GLASS, PRESSED OR BLOWN	9.0	25.2	7.7	17.4	456.4	7.2	-	-	-	-	1	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS	2.0	4.4	1.8	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	10.3	37.3	3.3	8.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	(D)	(D)	1.2	2.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	3.8	16.0	2.3	5.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS	.6	1.7	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	.4	1.8	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS	1.1	5.6	.5	1.2	17.7	.3	(D)	(D)	-	-	10	(X)	(X)
347	METAL SERVICES, NEC	.4	1.7	.3	.9	(D)	(D)	(D)	(Z)	-	-	(X)	82	(X)
349	MISC. FABRICATED METAL PRODUCTS	1.0	3.8	.6	1.3	7.6	.1	(D)	(D)	-	-	41	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	4.1	17.3	2.3	4.6	56.7	.9	31.4	.4	-	-	8	3	(X)
352	FARM AND GARDEN MACHINERY	.5	1.6	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.2	1.2	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.3	1.7	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.8	3.3	.5	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.6	2.5	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	6.4	28.0	3.1	7.5	225.7	3.5	103.5	1.5	-	-	1	1	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.6	2.7	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	2.6	10.6	1.2	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.5	2.5	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.8	2.9	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.8	3.7	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.5	2.3	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.5	6.2	.9	1.8	16.7	.3	(D)	(D)	(D)	(D)	6	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	1.2	5.2	.7	1.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	(D)	(D)	.1	.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
38	INSTRUMENTS, RELATED PRODS	1.8	6.2	1.3	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES	.3	1.3	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	.1	.7	(D)	(D)	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
39	MISC. MANUFACTURING INDUS.	1.0	4.7	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.5	2.4	.3	.8	18.7	.3	(D)	(D)	-	-	69	(X)	(X)
	SOUTH CAROLINA	233.1	650.7	178.1	317.3	1,612.1	25.4	9,122.2	123.1	1,650.4	53.9	9	1	1
20	FOOD AND KINDRED PRODUCTS	3.5	11.7	2.7	5.5	41.5	.7	156.3	2.1	(D)	(D)	(X)	1	(X)
202	DAIRY PRODUCTS	.5	1.8	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.4	1.2	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS	1.2	3.2	1.1	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	65.2	213.0	43.5	83.4	354.9	5.5	2,173.1	30.6	410.3	14.0	2	1	1
221	WEAVING MILLS, COTTON	6.9	30.9	2.7	5.8	39.5	.6	224.8	3.2	(D)	(D)	1	1	(X)
222	WEAVING MILLS, MANMADE FIBER	16.6	73.9	6.2	13.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
225	KNITTING MILLS	4.1	13.6	2.9	6.2	48.6	.7	174.1	2.6	(D)	(D)	1	1	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	28.6	60.1	26.6	47.0	48.4	.8	992.6	13.6	378.1	12.7	1	1	1
227	FLOOR COVERING MILLS	1.8	5.2	1.5	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NORTH CAROLINA--CON.												
25	FURNITURE AND FIXTURES--CON.												
252	OFFICE FURNITURE	-	-	(D)	(D)	(D)	(D)	43.8	1.3	-	.3	1.5	(X)
253	PUBLIC BLDG., RELATED FURNITURE	-	-	(Z)	(Z)	(D)	.1	(D)	(D)	-	.2	(D)	1
26	PAPER AND ALLIED PRODUCTS	-	-	.7	1.7	3.0	.3	1,123.7	26.6	1,457.3	51.3	100.4	10
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(D)	(D)	546.4	12.0	(D)	25.1	40.2	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.2	.5	.2	.6	102.8	2.8	(D)	1.4	4.5	1
27	PRINTING AND PUBLISHING	-	-	.2	.4	.3	.3	162.4	4.2	-	1.1	4.6	29
271	NEWSPAPERS	-	-	(Z)	(Z)	-	(D)	70.6	1.7	-	.5	2.1	1
275	COMMERCIAL PRINTING	-	-	.1	.3	(D)	(D)	68.2	1.8	-	.4	1.8	37
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	(D)	(D)	9.7	.3	-	(Z)	.2	51
28	CHEMICALS, ALLIED PRODUCTS	-	-	5.3	10.6	(D)	1.3	2,956.6	65.2	(D)	50.0	127.6	2
282	PLASTICS MATERIALS, SYNTHETICS	-	-	(D)	(D)	(S)	(S)	1,901.2	39.5	(D)	25.4	66.3	(X)
283	DRUGS	-	-	.1	.2	-	(D)	138.4	3.8	-	1.8	5.6	3
284	SOAPS, CLEANERS, TOILET GOODS	-	-	(Z)	(Z)	(D)	(D)	27.9	.7	(D)	.5	1.3	8
285	PAINTS AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	(D)	(X)
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(S)	(S)	139.6	3.6	-	6.6	13.1	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	.2	.3	-	.4	34.3	.8	(D)	.5	1.4	4
29	PETROLEUM AND COAL PRODUCTS	-	-	.1	.1	(Z)	(D)	27.5	.6	-	1.8	4.2	1
295	PAVING AND ROOFING MATERIALS	-	-	(D)	(D)	(Z)	(D)	24.1	.5	-	1.4	3.7	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.5	.9	.6	.5	790.5	18.7	-	6.8	23.9	6
301	TIRES AND INNER TUBES	-	-	.1	.3	(Z)	(D)	333.3	7.8	-	3.4	10.8	1
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	(S)	(S)	(Z)	(S)	22.9	.6	-	.3	1.0	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.3	.6	.5	.2	365.5	8.7	-	2.1	9.0	10
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	-	(D)	34.6	1.0	-	.4	1.3	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	(D)	(D)	-	(Z)	30.1	.9	-	.1	.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	7.0	15.6	(D)	9.5	756.4	17.3	(D)	23.7	49.6	5
322	GLASS, PRESSED OR BLOWN	-	-	4.3	9.0	(D)	(Z)	398.9	7.8	-	8.1	18.2	1
327	CONCRETE, GYPSUM, PLASTER PRODS	-	-	(Z)	.1	(D)	(D)	41.6	1.2	-	1.4	3.0	3
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(S)	(S)	(S)	(S)	-	9.1	27.4	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	(D)	(D)	(D)	.2	(D)	(D)	-	(D)	(D)	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(D)	(S)	439.0	11.0	-	4.1	13.8	(X)
341	METAL CANS, SHIPPING CONTAINERS	-	-	.3	.5	(D)	(D)	50.7	.9	-	.4	1.4	4
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	(S)	(S)	(Z)	(D)	52.1	1.3	-	.4	1.7	(X)
344	FABRICATED STRUC. METAL PRODS	-	-	.3	.6	.1	(Z)	165.5	4.4	-	1.4	4.6	13
347	METAL SERVICES, NEC	-	-	.2	.4	(D)	(D)	27.9	.8	-	.8	2.3	62
349	MISC. FABRICATED METAL PRODUCTS	-	-	.4	.8	(D)	(D)	101.3	2.6	-	.6	2.3	4
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.8	1.4	.8	1.0	530.9	12.8	-	3.9	15.4	7
352	FARM AND GARDEN MACHINERY	(D)	(D)	(D)	(D)	(D)	(D)	41.9	1.1	-	.8	2.1	(X)
353	CONSTRUCTION, RELATED MACHINERY	-	-	(D)	(D)	.1	(D)	30.8	1.0	-	.1	.7	(X)
354	METALWORKING MACHINERY	-	-	(Z)	.1	(D)	(D)	57.6	1.5	-	.3	1.5	15
355	SPECIAL INDUSTRY MACHINERY	-	-	.3	.5	(D)	(D)	98.3	2.4	-	.8	3.7	15
356	GENERAL INDUSTRIAL MACHINERY	-	-	(D)	(D)	(D)	(D)	61.4	1.5	(S)	.4	1.5	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.8	2.0	.6	(Z)	968.0	20.5	-	7.1	24.6	3
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.5	2.4	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	(D)	(D)	(D)	(Z)	416.3	7.6	-	3.5	9.0	(X)
363	HOUSEHOLD APPLIANCES	-	-	.1	.1	(Z)	(Z)	79.1	2.0	-	.4	2.0	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	(D)	(D)	(D)	(D)	77.7	1.7	-	.8	2.8	(X)
367	ELECTRONIC COMPONENTS, ACCESS	-	-	(Z)	.1	(Z)	(Z)	120.0	2.8	-	.9	3.6	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.4	1.8	(X)
37	TRANSPORTATION EQUIPMENT	-	-	.3	.6	(D)	.3	178.5	4.4	-	1.1	4.4	4
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.3	.5	(D)	.2	152.3	3.6	-	.9	3.5	5
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(D)	(D)	(Z)	.1	(D)	(D)	-	(D)	(D)	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.3	(D)	(D)	156.4	3.3	-	1.6	5.0	1
382	MEASURING, CONTROLLING DEVICES	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.3	1.2	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	(D)	(D)	-	(Z)	(D)	(D)	-	.1	.6	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.1	.3	(D)	(D)	131.3	3.4	-	1.2	4.9	15
399	MISCELLANEOUS MANUFACTURES	-	-	.1	.2	(D)	(D)	65.5	1.6	-	.7	3.0	19
	SOUTH CAROLINA	5.1	.7	54.7	91.9	17.7	4.7	16,108.7	333.4	1,579.3	226.2	554.7	3
20	FOOD AND KINDRED PRODUCTS	-	-	1.0	1.8	(D)	.3	235.7	6.3	-	3.6	9.9	3
202	DAIRY PRODUCTS	-	-	.2	.3	-	(D)	42.0	1.1	-	.6	1.6	10
205	BAKERY PRODUCTS	-	-	(D)	(D)	(Z)	.1	19.9	.6	-	.4	.9	(X)
207	FATS AND OILS	-	-	.2	.4	(D)	(D)	37.6	1.0	-	1.3	2.8	1
22	TEXTILE MILL PRODUCTS	-	-	11.9	23.3	7.8	2.2	6,333.1	129.6	(D)	64.9	187.0	1
221	WEAVING MILLS, COTTON	-	-	.7	1.5	.3	(D)	1,249.2	25.1	(D)	7.5	29.8	1
222	WEAV'G MILLS, MANMADE FIBER	-	-	(S)	(S)	(S)	(S)	3,038.3	60.5	(D)	17.6	66.3	(X)
225	KNITTING MILLS	-	-	1.2	2.2	(D)	(S)	350.2	7.4	-	4.9	13.0	1
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	7.0	13.7	(D)	(D)	587.0	13.0	126.9	27.1	50.1	1
227	FLOOR COVERING MILLS	-	-	.4	.9	(D)	(D)	81.2	1.9	(D)	1.7	4.3	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	SOUTH CAROLINA--CON.													
22	TEXTILE MILL PRODUCTS--CON.													
228	YARN AND THREAD MILLS.	3.8	18.0	1.3	2.9	57.2	.8	91.7	1.3	(D)	(D)	13	3	(X)
229	MISCELLANEOUS TEXTILE GOODS. . . .	2.6	8.7	(D)	(D)	4.6	.1	82.4	1.2	(D)	(D)	1	1	(X)
23	APPAREL, OTH. TEXTILE PRODS. . . .	4.0	13.2	2.9	6.0	11.2	.2	189.3	2.8	(D)	(D)	21	1	(X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	.3	1.7	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.5	2.4	.2	.5	(D)	(D)	3.6	.1	-	-	(X)	45	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.1	.5	(Z)	.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
236	CHILDREN'S OUTERWEAR	.2	1.0	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	2.7	6.9	2.3	4.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	5.7	20.2	3.9	9.3	406.7	6.6	70.5	1.0	(D)	(D)	35	30	(X)
242	SAWMILLS AND PLANING MILLS	2.2	8.5	1.2	2.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.9	3.6	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	2.0	5.8	1.6	3.3	56.4	.8	(D)	(D)	(D)	(D)	1	(X)	(X)
25	FURNITURE AND FIXTURES	.3	1.6	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE.	(D)	(D)	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	38.6	96.3	33.1	63.6	19.3	.3	3,945.3	51.5	(D)	(D)	11	1	(X)
263	PAPERBOARD MILLS	26.2	58.3	24.8	48.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	1.0	3.9	.6	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	1.4	3.9	1.2	2.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	60.1	138.3	49.5	75.7	198.0	3.1	1,769.7	24.2	(D)	(D)	3	1	(X)
282	PLASTICS MATERIALS, SYNTHETICS . .	38.9	95.5	31.6	52.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS. . .	.5	1.6	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	(D)	(D)	(D)	(D)	51.3	.8	57.2	.8	(D)	(Z)	10	1	1
30	RUBBER, MISC. PLASTICS PROD. . . .	6.4	20.2	4.2	8.4	(S)	(S)	(S)	(S)	(D)	(Z)	(X)	(X)	1
307	MISCELLANEOUS PLASTICS PRODUCTS. .	4.3	14.0	2.9	5.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
32	STONE, CLAY, GLASS PRODUCTS. . . .	25.5	53.5	23.0	38.2	153.9	2.6	467.9	6.1	-	-	11	4	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	1.3	2.7	1.2	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	11.9	34.8	7.8	12.0	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	84
331	BLAST FURNACE, BASIC STEEL PROD. .	11.0	31.5	7.1	10.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	.3	1.2	.2	.4	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	2.1	8.1	1.4	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.4	1.7	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	4.6	18.8	2.6	6.0	79.1	1.3	(D)	(D)	(D)	(D)	7	(X)	(X)
352	FARM AND GARDEN MACHINERY.	.2	.8	.1	.2	(S)	(S)	(D)	(Z)	-	-	(X)	1	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	.3	1.3	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.5	2.1	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY . . .	1.6	6.1	1.0	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
357	OFFICE AND COMPUTING MACHINES. . .	.1	(D)	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	.1	.4	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.3	10.1	1.1	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	.4	1.9	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.4	1.7	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	.2	.9	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	.8	3.9	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.7	2.4	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	(D)	(D)	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.9	3.3	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.4	1.8	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	.2	.7	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	GEORGIA.	263.6	756.5	214.4	384.0	3,217.6	50.3	8,659.7	112.7	764.5	24.0	2	3	1
20	FOOD AND KINDRED PRODUCTS. . . .	18.2	56.3	14.5	26.0	277.6	4.6	402.9	5.3	(D)	(D)	7	18	(X)
201	MEAT PRODUCTS.	3.6	12.6	2.6	4.7	46.3	.8	26.3	.4	-	-	2	4	(X)
202	DAIRY PRODUCTS	.6	2.4	.4	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	1.4	4.8	1.1	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	1.3	5.4	.9	2.1	44.3	.7	(D)	(D)	(D)	(D)	1	(X)	(X)
205	BAKERY PRODUCTS.	2.0	5.9	1.6	2.6	10.0	.2	-	-	-	-	1	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS. . .	2.6	7.0	2.3	4.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS.	3.7	8.5	3.4	5.8	51.4	.9	(D)	(D)	-	-	1	(X)	(X)
208	BEVERAGES.	2.2	6.8	1.7	3.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.7	2.8	(S)	(S)	-	-	-	-	(D)	(D)	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	52.4	170.4	38.7	69.7	456.9	6.9	1,362.5	19.2	127.7	4.7	4	15	1
221	WEAVING MILLS, COTTON.	10.4	39.2	6.5	10.6	(D)	(D)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
222	WEAVING MILLS, MANMADE FIBER. . .	3.6	15.6	1.8	3.2	(D)	(D)	45.8	.7	(D)	(D)	(X)	1	(X)
226	TEXTILE FINISHING, EXCEPT WOOL . .	6.3	15.4	5.6	10.1	54.5	.9	414.2	5.8	(D)	(D)	9	48	(X)
227	FLOOR COVERING MILLS	20.2	51.0	18.0	32.9	177.8	2.7	593.0	8.5	(D)	(D)	9	1	(X)
228	YARN AND THREAD MILLS.	7.2	31.6	3.8	6.9	66.7	1.0	86.4	1.2	(D)	(D)	4	2	(X)
229	MISCELLANEOUS TEXTILE GOODS. . . .	2.5	10.6	1.3	2.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . . .	5.3	21.0	3.5	6.5	62.9	1.0	28.3	.5	(D)	(D)	5	7	(X)
231	MEN'S AND BOYS' SUITS AND COATS. .	.3	1.5	.2	.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	(D)	(D)	(D)	(D)	9.5	.2	(D)	(D)	(D)	(Z)	1	(X)	1
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.3	1.8	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES. . .	.1	.4	(S)	(S)	(S)	(S)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		E	L	M	N	O	P	Q	R	S	T	U	N
	SOUTH CAROLINA--CON.												
22	TEXTILE MILL PRODUCTS--CON.												
228	YARN AND THREAD MILLS.	-	-	.2	.4	(D)	(D)	715.2	15.1	(D)	3.5	14.3	7
229	MISCELLANEOUS TEXTILE GOODS. . . .	-	-	.3	.5	(D)	1.0	225.6	5.1	-	2.0	6.7	1
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	1.2	2.1	.1	(D)	305.9	7.2	(D)	4.5	13.2	2
232	MEN'S AND BOYS' FURNISHINGS. . . .	-	-	(S)	(S)	(Z)	(S)	51.3	1.3	(D)	.3	1.6	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	-	-	(Z)	.1	(Z)	(D)	74.6	1.9	(S)	.5	2.3	10
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	-	-	(Z)	(Z)	(Z)	(D)	17.6	.4	-	.1	.5	1
236	CHILDREN'S OUTERWEAR	-	-	(D)	(D)	(Z)	(Z)	36.8	.8	-	.2	.9	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	-	-	1.0	1.9	(D)	.2	108.4	2.1	-	3.3	7.5	2
24	LUMBER AND WOOD PRODUCTS	-	-	1.3	2.1	3.4	(D)	527.3	10.9	(D)	6.0	19.3	16
242	SAWMILLS AND PLANING MILLS	-	-	.6	1.0	.1	(D)	293.6	5.6	(D)	2.1	7.0	24
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	(D)	(D)	(D)	.1	104.2	2.5	-	1.0	3.7	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	.4	.6	1.5	(D)	111.9	2.5	-	1.7	5.0	12
25	FURNITURE AND FIXTURES	-	-	(Z)	.1	(Z)	.2	44.1	1.3	-	.4	1.6	29
251	HOUSEHOLD FURNITURE.	-	-	(Z)	(Z)	(Z)	.1	(D)	(D)	-	(D)	(D)	39
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	3.0	4.6	2.0	1.3	1,633.0	32.8	706.8	42.2	88.7	1
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(D)	419.3	10.0	(D)	30.1	55.9	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	-	-	.2	.4	.1	(D)	129.7	2.9	(D)	1.0	3.4	7
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	.2	.5	(D)	.3	66.4	1.6	(D)	1.3	3.2	1
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	6.4	10.4	(D)	2.0	3,096.5	62.6	723.4	53.3	109.1	1
282	PLASTICS MATERIALS, SYNTHETICS . .	-	-	4.5	7.7	(D)	(D)	2,132.0	43.1	(D)	32.1	68.2	1
284	SOAPS, CLEANERS, TOILET GOODS. . .	-	-	(D)	(D)	-	(D)	30.5	.7	-	.5	1.3	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	-	-	(D)	(D)	(D)	.4	(D)	(D)	(D)	(D)	(D)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	(S)	(S)	(S)	(S)	626.7	11.8	(D)	5.7	16.6	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	(S)	(S)	(D)	(S)	420.0	8.6	(D)	3.9	10.8	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	16.6	26.1	.8	2.6	728.4	15.3	-	23.3	40.8	5
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	.3	.4	.3	1.0	26.2	.7	-	1.0	2.2	47
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(D)	(S)	1,198.3	22.7	(D)	11.5	29.5	(X)
331	BLAST FURNACE, BASIC STEEL PROD. .	-	-	(D)	(D)	(D)	(D)	1,128.3	21.0	-	5.8	20.8	(X)
335	NONFERROUS ROLLING AND DRAWING . .	-	-	(D)	(D)	(Z)	(D)	37.1	.9	(D)	.3	1.3	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	.7	1.4	.6	.3	204.1	5.2	(S)	2.1	6.9	2
344	FABRICATED STRUC. METAL PRODS. . .	-	-	.1	.2	(D)	.3	47.7	1.2	(D)	.6	2.0	13
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	1.3	2.7	(D)	.4	575.4	12.8	-	4.1	14.8	4
352	FARM AND GARDEN MACHINERY. . . .	-	-	(D)	(D)	(D)	(S)	20.2	.6	-	.1	.7	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	(D)	(D)	(D)	.1	37.7	1.0	-	.3	1.1	(X)
354	METALWORKING MACHINERY	-	-	.1	.2	(Z)	.1	77.9	1.6	-	.3	1.3	10
356	GENERAL INDUSTRIAL MACHINERY . . .	-	-	.6	1.3	(D)	(Z)	186.2	3.9	-	1.4	4.5	4
357	OFFICE AND COMPUTING MACHINES. . .	-	-	(D)	(D)	(S)	(S)	18.2	.5	-	.2	(D)	(X)
358	REFRIGERATION AND SERVICE MACH . .	-	-	.1	.1	-	(Z)	9.6	.3	-	.1	.5	7
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.7	1.2	.3	(Z)	331.4	7.9	(D)	2.1	8.3	1
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	(D)	(D)	(Z)	(Z)	57.3	1.5	-	.4	1.8	(X)
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	(D)	(Z)	54.7	1.3	-	.4	1.4	(X)
366	COMMUNICATION EQUIPMENT.	-	-	(D)	(D)	(D)	(Z)	25.7	.7	-	.2	.8	(X)
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	.2	.3	(Z)	(Z)	144.3	3.2	-	.8	3.2	1
37	TRANSPORTATION EQUIPMENT	-	-	.2	.2	(D)	.5	55.7	1.6	(D)	.6	2.2	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	-	-	(Z)	.1	-	.1	(D)	(D)	-	.2	(D)	1
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	.1	(D)	97.7	2.2	-	.8	2.8	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	(D)	(D)	(D)	(D)	46.4	1.3	(D)	.4	1.6	(X)
394	TOYS AND SPORTING GOODS.	-	-	(D)	(D)	(Z)	(D)	14.9	.5	-	.2	.6	(X)
	GEORGIA.	9.9	1.3	83.4	127.0	43.6	25.0	14,402.5	372.5	2,140.8	253.8	631.0	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	7.9	12.0	(D)	3.1	1,083.2	30.3	(D)	17.8	48.6	3
201	MEAT PRODUCTS.	-	-	1.5	2.5	.1	1.0	297.0	7.9	(D)	3.5	10.7	5
202	DAIRY PRODUCTS	-	-	.2	.4	-	(D)	58.8	1.8	-	.7	2.7	18
203	PRESERVED FRUITS AND VEGETABLES. .	-	-	.5	.9	(Z)	(D)	94.0	2.8	-	1.3	3.7	21
204	GRAIN MILL PRODUCTS.	-	-	.5	.8	(D)	(D)	124.4	3.3	-	1.0	4.0	2
205	BAKERY PRODUCTS.	-	-	1.3	2.2	.3	(Z)	136.2	3.3	1.6	1.6	4.0	11
206	SUGAR, CONFECTIONERY PRODUCTS. . .	-	-	.8	1.2	(D)	(D)	87.8	2.8	(D)	2.8	6.1	1
207	FATS AND OILS.	-	-	1.7	2.3	(D)	(D)	86.7	2.7	-	3.7	8.4	1
208	BEVERAGES.	-	-	1.1	1.5	(D)	(Z)	131.4	3.7	(D)	2.5	6.6	8
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	(S)	(S)	(D)	(S)	67.0	2.0	-	.7	2.4	(X)
22	TEXTILE MILL PRODUCTS.	-	-	18.9	29.3	4.7	4.8	4,006.6	100.7	81.5	48.4	140.9	6
221	WEAVING MILLS, COTTON.	-	-	(S)	(S)	(D)	(S)	1,138.3	28.6	(D)	8.5	26.3	(X)
222	WEAV'G MILLS, MANMADE FIBER. . . .	-	-	.9	1.4	.7	(D)	518.2	12.4	(D)	5.5	20.4	1
226	TEXTILE FINISHING, EXCEPT WOOL . .	-	-	3.5	5.4	.7	(Z)	214.5	5.2	(D)	2.9	5.9	30
227	FLOOR COVERING MILLS	-	-	7.9	12.4	1.2	(D)	662.1	18.1	(D)	18.7	41.7	3
228	YARN AND THREAD MILLS.	-	-	2.0	3.0	(D)	.2	993.8	24.7	(D)	7.5	29.3	1
229	MISCELLANEOUS TEXTILE GOODS. . . .	-	-	.7	1.1	.4	(D)	331.3	8.0	-	3.3	11.6	1
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	1.6	2.4	(D)	(D)	515.5	14.6	(S)	4.6	17.2	7
231	MEN'S AND BOYS' SUITS AND COATS. .	-	-	.1	.2	(Z)	.1	34.2	1.1	-	.3	1.4	1
232	MEN'S AND BOYS' FURNISHINGS. . . .	-	-	.3	.5	(D)	(D)	(D)	(D)	(S)	(D)	(D)	22
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	-	-	(Z)	(Z)	-	.2	65.7	1.5	-	.3	1.5	1
238	MISC. APPAREL AND ACCESSORIES. . .	-	-	(Z)	(Z)	-	(S)	10.2	.3	-	.1	.4	89

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	GEORGIA--CON.													
23	APPAREL, OTH. TEXTILE PRODS--CON.													
239	MISC. FABRICATED TEXTILE PRODS	2.3	7.3	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	8.0	29.3	6.0	13.1	325.1	5.3	53.1	.7	(D)	(Z)	15	10	1
241	LOGGING CAMPS, LOG CONTRACTORS	1.5	3.5	1.5	3.4	(D)	(D)	(D)	(Z)	-	-	(X)	98	(X)
242	SAWMILLS AND PLANING MILLS	3.5	13.4	2.6	6.0	222.5	3.7	(D)	(D)	-	-	16	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.2	5.7	.7	1.4	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
244	WOOD CONTAINERS	.3	1.1	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.2	1.0	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	1.3	4.7	.9	1.7	20.8	.3	(D)	(D)	(D)	(Z)	1	(X)	1
25	FURNITURE AND FIXTURES	.9	3.5	.7	1.2	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	79	(X)
251	HOUSEHOLD FURNITURE	.5	2.2	.4	.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	.1	(D)	.1	.1	-	-	(D)	(Z)	-	-	(X)	79	(X)
26	PAPER AND ALLIED PRODUCTS	80.3	179.4	72.8	127.2	255.1	4.0	5,806.0	72.6	(D)	(D)	6	1	(X)
263	PAPERBOARD MILLS	50.4	97.8	47.7	79.3	134.3	2.1	3,337.3	41.5	(D)	(D)	1	1	(X)
264	MISC. CONVERTED PAPER PRODUCTS	1.6	6.7	.9	1.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
265	PAPERBOARD CONTAINERS AND BOXES	1.8	6.5	1.4	2.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	1.2	6.2	.7	1.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
271	NEWSPAPERS	.3	1.9	(S)	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
275	COMMERCIAL PRINTING	.6	2.9	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.1	.6	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	33.8	98.7	27.6	52.8	788.1	12.0	792.3	11.2	(D)	(D)	2	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	10.3	37.4	6.8	13.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	1.4	4.6	1.0	1.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	.4	1.5	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	7.1	20.4	6.1	11.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	.8	2.6	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	2.7	6.0	2.6	4.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS	1.9	4.6	1.8	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	4.4	17.5	2.8	5.2	47.5	.8	55.2	.9	-	-	5	1	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	.7	2.5	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	1.9	8.6	1.0	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	.2	.9	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.1	.5	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	26.8	61.0	23.6	38.1	554.0	8.8	31.9	.4	(D)	(D)	6	1	(X)
323	PRODUCTS OF PURCHASED GLASS	.1	.4	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	7.3	14.0	6.9	10.9	147.0	2.3	(D)	(D)	-	-	7	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	4.5	11.1	4.1	8.2	144.2	2.4	(D)	(D)	(D)	(D)	20	(X)	(X)
328	CUT STONE AND STONE PRODUCTS	.3	1.5	.2	.4	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
329	MISC. NONMETALLIC MINERAL PRODS.	4.6	14.1	3.2	5.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	11.9	39.1	9.0	16.1	247.1	3.8	-	-	(D)	(D)	2	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	4.7	15.4	3.5	6.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	3.9	14.7	2.7	5.0	26.9	.4	(D)	(Z)	-	-	5	1	(X)
341	METAL CANS, SHIPPING CONTAINERS	.5	1.6	.4	.8	(S)	(S)	-	-	-	-	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	.1	.4	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS	1.4	5.9	1.0	2.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
346	METAL FORGINGS AND STAMPINGS	.6	2.2	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.5	2.7	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.1	9.0	1.3	2.4	(D)	(Z)	(D)	(D)	(D)	(Z)	1	(X)	89
352	FARM AND GARDEN MACHINERY	.4	1.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.3	1.0	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.3	1.3	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.5	2.4	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
359	MISC. MACHINERY, EXC. ELEC	(S)	(S)	.1	.2	-	-	-	-	(D)	(Z)	(X)	(X)	89
36	ELECTRIC, ELECTRONIC EQUIP	2.8	12.0	1.7	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.9	3.8	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.4	1.6	.3	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
366	COMMUNICATION EQUIPMENT	.1	(D)	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.7	3.5	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	7.0	23.8	5.1	9.6	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
379	TRANSPORTATION EQUIPMENT, NEC	.1	.3	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.4	1.9	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	.3	1.1	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.9	4.0	.6	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS	.4	(D)	.3	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.1	.5	.1	.2	-	-	(D)	(Z)	-	-	(X)	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	GEORGIA--CON.												
23	APPAREL, OTH. TEXTILE PRODS--CON.												
239	MISC. FABRICATED TEXTILE PRODS	-	-	1.1	1.6	(D)	.4	(D)	(D)	-	2.0	5.8	8
24	LUMBER AND WOOD PRODUCTS	(D)	(D)	1.7	2.7	3.7	.6	565.3	16.2	-	7.7	24.3	9
241	LOGGING CAMPS, LOG CONTRACTORS	(D)	(D)	-	-	1.9	.3	5.8	.1	-	1.5	3.4	(X)
242	SAWMILLS AND PLANING MILLS	-	-	.9	1.5	.7	(D)	264.4	7.4	-	3.4	11.1	15
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.1	.2	.6	.4	148.1	4.2	-	1.3	5.3	31
244	WOOD CONTAINERS	-	-	(D)	(D)	(D)	(D)	15.0	.7	-	.1	.4	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.1	(Z)	(Z)	21.7	.8	-	.1	.6	17
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(D)	(D)	(D)	.3	110.3	3.0	-	1.1	3.5	(X)
25	FURNITURE AND FIXTURES	-	-	.4	.6	.2	.3	68.2	2.3	-	.7	2.6	20
251	HOUSEHOLD FURNITURE	-	-	(D)	(D)	.2	.4	46.3	1.5	-	.4	1.9	(X)
259	MISC. FURNITURE AND FIXTURES	-	-	.1	.1	-	(Z)	(D)	(D)	-	.1	(D)	52
26	PAPER AND ALLIED PRODUCTS	-	-	11.3	16.2	(D)	3.3	2,209.9	52.2	2,021.4	79.4	156.1	1
263	PAPERBOARD MILLS	-	-	6.1	8.1	(D)	1.1	783.4	18.5	(D)	49.4	84.1	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.6	1.0	(D)	.2	213.3	5.3	-	1.6	6.2	2
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	.5	(D)	118.1	3.9	(S)	1.7	6.2	(X)
27	PRINTING AND PUBLISHING	-	-	.3	.4	(D)	(D)	173.4	5.0	(D)	1.3	5.6	14
271	NEWSPAPERS	-	-	(Z)	(Z)	(D)	(D)	(S)	(S)	(D)	.3	1.6	1
275	COMMERCIAL PRINTING	-	-	(S)	(S)	(Z)	.4	(S)	(S)	-	.8	3.0	(X)
276	MANIFOLD BUSINESS FORMS	-	-	(Z)	(Z)	(Z)	(Z)	17.0	.5	-	.1	.4	18
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	12.2	19.4	7.8	(D)	1,831.8	45.9	(D)	29.9	74.6	1
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	3.4	5.3	(D)	(D)	1,025.3	24.1	(D)	10.0	32.7	3
282	PLASTICS MATERIALS, SYNTHETICS	-	-	.3	.5	(D)	(D)	115.3	2.7	-	2.1	3.6	1
285	PAINTS AND ALLIED PRODUCTS	-	-	.1	.2	(D)	(D)	37.0	1.0	-	.4	1.7	5
287	AGRICULTURAL CHEMICALS	-	-	3.2	5.0	.3	(D)	301.0	9.2	-	7.7	17.0	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	.2	.4	(D)	(D)	31.8	1.1	-	1.0	2.7	10
29	PETROLEUM AND COAL PRODUCTS	-	-	1.7	2.6	(D)	(D)	43.8	1.5	-	2.8	5.0	28
295	PAVING AND ROOFING MATERIALS	-	-	.7	1.1	(D)	(D)	36.6	1.3	-	1.7	3.2	16
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.5	2.5	.1	1.0	455.8	12.3	-	3.9	13.6	4
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.2	.4	(D)	.3	55.6	1.5	-	.6	2.0	18
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.4	.7	(Z)	.6	241.4	6.6	-	1.7	6.8	3
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	(Z)	.1	23.4	.7	-	.2	.9	(X)
314	FOOTWEAR, EXCEPT RUBBER	-	-	(Z)	(Z)	(Z)	(Z)	14.9	.4	-	.1	.5	1
32	STONE, CLAY, GLASS PRODUCTS	(Z)	(Z)	(D)	(D)	2.4	2.0	936.4	22.9	(D)	31.7	58.1	(X)
323	PRODUCTS OF PURCHASED GLASS	-	-	(Z)	(Z)	-	(S)	6.7	.3	-	(Z)	.1	4
325	STRUCTURAL CLAY PRODUCTS	-	-	4.8	6.7	(D)	.8	114.1	3.1	-	9.2	14.4	14
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	2.2	4.0	(D)	.9	91.8	2.9	(S)	5.5	10.9	7
328	CUT STONE AND STONE PRODUCTS	(Z)	(Z)	(Z)	(Z)	(D)	(D)	38.6	1.1	-	.4	1.4	57
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	2.5	3.7	(D)	(D)	393.1	8.7	(D)	7.4	15.4	10
33	PRIMARY METAL INDUSTRIES	(D)	(D)	5.2	7.3	2.0	1.4	838.1	23.0	-	9.2	28.3	2
335	NONFERROUS ROLLING AND DRAWING	-	-	2.4	3.7	(D)	(D)	374.8	9.1	-	4.0	11.0	3
34	FABRICATED METAL PRODUCTS	-	-	1.2	2.0	1.3	1.3	361.9	9.7	(D)	3.5	11.9	13
341	METAL CANS, SHIPPING CONTAINERS	-	-	(S)	(S)	(S)	(S)	30.0	.8	(D)	.5	1.4	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	-	-	(D)	(D)	-	(D)	8.3	.3	-	.1	.3	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	.2	.4	.5	(D)	123.6	3.9	-	1.4	5.1	5
346	METAL FORGINGS AND STAMPINGS	-	-	.3	.5	(D)	(D)	47.1	1.4	(D)	.3	1.3	10
349	MISC. FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(S)	(S)	105.8	2.4	(S)	.5	2.1	(X)
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	(D)	(D)	.5	.7	223.1	6.6	-	2.0	7.8	(X)
352	FARM AND GARDEN MACHINERY	-	-	.1	.2	(D)	(D)	29.0	1.0	-	.5	1.5	10
353	CONSTRUCTION, RELATED MACHINERY	-	-	(D)	(D)	(D)	.1	18.9	.6	-	.3	.8	(X)
355	SPECIAL INDUSTRY MACHINERY	(D)	(D)	(D)	(D)	(Z)	.2	26.7	.9	-	.3	1.0	(X)
356	GENERAL INDUSTRIAL MACHINERY	-	-	(D)	(D)	(D)	.1	77.6	2.1	-	.4	1.7	(X)
359	MISC. MACHINERY, EXC. ELEC	-	-	(D)	(D)	(Z)	(D)	(S)	(S)	-	.1	.8	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(S)	(S)	323.6	8.8	-	2.8	9.7	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	.4	.6	(D)	(Z)	94.0	2.6	-	1.0	3.4	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.2	.4	(D)	(D)	34.9	1.1	-	.4	1.2	35
366	COMMUNICATION EQUIPMENT	-	-	(Z)	(Z)	-	(Z)	(D)	(D)	-	.1	(D)	22
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	.2	.3	(D)	(D)	115.3	3.0	-	.8	2.9	1
37	TRANSPORTATION EQUIPMENT	-	-	2.3	3.6	3.5	.3	554.3	14.2	(D)	6.6	20.8	1
379	TRANSPORTATION EQUIPMENT, NEC.	-	-	(Z)	(Z)	(Z)	(Z)	7.7	.3	-	.1	.3	4
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.3	(D)	(D)	48.7	1.4	-	.4	1.3	23
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	.1	.2	(D)	(D)	25.7	.8	-	.2	.7	7
39	MISC. MANUFACTURING INDUS.	-	-	.3	.6	(Z)	.3	96.8	3.0	-	.8	3.6	6
394	TOYS AND SPORTING GOODS	-	-	.1	.2	-	.1	(D)	(D)	-	.3	(D)	5
395	PENS, OFFICE AND ART GOODS	-	-	.1	.2	-	(Z)	12.8	.4	-	.2	.7	20

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	FLORIDA	202.7	585.4	170.3	308.7	1,548.5	24.3	10,956.4	137.2	244.4	7.9	4	1	1
20	FOOD AND KINDRED PRODUCTS	28.5	87.6	23.6	44.0	489.2	7.9	1,312.4	17.2	-	-	7	3	(X)
201	MEAT PRODUCTS	1.1	5.2	.7	1.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.2	6.1	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	14.8	39.2	12.6	21.1	248.4	3.7	717.1	8.9	-	-	1	5	(X)
204	GRAIN MILL PRODUCTS	.5	2.0	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	1.2	4.1	.9	1.9	29.3	.5	-	-	-	-	70	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	3.6	9.9	3.5	8.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	3.6	12.3	2.9	5.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	1.8	6.8	1.3	2.3	23.5	.4	(D)	(D)	-	-	2	(X)	(X)
21	TOBACCO PRODUCTS	.3	1.1	.2	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
212	CIGARS	.3	1.1	.2	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	.6	2.2	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
225	KNITTING MILLS	.4	1.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.2	6.1	.6	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
232	MEN'S AND BOYS' FURNISHINGS	.2	1.1	(S)	(S)	-	-	(D)	(Z)	-	-	(X)	1	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.7	3.0	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.3	(Z)	.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
236	CHILDREN'S OUTERWEAR	.1	.4	(Z)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.4	12.6	2.6	5.3	118.3	1.7	-	-	-	-	22	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.7	3.3	.4	1.0	37.6	.6	-	-	-	-	21	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.8	(S)	(S)	(Z)	(Z)	-	-	-	-	1	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.9	2.8	.7	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.5	2.8	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	.3	1.8	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	.1	.4	(S)	(S)	(Z)	(Z)	-	-	-	-	88	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	53.4	112.6	51.6	96.1	30.8	.5	6,478.8	80.7	(D)	(D)	2	1	(X)
263	PAPERBOARD MILLS	24.3	55.1	23.7	48.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.2	1.4	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	1.0	4.0	.7	1.5	11.0	.2	34.4	.5	-	-	5	4	(X)
27	PRINTING AND PUBLISHING	1.8	12.0	.6	1.3	13.4	.2	-	-	-	-	62	(X)	(X)
271	NEWSPAPERS	.7	5.9	.1	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
275	COMMERCIAL PRINTING	.8	3.9	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	67.6	190.8	55.4	99.6	465.5	7.1	2,586.5	31.7	(Z)	(Z)	1	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	4.7	23.5	1.9	4.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	23.1	78.0	16.5	27.2	373.5	5.6	941.9	11.2	(Z)	(Z)	1	1	1
29	PETROLEUM AND COAL PRODUCTS	1.6	4.1	(D)	(D)	92.0	1.4	(D)	(D)	-	-	28	(X)	(X)
295	PAVING AND ROOFING MATERIALS	1.1	3.2	1.0	2.5	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.6	9.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	1.4	8.0	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	23.9	53.7	21.9	35.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
322	GLASS, PRESSED OR BLOWN	4.9	11.1	4.4	6.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	5.8	14.5	5.4	10.1	193.7	3.1	62.8	.9	-	-	19	40	(X)
33	PRIMARY METAL INDUSTRIES	5.3	20.4	3.8	6.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	.4	1.6	.3	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.4	18.1	3.0	5.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS	1.3	5.6	.9	1.7	-	-	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	1.6	6.8	1.0	1.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
346	METAL FORGINGS AND STAMPINGS	.3	1.2	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.2	1.1	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.6	9.3	(S)	(S)	(D)	(D)	(D)	(Z)	(D)	(Z)	(X)	1	98
357	OFFICE AND COMPUTING MACHINES	.4	2.7	(S)	(S)	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.2	1.2	.1	.3	-	-	-	-	(D)	(Z)	(X)	(X)	98
37	TRANSPORTATION EQUIPMENT	2.9	14.9	1.6	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
372	AIRCRAFT AND PARTS	.8	5.5	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	1.4	5.7	(S)	(S)	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
376	GUIDED MISSILES, SPACE VEHICLES	.4	2.7	(S)	(S)	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
38	INSTRUMENTS, RELATED PRODS	.6	3.9	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES	.1	.2	(Z)	(Z)	(D)	(Z)	-	-	-	-	1	(X)	(X)
	KENTUCKY	252.6	781.1	145.9	279.1	2,645.6	42.2	1,284.8	18.8	1,249.3	35.6	5	1	2
20	FOOD AND KINDRED PRODUCTS	13.6	30.6	12.0	20.3	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
201	MEAT PRODUCTS	1.2	3.1	.9	1.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.4	3.9	1.2	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
205	BAKERY PRODUCTS	.9	2.1	.8	1.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
207	FATS AND OILS	2.5	5.4	2.2	4.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	6.3	12.5	5.7	8.9	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	FLORIDA	(D)	(D)	49.4	71.2	38.9	(D)	9,501.7	276.7	2,470.5	198.4	504.9	3
20	FOOD AND KINDRED PRODUCTS	(D)	(Z)	9.3	13.4	(D)	3.7	1,422.9	43.7	(D)	27.0	76.8	14
201	MEAT PRODUCTS	(D)	(Z)	(D)	(D)	(D)	.3	114.6	3.8	(S)	1.4	5.1	(X)
202	DAIRY PRODUCTS	-	-	(D)	(D)	(D)	(D)	136.0	4.7	(D)	1.2	5.5	(X)
203	PRESERVED FRUITS AND VEGETABLES	-	-	6.2	8.0	.4	.1	661.8	18.1	(D)	12.6	32.3	20
204	GRAIN MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	40.6	1.3	-	1.0	2.8	(X)
205	BAKERY PRODUCTS	-	-	(D)	(D)	(D)	(D)	70.5	2.2	(S)	1.0	3.3	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	(D)	(D)	(D)	(D)	55.3	1.8	(S)	4.0	9.8	(X)
208	BEVERAGES	-	-	(D)	(D)	(Z)	.6	186.8	6.5	-	2.9	9.5	(X)
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.7	1.1	(D)	.7	137.9	4.5	-	1.8	6.0	1
21	TOBACCO PRODUCTS	-	-	(D)	(D)	-	(D)	27.7	.8	-	.3	1.0	(X)
212	CIGARS	-	-	(D)	(D)	-	(D)	27.5	.8	-	.3	1.0	(X)
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	40.0	1.5	-	.5	2.2	(X)
225	KNITTING MILLS	-	-	(D)	(D)	-	.5	28.0	1.0	-	.5	1.9	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.3	.1	(D)	171.6	4.9	(S)	1.0	4.6	13
232	MEN'S AND BOYS' FURNISHINGS	-	-	(D)	(D)	-	(D)	15.9	.8	-	.1	.4	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.1	.2	-	.5	104.3	2.4	(S)	.5	2.5	8
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	(Z)	(D)	7.4	.3	-	(Z)	.3	30
236	CHILDREN'S OUTERWEAR	-	-	(Z)	(Z)	(Z)	(Z)	13.6	.3	-	.1	.4	99
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	2.3	245.9	7.4	(Z)	2.9	9.6	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(Z)	(Z)	(D)	(D)	70.4	2.3	(Z)	.7	3.0	1
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(Z)	(Z)	(Z)	(S)	19.2	.6	-	.1	.6	1
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(D)	(D)	(Z)	(D)	44.9	1.4	-	.8	2.0	(X)
25	FURNITURE AND FIXTURES	-	-	(Z)	.1	(D)	(S)	62.6	2.1	-	.6	2.8	39
251	HOUSEHOLD FURNITURE	-	-	(Z)	.1	(D)	(S)	40.2	1.4	-	.4	1.9	53
254	PARTITIONS AND FIXTURES	-	-	(Z)	(Z)	-	(D)	6.1	.2	-	.1	.3	23
26	PAPER AND ALLIED PRODUCTS	-	-	9.0	11.9	2.6	(D)	509.0	16.5	2,286.0	59.2	108.2	3
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(D)	190.2	7.0	1,045.5	25.9	47.8	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(S)	(S)	(D)	(D)	35.7	1.2	(D)	.3	1.4	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.3	.5	.3	.1	73.0	2.5	-	1.1	3.7	1
27	PRINTING AND PUBLISHING	-	-	.1	.3	(D)	(D)	356.6	10.7	-	1.7	9.8	6
271	NEWSPAPERS	-	-	.1	.2	(Z)	(Z)	160.6	5.6	-	.7	5.0	1
275	COMMERCIAL PRINTING	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.8	3.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	18.4	26.0	27.1	4.7	3,576.4	91.2	161.7	63.7	158.5	1
281	INDUSTRIAL INORGANIC CHEMICALS	(D)	(D)	(D)	(D)	(Z)	.2	815.0	18.8	-	2.6	13.7	(X)
287	AGRICULTURAL CHEMICALS	-	-	7.4	9.1	(D)	(D)	1,933.5	50.9	(D)	22.4	68.8	1
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(D)	.1	(D)	(D)	-	1.5	3.3	(X)
295	PAVING AND ROOFING MATERIALS	-	-	(D)	(D)	(D)	(S)	20.9	.7	-	.6	1.7	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(S)	(S)	(Z)	(S)	240.4	7.8	(S)	1.3	6.1	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	(S)	(S)	(Z)	(S)	209.2	6.8	(S)	1.0	4.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	7.4	11.0	(D)	3.4	577.1	18.5	-	21.1	43.6	3
322	GLASS, PRESSED OR BLOWN	-	-	(D)	(D)	(D)	(D)	134.7	4.2	-	4.7	9.1	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS	-	-	1.3	1.8	1.5	2.7	123.5	4.4	-	6.1	13.8	5
33	PRIMARY METAL INDUSTRIES	(D)	(D)	2.3	3.7	.8	1.4	437.5	13.5	-	4.5	15.3	9
335	NONFERROUS ROLLING AND DRAWING	-	-	(D)	(D)	(Z)	(D)	40.8	1.2	-	.3	1.1	(X)
34	FABRICATED METAL PRODUCTS	-	-	1.2	2.1	.6	2.7	401.2	12.7	(S)	4.0	15.6	7
341	METAL CANS, SHIPPING CONTAINERS	-	-	.8	1.4	.2	.1	110.9	3.9	-	1.2	4.7	2
344	FABRICATED STRUC. METAL PRODS	-	-	.2	.4	(D)	1.3	182.6	5.0	-	1.3	5.2	10
346	METAL FORGINGS AND STAMPINGS	-	-	(D)	(D)	-	(S)	23.8	.8	(S)	.3	1.2	(X)
349	MISC. FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	24.7	.9	-	.4	1.6	(X)
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	(S)	(S)	(D)	(S)	240.8	7.8	(D)	1.8	9.5	(X)
357	OFFICE AND COMPUTING MACHINES	-	-	(Z)	(Z)	-	(D)	87.9	2.5	-	.5	3.1	1
359	MISC. MACHINERY, EXC. ELEC	-	-	-	-	(D)	(D)	27.8	.9	-	.2	1.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	(S)	(S)	(S)	(S)	368.6	11.9	(S)	3.2	13.8	(X)
372	AIRCRAFT AND PARTS	-	-	(D)	(D)	(D)	.1	167.7	5.1	(D)	1.6	6.0	(X)
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(S)	(S)	(S)	(S)	92.1	3.5	-	1.0	4.2	(X)
376	GUIDED MISSILES, SPACE VEHICLES	-	-	(D)	(D)	(Z)	(D)	85.6	2.6	-	.4	2.5	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	(Z)	(S)	114.3	3.6	-	.6	4.2	(X)
382	MEASURING, CONTROLLING DEVICES	-	-	(Z)	(Z)	-	(Z)	11.4	.2	-	(Z)	.2	1
	KENTUCKY	(D)	(D)	51.8	79.1	(D)	(Z)	31,264.6	502.0	15.3	258.0	689.3	4
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	472.6	10.3	(D)	13.4	24.4	(X)
201	MEAT PRODUCTS	-	-	.3	.5	-	.1	90.3	1.6	-	1.1	2.6	3
202	DAIRY PRODUCTS	-	-	(S)	(S)	(D)	(S)	67.6	1.6	-	1.4	3.4	(X)
205	BAKERY PRODUCTS	-	-	.5	.9	(D)	(D)	26.3	.7	-	.8	1.5	19
207	FATS AND OILS	-	-	1.4	1.9	(Z)	(D)	63.2	1.1	(S)	2.8	4.2	18
208	BEVERAGES	-	-	(S)	(S)	(S)	(S)	159.9	3.6	(D)	6.1	10.0	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	KENTUCKY--CON.													
20	FOOD AND KINDRED PRODUCTS--CON.													
209	MISC. FOODS, KINDRED PRODUCTS. . .	.8	2.3	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
21	TOBACCO PRODUCTS	3.3	9.1	2.6	5.0	(D)	(D)	(D)	(D)	19.9	.8	(X)	(X)	7
214	TOBACCO STEMMING AND REDRYING. . .	.7	2.2	.6	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	2.4	6.5	1.7	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	1.2	4.6	.7	1.5	13.8	.2	(D)	(D)	(D)	(Z)	2	(X)	1
231	MEN'S AND BOYS' SUITS AND COATS. .	.2	.7	.2	.3	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
232	MEN'S AND BOYS' FURNISHINGS. . . .	.5	2.2	.2	.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	(D)	(D)	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.9	6.3	1.4	2.8	33.6	.6	(D)	(D)	(D)	(D)	39	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.8	2.9	.5	.9	2.7	.1	(D)	(D)	(D)	(D)	1	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.4	1.2	.3	.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.6	.3	.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
251	HOUSEHOLD FURNITURE.	.3	1.1	.2	.4	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	8.2	18.9	6.8	11.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	.3	1.4	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	.7	2.1	.5	1.0	30.2	.5	-	-	-	-	17	(X)	(X)
27	PRINTING AND PUBLISHING.	1.5	5.6	.9	1.8	44.1	.7	-	-	-	-	1	(X)	(X)
271	NEWSPAPERS	.3	1.1	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	.8	2.7	.6	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	94.7	331.8	30.8	46.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS . .	16.7	30.6	14.8	21.8	320.8	5.0	-	-	377.4	10.8	1	(X)	1
285	PAINTS AND ALLIED PRODUCTS	.4	1.1	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	253.5	6.9	(X)	(X)	1
287	AGRICULTURAL CHEMICALS	.5	1.0	.4	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	4.6	15.9	3.2	6.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	1.9	7.4	1.1	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	10.1	21.0	9.0	14.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
322	GLASS, PRESSED OR BLOWN.	3.2	6.3	3.0	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	2.1	4.6	2.0	3.6	(D)	(D)	-	-	(Z)	(Z)	(X)	(X)	1
327	CONCRETE, GYPSUM, PLASTER PRODS. .	.9	2.6	.8	1.9	73.5	1.2	-	-	-	-	74	(X)	(X)
33	PRIMARY METAL INDUSTRIES	76.3	230.4	51.1	120.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
331	BLAST FURNACE, BASIC STEEL PROD. .	(D)	(D)	42.0	103.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	7.0	18.1	5.6	10.6	158.7	2.6	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	6.7	17.6	5.4	9.3	154.7	2.6	(D)	(Z)	(D)	(D)	1	1	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.3	1.2	.2	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.5	1.5	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS . . .	.8	2.0	.7	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
347	METAL SERVICES, NEC.	.3	.9	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	2.8	6.9	2.3	3.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	8.2	26.7	5.8	11.6	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	.8	3.4	.5	1.0	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
356	GENERAL INDUSTRIAL MACHINERY . . .	.7	2.4	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH . .	2.3	6.4	1.6	2.4	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.3	1.4	(S)	(S)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	7.6	21.5	5.3	8.3	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.5	2.1	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	.7	2.6	.5	.9	(D)	(Z)	-	-	(D)	(D)	95	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	1.0	2.5	.8	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	4.2	11.5	3.2	5.4	9.2	.1	(D)	(D)	(D)	(D)	1	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	4.0	10.6	2.9	5.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.3	1.2	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES . .	.1	.5	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.4	1.6	.3	.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
394	TOYS AND SPORTING GOODS.	.2	.7	.1	.2	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	TENNESSEE.	341.7	902.9	229.9	350.1	2,890.5	46.2	3,820.4	49.2	3,447.7	92.0	2	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	22.4	55.4	18.6	33.6	413.4	6.8	608.5	7.9	(D)	(D)	3	1	(X)
201	MEAT PRODUCTS.	2.1	6.3	1.5	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.8	5.1	1.4	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	1.4	4.0	1.1	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	3.5	8.9	2.7	4.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
205	BAKERY PRODUCTS.	1.7	3.9	1.4	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS. . .	.3	.8	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS.	8.1	17.2	7.4	13.1	164.4	2.5	377.8	4.8	-	-	1	1	(X)
208	BEVERAGES.	2.2	5.9	1.7	3.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
209	MISC. FOODS, KINDRED PRODUCTS. . .	1.3	3.3	1.1	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	KENTUCKY--CON.												
20	FOOD AND KINDRED PRODUCTS--CON.												
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	.1	.2	(D)	(D)	42.3	1.0	-	.6	1.7	1
21	TOBACCO PRODUCTS	-	-	.9	1.1	(Z)	(D)	205.4	4.2	-	3.3	7.7	1
214	TOBACCO STEMMING AND REDRYING. . .	-	-	(D)	(D)	-	(D)	33.8	.9	-	.7	1.7	(X)
22	TEXTILE MILL PRODUCTS.	-	-	1.4	2.1	.1	.1	188.3	3.7	-	2.2	5.5	9
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	.2	.4	(Z)	(D)	133.3	3.1	(S)	1.2	3.9	6
231	MEN'S AND BOYS' SUITS AND COATS. .	-	-	.1	.1	-	.1	17.6	.4	-	.2	.6	1
232	MEN'S AND BOYS' FURNISHINGS. . . .	-	-	.1	.2	(Z)	.1	74.6	1.7	(S)	.5	1.9	8
233	WOMEN'S AND MISSES' OUTERWEAR. . .	-	-	(Z)	(Z)	(Z)	(D)	17.2	.4	-	.1	.4	5
239	MISC. FABRICATED TEXTILE PRODS . .	-	-	(D)	(D)	(Z)	(D)	(D)	(D)	-	.1	(D)	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.4	.6	(D)	1.2	143.4	3.4	-	1.7	4.7	38
242	SAWMILLS AND PLANING MILLS	-	-	(Z)	.1	(D)	.7	89.2	2.0	-	1.2	3.2	58
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	(S)	(S)	(S)	(S)	21.7	.5	-	.3	.6	(X)
25	FURNITURE AND FIXTURES	-	-	.1	.2	.1	.2	33.8	1.0	-	.6	1.9	27
251	HOUSEHOLD FURNITURE.	-	-	(D)	(D)	(Z)	.2	23.2	.7	-	.4	1.3	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	4.1	5.2	.8	.1	414.2	7.1	-	9.1	15.2	2
264	MISC. CONVERTED PAPER PRODUCTS . .	-	-	.1	.2	(D)	(D)	43.0	1.0	-	.5	1.7	1
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	.2	.3	(Z)	(D)	50.1	1.1	-	.7	2.2	24
27	PRINTING AND PUBLISHING.	-	-	.5	.8	(Z)	(D)	172.9	3.8	-	1.6	5.1	12
271	NEWSPAPERS	-	-	(D)	(D)	-	(Z)	43.3	.9	-	.3	1.0	(X)
275	COMMERCIAL PRINTING.	-	-	(D)	(D)	(Z)	(D)	74.7	1.6	-	1.0	2.8	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	(S)	(S)	(S)	(S)	18,729.7	285.4	-	98.3	321.0	(X)
282	PLASTICS MATERIALS, SYNTHETICS . .	-	-	.5	.7	(D)	(D)	532.5	8.7	-	15.9	24.8	1
285	PAINTS AND ALLIED PRODUCTS	-	-	.2	.3	(D)	(D)	23.6	.6	-	.3	.7	19
286	INDUSTRIAL ORGANIC CHEMICALS . . .	-	-	2.5	3.4	(D)	(D)	(D)	(D)	-	(D)	(D)	1
287	AGRICULTURAL CHEMICALS	-	-	(D)	(D)	(D)	(D)	14.4	.4	-	.5	.8	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	.8	1.2	(D)	(D)	426.9	9.2	(S)	3.9	11.3	3
307	MISCELLANEOUS PLASTICS PRODUCTS. .	-	-	.5	.8	.1	.4	247.8	5.4	(S)	1.1	4.1	3
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(S)	(S)	301.1	6.1	-	10.9	18.9	(X)
322	GLASS, PRESSED OR BLOWN.	-	-	2.0	2.9	(D)	(Z)	61.6	1.3	-	2.8	5.0	1
325	STRUCTURAL CLAY PRODUCTS	-	-	(S)	(S)	(D)	(S)	36.7	1.0	-	2.6	4.0	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	.1	.2	(D)	(D)	28.5	.7	-	.8	1.9	67
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(S)	(S)	7,404.0	110.4	(D)	79.1	192.7	(X)
331	BLAST FURNACE, BASIC STEEL PROD. .	(D)	(D)	(S)	(S)	(S)	(S)	(D)	(D)	(D)	(D)	(D)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	-	-	4.3	7.3	(D)	(D)	398.8	7.5	-	6.6	13.1	1
34	FABRICATED METAL PRODUCTS. . . .	-	-	2.9	4.2	(D)	1.0	368.5	8.3	-	6.6	13.7	5
342	CUTLERY, HANDTOOLS AND HARDWARE. .	-	-	.2	.2	(D)	(Z)	38.5	.9	-	.2	.8	1
344	FABRICATED STRUC. METAL PRODS. . .	-	-	.1	.2	(Z)	(D)	32.6	.9	-	.4	1.2	43
346	METAL FORGINGS AND STAMPINGS . . .	-	-	.3	.4	(D)	(D)	31.7	.8	-	.7	1.4	7
347	METAL SERVICES, NEC.	-	-	(D)	(D)	(Z)	(Z)	16.2	.5	-	.3	.6	(X)
349	MISC. FABRICATED METAL PRODUCTS. .	-	-	1.2	1.8	.2	(D)	143.9	3.1	-	2.8	5.7	1
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	(S)	(S)	(D)	(S)	712.3	15.1	-	8.0	21.8	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	-	-	.1	.2	(D)	.2	97.3	2.4	-	.8	2.9	1
356	GENERAL INDUSTRIAL MACHINERY . . .	-	-	(D)	(D)	(D)	.1	70.9	1.7	-	.7	2.1	(X)
358	REFRIGERATION AND SERVICE MACH . .	-	-	.5	.9	(D)	(Z)	194.8	3.9	-	2.0	5.0	2
359	MISC. MACHINERY, EXC. ELEC	-	-	(S)	(S)	(D)	(S)	47.6	1.1	-	.2	1.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	(S)	(S)	(D)	(S)	652.6	13.1	-	7.7	18.7	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	-	-	(D)	(D)	(Z)	.1	64.8	1.5	-	.5	1.6	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	-	-	(D)	(D)	(D)	(S)	74.7	1.7	-	1.1	2.9	(X)
364	ELEC. LIGHTING, WIRING EQUIP . . .	-	-	.5	.7	(D)	.1	56.5	1.3	-	1.0	2.5	7
37	TRANSPORTATION EQUIPMENT	-	-	1.3	2.2	(D)	(D)	318.5	6.1	-	4.0	9.3	1
371	MOTOR VEHICLES AND EQUIPMENT . . .	-	-	1.3	2.1	(D)	(Z)	300.0	5.6	-	3.7	8.4	1
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	(Z)	(D)	37.3	.9	-	.2	.8	(X)
382	MEASURING, CONTROLLING DEVICES . .	-	-	(Z)	(Z)	(Z)	(D)	18.9	.4	-	.1	.5	1
39	MISC. MANUFACTURING INDUS. . . .	-	-	(D)	(D)	.1	(D)	42.9	1.1	-	.4	1.3	(X)
394	TOYS AND SPORTING GOODS.	-	-	(D)	(D)	(Z)	(D)	22.9	.6	-	.1	.5	(X)
	TENNESSEE.	80.9	10.3	78.0	120.7	18.6	13.1	32,745.0	552.8	1,725.3	351.0	826.1	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	7.8	11.9	2.5	(D)	1,111.3	21.8	(D)	20.8	43.2	3
201	MEAT PRODUCTS.	-	-	.7	1.1	(Z)	(D)	170.0	3.4	-	2.4	5.8	2
202	DAIRY PRODUCTS	-	-	.7	1.3	(D)	(D)	95.5	2.2	(D)	1.5	4.2	6
203	PRESERVED FRUITS AND VEGETABLES. .	-	-	.3	.6	(D)	(D)	81.9	1.6	(D)	1.9	4.5	9
204	GRAIN MILL PRODUCTS.	-	-	.5	.7	.3	.3	225.2	4.5	-	1.8	4.7	5
205	BAKERY PRODUCTS.	-	-	(D)	(D)	(D)	(D)	79.1	1.5	-	1.4	2.9	(X)
206	SUGAR, CONFECTIONERY PRODUCTS. . .	-	-	(D)	(D)	-	(D)	27.1	.4	-	.3	.7	(X)
207	FATS AND OILS.	-	-	3.2	4.5	(D)	(D)	221.2	4.1	-	8.5	13.3	4
208	BEVERAGES.	-	-	(S)	(S)	(S)	(S)	137.8	2.6	-	2.2	5.0	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	.5	.7	(D)	(D)	73.4	1.5	-	.9	2.2	5

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	TENNESSEE--CON.													
21	TOBACCO PRODUCTS	.2	.7	.2	.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	7.5	24.6	4.7	9.2	127.5	2.1	47.8	.7	(D)	(D)	3	1	(X)
222	WEAV'G MILLS, MANMADE FIBER.	.6	2.2	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	2.6	7.4	1.9	3.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
228	YARN AND THREAD MILLS.	1.4	6.2	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS.	.7	2.4	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	3.4	12.7	2.0	3.5	13.8	.2	(D)	(D)	(D)	(D)	1	(X)	(X)
231	MEN'S AND BOYS' SUITS AND COATS.	.3	1.3	.2	.4	-	-	5.2	.1	-	-	(X)	1	(X)
232	MEN'S AND BOYS' FURNISHINGS.	1.7	6.8	.9	1.5	10.5	.2	(D)	(D)	-	-	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR.	.5	1.9	.2	.5	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES.	(Z)	.2	(Z)	(Z)	-	-	-	-	(D)	(Z)	(X)	(X)	1
239	MISC. FABRICATED TEXTILE PRODS	.7	2.0	.6	1.0	(D)	(Z)	-	-	-	-	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.6	12.5	2.6	5.3	87.2	1.5	-	-	(D)	(Z)	24	(X)	1
242	SAWMILLS AND PLANING MILLS	1.6	6.7	1.0	2.2	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.4	1.3	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	2.1	7.5	1.4	2.6	20.1	.3	(D)	(D)	-	-	17	(X)	(X)
251	HOUSEHOLD FURNITURE.	1.5	5.7	.9	1.8	12.9	.2	(D)	(D)	-	-	15	(X)	(X)
253	PUBLIC BLDG., RELATED FURNITURE.	.1	.5	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	29.0	67.6	23.9	39.5	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER.	15.0	30.7	12.3	17.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	1.1	4.0	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	1.2	3.6	.9	1.8	21.6	.4	(D)	(D)	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING.	2.0	7.6	1.1	2.1	37.6	.6	(D)	(D)	-	-	1	(X)	(X)
271	NEWSPAPERS	.3	1.2	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING.	.9	3.3	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	161.5	399.5	104.9	132.7	1,233.7	19.4	465.5	6.1	2,717.9	72.7	1	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	70.0	259.6	20.7	31.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	37.3	62.2	32.8	39.5	305.8	4.9	(D)	(D)	1,084.1	30.4	1	(X)	1
284	SOAPS, CLEANERS, TOILET GOODS.	.3	.8	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	8.1	16.3	7.0	10.5	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	(D)	(D)	(D)	(D)	57.3	.9	(D)	(D)	(D)	(D)	1	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	11.4	31.8	8.3	14.9	106.4	1.7	440.2	5.7	(D)	(D)	2	1	(X)
301	TIRES AND INNER TUBES.	5.7	15.6	4.3	8.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	1.8	5.3	1.4	2.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	2.9	8.2	1.9	3.0	10.7	.2	(D)	(D)	(D)	(D)	1	(X)	(X)
31	LEATHER, LEATHER PRODUCTS.	.9	3.8	.5	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING.	.4	1.0	.3	.6	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
314	FOOTWEAR, EXCEPT RUBBER.	.4	2.3	.2	.3	3.2	.1	(D)	(Z)	(D)	(D)	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS.	31.6	58.8	27.9	38.0	(D)	(D)	(D)	(D)	431.5	11.1	(X)	(X)	1
324	CEMENT, HYDRAULIC.	11.2	15.2	10.4	10.2	(D)	(D)	(D)	(D)	391.4	9.8	(X)	(X)	1
326	POTTERY AND RELATED PRODUCTS	.4	1.2	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.9	4.1	1.8	3.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	1.3	4.6	.7	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	38.9	133.2	15.4	33.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	4.2	18.0	3.2	11.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	9.6	22.2	7.7	13.4	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
339	MISC. PRIMARY METAL PRODUCTS	.6	1.5	.4	.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	7.4	23.0	5.3	9.7	53.0	.9	25.6	.5	(D)	(D)	1	66	(X)
341	METAL CANS, SHIPPING CONTAINERS.	.2	.5	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE.	.5	2.0	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	.6	1.5	.6	1.1	-	-	(D)	(Z)	-	-	(X)	1	(X)
344	FABRICATED STRUC. METAL PRODS.	2.8	8.4	2.2	3.9	13.4	.2	(D)	(D)	(D)	(Z)	1	(X)	91
345	SCREW MACHINE PROD., BOLTS, ETC.	.1	.4	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	.8	2.1	.6	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	1.0	3.9	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	4.8	16.2	3.0	5.4	12.3	.2	-	-	-	-	1	(X)	(X)
354	METALWORKING MACHINERY	.3	1.3	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.5	1.4	.3	.4	-	-	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.7	2.5	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	1.6	5.6	1.1	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.3	1.3	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	7.7	25.4	5.0	9.7	135.3	2.2	5.6	.1	-	-	1	3	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.7	2.1	.5	.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
365	RADIO, TV RECEIVING EQUIPMENT.	.3	1.1	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.3	1.2	.2	.3	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.3	.9	(S)	(S)	(S)	(Z)	-	-	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	3.5	12.9	2.1	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	2.3	8.7	1.3	2.6	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
373	SHIP, BOAT BUILDING, REPAIRING	.2	.8	.1	.2	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
39	MISC. MANUFACTURING INDUS.	1.1	3.7	.7	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
394	TOYS AND SPORTING GOODS.	.2	.5	.2	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
395	PENS, OFFICE AND ART GOODS	.2	.9	.1	.2	(D)	(Z)	(D)	(D)	(D)	(Z)	1	(X)	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	TENNESSEE--CON.												
21	TOBACCO PRODUCTS	-	-	(D)	(D)	(Z)	(S)	9.2	.3	-	.2	.5	(X)
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	.3	1.6	812.1	15.5	(D)	7.7	23.0	(X)
222	WEAV'G MILLS, MANMADE FIBER	-	-	(D)	(D)	(D)	(D)	85.0	1.5	-	.6	2.3	(X)
225	KNITTING MILLS	-	-	.8	1.3	(D)	.8	201.4	3.9	-	2.6	7.2	9
228	YARN AND THREAD MILLS	-	-	.3	.5	(Z)	(D)	275.5	5.1	-	1.5	5.8	2
229	MISCELLANEOUS TEXTILE GOODS	-	-	(D)	(D)	-	.1	94.1	1.5	(S)	.6	2.0	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.8	1.1	(D)	1.4	414.5	9.2	(D)	3.2	12.4	3
231	MEN'S AND BOYS' SUITS AND COATS.	-	-	.1	.1	(Z)	.2	(S)	(S)	-	.2	1.0	1
232	MEN'S AND BOYS' FURNISHINGS	-	-	.5	.7	(D)	(D)	222.1	5.3	-	1.5	5.9	3
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.1	.1	(Z)	.2	79.5	1.4	-	.7	3.4	3
238	MISC. APPAREL AND ACCESSORIES	-	-	(Z)	(Z)	-	(Z)	3.4	.1	-	(Z)	.2	68
239	MISC. FABRICATED TEXTILE PRODS	-	-	.2	.2	(D)	(D)	39.6	.9	-	.6	1.6	3
24	LUMBER AND WOOD PRODUCTS	-	-	1.1	1.8	.2	1.7	299.5	7.2	(D)	4.5	12.1	20
242	SAWMILLS AND PLANING MILLS	-	-	.2	.5	.2	(D)	182.5	4.4	(D)	2.2	6.3	73
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	-	.3	28.7	.7	-	.4	1.0	(X)
25	FURNITURE AND FIXTURES	-	-	.7	1.2	.5	(D)	205.5	5.0	-	2.1	6.6	6
251	HOUSEHOLD FURNITURE	-	-	.5	.8	(D)	(D)	168.3	4.0	-	1.6	5.0	4
253	PUBLIC BLDG., RELATED FURNITURE	-	-	(D)	(D)	(D)	(S)	6.1	.2	-	.2	.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(D)	1,505.1	28.1	(D)	32.9	61.8	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	(D)	(D)	(D)	(D)	772.0	13.4	(D)	14.7	27.3	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.4	.7	(Z)	.2	129.3	2.7	-	1.2	3.5	4
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.4	.7	(Z)	(D)	84.5	1.8	(S)	1.1	3.0	1
27	PRINTING AND PUBLISHING	-	-	.5	.9	(D)	.6	263.0	5.6	-	1.7	5.6	16
271	NEWSPAPERS	-	-	(Z)	.1	-	(D)	52.7	1.0	-	.3	1.1	6
275	COMMERCIAL PRINTING	-	-	.2	.3	(Z)	(D)	108.1	2.3	-	.7	2.1	36
28	CHEMICALS, ALLIED PRODUCTS	-	-	20.2	29.1	(D)	(D)	16,577.9	266.8	1,281.3	172.8	387.8	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	5.4	7.6	4.0	.4	14,439.0	228.3	(D)	76.0	258.6	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	2.4	3.8	(D)	(D)	1,301.3	22.6	(D)	34.8	52.7	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.1	.2	(D)	(D)	17.6	.3	-	.2	.5	22
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(Z)	(S)	322.7	5.8	(D)	16.1	23.1	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	(D)	(D)	(D)	.1	(D)	(D)	-	(D)	(D)	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	3.1	4.5	(D)	1.0	889.9	17.0	-	8.9	21.8	7
301	TIRES AND INNER TUBES	-	-	(S)	(S)	-	(S)	407.3	7.6	-	5.0	11.4	(X)
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.4	.6	(D)	(D)	127.0	2.6	-	1.4	3.8	6
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	.7	1.1	(D)	(D)	276.6	5.2	-	1.7	4.9	27
31	LEATHER, LEATHER PRODUCTS	-	-	(S)	(S)	(D)	(S)	114.0	2.7	-	1.0	3.3	(X)
311	LEATHER TANNING AND FINISHING	-	-	.2	.4	-	(D)	22.3	.4	-	.4	.9	26
314	FOOTWEAR, EXCEPT RUBBER	-	-	.1	.2	(Z)	(D)	82.6	2.0	-	.4	2.0	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	12.1	18.1	.6	2.4	1,075.3	20.8	(D)	29.8	48.9	3
324	CEMENT, HYDRAULIC	-	-	(D)	(D)	(D)	.1	232.8	5.0	-	10.8	13.3	(X)
326	POTTERY AND RELATED PRODUCTS	-	-	(D)	(D)	.1	(D)	16.1	.4	-	.6	1.4	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	.5	1.0	(D)	1.6	35.4	1.0	-	1.6	3.3	39
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	(D)	(D)	(S)	(S)	190.1	3.5	-	1.2	3.7	(X)
33	PRIMARY METAL INDUSTRIES	(S)	(S)	(S)	(S)	(D)	(S)	6,877.1	99.5	-	39.0	124.0	(X)
332	IRON AND STEEL FOUNDRIES	79.9	10.2	1.0	1.6	(Z)	(D)	283.8	6.1	-	2.7	9.3	7
335	NONFERROUS ROLLING AND DRAWING	-	-	(S)	(S)	(D)	(S)	537.7	8.8	-	8.6	17.4	(X)
339	MISC. PRIMARY METAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	39.0	.7	-	.6	1.4	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	3.3	5.6	1.3	1.3	611.9	13.2	(D)	7.1	18.3	6
341	METAL CANS, SHIPPING CONTAINERS	-	-	(Z)	.1	(D)	(D)	11.0	.2	(D)	.2	.4	2
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	(D)	(D)	(D)	.1	72.6	1.5	-	.5	1.6	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	-	-	.2	.5	(D)	.2	17.6	.4	-	.5	1.2	1
344	FABRICATED STRUC. METAL PRODS.	(D)	(Z)	1.6	2.5	(D)	.2	194.3	4.5	(Z)	3.0	6.4	5
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	(Z)	(Z)	(Z)	(Z)	15.7	.4	-	.1	.4	23
346	METAL FORGINGS AND STAMPINGS	-	-	.5	.8	(Z)	(D)	57.1	1.2	-	.8	1.9	29
349	MISC. FABRICATED METAL PRODUCTS	-	-	.5	1.0	(Z)	(D)	128.2	2.8	-	.9	3.1	15
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	2.0	3.2	1.1	(D)	516.9	10.9	-	4.2	13.0	5
354	METALWORKING MACHINERY	-	-	.1	.1	(Z)	.1	51.2	1.0	-	.3	1.4	40
355	SPECIAL INDUSTRY MACHINERY	-	-	.3	.4	(Z)	.1	50.3	1.0	-	.4	1.1	18
356	GENERAL INDUSTRIAL MACHINERY	(D)	(D)	.4	.8	(D)	(D)	75.4	1.6	-	.6	1.9	15
358	REFRIGERATION AND SERVICE MACH	-	-	.6	1.0	.4	.2	169.9	3.6	-	1.3	4.1	2
359	MISC. MACHINERY, EXC. ELEC	-	-	.1	.1	(D)	(Z)	42.5	1.0	-	.1	.8	50
36	ELECTRIC, ELECTRONIC EQUIP	-	-	3.2	5.7	1.3	.4	802.5	15.8	-	8.1	23.8	4
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.2	.3	(D)	(D)	58.0	1.3	-	.6	1.8	6
365	RADIO, TV RECEIVING EQUIPMENT	-	-	(S)	(S)	(Z)	(D)	35.7	.8	-	.2	.8	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	.1	.2	(Z)	(D)	48.3	.9	-	.2	.6	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES	-	-	(S)	(S)	(Z)	(D)	31.6	.7	-	.2	.8	(X)
37	TRANSPORTATION EQUIPMENT	-	-	1.4	2.6	.5	.2	423.7	8.8	-	3.2	10.3	5
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.8	1.6	(D)	(D)	297.1	6.0	-	1.9	6.5	4
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(Z)	(Z)	(D)	(D)	22.6	.5	-	.2	.7	1
39	MISC. MANUFACTURING INDUS.	-	-	(S)	(S)	(S)	(S)	112.1	2.5	-	1.1	3.6	(X)
394	TOYS AND SPORTING GOODS	-	-	.2	.4	(Z)	(D)	13.8	.3	-	.1	.4	69
395	PENS, OFFICE AND ART GOODS	-	-	.1	.1	(Z)	(D)	30.7	.7	-	.3	1.1	13

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	TENNESSEE--CON.													
39	MISC. MANUFACTURING INDUS--CON.													
399	MISCELLANEOUS MANUFACTURES	.5	1.7	.4	.7	-	-	-	-	(D)	(Z)	(X)	(X)	97
	ALABAMA	344.5	923.5	267.4	450.7	2,339.9	36.4	7,810.6	96.7	1,671.6	51.3	5	2	4
20	FOOD AND KINDRED PRODUCTS	9.4	28.8	7.3	13.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
201	MEAT PRODUCTS	2.5	7.7	1.9	3.3	41.9	.7	(D)	(D)	-	-	1	(X)	(X)
202	DAIRY PRODUCTS	.8	3.0	.5	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	.2	.8	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS	2.2	6.3	1.6	3.1	26.1	.4	(D)	(D)	-	-	6	(X)	(X)
205	BAKERY PRODUCTS	.6	1.8	.5	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS	2.2	5.6	1.8	3.7	(S)	(S)	(D)	(D)	(D)	(Z)	(X)	(X)	1
208	BEVERAGES	.5	(D)	(D)	(D)	(D)	(Z)	(D)	(Z)	(D)	(D)	1	1	(X)
209	MISC. FOODS, KINDRED PRODUCTS	.3	1.2	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	17.2	66.7	10.7	18.9	243.0	3.8	191.3	2.9	30.7	1.2	1	1	1
221	WEAVING MILLS, COTTON	4.3	21.0	2.0	3.5	63.7	1.0	23.6	.4	22.3	.8	1	1	1
222	WEAV'G MILLS, MANMADE FIBER	2.1	9.0	1.3	2.4	(D)	(D)	15.7	.3	-	-	(X)	1	(X)
224	NARROW FABRIC MILLS	.3	1.1	.3	.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
227	FLOOR COVERING MILLS	.6	1.5	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
228	YARN AND THREAD MILLS	3.2	16.8	1.3	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	1.8	6.0	1.0	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS	2.5	11.3	1.4	2.4	5.2	.1	8.4	.1	(D)	(D)	1	1	(X)
232	MEN'S AND BOYS' FURNISHINGS	1.0	4.5	.5	.8	2.5	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.4	1.5	(S)	(S)	-	-	(S)	(S)	-	-	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.8	3.5	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
236	CHILDREN'S OUTERWEAR	.1	.5	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES	.1	(D)	(D)	(D)	(D)	(Z)	-	-	-	-	1	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	.2	.7	.1	.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	9.0	29.0	7.0	13.5	145.0	2.4	113.9	1.6	-	-	39	66	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	1.2	3.1	1.2	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	3.1	11.8	2.1	4.1	26.8	.5	(D)	(D)	-	-	32	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	2.5	7.7	2.0	3.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.8	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.8	3.3	.5	.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	.6	2.4	(S)	(S)	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	.1	.4	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	78.6	165.8	70.8	114.3	153.4	2.4	4,349.2	50.8	690.7	21.5	1	1	1
262	PAPERMILLS, EXC. BUILDING PAPER	40.7	90.8	35.2	56.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
263	PAPERBOARD MILLS	32.5	61.9	30.8	50.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	1.2	2.5	1.0	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.4	1.2	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.9	3.3	.5	.7	-	-	-	-	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.2	1.0	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	63.6	163.0	49.3	82.1	526.0	8.1	1,597.9	20.5	(D)	(D)	1	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	15.2	53.0	9.5	19.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	2.1	3.7	1.9	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	9.3	29.2	6.8	11.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
301	TIRES AND INNER TUBES	6.5	19.3	4.8	7.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	36.7	71.1	33.9	50.3	398.9	6.2	435.0	5.0	395.4	11.4	11	4	17
324	CEMENT, HYDRAULIC	13.6	28.3	12.2	18.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	5.4	10.4	5.2	7.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS	5.1	11.2	4.7	8.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	98.6	290.4	66.4	119.6	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
331	BLAST FURNACE, BASIC STEEL PROD	50.2	115.8	41.6	67.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	11.4	44.4	9.5	29.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
334	SECONDARY NONFERROUS METALS	1.5	4.0	1.4	3.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	(D)	(D)	10.0	14.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	5.0	18.7	3.4	6.2	13.6	.2	-	-	(D)	(D)	29	(X)	(X)
344	FABRICATED STRUC. METAL PRODS	1.7	6.2	1.2	2.2	6.1	.1	-	-	-	-	67	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	.4	1.0	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	.7	2.5	(S)	(S)	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	1.2	5.2	.7	1.1	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.1	7.9	1.4	2.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.5	2.1	.3	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.4	1.5	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	.3	1.3	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	.5	1.5	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.3	9.2	1.5	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.2	1.0	.2	.2	-	-	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT	.3	1.5	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	3.0	11.8	2.1	4.2	59.1	.9	(D)	(D)	(D)	(D)	1	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	1.3	5.3	.8	1.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
373	SHIP, BOAT BUILDING, REPAIRING	.5	1.9	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	TENNESSEE--CON.												
39	MISC. MANUFACTURING INDUS--CON.												
399	MISCELLANEOUS MANUFACTURES	-	-	.2	.4	.3	(D)	48.5	1.1	-	.5	1.5	16
	ALABAMA	479.9	46.1	126.7	185.7	20.0	14.5	22,590.3	472.8	2,581.7	332.4	732.4	1
20	FOOD AND KINDRED PRODUCTS	-	-	3.9	6.0	1.0	.6	629.1	15.5	-	8.2	20.3	10
201	MEAT PRODUCTS	-	-	1.2	1.9	(D)	(D)	161.2	4.4	-	2.2	5.9	3
202	DAIRY PRODUCTS	-	-	.2	.4	(D)	(D)	71.5	2.0	-	.8	2.4	4
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	(D)	(D)	15.9	.5	-	.3	.7	(X)
204	GRAIN MILL PRODUCTS	-	-	.7	1.0	(D)	(D)	155.0	3.3	-	1.1	2.9	11
205	BAKERY PRODUCTS	-	-	.4	.5	-	(D)	37.9	1.1	-	.5	1.3	11
207	FATS AND OILS	-	-	(S)	(S)	(D)	(S)	108.2	1.9	-	2.5	4.6	(X)
208	BEVERAGES	-	-	.2	.5	(D)	(D)	(D)	(D)	-	.4	(D)	40
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(D)	(D)	(D)	.2	33.9	.9	-	.3	1.0	(X)
22	TEXTILE MILL PRODUCTS	-	-	5.9	8.6	1.7	.8	1,910.6	47.8	(D)	16.8	51.9	4
221	WEAVING MILLS, COTTON	-	-	.7	1.0	(Z)	.2	681.1	17.4	-	4.0	14.5	1
222	WEAV'G MILLS, MANMADE FIBER	-	-	.8	1.2	(Z)	(Z)	254.8	6.6	-	2.6	8.8	1
224	NARROW FABRIC MILLS	-	-	.4	.6	-	(D)	13.2	.6	-	.3	.4	55
227	FLOOR COVERING MILLS	-	-	.4	.8	(Z)	(Z)	18.0	.5	-	.5	.9	3
228	YARN AND THREAD MILLS	-	-	.7	1.1	.5	(D)	565.9	14.5	-	3.6	14.3	1
229	MISCELLANEOUS TEXTILE GOODS	-	-	.8	1.2	(D)	.1	214.5	4.3	-	1.6	5.1	1
23	APPAREL, OTH. TEXTILE PRODS	-	-	.9	1.5	.1	(D)	321.3	8.9	(D)	2.4	9.3	7
232	MEN'S AND BOYS' FURNISHINGS	-	-	.4	.4	.1	(D)	124.5	3.8	-	.7	3.4	24
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	(Z)	(Z)	(S)	60.9	1.2	-	.4	1.6	4
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	.4	.9	-	(D)	86.2	2.5	-	.8	2.6	1
236	CHILDREN'S OUTERWEAR	-	-	(S)	(S)	-	(D)	13.5	.4	-	.1	.5	(X)
238	MISC. APPAREL AND ACCESSORIES	-	-	(D)	(D)	(Z)	(D)	(D)	(D)	-	.1	(D)	(X)
239	MISC. FABRICATED TEXTILE PRODS	-	-	.1	.1	(Z)	(D)	24.9	.6	(D)	.2	.5	29
24	LUMBER AND WOOD PRODUCTS	-	-	2.8	4.2	(D)	(D)	588.6	15.6	(S)	9.8	24.3	7
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	(D)	(D)	.8	(D)	(S)	(S)	-	1.5	3.4	(X)
242	SAWMILLS AND PLANING MILLS	-	-	.7	1.1	1.2	1.1	278.5	7.6	(S)	3.4	9.6	16
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	1.3	2.1	.9	(D)	154.9	4.2	-	3.1	6.8	9
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.1	(D)	(D)	18.0	.5	-	.3	.9	3
25	FURNITURE AND FIXTURES	-	-	.3	.4	(Z)	.4	73.6	2.4	-	.7	2.5	7
251	HOUSEHOLD FURNITURE	-	-	(S)	(S)	(Z)	(S)	57.2	1.7	-	.5	1.9	(X)
254	PARTITIONS AND FIXTURES	-	-	.1	.1	-	(Z)	5.8	.3	-	.1	.3	7
26	PAPER AND ALLIED PRODUCTS	-	-	22.9	37.5	2.0	.2	2,297.3	51.5	2,321.5	80.2	138.5	1
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	10.7	20.0	(D)	(Z)	1,602.2	34.6	(D)	37.7	70.7	1
263	PAPERBOARD MILLS	-	-	8.9	12.4	(D)	(Z)	497.9	11.6	(D)	33.3	53.0	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	.6	.7	(D)	(Z)	39.9	1.2	(D)	1.3	2.2	15
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.1	.1	(D)	.2	27.8	.8	(D)	.3	.9	1
27	PRINTING AND PUBLISHING	-	-	.3	.5	(D)	(D)	113.6	2.6	-	.9	2.5	13
271	NEWSPAPERS	-	-	(S)	(S)	-	(S)	26.7	.8	-	.1	.5	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	21.2	36.4	.8	(D)	4,210.9	80.9	(D)	61.9	130.0	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	5.1	11.0	(Z)	.6	1,672.5	33.7	(D)	12.3	37.2	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	1.3	1.3	(D)	(D)	35.6	1.0	-	.5	1.1	1
30	RUBBER, MISC. PLASTICS PROD	-	-	4.4	6.6	.1	(D)	742.4	17.5	-	7.8	19.4	1
301	TIRES AND INNER TUBES	-	-	3.5	4.7	-	(D)	486.8	11.7	-	5.1	12.6	1
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	12.0	16.5	1.4	(D)	813.1	20.8	-	32.5	55.6	8
324	CEMENT, HYDRAULIC	-	-	3.3	4.7	(D)	-	413.3	10.1	-	13.2	23.4	1
325	STRUCTURAL CLAY PRODUCTS	-	-	3.3	4.8	.4	1.6	76.8	2.4	-	5.4	9.0	21
329	MISC. NONMETALLIC MINERAL PRODS	(D)	(D)	2.3	3.3	.2	(D)	109.6	2.8	-	5.7	9.2	20
33	PRIMARY METAL INDUSTRIES	(S)	(S)	(S)	(S)	(S)	(S)	9,436.5	170.7	(D)	94.7	234.1	(X)
331	BLAST FURNACE, BASIC STEEL PROD	(D)	(D)	28.5	34.4	(D)	(D)	2,499.3	48.5	(D)	48.7	85.7	1
332	IRON AND STEEL FOUNDRIES	(D)	(D)	(S)	(S)	(S)	(S)	536.5	15.3	-	9.8	30.5	(X)
334	SECONDARY NONFERROUS METALS	(D)	(D)	(D)	(D)	(D)	(S)	26.8	.5	-	1.6	3.1	(X)
335	NONFERROUS ROLLING AND DRAWING	-	-	7.7	9.4	1.9	.4	(D)	(D)	-	(D)	(D)	1
34	FABRICATED METAL PRODUCTS	(D)	(D)	2.4	3.8	.9	.3	458.2	12.5	(D)	5.2	13.5	5
344	FABRICATED STRUC. METAL PRODS	(D)	(D)	.8	1.3	(D)	.5	150.3	4.0	(D)	1.4	4.4	11
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	(D)	(D)	(D)	.1	24.1	.6	-	.6	.9	(X)
346	METAL FORGINGS AND STAMPINGS	-	-	(S)	(S)	(D)	(S)	67.5	1.7	-	.6	1.7	(X)
349	MISC. FABRICATED METAL PRODUCTS	(D)	(D)	.5	.7	.2	(D)	143.3	4.0	-	1.9	5.2	12
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	.9	1.4	(D)	.7	200.2	5.6	-	1.7	5.8	11
353	CONSTRUCTION, RELATED MACHINERY	(D)	(Z)	(D)	(D)	(Z)	(D)	56.1	1.6	-	.4	1.3	(X)
356	GENERAL INDUSTRIAL MACHINERY	-	-	.3	.4	(D)	(D)	35.9	1.1	-	.3	1.0	30
358	REFRIGERATION AND SERVICE MACH	-	-	.1	.2	(D)	(D)	35.7	1.0	-	.3	1.1	1
359	MISC. MACHINERY, EXC. ELEC	-	-	(S)	(S)	(Z)	(D)	31.4	.8	-	.3	1.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.6	1.0	.5	(D)	246.7	6.5	(D)	1.8	6.2	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	(D)	(D)	(D)	.1	26.0	.8	-	.3	.9	(X)
366	COMMUNICATION EQUIPMENT	-	-	(D)	(D)	-	(Z)	56.5	1.2	-	.4	1.4	(X)
37	TRANSPORTATION EQUIPMENT	(D)	(D)	1.0	1.6	.6	.6	289.7	7.6	(S)	2.8	8.9	1
371	MOTOR VEHICLES AND EQUIPMENT	(D)	(D)	(D)	(D)	(Z)	.2	145.1	3.6	-	1.1	3.9	(X)
373	SHIP, BOAT BUILDING, REPAIRING	(D)	(D)	(D)	(D)	(D)	.3	41.7	1.1	(D)	.5	1.4	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ALABAMA--CON.													
38	INSTRUMENTS, RELATED PRODS	.2	1.3	.1	.2	(D)	(Z)	(D)	(Z)	(D)	(Z)	1	1	1
39	MISC. MANUFACTURING INDUS.	.6	2.2	.4	.7	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	MISSISSIPPI	138.4	309.3	117.7	167.3	884.7	14.0	2,695.1	32.7	(D)	(D)	9	1	(X)
20	FOOD AND KINDRED PRODUCTS	7.2	22.3	5.6	9.5	95.7	1.5	(D)	(D)	-	-	19	(X)	(X)
201	MEAT PRODUCTS	2.7	7.9	2.0	3.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	.5	1.8	.4	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
204	GRAIN MILL PRODUCTS	.7	2.1	.6	1.0	-	-	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS	2.3	7.3	1.8	3.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	.3	.9	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	2.1	7.0	1.5	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	.5	1.8	.4	.7	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.5	6.9	.9	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	1.0	4.6	.6	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.6	(Z)	.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.5	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	.2	.4	.1	.2	-	-	(D)	(Z)	-	-	(X)	1	(X)
24	LUMBER AND WOOD PRODUCTS	15.7	49.1	12.5	24.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	.6	1.9	.5	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	3.9	13.7	3.0	5.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.6	5.6	1.1	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
244	WOOD CONTAINERS	.1	.6	(Z)	.1	-	-	(D)	(Z)	-	-	(X)	1	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.2	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	9.4	27.1	7.7	15.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.2	4.9	.8	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	27.3	48.6	26.6	43.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	.5	1.5	.4	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.4	1.2	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.5	2.5	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	23.3	58.1	18.2	28.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	4.6	9.6	4.2	6.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	2.6	9.0	1.7	2.7	14.0	.2	(D)	(Z)	-	-	5	1	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	.7	2.8	(S)	(S)	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
31	LEATHER, LEATHER PRODUCTS	.1	.5	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	18.9	35.9	17.7	26.7	157.1	2.4	(D)	(D)	(D)	(D)	15	(X)	(X)
322	GLASS, PRESSED OR BLOWN	2.0	4.2	1.8	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	3.5	6.2	3.4	5.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.2	2.9	1.1	2.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	6.2	13.2	5.8	9.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.8	6.5	1.2	2.3	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS	.1	.3	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	.5	2.1	.3	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	.6	2.1	.4	.8	-	-	7.1	.1	-	-	(X)	1	(X)
349	MISC. FABRICATED METAL PRODUCTS	.2	.6	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.5	5.9	1.0	1.7	(D)	(Z)	(D)	(D)	(D)	(Z)	4	(X)	99
352	FARM AND GARDEN MACHINERY	.4	1.3	.3	.5	-	-	(D)	(D)	(D)	(Z)	(X)	(X)	99
353	CONSTRUCTION, RELATED MACHINERY	.3	1.2	.2	.3	(D)	(Z)	-	-	-	-	71	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.3	9.3	1.5	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.4	2.0	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	.5	1.7	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.5	2.2	.3	.4	-	-	-	-	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.7	2.0	.5	.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.7	9.9	.6	1.0	-	-	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.2	.9	.1	.1	-	-	(D)	(Z)	-	-	(X)	1	(X)
39	MISC. MANUFACTURING INDUS.	.6	2.4	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	ARKANSAS	174.5	377.2	148.7	210.0	947.0	14.3	4,113.7	46.9	296.8	8.4	10	1	1
20	FOOD AND KINDRED PRODUCTS	11.7	31.1	9.4	13.2	168.5	2.7	(D)	(D)	-	-	2	(X)	(X)
201	MEAT PRODUCTS	2.5	7.7	1.8	2.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	.5	1.2	.4	.5	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
203	PRESERVED FRUITS AND VEGETABLES	2.5	5.1	2.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS	1.8	5.8	1.3	1.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
205	BAKERY PRODUCTS	.4	1.1	.4	.5	-	-	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS	3.4	8.1	3.0	5.0	143.6	2.3	-	-	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	2.9	6.6	2.4	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ALABAMA--CON.												
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.1	(D)	(Z)	37.2	1.1	-	.2	.8	43
39	MISC. MANUFACTURING INDUS.	-	-	.2	.3	(D)	(D)	58.8	1.5	-	.5	1.7	4
	MISSISSIPPI	(D)	(D)	82.3	99.5	13.9	(D)	6,041.5	142.0	(D)	140.5	260.2	2
20	FOOD AND KINDRED PRODUCTS	-	-	4.4	7.0	(D)	.1	458.5	12.7	(D)	7.3	18.9	14
201	MEAT PRODUCTS	-	-	1.6	2.4	(D)	.4	195.7	4.8	(S)	2.2	6.0	2
202	DAIRY PRODUCTS	-	-	.2	.4	(D)	(D)	(S)	(S)	-	.5	1.4	1
204	GRAIN MILL PRODUCTS	-	-	.7	1.2	-	(D)	31.6	1.1	-	.9	2.1	67
207	FATS AND OILS	-	-	1.4	2.2	(Z)	(D)	129.6	3.8	-	2.7	6.4	22
208	BEVERAGES	-	-	(D)	(D)	(D)	(S)	25.3	.6	-	.2	.8	(X)
22	TEXTILE MILL PRODUCTS	-	-	1.1	1.7	(D)	.1	173.2	4.4	-	2.2	5.9	1
225	KNITTING MILLS	-	-	.3	.5	(D)	(Z)	37.3	1.1	-	.5	1.4	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.6	1.0	(D)	.4	183.2	5.3	(D)	1.4	5.8	15
232	MEN'S AND BOYS' FURNISHINGS	-	-	.3	.4	.1	(D)	117.7	3.5	(D)	.9	3.6	3
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	(Z)	(Z)	-	(Z)	20.1	.5	-	.1	.6	1
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(D)	18.1	.4	-	.1	.4	1
239	MISC. FABRICATED TEXTILE PRODS	-	-	.1	.2	(Z)	(D)	8.1	.2	-	.1	.7	25
24	LUMBER AND WOOD PRODUCTS	-	-	7.0	12.4	3.3	.3	933.2	24.5	-	18.6	44.7	5
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	(D)	(D)	18.4	.5	-	.6	1.8	(X)
242	SAWMILLS AND PLANING MILLS	-	-	1.3	2.1	(D)	1.3	268.7	8.0	-	4.1	12.0	7
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.8	1.4	.4	(D)	136.7	3.6	-	1.8	4.9	5
244	WOOD CONTAINERS	-	-	(S)	(S)	(D)	(S)	10.0	.5	-	.1	.7	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(Z)	(Z)	-	(Z)	4.2	.1	-	.1	.2	1
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	495.3	11.7	-	12.0	25.2	(X)
25	FURNITURE AND FIXTURES	-	-	.4	.7	.3	(D)	122.7	3.5	-	1.4	5.0	2
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	.5	(D)	196.7	5.0	(D)	26.1	41.1	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(D)	(D)	(D)	(D)	31.7	1.0	(Z)	.8	1.8	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	(D)	(D)	(Z)	(D)	29.3	.7	-	.3	.8	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(Z)	.2	77.1	1.9	-	.2	1.4	10
28	CHEMICALS, ALLIED PRODUCTS	-	-	11.9	15.0	(D)	(D)	1,474.7	30.1	(D)	26.4	50.6	3
282	PLASTICS MATERIALS, SYNTHETICS	-	-	1.7	2.5	2.6	1.3	112.0	2.7	(D)	3.9	6.8	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.2	1.8	(Z)	.7	260.3	6.3	-	2.3	6.8	3
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	(D)	(D)	(Z)	(D)	106.1	2.2	-	.4	1.5	(X)
31	LEATHER, LEATHER PRODUCTS	-	-	(Z)	(Z)	-	(D)	17.0	.5	-	.1	.4	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	13.2	18.6	3.8	(D)	356.9	9.2	(S)	17.9	26.9	6
322	GLASS, PRESSED OR BLOWN	-	-	1.3	2.1	(D)	(Z)	50.6	1.2	-	2.1	3.4	1
325	STRUCTURAL CLAY PRODUCTS	-	-	(D)	(D)	(D)	(D)	47.6	1.2	-	3.2	4.1	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(D)	(D)	(D)	(S)	29.5	.8	(D)	2.1	3.9	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	3.9	5.3	(D)	(D)	127.7	3.6	-	4.9	8.1	1
34	FABRICATED METAL PRODUCTS	-	-	.8	1.4	.4	.3	166.9	4.3	(D)	1.5	5.2	15
341	METAL CANS, SHIPPING CONTAINERS	-	-	(Z)	.1	(Z)	(Z)	9.7	.2	-	.1	.2	7
344	FABRICATED STRUC. METAL PRODS.	-	-	.2	.3	(Z)	.3	61.7	1.4	-	.5	1.7	3
346	METAL FORGINGS AND STAMPINGS	-	-	.2	.4	.2	(Z)	50.4	1.3	-	.5	1.8	1
349	MISC. FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(D)	(S)	15.4	.3	(D)	.2	.4	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.6	1.0	(D)	(D)	145.3	4.2	-	1.2	4.2	7
352	FARM AND GARDEN MACHINERY	-	-	.2	.3	(Z)	(D)	26.1	.8	-	.4	1.0	4
353	CONSTRUCTION, RELATED MACHINERY	-	-	(D)	(D)	.1	(D)	33.4	.9	-	.3	1.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.2	1.9	.3	.2	260.2	6.9	-	2.3	7.5	1
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	.2	.3	(D)	(D)	49.7	1.6	-	.4	1.7	1
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	.3	.5	(D)	(D)	59.7	1.2	-	.6	1.6	1
363	HOUSEHOLD APPLIANCES	-	-	.2	.3	-	.1	61.9	1.7	-	.4	1.6	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.4	.6	(D)	(D)	38.9	1.1	-	.6	1.6	1
37	TRANSPORTATION EQUIPMENT	-	-	.4	.6	.1	(D)	318.0	8.9	-	1.9	9.6	1
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.1	-	(Z)	29.6	.8	-	.1	.7	21
39	MISC. MANUFACTURING INDUS.	-	-	.3	.6	(D)	(D)	62.9	1.7	-	.5	1.6	6
	ARKANSAS	(D)	(D)	97.8	121.6	(D)	3.7	7,567.4	167.2	1,848.3	177.9	306.8	2
20	FOOD AND KINDRED PRODUCTS	-	-	7.0	8.3	.7	(D)	683.0	17.8	-	11.6	26.6	5
201	MEAT PRODUCTS	-	-	1.5	1.9	(D)	.2	224.9	5.5	-	2.2	6.8	15
202	DAIRY PRODUCTS	-	-	.3	.4	(D)	(D)	24.2	.7	-	.5	1.1	13
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	(D)	.1	101.6	2.5	-	2.3	4.1	(X)
204	GRAIN MILL PRODUCTS	-	-	1.0	1.1	(Z)	(D)	145.5	4.1	-	1.5	4.5	8
205	BAKERY PRODUCTS	-	-	(S)	(S)	(D)	(S)	21.0	.6	-	.4	.8	(X)
207	FATS AND OILS	-	-	1.7	2.1	(D)	(D)	119.3	3.0	-	4.1	7.8	1
22	TEXTILE MILL PRODUCTS	-	-	1.9	2.3	(D)	.2	127.5	3.2	-	2.5	4.9	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--
						Distillate		Residual				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	
		A	B	C	D	E	F	G	H	I	J	F H J
	ARKANSAS--CON.											
23	APPAREL, OTH. TEXTILE PRODS.	.5	2.3	.3	.5	-	-	-	-	-	-	(X) (X) (X)
232	MEN'S AND BOYS' FURNISHINGS.	.3	1.2	.2	.3	-	-	-	-	-	-	(X) (X) (X)
233	WOMEN'S AND MISSES' OUTERWEAR.	.1	.6	.1	.1	-	-	-	-	-	-	(X) (X) (X)
24	LUMBER AND WOOD PRODUCTS	8.9	25.7	7.0	11.3	(S)	(S)	(D)	(D)	-	-	(X) (X) (X)
241	LOGGING CAMPS, LOG CONTRACTORS	.8	1.9	(D)	(D)	(D)	(D)	-	-	-	-	(X) (X) (X)
242	SAWMILLS AND PLANING MILLS	4.1	12.7	3.1	4.2	(S)	(S)	(D)	(D)	-	-	(X) (X) (X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	2.7	7.0	2.2	3.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
244	WOOD CONTAINERS.	.1	.5	(D)	(D)	-	-	-	-	-	-	(X) (X) (X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.2	.1	.1	-	-	-	-	-	-	(X) (X) (X)
249	MISCELLANEOUS WOOD PRODUCTS.	1.1	3.3	.8	1.5	(D)	(D)	-	-	-	-	(X) (X) (X)
25	FURNITURE AND FIXTURES	1.4	4.5	1.0	1.2	(D)	(D)	-	-	-	-	(X) (X) (X)
251	HOUSEHOLD FURNITURE.	1.1	3.4	.8	.8	(D)	(D)	-	-	-	-	(X) (X) (X)
253	PUBLIC BLDG., RELATED FURNITURE.	.2	.6	.1	.1	(D)	(D)	-	-	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS.	39.0	80.0	36.0	57.8	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
262	PAPERMILLS, EXC. BUILDING PAPER.	21.2	43.5	19.2	30.3	(D)	(Z)	(D)	(D)	(D)	(D)	1 (X) (X)
265	PAPERBOARD CONTAINERS AND BOXES.	.5	1.7	.4	.5	(D)	(Z)	-	-	-	-	1 (X) (X)
27	PRINTING AND PUBLISHING.	.6	2.7	.3	.5	(D)	(D)	-	-	-	-	(X) (X) (X)
271	NEWSPAPERS	.1	.7	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
28	CHEMICALS, ALLIED PRODUCTS	50.7	82.3	48.7	68.7	(S)	(S)	(S)	(S)	(D)	(D)	(X) (X) (X)
281	INDUSTRIAL INORGANIC CHEMICALS	29.5	41.5	29.0	39.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
287	AGRICULTURAL CHEMICALS	14.7	23.9	14.4	21.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	.4	1.0	.4	.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
29	PETROLEUM AND COAL PRODUCTS.	5.9	10.0	5.5	6.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
295	PAVING AND ROOFING MATERIALS	1.5	2.4	1.4	1.6	(D)	(D)	(D)	(Z)	-	-	(X) 1 (X)
30	RUBBER, MISC. PLASTICS PROD.	3.5	12.5	2.2	3.8	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
301	TIRES AND INNER TUBES.	1.5	4.5	1.1	2.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
307	MISCELLANEOUS PLASTICS PRODUCTS.	1.3	6.0	.7	1.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
31	LEATHER, LEATHER PRODUCTS.	.2	1.2	.1	.1	(D)	(D)	(D)	(Z)	-	-	(X) 1 (X)
32	STONE, CLAY, GLASS PRODUCTS.	17.3	25.0	16.4	18.4	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	3.4	5.3	3.2	3.9	(D)	(Z)	(D)	(D)	-	-	1 (X) (X)
329	MISC. NONMETALLIC MINERAL PRODS.	1.9	3.5	1.8	2.5	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	22.6	62.8	12.9	16.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
335	NONFERROUS ROLLING AND DRAWING	2.0	5.5	1.4	1.3	-	-	-	-	-	-	(X) (X) (X)
336	NONFERROUS FOUNDRIES	.5	1.1	.4	.5	-	-	-	-	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS.	3.0	10.4	2.1	3.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
344	FABRICATED STRUC. METAL PRODS.	.5	2.1	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
349	MISC. FABRICATED METAL PRODUCTS.	1.0	3.6	(S)	(S)	-	-	(S)	(S)	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	1.6	5.7	1.1	1.4	-	-	-	-	-	-	(X) (X) (X)
354	METALWORKING MACHINERY	.3	1.3	.2	.3	-	-	-	-	-	-	(X) (X) (X)
358	REFRIGERATION AND SERVICE MACH	.5	1.7	.4	.4	-	-	-	-	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	3.2	9.5	2.1	2.7	(D)	(D)	-	-	-	-	(X) (X) (X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.2	3.2	.8	.9	-	-	-	-	-	-	(X) (X) (X)
363	HOUSEHOLD APPLIANCES	1.0	2.6	.7	.9	-	-	-	-	-	-	(X) (X) (X)
364	ELEC. LIGHTING, WIRING EQUIP	.3	1.1	.3	.4	(D)	(D)	-	-	-	-	(X) (X) (X)
37	TRANSPORTATION EQUIPMENT	.8	2.4	.6	.8	(D)	(D)	-	-	-	-	(X) (X) (X)
371	MOTOR VEHICLES AND EQUIPMENT	.4	1.3	(S)	(S)	(D)	(Z)	-	-	-	-	1 (X) (X)
38	INSTRUMENTS, RELATED PRODS	.3	1.3	.2	.3	-	-	(D)	(D)	-	-	(X) (X) (X)
	LOUISIANA.	865.2	1,157.3	791.0	832.8	5,217.9	66.2	8,254.0	102.8	26.4	.8	2 2 1
20	FOOD AND KINDRED PRODUCTS.	23.3	50.7	21.4	38.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
202	DAIRY PRODUCTS	.8	2.7	.5	.9	-	-	-	-	-	-	(X) (X) (X)
203	PRESERVED FRUITS AND VEGETABLES.	.4	1.2	.4	.6	(D)	(D)	-	-	-	-	(X) (X) (X)
204	GRAIN MILL PRODUCTS.	.6	2.2	.3	.6	(D)	(D)	-	-	-	-	(X) (X) (X)
205	BAKERY PRODUCTS.	.7	1.7	.6	.8	-	-	-	-	-	-	(X) (X) (X)
206	SUGAR, CONFECTIONERY PRODUCTS.	15.8	28.8	15.5	27.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
208	BEVERAGES.	.6	2.0	.5	.8	(D)	(D)	-	-	-	-	(X) (X) (X)
209	MISC. FOODS, KINDRED PRODUCTS.	1.5	4.2	1.2	1.9	(D)	(D)	-	-	-	-	(X) (X) (X)
22	TEXTILE MILL PRODUCTS.	.5	1.4	.4	.8	-	-	-	-	-	-	(X) (X) (X)
229	MISCELLANEOUS TEXTILE GOODS.	.1	.4	(D)	(D)	-	-	-	-	-	-	(X) (X) (X)
23	APPAREL, OTH. TEXTILE PRODS.	.5	1.9	.2	.4	-	-	(D)	(D)	-	-	(X) (X) (X)
232	MEN'S AND BOYS' FURNISHINGS.	.3	1.2	.1	.2	-	-	(D)	(D)	-	-	(X) (X) (X)
233	WOMEN'S AND MISSES' OUTERWEAR.	(Z)	.1	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
24	LUMBER AND WOOD PRODUCTS	9.8	22.1	8.2	13.3	52.7	1.0	(D)	(D)	-	-	31 (X) (X)
241	LOGGING CAMPS, LOG CONTRACTORS	.9	2.0	.9	2.0	(D)	(D)	-	-	-	-	(X) (X) (X)
242	SAWMILLS AND PLANING MILLS	3.0	6.5	2.3	2.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	5.0	11.3	4.4	7.5	-	-	(D)	(D)	-	-	(X) (X) (X)
249	MISCELLANEOUS WOOD PRODUCTS.	.9	2.0	.6	1.0	(D)	(D)	-	-	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS.	76.7	141.3	69.6	106.6	86.7	1.3	4,737.3	57.6	-	-	1 1 (X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ARKANSAS--CON.												
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	-	(D)	71.9	1.8	-	.3	1.5	(X)
232	MEN'S AND BOYS' FURNISHINGS.	-	-	(D)	(D)	-	(D)	35.5	1.0	-	.3	1.3	(X)
233	WOMEN'S AND MISSES' OUTERWEAR.	-	-	.1	.1	-	(Z)	17.5	.5	-	.2	.5	38
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	531.4	14.4	(D)	11.0	28.0	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	2.9	(D)	(D)	(D)	-	2.1	4.0	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(S)	(S)	(S)	(D)	301.7	8.5	(D)	5.3	14.4	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	.7	.5	2.7	(D)	131.4	3.3	-	2.1	5.2	1
244	WOOD CONTAINERS.	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.4	1.3	50
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	(Z)	.1	(Z)	(Z)	2.7	.1	-	(Z)	.1	1
249	MISCELLANEOUS WOOD PRODUCTS.	-	-	.6	1.0	.1	(D)	66.8	1.8	-	1.2	3.0	13
25	FURNITURE AND FIXTURES	-	-	.9	1.0	(D)	(Z)	117.5	3.3	-	1.3	3.6	7
251	HOUSEHOLD FURNITURE.	-	-	.7	.7	(D)	(D)	89.2	2.6	-	.9	2.7	10
253	PUBLIC BLDG., RELATED FURNITURE.	-	-	.1	.1	-	(D)	15.1	.4	-	.3	.7	18
26	PAPER AND ALLIED PRODUCTS.	-	-	14.0	20.7	(D)	.2	891.9	22.2	849.6	37.9	64.3	1
262	PAPERMILLS, EXC. BUILDING PAPER.	-	-	9.0	14.5	(D)	(Z)	573.3	13.2	(D)	20.9	35.5	1
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	.3	.3	(Z)	(D)	47.3	1.3	-	.5	1.4	1
27	PRINTING AND PUBLISHING.	-	-	.2	.3	(D)	.2	83.9	2.2	-	.5	1.7	24
271	NEWSPAPERS	-	-	(Z)	(Z)	(Z)	(Z)	23.0	.6	-	.1	.6	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	573.1	13.6	(D)	57.3	66.0	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	22.3	28.2	-	(D)	155.0	2.0	(D)	32.5	33.0	3
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(Z)	(S)	87.8	2.6	(D)	19.6	21.8	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	(S)	(S)	(Z)	(D)	20.9	.5	-	.5	.9	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	5.3	6.4	(Z)	(D)	129.5	3.3	-	6.3	7.5	8
295	PAVING AND ROOFING MATERIALS	-	-	(D)	(D)	(Z)	(S)	28.2	.9	-	1.4	1.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.2	1.6	(Z)	.3	363.8	8.7	-	2.6	8.1	1
301	TIRES AND INNER TUBES.	-	-	.6	.9	-	(Z)	116.6	2.5	-	1.4	3.3	1
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	.2	.3	-	(D)	194.7	4.8	-	.7	3.3	4
31	LEATHER, LEATHER PRODUCTS.	-	-	.1	.1	-	(D)	32.8	1.1	-	.2	1.2	8
32	STONE, CLAY, GLASS PRODUCTS.	-	-	9.4	8.9	(D)	(D)	263.9	6.6	-	17.6	19.9	2
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(D)	(D)	(D)	(D)	51.3	1.4	-	3.3	4.2	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	-	-	1.2	1.6	(D)	(D)	38.4	.9	-	1.3	1.9	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	12.2	15.0	(Z)	(D)	2,840.3	46.8	(D)	20.5	49.9	1
335	NONFERROUS ROLLING AND DRAWING	-	-	(D)	(D)	-	(D)	158.9	4.2	-	1.7	4.4	(X)
336	NONFERROUS FOUNDRIES	-	-	.3	.4	(Z)	.1	18.3	.6	-	.4	1.0	1
34	FABRICATED METAL PRODUCTS.	-	-	1.5	1.9	.4	.6	267.7	7.4	-	2.8	8.3	4
344	FABRICATED STRUC. METAL PRODS.	-	-	(S)	(S)	(D)	(D)	49.3	1.6	-	.5	1.4	(X)
349	MISC. FABRICATED METAL PRODUCTS.	-	-	(S)	(S)	(Z)	(S)	102.6	2.7	-	.9	2.9	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.8	.9	.1	.3	169.7	4.3	-	1.3	4.1	8
354	METALWORKING MACHINERY	-	-	(D)	(D)	(D)	(Z)	41.6	1.0	-	.2	.8	(X)
358	REFRIGERATION AND SERVICE MACH	-	-	.4	.4	-	(Z)	50.2	1.3	-	.4	1.1	16
36	ELECTRIC, ELECTRONIC EQUIP	-	-	2.0	2.3	.2	(D)	294.8	6.8	-	2.6	6.7	10
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	.8	.9	.1	(Z)	123.0	2.2	-	1.1	2.4	1
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	(D)	(D)	69.7	1.7	-	.7	1.5	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.2	.2	(Z)	(D)	26.0	.7	-	.3	.8	3
37	TRANSPORTATION EQUIPMENT	-	-	.5	.6	(Z)	(D)	57.1	1.6	-	.7	2.1	32
371	MOTOR VEHICLES AND EQUIPMENT	-	-	(S)	(S)	-	(S)	33.3	.9	-	.4	1.2	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.2	-	(D)	33.3	1.0	-	.4	1.3	11
	LOUISIANA.	(D)	(D)	652.3	583.0	67.1	(D)	21,748.2	324.6	8,917.3	831.4	873.6	1
20	FOOD AND KINDRED PRODUCTS.	-	-	18.7	33.0	.4	(D)	576.0	12.3	81.0	20.0	35.7	14
202	DAIRY PRODUCTS	-	-	(D)	(D)	(D)	.2	82.7	1.8	-	.6	1.8	(X)
203	PRESERVED FRUITS AND VEGETABLES.	-	-	.2	.4	-	(D)	27.8	.6	-	.5	1.0	1
204	GRAIN MILL PRODUCTS.	-	-	.3	.4	(Z)	(D)	82.8	1.7	-	1.2	2.7	9
205	BAKERY PRODUCTS.	-	-	.3	.5	-	.4	36.2	.8	-	.7	2.0	18
206	SUGAR, CONFECTIONERY PRODUCTS.	-	-	12.7	22.5	-	(D)	89.8	1.7	81.0	16.5	23.6	17
208	BEVERAGES.	-	-	.3	.6	-	(D)	46.3	1.2	-	.6	1.7	11
209	MISC. FOODS, KINDRED PRODUCTS.	-	-	1.0	1.6	(D)	.1	96.6	2.2	-	2.0	6.4	14
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	(D)	26.9	.6	-	.5	1.0	(X)
229	MISCELLANEOUS TEXTILE GOODS.	-	-	(D)	(D)	-	(D)	(D)	(D)	-	(Z)	.3	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.2	.3	(D)	.1	71.1	1.5	-	.6	1.9	10
232	MEN'S AND BOYS' FURNISHINGS.	-	-	.1	.1	(Z)	(D)	45.0	1.0	-	.2	.7	1
233	WOMEN'S AND MISSES' OUTERWEAR.	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.1	.4	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	5.6	7.6	(D)	1.3	458.7	8.8	(Z)	8.7	18.0	7
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	(Z)	(Z)	(D)	.3	(S)	(S)	-	.8	1.5	1
242	SAWMILLS AND PLANING MILLS	-	-	1.7	1.4	(D)	(D)	200.5	3.8	(Z)	2.2	5.3	13
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	3.2	5.1	1.1	(D)	180.1	3.7	-	5.1	9.7	2
249	MISCELLANEOUS WOOD PRODUCTS.	-	-	.6	1.0	(Z)	(D)	66.6	1.1	-	.5	1.2	51
26	PAPER AND ALLIED PRODUCTS.	-	-	37.0	44.7	2.8	.3	2,064.7	34.7	2,040.0	76.3	114.8	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		
						Distillate		Residual				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F H J
		A	B	C	D	E	F	G	H	I	J	
	LOUISIANA--CON.											
26	PAPER AND ALLIED PRODUCTS--CON.											
262	PAPERMILLS, EXC. BUILDING PAPER. .	25.2	46.5	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
263	PAPERBOARD MILLS	44.2	78.3	40.6	60.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
264	MISC. CONVERTED PAPER PRODUCTS . .	.4	1.3	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
265	PAPERBOARD CONTAINERS AND BOXES. .	.6	1.5	.5	.8	-	-	-	-	-	-	(X) (X) (X)
27	PRINTING AND PUBLISHING.	.5	2.4	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
271	NEWSPAPERS	.2	1.1	.1	.1	-	-	-	-	-	-	(X) (X) (X)
28	CHEMICALS, ALLIED PRODUCTS . . .	513.1	639.7	467.5	447.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
281	INDUSTRIAL INORGANIC CHEMICALS . .	84.6	112.5	70.8	53.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
282	PLASTICS MATERIALS, SYNTHETICS . .	22.3	54.1	17.9	33.4	-	-	(D)	(D)	-	-	(X) (X) (X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	319.7	384.9	296.8	292.6	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
287	AGRICULTURAL CHEMICALS	75.4	71.3	71.8	57.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	10.8	16.0	9.9	10.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
29	PETROLEUM AND COAL PRODUCTS. . .	147.3	207.5	135.9	167.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
291	PETROLEUM REFINING	145.1	203.8	133.9	164.8	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
299	MISC. PETROLEUM, COAL PRODUCTS . .	1.3	2.1	1.3	1.8	-	-	-	-	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS. . .	18.8	37.4	17.4	27.9	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
322	GLASS, PRESSED OR BLOWN.	4.2	8.1	3.8	6.3	(D)	(D)	-	-	-	-	(X) (X) (X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	4.6	9.7	4.4	8.1	71.7	1.2	(D)	(D)	(D)	(D)	27 (X) (X)
33	PRIMARY METAL INDUSTRIES	66.8	27.2	65.2	20.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS. . . .	2.7	7.1	2.0	3.6	(D)	(D)	-	-	-	-	(X) (X) (X)
341	METAL CANS, SHIPPING CONTAINERS. .	.4	1.1	.4	.6	-	-	-	-	-	-	(X) (X) (X)
344	FABRICATED STRUC. METAL PRODS. . .	1.5	3.8	1.1	1.9	(D)	(D)	-	-	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.1	4.0	.7	1.3	(D)	(D)	(D)	(Z)	-	-	(X) 95 (X)
353	CONSTRUCTION, RELATED MACHINERY. .	.3	1.1	.2	.3	(D)	(D)	-	-	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.4	5.4	.7	1.5	(D)	(D)	-	-	-	-	(X) (X) (X)
37	TRANSPORTATION EQUIPMENT	1.9	6.9	1.0	2.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	.1	.3	.1	.1	-	-	-	-	-	-	(X) (X) (X)
373	SHIP, BOAT BUILDING, REPAIRING . .	1.8	6.5	1.0	1.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
39	MISC. MANUFACTURING INDUS. . . .	.3	.9	.2	.4	-	-	-	-	-	-	(X) (X) (X)
	OKLAHOMA	152.8	302.8	134.2	187.9	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
20	FOOD AND KINDRED PRODUCTS. . . .	5.5	14.7	4.2	6.2	(D)	(D)	(D)	(Z)	-	-	(X) 75 (X)
201	MEAT PRODUCTS.	1.2	2.9	.9	1.4	(D)	(Z)	(D)	(Z)	-	-	1 85 (X)
202	DAIRY PRODUCTS	.6	2.1	.4	.6	-	-	(D)	(D)	-	-	(X) (X) (X)
203	PRESERVED FRUITS AND VEGETABLES. .	.5	1.3	.4	.5	-	-	-	-	-	-	(X) (X) (X)
204	GRAIN MILL PRODUCTS.	.9	3.0	.6	.9	(D)	(D)	-	-	-	-	(X) (X) (X)
205	BAKERY PRODUCTS.	.4	.9	.3	.4	-	-	-	-	-	-	(X) (X) (X)
207	FATS AND OILS.	1.1	2.5	1.0	1.4	-	-	-	-	-	-	(X) (X) (X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.2	.6	.1	.2	-	-	-	-	-	-	(X) (X) (X)
22	TEXTILE MILL PRODUCTS.	1.1	2.4	.9	1.2	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
227	FLOOR COVERING MILLS	.8	1.5	.7	.9	-	-	(D)	(D)	-	-	(X) (X) (X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.5	2.1	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
232	MEN'S AND BOYS' FURNISHINGS. . . .	.2	1.1	.1	.1	-	-	-	-	-	-	(X) (X) (X)
239	MISC. FABRICATED TEXTILE PRODS . .	.1	.3	(D)	(D)	-	-	-	-	-	-	(X) (X) (X)
24	LUMBER AND WOOD PRODUCTS	2.8	6.2	2.4	3.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
25	FURNITURE AND FIXTURES	.2	.6	.1	.2	-	-	-	-	-	-	(X) (X) (X)
251	HOUSEHOLD FURNITURE.	.1	.4	.1	.1	-	-	-	-	-	-	(X) (X) (X)
27	PRINTING AND PUBLISHING.	.9	3.2	.5	.8	-	-	-	-	-	-	(X) (X) (X)
271	NEWSPAPERS	.4	1.3	.2	.3	-	-	-	-	-	-	(X) (X) (X)
28	CHEMICALS, ALLIED PRODUCTS . . .	31.1	53.5	29.0	41.4	-	-	-	-	-	-	(X) (X) (X)
285	PAINTS AND ALLIED PRODUCTS	.1	.3	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
29	PETROLEUM AND COAL PRODUCTS. . .	52.4	86.0	49.1	66.6	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
291	PETROLEUM REFINING	49.8	81.6	46.6	63.0	-	-	(D)	(D)	-	-	(X) (X) (X)
30	RUBBER, MISC. PLASTICS PROD. . .	5.4	15.0	3.9	5.8	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
301	TIRES AND INNER TUBES.	4.3	11.0	3.2	4.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
307	MISCELLANEOUS PLASTICS PRODUCTS. .	.8	2.9	(S)	(S)	(D)	(D)	-	-	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS. . .	24.1	40.9	21.9	27.6	50.7	.9	(D)	(D)	(D)	(D)	39 (X) (X)
322	GLASS, PRESSED OR BLOWN.	7.3	13.8	6.5	9.1	(D)	(Z)	-	-	-	-	1 (X) (X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	2.7	5.3	2.5	4.2	(D)	(D)	-	-	-	-	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	5.3	16.2	3.3	5.0	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
34	FABRICATED METAL PRODUCTS. . . .	3.4	9.8	2.5	4.0	(D)	(D)	(D)	(Z)	-	-	(X) 83 (X)
344	FABRICATED STRUC. METAL PRODS. . .	1.8	5.5	1.4	2.2	(D)	(Z)	-	-	-	-	1 (X) (X)
35	MACHINERY, EXCEPT ELECTRIC . . .	3.5	11.5	2.3	3.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
352	FARM AND GARDEN MACHINERY. . . .	.2	.4	.2	.2	-	-	-	-	-	-	(X) (X) (X)
353	CONSTRUCTION, RELATED MACHINERY. .	1.5	4.9	1.0	1.5	(D)	(D)	-	-	-	-	(X) (X) (X)
356	GENERAL INDUSTRIAL MACHINERY . . .	.5	1.8	.3	.5	-	-	-	-	-	-	(X) (X) (X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976 – Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	LOUISIANA--CON.												
26	PAPER AND ALLIED PRODUCTS--CON.												
262	PAPERMILLS, EXC. BUILDING PAPER.	-	-	(D)	(D)	(D)	(Z)	633.5	10.6	872.0	32.7	51.9	(X)
263	PAPERBOARD MILLS	-	-	20.4	22.5	(D)	(D)	1,054.6	17.6	1,167.9	37.8	52.7	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(S)	(S)	(D)	(D)	58.8	.9	-	.5	1.2	(X)
265	PAPERBOARD CONTAINERS AND BOXES.	-	-	.2	.4	(D)	(D)	40.6	.7	-	.6	1.2	1
27	PRINTING AND PUBLISHING.	-	-	(S)	(S)	(Z)	(S)	89.4	2.0	-	.5	2.0	(X)
271	NEWSPAPERS	-	-	.1	.1	-	(Z)	41.5	1.0	-	.2	.9	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	396.6	323.2	55.4	2.6	13,378.6	191.8	2,266.9	500.7	462.8	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	65.0	44.8	.2	.4	4,042.3	59.2	(D)	73.3	91.6	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	11.3	20.4	(D)	(D)	1,277.5	20.7	-	19.2	41.7	1
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	243.1	194.9	43.1	(D)	6,720.7	92.3	(D)	300.1	256.2	1
287	AGRICULTURAL CHEMICALS	-	-	68.9	54.5	(D)	(D)	1,044.1	13.8	(D)	98.1	60.2	1
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	8.1	8.4	(D)	(D)	274.2	5.4	(D)	9.7	12.3	1
29	PETROLEUM AND COAL PRODUCTS.	-	-	119.0	136.4	(D)	(D)	3,334.3	39.8	(D)	137.0	166.1	1
291	PETROLEUM REFINING	-	-	117.4	134.0	(D)	(D)	3,289.2	39.0	(D)	135.2	163.8	1
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	(D)	(D)	-	(D)	22.4	.4	-	.9	.9	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	10.6	17.0	.6	3.4	413.4	9.5	-	18.6	29.9	1
322	GLASS, PRESSED OR BLOWN.	-	-	3.3	5.3	(D)	(Z)	106.2	1.8	-	4.2	6.1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	2.5	4.6	.5	(D)	78.3	1.7	-	4.9	9.2	2
33	PRIMARY METAL INDUSTRIES	(D)	(D)	61.5	15.2	(D)	(D)	482.0	7.2	(D)	61.4	21.8	1
34	FABRICATED METAL PRODUCTS.	-	-	1.0	1.6	(D)	.9	197.3	3.5	(D)	2.5	5.8	10
341	METAL CANS, SHIPPING CONTAINERS.	-	-	(S)	(S)	(S)	(S)	22.4	.6	-	.5	1.2	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	(D)	(D)	(D)	.7	115.8	1.9	(D)	1.1	2.7	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.3	.5	(D)	(D)	122.6	2.7	(D)	.9	2.6	25
353	CONSTRUCTION, RELATED MACHINERY.	-	-	.1	.2	(Z)	(D)	33.3	.8	-	.4	1.0	11
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.6	1.2	(Z)	(D)	200.3	3.9	-	1.5	4.0	2
37	TRANSPORTATION EQUIPMENT	-	-	.5	.9	.4	(D)	255.9	4.8	-	1.7	5.5	1
371	MOTOR VEHICLES AND EQUIPMENT	-	-	(Z)	(Z)	(D)	(D)	9.2	.2	-	.1	.3	1
373	SHIP, BOAT BUILDING, REPAIRING	-	-	.4	.9	(D)	(D)	245.7	4.6	-	1.6	5.1	1
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	(D)	(Z)	(S)	(S)	-	.2	.4	(X)
	OKLAHOMA	(D)	(D)	114.0	159.6	8.1	11.1	5,440.0	114.9	(D)	141.6	219.8	2
20	FOOD AND KINDRED PRODUCTS.	-	-	3.3	4.7	(D)	.9	376.3	8.6	-	4.8	10.7	7
201	MEAT PRODUCTS.	-	-	(D)	(D)	(D)	.3	64.9	1.6	-	1.1	2.2	(X)
202	DAIRY PRODUCTS	-	-	.4	.5	(D)	.1	55.1	1.5	-	.5	1.4	13
203	PRESERVED FRUITS AND VEGETABLES.	-	-	.3	.4	(Z)	.1	37.3	.8	-	.5	1.1	11
204	GRAIN MILL PRODUCTS.	-	-	.5	.7	(D)	(D)	97.2	2.1	-	.9	2.3	18
205	BAKERY PRODUCTS.	-	-	.2	.3	-	.1	20.7	.5	-	.4	.8	1
207	FATS AND OILS.	-	-	.9	1.3	.2	(D)	50.9	1.1	-	.8	1.3	15
209	MISC. FOODS, KINDRED PRODUCTS.	-	-	(D)	(D)	-	(D)	19.8	.4	-	.2	.5	(X)
22	TEXTILE MILL PRODUCTS.	-	-	.8	1.0	-	.2	54.3	1.2	-	1.3	2.3	1
227	FLOOR COVERING MILLS	-	-	.7	.8	-	(D)	25.0	.6	-	.9	1.2	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(S)	(S)	-	(S)	61.0	1.7	-	.4	1.6	(X)
232	MEN'S AND BOYS' FURNISHINGS.	-	-	.1	.1	-	(Z)	33.8	1.0	-	.2	.9	1
239	MISC. FABRICATED TEXTILE PRODS	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.1	.2	1
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	129.0	2.8	-	2.1	3.9	(X)
25	FURNITURE AND FIXTURES	-	-	.1	.1	(Z)	(Z)	14.3	.4	-	.2	.5	28
251	HOUSEHOLD FURNITURE.	-	-	(D)	(D)	(Z)	(D)	10.8	.3	-	.1	.3	(X)
27	PRINTING AND PUBLISHING.	-	-	.3	.5	(D)	(D)	111.7	2.4	-	.8	2.6	18
271	NEWSPAPERS	-	-	.2	.4	(D)	(D)	55.3	1.0	-	.3	1.0	25
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	617.9	12.1	-	20.8	27.7	(X)
285	PAINTS AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	5.4	.2	-	.2	.4	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	45.1	62.1	-	(D)	968.9	19.4	(D)	57.4	70.6	1
291	PETROLEUM REFINING	-	-	43.4	59.6	-	(D)	936.3	18.5	(D)	54.3	66.9	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	2.7	3.7	(D)	(D)	442.8	9.1	-	4.7	10.1	1
301	TIRES AND INNER TUBES.	-	-	2.4	3.2	(D)	(D)	319.5	6.3	-	3.8	7.6	1
307	MISCELLANEOUS PLASTICS PRODUCTS.	-	-	(S)	(S)	-	(D)	93.4	2.2	-	.6	1.6	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	14.7	19.7	.9	(D)	644.8	13.3	-	21.6	30.6	1
322	GLASS, PRESSED OR BLOWN.	-	-	6.3	9.0	(D)	(D)	229.0	4.7	-	6.8	10.1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	.9	1.2	.8	(D)	64.2	1.1	-	1.8	3.1	18
33	PRIMARY METAL INDUSTRIES	(D)	(D)	2.3	3.0	(Z)	(D)	576.9	11.3	-	5.4	11.3	4
34	FABRICATED METAL PRODUCTS.	-	-	1.5	2.2	(D)	1.4	235.8	5.8	-	3.0	7.4	9
344	FABRICATED STRUC. METAL PRODS.	-	-	1.0	1.4	(D)	(D)	134.2	3.3	-	1.7	4.1	7
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.8	2.5	(D)	.7	344.8	8.1	-	3.3	10.0	8
352	FARM AND GARDEN MACHINERY.	-	-	(D)	(D)	-	(D)	8.4	.2	-	.1	.2	(X)
353	CONSTRUCTION, RELATED MACHINERY.	-	-	.8	1.2	(D)	(D)	147.2	3.4	-	1.4	3.9	4
356	GENERAL INDUSTRIAL MACHINERY	-	-	.3	.4	(D)	(D)	49.6	1.3	-	.7	2.2	21

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	OKLAHOMA--CON.													
35	MACHINERY, EXCEPT ELECTRIC--CON.													
359	MISC. MACHINERY, EXC. ELEC	.3	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.3	4.5	.8	1.2	-	-	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	.1	.5	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT	.7	2.0	.4	.5	-	-	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.2	.6	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
399	MISCELLANEOUS MANUFACTURES	.1	.3	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
	TEXAS	1,805.4	3,601.3	1,631.9	2,589.9	2,140.1	33.2	5,947.6	71.6	(D)	(D)	5	1	(X)
20	FOOD AND KINDRED PRODUCTS	44.0	123.2	35.1	65.0	125.5	1.9	243.8	2.9	(D)	(D)	16	1	(X)
201	MEAT PRODUCTS	7.6	22.1	5.6	8.8	(D)	(D)	(D)	(Z)	-	-	(X)	29	(X)
202	DAIRY PRODUCTS	2.2	8.5	1.5	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	3.7	9.9	3.2	5.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS	7.3	20.3	6.2	12.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	2.8	7.8	2.2	3.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	3.5	7.7	3.0	6.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS	7.2	18.2	6.1	10.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES	5.1	15.4	3.8	7.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
209	MISC. FOODS, KINDRED PRODUCTS	4.5	13.4	3.5	7.1	(D)	(Z)	(D)	(D)	(D)	(Z)	86	(X)	85
22	TEXTILE MILL PRODUCTS	2.4	10.0	1.5	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	3.3	13.5	2.0	3.4	(D)	(Z)	(D)	(Z)	-	-	1	16	(X)
232	MEN'S AND BOYS' FURNISHINGS	1.0	4.5	.6	.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	.9	4.0	.6	.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
235	HATS, CAPS, AND MILLINERY	.2	.5	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
236	CHILDREN'S OUTERWEAR	.1	.5	(S)	(S)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	10.5	31.3	8.1	15.1	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	3.3	10.9	2.5	4.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
244	WOOD CONTAINERS	.2	.9	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.4	1.6	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	3.3	9.2	2.6	4.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.6	5.8	1.1	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	.9	3.3	.6	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
252	OFFICE FURNITURE	.1	.5	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	49.9	106.8	44.4	74.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
263	PAPERBOARD MILLS	21.3	40.7	20.2	34.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	1.4	5.5	.8	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
266	BUILDING PAPER AND BOARD MILLS	.6	1.5	.6	1.0	-	-	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	3.4	15.7	1.7	3.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
271	NEWSPAPERS	1.1	5.3	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	1.4	6.0	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.4	1.8	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.2	.7	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES	.1	.7	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	761.1	1,489.5	696.7	1,122.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	82.7	201.0	69.2	126.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	75.8	188.2	64.2	128.0	709.4	10.1	(D)	(D)	-	-	1	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	1.2	3.7	1.0	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	.9	2.7	.7	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	541.9	986.4	506.9	780.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
287	AGRICULTURAL CHEMICALS	38.4	71.6	36.0	58.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	19.8	34.8	18.5	25.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	639.3	1,036.7	616.0	905.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	633.6	1,025.4	610.7	895.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	8.7	32.1	5.6	10.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	5.4	20.5	3.1	5.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	104.8	207.6	97.6	159.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
322	GLASS, PRESSED OR BLOWN	6.2	15.6	5.5	10.7	-	-	-	-	-	-	(X)	(X)	(X)
323	PRODUCTS OF PURCHASED GLASS	.7	1.5	.6	1.1	-	-	-	-	-	-	(X)	(X)	(X)
324	CEMENT, HYDRAULIC	53.3	96.5	50.0	74.7	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	10.1	16.5	9.7	13.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
326	POTTERY AND RELATED PRODUCTS	1.3	2.9	1.2	2.0	-	-	-	-	-	-	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	21.5	44.1	20.4	36.0	231.6	4.2	(D)	(D)	(D)	(D)	20	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	7.3	20.2	6.2	13.4	12.2	.2	-	-	-	-	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	103.8	324.0	67.8	147.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
331	BLAST FURNACE, BASIC STEEL PROD.	39.0	132.7	30.0	71.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	5.1	21.5	3.8	11.9	-	-	-	-	-	-	(X)	(X)	(X)
333	PRIMARY NONFERROUS METALS	56.4	150.6	31.9	54.2	(D)	(D)	608.6	7.2	(D)	(D)	(X)	1	(X)
334	SECONDARY NONFERROUS METALS	1.7	4.5	1.5	2.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	22.3	68.9	17.2	33.2	162.3	2.5	(D)	(D)	(D)	(Z)	28	(X)	1
341	METAL CANS, SHIPPING CONTAINERS	2.7	7.8	2.1	3.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
343	PLUMBING, HEATING, EXCEPT ELEC	.4	1.3	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	5.6	20.3	3.8	7.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	OKLAHOMA--CON.												
35	MACHINERY, EXCEPT ELECTRIC--CON.												
359	MISC. MACHINERY, EXC. ELEC	-	-	(S)	(S)	(S)	(S)	21.8	.6	-	.2	.6	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(Z)	(D)	146.5	3.3	-	1.1	3.1	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	(D)	(D)	(Z)	(D)	11.9	.4	-	.3	.8	(X)
366	COMMUNICATION EQUIPMENT	-	-	.4	.5	(Z)	(Z)	75.9	1.5	-	.6	1.6	16
39	MISC. MANUFACTURING INDUS.	-	-	(S)	(S)	-	(S)	17.2	.5	-	.1	.5	(X)
399	MISCELLANEOUS MANUFACTURES	-	-	(Z)	.1	-	(Z)	7.7	.2	-	.1	.3	64
	TEXAS	422.7	41.9	1,432.2	2,260.3	89.6	(D)	50,839.7	1,011.5	9,458.0	1,816.8	3,101.1	1
20	FOOD AND KINDRED PRODUCTS	-	-	29.2	54.9	1.8	(D)	2,598.8	58.3	62.1	43.3	105.2	3
201	MEAT PRODUCTS	-	-	4.3	6.8	(D)	1.7	582.8	13.4	(S)	6.9	18.1	4
202	DAIRY PRODUCTS	-	-	1.1	1.9	(D)	(D)	221.1	5.7	-	2.4	7.5	5
203	PRESERVED FRUITS AND VEGETABLES	-	-	3.1	5.8	(Z)	(D)	150.5	4.0	(S)	3.5	7.9	8
204	GRAIN MILL PRODUCTS	-	-	(S)	(S)	(S)	(S)	324.3	7.9	(D)	7.7	18.9	(X)
205	BAKERY PRODUCTS	-	-	1.9	3.3	-	(D)	164.0	4.0	-	2.8	6.9	9
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	(D)	(D)	(D)	(Z)	(S)	(S)	(D)	3.3	5.5	(X)
207	FATS AND OILS	-	-	5.4	9.8	(D)	(D)	321.8	7.3	(D)	6.8	14.1	9
208	BEVERAGES	-	-	3.0	5.7	.6	(D)	377.0	8.2	-	5.4	14.2	3
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	313.2	6.3	-	4.5	12.1	(X)
22	TEXTILE MILL PRODUCTS	-	-	.9	1.7	(D)	(D)	265.0	7.2	-	2.7	9.4	5
23	APPAREL, OTH. TEXTILE PRODS.	-	-	1.1	1.8	(D)	(D)	376.2	10.1	-	3.0	12.3	10
232	MEN'S AND BOYS' FURNISHINGS	-	-	(D)	(D)	(D)	.2	139.4	3.7	-	1.1	4.2	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.3	.5	(D)	(D)	109.9	3.1	-	1.0	4.4	15
235	HATS, CAPS, AND MILLINERY	-	-	(D)	(D)	-	(D)	6.8	.2	-	.2	.4	(X)
236	CHILDREN'S OUTERWEAR	-	-	(Z)	(Z)	-	(D)	12.5	.3	-	.3	1.0	23
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	702.8	16.2	(S)	8.2	20.9	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	1.8	3.4	(D)	.5	254.5	6.2	(D)	3.3	8.9	2
244	WOOD CONTAINERS	-	-	(Z)	.1	(D)	(D)	21.2	.6	-	.3	.9	44
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.2	.3	(Z)	(D)	41.3	1.1	-	.4	1.4	4
249	MISCELLANEOUS WOOD PRODUCTS	-	-	2.2	4.0	-	(D)	205.5	4.6	-	1.1	2.7	5
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(D)	.9	137.5	3.7	(S)	1.5	5.1	(X)
251	HOUSEHOLD FURNITURE	-	-	.2	.4	(D)	.4	80.0	2.1	-	1.0	3.2	5
252	OFFICE FURNITURE	-	-	(D)	(D)	-	(D)	9.7	.3	(S)	.1	.3	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	37.4	62.2	3.1	1.2	1,602.4	32.6	1,576.1	47.9	91.6	1
263	PAPERBOARD MILLS	-	-	(D)	(D)	.4	(D)	313.4	6.7	(D)	17.5	33.1	(X)
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(D)	(D)	-	.6	188.6	4.2	-	1.1	3.8	(X)
266	BUILDING PAPER AND BOARD MILLS	-	-	(D)	(D)	(D)	(D)	22.5	.4	-	3.2	6.9	(X)
27	PRINTING AND PUBLISHING	-	-	1.0	1.6	.2	(D)	506.0	12.7	(D)	3.5	13.7	14
271	NEWSPAPERS	-	-	(D)	(D)	(D)	.2	185.6	4.4	-	1.2	5.0	(X)
275	COMMERCIAL PRINTING	-	-	(S)	(S)	(D)	(D)	178.0	4.6	(D)	1.5	5.5	(X)
276	MANIFOLD BUSINESS FORMS	-	-	(D)	(D)	-	(D)	57.1	1.5	-	.4	1.4	(X)
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	(Z)	-	(S)	20.2	.5	-	.1	.5	52
279	PRINTING TRADE SERVICES	-	-	(D)	(D)	(Z)	(D)	(D)	(D)	-	.1	.6	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	620.7	979.7	70.8	(D)	18,879.6	366.9	3,835.6	800.2	1,274.3	1
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	59.1	109.9	.9	(Z)	3,961.2	74.3	1,086.8	108.9	196.2	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	43.5	86.4	24.4	(D)	3,403.5	60.2	-	63.9	140.2	1
284	SOAPS, CLEANERS, TOILET GOODS	-	-	.9	1.8	(Z)	(D)	67.1	1.8	(D)	1.2	2.8	3
285	PAINTS AND ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	.4	59.5	1.6	-	.9	2.4	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	465.1	699.3	(D)	(D)	10,240.2	205.9	2,737.0	568.1	850.0	1
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(S)	(S)	709.4	13.6	(D)	38.2	57.3	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	16.2	23.2	(D)	2.3	405.4	9.0	(D)	18.8	24.5	1
29	PETROLEUM AND COAL PRODUCTS	-	-	593.5	890.4	(D)	(D)	6,803.4	131.6	2,852.1	634.7	982.9	1
291	PETROLEUM REFINING	-	-	589.3	882.9	(D)	(D)	6,722.3	129.5	2,852.1	630.0	974.7	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	3.8	6.9	(D)	1.6	921.3	21.6	(S)	8.3	25.0	3
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	2.2	3.8	(D)	1.3	650.5	15.0	-	4.9	15.4	3
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	64.0	111.6	5.1	(D)	2,105.6	47.8	(D)	100.0	168.2	2
322	GLASS, PRESSED OR BLOWN	-	-	5.2	10.4	.1	.2	210.7	4.9	-	6.1	12.2	1
323	PRODUCTS OF PURCHASED GLASS	-	-	(D)	(D)	-	(D)	15.2	.4	-	.7	1.2	(X)
324	CEMENT, HYDRAULIC	(D)	(D)	(S)	(S)	(S)	(S)	981.7	21.8	(D)	51.4	77.8	(X)
325	STRUCTURAL CLAY PRODUCTS	-	-	(S)	(S)	(S)	(S)	112.7	3.1	-	8.0	13.6	(X)
326	POTTERY AND RELATED PRODUCTS	-	-	(S)	(S)	-	(S)	32.8	.9	-	1.1	1.9	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	(D)	(D)	11.2	20.3	1.9	(D)	313.6	8.1	-	20.2	35.5	2
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	4.7	8.8	.4	(D)	322.8	6.9	-	9.1	20.1	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	40.6	77.7	2.5	(D)	10,536.0	176.0	(D)	101.5	214.4	1
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	9.7	24.5	(D)	(D)	2,618.3	60.8	(D)	46.8	75.9	1
332	IRON AND STEEL FOUNDRIES	(S)	(S)	(S)	(S)	(D)	(S)	389.6	9.6	-	5.4	18.2	(X)
333	PRIMARY NONFERROUS METALS	(D)	(D)	25.2	42.3	(D)	(D)	7,177.0	96.4	(D)	43.1	104.2	1
334	SECONDARY NONFERROUS METALS	(D)	(D)	1.0	1.7	(D)	(D)	51.5	1.6	(D)	1.8	3.9	1
34	FABRICATED METAL PRODUCTS	(D)	(D)	13.3	25.6	1.0	3.5	1,496.4	35.7	(S)	22.1	60.5	9
341	METAL CANS, SHIPPING CONTAINERS	-	-	1.9	3.7	.1	(D)	196.6	3.9	-	2.5	6.4	3
343	PLUMBING, HEATING, EXCEPT ELEC	-	-	.2	.3	(Z)	.2	33.8	.8	-	.3	1.0	1
344	FABRICATED STRUC. METAL PRODS.	-	-	2.3	4.1	(D)	1.6	522.1	13.2	(S)	7.0	22.6	4

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F	H	J
		A	B	C	D	E	F	G	H	I	J			
	TEXAS--CON.													
34	FABRICATED METAL PRODUCTS--CON.													
346	METAL FORGINGS AND STAMPINGS	5.8	14.9	5.2	10.7	4.5	.1	(D)	(D)	(D)	(Z)	1	(X)	1
347	METAL SERVICES, NEC.	2.3	6.9	1.8	3.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
348	ORDNANCE AND ACCESSORIES, NEC.	2.0	4.6	1.7	2.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS.	2.8	10.7	1.8	3.7	4.2	.1	-	-	-	-	71	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	18.6	63.6	12.8	23.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY.	11.3	35.7	8.0	14.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
354	METALWORKING MACHINERY	.3	1.4	(S)	(S)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.5	1.7	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	1.1	4.0	.7	1.2	-	-	-	-	-	-	(X)	(X)	(X)
357	OFFICE AND COMPUTING MACHINES.	.8	4.9	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	2.2	7.4	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.7	6.0	1.1	1.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	7.4	32.4	3.8	6.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.2	.8	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS.	.3	1.5	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
363	HOUSEHOLD APPLIANCES	.1	.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
364	ELEC. LIGHTING, WIRING EQUIP	.3	1.1	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	2.2	10.2	1.0	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	3.3	14.6	1.5	2.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.8	3.1	.5	1.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	11.0	30.5	8.1	12.6	20.9	.3	(D)	(D)	(D)	(D)	5	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	3.0	8.5	2.3	4.2	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
372	AIRCRAFT AND PARTS	4.9	15.0	3.2	5.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING	2.1	4.4	1.7	1.5	(S)	(S)	-	-	-	-	(X)	(X)	(X)
379	TRANSPORTATION EQUIPMENT, NEC.	.5	1.1	.4	.6	-	-	-	-	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	1.1	4.5	.6	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
381	ENGINEERING, SCIENTIFIC INSTRU	.1	.4	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
382	MEASURING, CONTROLLING DEVICES	.3	1.2	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	1.1	3.9	.7	1.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
391	JEWELRY, SILVER AND PLATED WARE.	.1	.5	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
	MONTANA.	45.5	76.3	30.4	47.2	242.7	3.5	(D)	(D)	(D)	(D)	14	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	4.1	6.9	3.8	5.5	107.9	1.3	(D)	(D)	(D)	(D)	20	(X)	(X)
201	MEAT PRODUCTS.	.3	.6	(S)	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
202	DAIRY PRODUCTS	.1	.4	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	.2	.5	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	4.8	12.2	3.5	7.3	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	1.8	5.0	1.1	2.6	51.2	.9	(D)	(D)	-	-	16	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.0	2.5	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.1	.3	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	5.3	8.0	4.1	4.6	-	-	-	-	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	5.2	7.8	4.1	4.5	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	7.6	12.9	7.3	11.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.4	4.7	2.4	4.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	IDAHO.	53.3	116.1	38.2	69.3	461.1	7.0	219.2	2.9	(D)	(D)	15	15	(X)
20	FOOD AND KINDRED PRODUCTS.	21.5	39.8	19.7	32.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
201	MEAT PRODUCTS.	.8	2.0	.6	1.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	51
202	DAIRY PRODUCTS	.8	1.7	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES.	10.9	23.4	9.5	18.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	5.6	14.1	4.1	8.8	216.7	3.6	34.9	.5	(D)	(D)	25	81	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	1.5	4.1	1.5	3.9	160.3	2.6	(D)	(D)	-	-	31	(X)	(X)
242	SAWMILLS AND PLANING MILLS	2.4	6.8	1.4	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.2	2.4	.8	1.2	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	.2	.5	(D)	(D)	-	-	-	-	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	11.7	31.8	2.5	5.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	1.9	3.3	1.8	2.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	1.6	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
	WYOMING.	21.3	29.7	20.1	24.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	3.1	5.0	3.0	4.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	13.0	17.5	12.5	15.3	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
291	PETROLEUM REFINING	12.6	16.3	12.1	14.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	3.4	3.2	3.3	2.6	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	TEXAS--CON.												
34	FABRICATED METAL PRODUCTS--CON.												
346	METAL FORGINGS AND STAMPINGS	(D)	(D)	(S)	(S)	(S)	(S)	170.8	4.2	-	3.3	6.4	(X)
347	METAL SERVICES, NEC.	-	-	1.6	3.4	(D)	.2	150.0	3.2	(D)	3.3	9.8	34
348	ORDNANCE AND ACCESSORIES, NEC.	-	-	1.1	1.2	(D)	(D)	80.6	1.9	-	2.1	3.7	1
349	MISC. FABRICATED METAL PRODUCTS.	-	-	1.3	2.8	(D)	(D)	278.6	7.0	-	2.9	8.7	10
35	MACHINERY, EXCEPT ELECTRIC	-	-	9.5	17.4	.7	(D)	1,716.6	40.5	(D)	21.6	60.7	2
353	CONSTRUCTION, RELATED MACHINERY.	-	-	6.9	13.1	(D)	1.4	969.6	20.8	(S)	15.0	36.6	1
354	METALWORKING MACHINERY	-	-	(S)	(S)	(D)	(D)	48.3	1.1	(D)	.2	1.1	(X)
355	SPECIAL INDUSTRY MACHINERY	-	-	.1	.3	(D)	(D)	47.5	1.2	-	.9	2.9	12
356	GENERAL INDUSTRIAL MACHINERY	-	-	(D)	(D)	-	(D)	116.6	2.8	-	.9	2.8	(X)
357	OFFICE AND COMPUTING MACHINES.	-	-	.2	.4	-	(D)	130.7	4.1	-	1.0	5.9	1
358	REFRIGERATION AND SERVICE MACH	-	-	(S)	(S)	-	(S)	183.9	4.9	-	1.9	5.6	(X)
359	MISC. MACHINERY, EXC. ELEC	-	-	.5	.8	(D)	(D)	170.8	4.1	-	1.3	4.3	23
36	ELECTRIC, ELECTRONIC EQUIP	-	-	3.5	6.2	(D)	(D)	1,059.3	25.7	-	6.3	22.1	12
361	ELECTRIC DISTRIBUTING EQUIPMENT.	-	-	.1	.1	-	.1	26.0	.6	-	.2	.9	22
362	ELECTRICAL INDUSTRIAL APPARATUS.	-	-	(S)	(S)	(Z)	(S)	49.8	1.2	-	.2	.7	(X)
363	HOUSEHOLD APPLIANCES	-	-	.1	.1	-	(Z)	11.2	.3	-	.1	.3	1
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.2	.3	(D)	(D)	23.6	.6	-	.3	1.0	14
366	COMMUNICATION EQUIPMENT.	-	-	.9	1.5	(D)	(Z)	343.2	8.6	-	2.0	7.5	8
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	(D)	(D)	(D)	(D)	516.5	12.0	-	2.6	8.6	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	-	-	(D)	(D)	-	(D)	70.5	2.0	-	.8	2.5	(X)
37	TRANSPORTATION EQUIPMENT	-	-	6.7	10.1	(D)	1.1	848.8	17.9	(Z)	9.9	27.4	5
371	MOTOR VEHICLES AND EQUIPMENT	-	-	1.6	3.0	(D)	.9	204.7	4.2	-	2.8	6.7	4
372	AIRCRAFT AND PARTS	-	-	3.1	5.4	.1	(D)	485.5	9.5	(Z)	4.7	12.7	2
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(S)	(S)	(D)	(S)	102.7	2.8	-	1.5	5.2	(X)
379	TRANSPORTATION EQUIPMENT, NEC.	-	-	.3	.4	(Z)	(D)	25.4	.5	-	.5	1.7	9
38	INSTRUMENTS, RELATED PRODS	-	-	.4	.8	(Z)	(D)	125.7	3.3	-	.8	3.3	11
381	ENGINEERING, SCIENTIFIC INSTRU	-	-	(Z)	(Z)	-	(S)	6.5	.2	-	.1	.3	1
382	MEASURING, CONTROLLING DEVICES	-	-	.1	.1	-	(S)	35.2	.9	-	.1	.6	51
39	MISC. MANUFACTURING INDUS.	-	-	.2	.3	.3	(D)	117.0	2.6	-	1.0	3.1	24
391	JEWELRY, SILVER AND PLATED WARE.	-	-	(Z)	(Z)	-	(Z)	14.1	.4	-	.1	.4	1
	MONTANA.	(D)	(D)	23.5	35.2	3.4	(Z)	4,421.2	29.1	(D)	49.3	70.7	6
20	FOOD AND KINDRED PRODUCTS.	(D)	(D)	2.0	2.2	(Z)	(D)	88.6	1.4	(D)	4.6	6.6	7
201	MEAT PRODUCTS.	-	-	(S)	(S)	-	(S)	21.0	.3	-	.3	.7	(X)
202	DAIRY PRODUCTS	-	-	.1	.1	-	(S)	(S)	(S)	-	(Z)	.1	56
204	GRAIN MILL PRODUCTS.	-	-	(S)	(S)	-	(D)	22.2	.3	-	.2	.5	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	385.4	4.9	-	3.9	9.4	(X)
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	1.3	(Z)	186.5	2.5	-	1.6	4.4	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.9	2.1	(X)
27	PRINTING AND PUBLISHING.	-	-	(S)	(S)	-	(S)	16.4	.2	-	.1	.3	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	(D)	(D)	(D)	(S)	327.1	3.4	-	6.2	7.3	(X)
291	PETROLEUM REFINING	-	-	(D)	(D)	(D)	(S)	324.3	3.4	-	6.1	7.1	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	5.4	9.5	(D)	(D)	107.9	1.3	-	6.9	9.7	17
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	3.2	5.5	(D)	(D)	17.8	.3	-	2.2	3.4	29
	IDAHO.	(D)	(D)	23.6	44.9	4.6	(Z)	4,430.2	46.8	(D)	58.2	108.2	2
20	FOOD AND KINDRED PRODUCTS.	(D)	(D)	(S)	(S)	(S)	(S)	542.9	7.4	(D)	22.5	34.9	(X)
201	MEAT PRODUCTS.	-	-	(D)	(D)	.1	.2	62.6	.9	-	.4	.8	(X)
202	DAIRY PRODUCTS	-	-	.5	1.0	(Z)	(D)	28.2	.4	(D)	.7	1.6	15
203	PRESERVED FRUITS AND VEGETABLES.	-	-	8.2	15.9	.1	(D)	396.7	5.1	-	11.0	21.0	4
24	LUMBER AND WOOD PRODUCTS	-	-	1.5	2.5	2.8	(D)	426.9	5.3	(D)	5.9	13.2	17
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	(D)	(D)	1.5	(D)	12.9	.2	-	2.1	4.6	(X)
242	SAWMILLS AND PLANING MILLS	-	-	.6	1.1	(D)	(D)	283.0	3.6	(D)	1.9	5.1	6
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	(D)	(D)	108.6	1.1	-	1.5	2.7	(X)
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.2	.4	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.3	4.7	(D)	(D)	2,694.4	26.8	-	13.7	32.4	1
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(D)	(D)	(D)	.9	41.8	.6	-	2.9	3.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(D)	(S)	47.2	.7	(D)	.5	1.3	(X)
	WYOMING.	(D)	(D)	14.4	16.5	.3	1.6	357.2	5.4	(D)	24.0	29.5	2
20	FOOD AND KINDRED PRODUCTS.	(D)	(D)	(D)	(D)	(D)	(D)	38.7	.8	(D)	3.6	4.7	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	(D)	(D)	-	(D)	162.8	2.2	-	15.0	18.2	(X)
291	PETROLEUM REFINING	-	-	(D)	(D)	-	(D)	143.8	1.8	-	14.5	17.3	(X)
32	STONE, CLAY, GLASS PRODUCTS.	-	-	1.1	.9	(D)	-	45.1	.6	-	3.7	3.3	5

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Reivsed 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	COLORADO	75.2	134.5	64.2	69.4	264.8	3.4	69.4	.8	(D)	(D)	3	19	(X)
20	FOOD AND KINDRED PRODUCTS	19.8	31.1	18.2	20.8	112.2	1.5	(D)	(Z)	(D)	(D)	4	1	(X)
201	MEAT PRODUCTS	2.6	6.1	2.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	.5	1.4	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.8	1.6	.7	.8	(S)	(S)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.1	.6	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.0	2.7	.8	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.4	1.4	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.3	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.0	2.0	.9	1.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.3	.8	.3	.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.9	3.3	.6	.9	(D)	(Z)	(D)	(D)	-	-	84	(X)	(X)
271	NEWSPAPERS	.2	1.0	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	.3	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	3.3	6.4	2.5	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	3.7	4.8	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	17.3	24.1	16.0	15.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.9	3.8	1.8	2.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS.	1.3	2.8	1.2	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	12.7	22.9	10.2	10.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	3.0	8.6	2.2	2.8	2.2	(Z)	(D)	(D)	-	-	21	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	.4	1.2	.3	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.5	1.6	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.7	6.3	2.1	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY	.7	2.0	.5	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.1	.5	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
359	MISC. MACHINERY, EXC. ELEC	1.1	1.8	1.0	.9	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.8	2.6	.5	.6	(D)	(Z)	(D)	(Z)	-	-	16	49	(X)
37	TRANSPORTATION EQUIPMENT	1.1	3.2	.7	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT	.2	.5	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	3.1	7.3	2.2	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.3	1.0	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
	NEW MEXICO	26.7	62.3	23.4	37.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.9	4.9	1.6	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
201	MEAT PRODUCTS	.4	1.2	.3	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.1	.4	.1	(D)	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.3	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.4	1.3	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.0	8.0	3.7	5.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	ARIZONA	67.2	151.4	56.8	72.1	741.5	10.7	340.5	4.2	(D)	(D)	7	2	(X)
20	FOOD AND KINDRED PRODUCTS	3.6	11.0	3.0	5.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
201	MEAT PRODUCTS	.5	1.6	.4	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	.3	1.5	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	.3	.6	.2	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	.3	.9	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
207	FATS AND OILS	.7	2.2	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
208	BEVERAGES	.3	1.0	(S)	(S)	(S)	(S)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	1.5	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.2	1.0	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	.2	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.8	3.7	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.7	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.3	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.5	2.5	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.3	7.5	1.4	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	.4	1.0	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	64	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	COLORADO	(D)	(D)	42.7	45.9	1.8	7.2	3,197.8	65.1	200.1	72.7	116.9	3
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	10.5	12.4	.5	2.1	461.7	10.3	126.3	21.8	34.8	2
201	MEAT PRODUCTS	-	-	1.7	1.9	(D)	.3	160.0	3.6	-	2.9	5.8	4
202	DAIRY PRODUCTS	-	-	(S)	(S)	-	(D)	36.9	.9	-	.6	1.4	(X)
205	BAKERY PRODUCTS	-	-	(S)	(S)	(D)	(D)	40.1	.8	-	.6	.8	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	-	(S)	(D)	(D)	-	.1	.3	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.3	(D)	.7	58.8	1.4	-	2.0	4.4	21
242	SAWMILLS AND PLANING MILLS	-	-	(D)	(D)	(Z)	(D)	37.6	.9	-	1.3	3.1	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(D)	(D)	(D)	(Z)	12.6	.2	-	.2	.4	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	.1	.1	(D)	(D)	4.6	.1	-	.2	.3	34
26	PAPER AND ALLIED PRODUCTS	-	-	.7	.7	(D)	(D)	47.0	1.0	-	.9	1.7	6
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.2	.2	(D)	(D)	18.1	.5	-	.3	.7	16
27	PRINTING AND PUBLISHING	-	-	.4	.5	(D)	(D)	101.0	2.4	-	.8	2.5	22
271	NEWSPAPERS	-	-	.1	.1	(D)	(D)	29.9	.8	-	.2	1.0	28
275	COMMERCIAL PRINTING	-	-	.2	.3	-	(Z)	32.8	.7	-	.3	.9	39
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.9	1.9	(Z)	(D)	222.5	3.7	(D)	2.7	5.4	7
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	-	.2	(D)	(D)	-	4.3	5.5	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	6.5	7.3	(D)	1.5	397.5	8.5	-	15.3	18.2	16
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	.6	.7	(D)	1.6	35.0	1.2	-	2.0	3.7	12
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	(D)	(D)	(D)	(D)	27.1	.7	-	.9	2.1	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	9.2	9.2	(D)	(D)	734.6	12.2	(D)	10.9	16.6	4
34	FABRICATED METAL PRODUCTS	-	-	1.8	2.0	(D)	.2	223.0	5.9	-	1.9	4.8	8
344	FABRICATED STRUC. METAL PRODS.	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.2	.7	(X)
349	MISC. FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	(S)	41.6	1.1	-	.5	1.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.7	1.6	.1	(D)	177.1	4.0	(D)	2.7	5.6	6
353	CONSTRUCTION, RELATED MACHINERY	-	-	.5	.5	(Z)	(D)	56.8	1.3	-	.7	1.5	6
356	GENERAL INDUSTRIAL MACHINERY	-	-	(S)	(S)	(Z)	(Z)	12.3	.3	-	.1	.4	(X)
359	MISC. MACHINERY, EXC. ELEC	-	-	(D)	(D)	.1	(D)	45.1	.9	-	1.2	1.8	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.4	.3	(D)	(D)	88.0	2.0	-	.6	1.8	15
37	TRANSPORTATION EQUIPMENT	-	-	.6	.6	(D)	.1	115.4	2.4	-	1.3	3.2	15
371	MOTOR VEHICLES AND EQUIPMENT	-	-	.1	.2	-	-	9.3	.3	-	.2	.5	56
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	(D)	(D)	279.1	5.1	(D)	3.0	6.1	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.1	.1	-	.2	29.9	.7	-	.3	.9	19
	NEW MEXICO	(D)	(D)	14.8	21.9	1.8	5.5	981.7	25.0	(D)	23.8	43.2	5
20	FOOD AND KINDRED PRODUCTS	-	-	.9	1.2	(D)	(D)	91.6	2.5	(D)	1.4	3.0	24
201	MEAT PRODUCTS	-	-	(D)	(D)	(D)	(D)	29.1	.7	-	.3	.7	(X)
205	BAKERY PRODUCTS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.1	.3	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.4	(D)	(D)	56.0	1.4	-	.5	1.6	25
242	SAWMILLS AND PLANING MILLS	-	-	.2	.3	(D)	(D)	29.0	.9	-	.2	.9	25
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.5	4.1	-	(D)	75.2	2.1	-	3.8	5.6	1
	ARIZONA	(D)	(D)	30.6	37.1	4.2	(D)	3,058.4	79.3	481.3	65.3	128.1	2
20	FOOD AND KINDRED PRODUCTS	-	-	1.9	2.9	.4	.1	191.4	5.9	(D)	4.6	11.3	12
201	MEAT PRODUCTS	-	-	.3	.4	(D)	(D)	30.3	1.0	-	.4	1.4	8
202	DAIRY PRODUCTS	-	-	.1	.2	-	(D)	35.0	1.2	-	.2	1.1	1
203	PRESERVED FRUITS AND VEGETABLES	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.2	.5	(X)
205	BAKERY PRODUCTS	-	-	.1	.2	(Z)	(D)	12.8	.5	-	.2	.7	16
207	FATS AND OILS	-	-	(S)	(S)	(D)	(S)	45.7	1.3	-	.6	1.7	(X)
208	BEVERAGES	-	-	(S)	(S)	(D)	(D)	23.2	.7	-	.3	1.1	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	(Z)	(Z)	(S)	38.6	1.3	-	.2	1.3	24
232	MEN'S AND BOYS' FURNISHINGS	-	-	(Z)	(Z)	-	(S)	24.9	.9	-	.1	.7	1
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	(Z)	(D)	(D)	-	(Z)	.1	1
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	.1	(D)	91.9	2.7	-	.9	3.4	10
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	(Z)	(Z)	(Z)	(D)	22.2	.6	-	.2	.7	50
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(D)	(D)	-	(D)	8.5	.2	-	.1	.2	(X)
27	PRINTING AND PUBLISHING	-	-	.1	.1	(D)	.2	78.2	2.2	(D)	.4	2.1	31
28	CHEMICALS, ALLIED PRODUCTS	-	-	.8	1.3	(Z)	(D)	267.4	5.4	(D)	3.7	7.1	1
29	PETROLEUM AND COAL PRODUCTS	-	-	.3	.4	-	(D)	5.7	.2	-	.3	.7	8

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ARIZONA--CON.													
32	STONE, CLAY, GLASS PRODUCTS. . .	13.1	25.4	12.2	16.4	190.6	3.0	(D)	(D)	(D)	(D)	21	(X)	(X)
33	PRIMARY METAL INDUSTRIES	30.1	55.5	26.5	33.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
333	PRIMARY NONFERROUS METALS. . . .	26.4	41.8	24.2	30.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING . .	2.0	7.0	1.1	1.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.7	2.9	.5	.9	-	-	-	-	(D)	(D)	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.3	1.3	.2	.4	-	-	-	-	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.1	6.6	(S)	(S)	(S)	(S)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.2	12.1	.7	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
367	ELECTRONIC COMPONENTS, ACCFSS. . .	1.7	9.6	.5	.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	1.5	7.2	.9	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.3	.9	.2	.3	-	-	(D)	(Z)	-	-	(X)	1	(X)
	UTAH	61.4	107.5	54.7	67.9	240.2	3.6	958.9	12.3	252.0	6.0	26	1	4
20	FOOD AND KINDRED PRODUCTS. . . .	3.4	7.3	2.8	3.3	1.5	(Z)	(D)	(D)	(D)	(D)	8	(X)	(X)
201	MEAT PRODUCTS.	.3	1.3	.2	.3	-	-	-	-	(D)	(D)	(X)	(X)	(X)
202	DAIRY PRODUCTS	.9	1.7	.8	.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
204	GRAIN MILL PRODUCTS.	.3	1.2	(S)	(S)	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.3	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES. .	.1	.2	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.4	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	6.1	9.5	5.4	6.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
291	PETROLEUM REFINING	6.1	9.4	5.4	6.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	10.8	13.1	10.2	9.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	4.1	5.4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	(D)	(D)	.4	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	31.9	52.3	29.6	39.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.8	2.1	.6	.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.6	1.3	(S)	(S)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.0	3.2	.7	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.4	1.5	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.8	3.8	1.5	2.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	.2	.5	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.2	.7	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	NEVADA	17.0	34.3	13.8	20.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.8	2.4	.7	1.2	-	-	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.1	.6	(Z)	.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	(Z)	.3	(S)	(S)	-	-	(S)	(S)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	7.1	13.2	6.7	9.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	4.4	8.5	4.2	6.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	.1	.3	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.1	.4	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.1	.4	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
	WASHINGTON	240.9	433.5	145.2	278.4	1,267.0	20.2	4,206.8	47.7	(D)	(D)	9	2	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	20.5	40.8	17.6	32.5	32.6	.5	76.8	1.0	(D)	(D)	6	26	(X)
202	DAIRY PRODUCTS	1.7	3.4	1.4	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	6.4	13.1	5.2	11.0	12.3	.2	41.1	.6	-	-	4	45	(X)
204	GRAIN MILL PRODUCTS.	.9	2.0	.6	1.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS.	.6	1.4	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
208	BEVERAGES.	2.4	4.9	1.9	3.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	1.1	2.7	.9	1.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.2	.7	.1	.3	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	18.7	47.3	14.3	32.8	842.2	13.3	138.1	2.1	(D)	(D)	11	22	(X)
241	LOGGING CAMPS, LOG CONTRACTORS . .	7.5	19.0	7.2	17.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	6.0	16.2	3.6	7.8	114.7	1.8	52.9	.7	-	-	17	18	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	4.0	9.4	2.6	5.3	7.9	.1	(D)	(D)	(D)	(D)	39	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	.7	1.6	.5	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.3	.8	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ARIZONA--CON.												
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	3.1	3.9	(D)	.4	272.3	9.0	(D)	8.4	17.0	5
33	PRIMARY METAL INDUSTRIES	-	-	21.6	24.3	(D)	(D)	1,061.6	21.7	124.3	33.7	50.3	1
333	PRIMARY NONFERROUS METALS. . . .	-	-	19.9	21.9	(D)	(D)	627.3	11.7	(S)	30.4	40.1	1
335	NONFERROUS ROLLING AND DRAWING . .	-	-	(D)	(D)	(D)	(Z)	248.3	5.5	(S)	1.8	5.5	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	.1	.1	(D)	(D)	52.4	2.0	-	.6	2.2	51
344	FABRICATED STRUC. METAL PRODS. . .	-	-	(Z)	(Z)	(D)	(D)	23.2	.9	-	.3	1.4	1
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(S)	(S)	(Z)	(S)	178.1	5.6	-	1.0	5.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.6	.9	(D)	(D)	429.4	10.9	-	2.1	9.1	7
367	ELECTRONIC COMPONENTS, ACCESS. . .	-	-	(S)	(S)	-	(S)	354.8	8.8	-	1.7	6.9	(X)
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	.1	179.6	5.5	(D)	1.3	5.9	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	(D)	(D)	(D)	(Z)	22.1	.6	-	.2	.6	(X)
	UTAH	(D)	(D)	37.6	40.3	1.4	(D)	1,952.9	39.6	(D)	54.7	84.0	6
20	FOOD AND KINDRED PRODUCTS. . . .	(D)	(D)	1.9	2.2	(D)	.2	171.8	4.0	(D)	3.9	7.6	14
201	MEAT PRODUCTS.	-	-	.2	.3	(D)	(D)	41.5	1.0	-	.4	1.3	45
202	DAIRY PRODUCTS	-	-	.8	.9	(D)	(D)	41.4	.9	(S)	1.1	1.8	16
204	GRAIN MILL PRODUCTS.	-	-	(S)	(S)	(Z)	(D)	41.0	.9	-	.3	1.0	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.1	.1	(D)	18.5	.6	-	.3	.8	32
245	WOOD BUILDINGS AND MOBILE HOMES. .	-	-	(Z)	.1	(Z)	.1	4.1	.1	-	.1	.2	32
25	FURNITURE AND FIXTURES	-	-	.2	.2	-	(D)	8.2	.2	-	.1	.2	58
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	(D)	(D)	(Z)	(S)	197.8	3.2	-	5.3	8.1	(X)
291	PETROLEUM REFINING	-	-	(D)	(D)	(Z)	(S)	(S)	(S)	-	5.3	8.1	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(D)	(S)	168.0	3.2	-	9.7	11.1	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	(D)	(D)	(D)	1.2	(D)	(D)	-	3.2	4.3	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	-	-	(S)	(S)	(Z)	(S)	(D)	(D)	-	(D)	(D)	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	21.0	22.2	(D)	(D)	669.5	13.1	(D)	27.3	36.1	1
34	FABRICATED METAL PRODUCTS. . . .	-	-	.4	.5	(Z)	(D)	53.5	1.2	-	.7	1.8	18
344	FABRICATED STRUC. METAL PRODS. . .	-	-	.3	.4	-	(D)	37.3	.7	-	.4	1.0	23
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.5	.6	(D)	(D)	93.3	2.3	-	1.0	2.9	15
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.1	.1	(D)	(D)	54.3	1.2	-	.4	1.2	1
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	(D)	84.6	1.6	-	1.8	3.4	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	-	-	(D)	(D)	(Z)	(Z)	13.0	.3	-	.1	.4	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	(D)	(D)	-	(Z)	22.7	.6	-	.2	.6	(X)
	NEVADA	-	-	5.7	8.4	2.4	(D)	933.3	13.9	(D)	17.7	35.6	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.6	1.0	(Z)	(D)	40.0	1.2	-	.8	2.5	5
27	PRINTING AND PUBLISHING.	-	-	(Z)	(Z)	(D)	(S)	19.1	.5	(D)	.1	.6	1
271	NEWSPAPERS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	(Z)	.2	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(S)	(S)	127.2	3.9	(D)	7.4	14.0	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	-	-	(D)	(D)	(D)	(D)	71.2	2.0	(D)	4.3	7.0	(X)
329	MISC. NONMETALLIC MINERAL PRODS. .	-	-	(D)	(D)	(D)	(D)	2.6	.1	(D)	.9	2.2	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(Z)	(Z)	-	(Z)	10.0	.3	-	.1	.4	41
39	MISC. MANUFACTURING INDUS. . . .	-	-	(Z)	(Z)	-	(D)	(D)	(D)	-	.2	.5	1
	WASHINGTON	(D)	(D)	77.1	156.1	30.2	(D)	28,015.7	155.1	(S)	237.6	388.1	2
20	FOOD AND KINDRED PRODUCTS. . . .	(D)	(D)	12.0	24.3	.4	1.0	870.8	8.3	(D)	20.7	37.7	10
202	DAIRY PRODUCTS	-	-	1.2	2.0	(D)	.3	82.6	1.0	-	1.3	2.7	8
203	PRESERVED FRUITS AND VEGETABLES. .	-	-	4.7	10.0	(D)	(D)	349.5	2.1	-	6.5	11.9	6
204	GRAIN MILL PRODUCTS.	-	-	(S)	(S)	(D)	(S)	72.5	.8	-	.9	1.9	(X)
205	BAKERY PRODUCTS.	-	-	.5	1.0	-	(D)	21.8	.3	-	.4	1.0	30
208	BEVERAGES.	-	-	(S)	(S)	(D)	(S)	(S)	(S)	-	2.0	4.6	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	-	-	.3	.6	(Z)	(D)	(S)	(S)	-	.9	1.8	2
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	.1	.1	(D)	.1	26.1	.4	-	.2	.6	26
24	LUMBER AND WOOD PRODUCTS	-	-	2.4	4.8	12.5	(D)	1,273.7	14.5	(S)	17.9	41.7	9
241	LOGGING CAMPS, LOG CONTRACTORS . .	-	-	(Z)	(Z)	(S)	(S)	89.9	1.1	-	6.9	16.1	53
242	SAWMILLS AND PLANING MILLS	-	-	.8	1.6	3.0	.7	718.1	8.3	(S)	6.1	14.5	16
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	-	-	(D)	(D)	2.1	.5	411.4	4.2	-	3.7	8.1	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	-	-	(D)	(D)	(D)	(D)	40.2	.5	-	.7	1.6	(X)
25	FURNITURE AND FIXTURES	-	-	.1	.2	(Z)	(D)	25.1	.5	(D)	.2	.6	43

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977												
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--		
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	WASHINGTON--CON.													
26	PAPER AND ALLIED PRODUCTS. . . .	73.2	136.0	55.0	102.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
261	PULPMILLS.	14.8	26.0	10.7	18.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER. .	41.3	77.0	32.1	58.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
263	PAPERBOARD MILLS	15.4	29.0	11.1	22.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS . .	.9	2.2	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	15.9	28.1	9.4	17.0	41.6	.6	218.4	2.6	(D)	(D)	17	1	(X)
281	INDUSTRIAL INORGANIC CHEMICALS . .	11.2	18.9	5.9	10.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	.1	.3	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	10.6	23.3	8.1	16.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.8	2.5	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	15.7	26.7	14.2	22.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
324	CEMENT, HYDRAULIC.	9.2	11.3	8.4	9.7	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS. .	2.2	6.4	2.0	5.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	70.2	90.3	16.0	33.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
331	BLAST FURNACE, BASIC STEEL PROD. .	3.9	8.9	2.8	6.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	.8	1.9	.5	.9	(D)	(Z)	-	-	-	-	1	(X)	(X)
333	PRIMARY NONFERROUS METALS.	59.8	68.9	8.7	17.5	45.6	.7	(D)	(D)	(D)	(D)	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	2.1	5.4	1.3	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
344	FABRICATED STRUC. METAL PRODS. . .	.7	2.0	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.6	4.6	1.0	2.1	12.5	.2	(D)	(D)	-	-	34	(X)	(X)
353	CONSTRUCTION, RELATED MACHINERY. .	.5	1.4	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	.2	.6	.2	.3	(D)	(D)	(D)	(Z)	-	-	(X)	57	(X)
359	MISC. MACHINERY, EXC. ELEC	.4	1.3	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.6	1.5	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
366	COMMUNICATION EQUIPMENT.	.2	.5	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	8.8	20.8	6.1	12.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
371	MOTOR VEHICLES AND EQUIPMENT . . .	.2	.6	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
373	SHIP, BOAT BUILDING, REPAIRING . .	1.1	2.9	.8	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	.5	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
	OREGON	132.0	305.0	84.1	166.3	927.4	14.9	1,792.9	21.7	(D)	(D)	15	N	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	11.3	25.0	9.1	16.4	160.3	2.3	113.5	1.5	(D)	(D)	67	44	(X)
201	MEAT PRODUCTS.	.7	1.7	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	1.0	2.7	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES. .	4.2	10.6	3.1	6.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
204	GRAIN MILL PRODUCTS.	.6	1.8	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS.	.7	1.7	.6	1.2	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
207	FATS AND OILS.	.6	1.2	.5	1.0	-	-	-	-	-	-	(X)	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.7	1.8	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.3	.8	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.1	.5	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	30.2	87.5	20.9	46.3	609.5	10.2	250.3	3.4	-	-	14	7	(X)
241	LOGGING CAMPS, LOG CONTRACTORS . .	5.6	14.3	5.4	13.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	7.4	25.1	3.8	8.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	12.4	34.0	8.7	18.4	39.8	.6	166.1	2.2	-	-	11	4	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	4.5	13.4	2.9	6.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.3	.9	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE.	.2	.5	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	39.8	91.4	27.6	54.8	(D)	(D)	1,085.7	12.5	-	-	(X)	1	(X)
262	PAPERMILLS, EXC. BUILDING PAPER. .	24.4	57.0	16.4	30.9	-	-	(D)	(D)	-	-	(X)	(X)	(X)
263	PAPERBOARD MILLS	12.7	27.5	9.0	19.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES. .	.1	.4	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.5	1.9	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
271	NEWSPAPERS	.2	.7	(Z)	.1	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	7.7	16.4	4.6	9.1	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS . . .	.4	1.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.8	2.0	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	2.8	5.7	2.6	4.8	11.9	.2	87.0	1.1	-	-	1	19	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	8.4	13.7	7.6	10.4	38.0	.7	(D)	(D)	(D)	(D)	86	(X)	(X)
33	PRIMARY METAL INDUSTRIES	23.5	39.1	6.3	13.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
332	IRON AND STEEL FOUNDRIES	1.8	5.1	1.3	2.7	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.8	5.8	1.3	3.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
341	METAL CANS, SHIPPING CONTAINERS. .	.3	.8	.2	.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.3	1.0	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.5	1.7	.3	.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	(Z)	.2	(Z)	(S)	-	-	(D)	(Z)	-	-	(X)	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	WASHINGTON--CON.												
26	PAPER AND ALLIED PRODUCTS	-	-	27.1	52.5	10.2	(D)	5,319.2	33.9	(S)	69.4	115.4	1
261	PULPMILLS	-	-	(D)	(D)	(D)	(Z)	1,213.6	7.4	(D)	14.9	26.4	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	15.8	29.8	7.9	(D)	2,708.8	18.1	(D)	39.2	64.5	1
263	PAPERBOARD MILLS	-	-	7.1	13.6	(D)	-	1,265.3	6.8	(D)	13.8	21.3	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	(S)	(S)	(Z)	(S)	91.1	1.0	(D)	.8	1.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	5.4	11.2	(Z)	(D)	1,895.1	11.1	(D)	14.7	22.8	2
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	2.7	5.5	(Z)	(D)	1,530.7	8.7	(D)	9.7	14.4	1
285	PAINTS AND ALLIED PRODUCTS	-	-	(Z)	(Z)	-	(D)	8.5	.2	-	.1	.2	37
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(D)	(S)	721.0	6.6	(D)	12.6	21.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.7	(D)	(D)	(S)	(S)	-	.8	1.8	44
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	4.0	8.0	1.0	.4	423.5	4.0	-	10.3	22.0	11
324	CEMENT, HYDRAULIC	-	-	(D)	(D)	-	(D)	228.0	1.6	-	6.1	10.9	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	(S)	(S)	(S)	(S)	51.9	1.0	-	.9	3.6	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	13.1	27.8	1.0	(D)	15,897.2	57.2	(D)	76.4	91.2	5
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	(S)	(S)	-	(S)	298.6	2.6	-	3.6	6.9	(X)
332	IRON AND STEEL FOUNDRIES	-	-	(S)	(S)	(D)	(D)	87.1	1.0	-	.8	1.5	(X)
333	PRIMARY NONFERROUS METALS	(D)	(D)	6.3	13.3	.7	(D)	14,968.4	51.4	(D)	66.4	72.9	1
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	216.7	2.7	(D)	1.7	4.9	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	.1	.2	(D)	(D)	87.4	1.2	-	.6	1.5	13
35	MACHINERY, EXCEPT ELECTRIC	-	-	.4	.9	.2	(D)	164.2	2.6	-	1.5	4.2	11
353	CONSTRUCTION, RELATED MACHINERY	-	-	.2	.4	(D)	.1	48.5	.6	-	.5	1.1	8
355	SPECIAL INDUSTRY MACHINERY	-	-	.2	.3	-	(D)	20.2	.3	-	.2	.8	31
359	MISC. MACHINERY, EXC. ELEC	-	-	(D)	(D)	(D)	(D)	(S)	(S)	-	.4	1.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.2	.4	-	(D)	56.4	.8	-	.4	1.0	12
366	COMMUNICATION EQUIPMENT	-	-	(Z)	.1	-	.1	11.3	.3	-	.1	.4	55
37	TRANSPORTATION EQUIPMENT	-	-	4.0	8.4	(D)	(D)	786.6	8.1	-	9.2	18.4	1
371	MOTOR VEHICLES AND EQUIPMENT	-	-	(D)	(D)	-	(D)	22.4	.3	-	.2	.5	(X)
373	SHIP, BOAT BUILDING, REPAIRING	-	-	.5	.9	(D)	.5	96.6	1.3	-	.8	1.9	1
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	-	(D)	31.8	.4	-	.1	.4	(X)
	OREGON	(D)	(D)	45.0	94.5	16.4	(D)	14,039.0	138.8	165.0	132.2	269.7	2
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	4.7	9.6	.4	.7	654.2	8.7	(D)	9.4	19.6	4
201	MEAT PRODUCTS	-	-	.3	.5	(Z)	.3	57.4	.8	-	.8	1.8	18
202	DAIRY PRODUCTS	-	-	.5	.9	(D)	(D)	94.3	1.1	-	.6	1.4	31
203	PRESERVED FRUITS AND VEGETABLES	-	-	2.5	5.2	.2	(D)	320.5	3.8	-	2.9	6.5	3
204	GRAIN MILL PRODUCTS	-	-	.3	.7	-	(D)	65.0	.9	-	.7	1.8	12
205	BAKERY PRODUCTS	-	-	.4	.8	(Z)	(D)	29.6	.5	-	.6	1.4	1
207	FATS AND OILS	-	-	(D)	(D)	(D)	(D)	9.6	.2	-	.5	1.1	(X)
209	MISC. FOODS, KINDRED PRODUCTS	-	-	.2	.5	(D)	(D)	39.2	.7	-	.9	2.0	8
22	TEXTILE MILL PRODUCTS	-	-	(S)	(S)	-	(S)	16.0	.3	-	.2	.4	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	(Z)	-	(D)	15.3	.3	-	.1	.4	1
24	LUMBER AND WOOD PRODUCTS	-	-	8.3	17.8	9.2	5.7	2,715.5	41.2	155.9	31.9	82.1	4
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	(D)	(Z)	3.3	2.1	68.0	.9	-	6.7	14.5	1
242	SAWMILLS AND PLANING MILLS	-	-	1.3	2.6	2.0	1.6	1,068.7	16.8	93.9	8.1	24.5	12
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	5.5	12.0	2.8	.8	1,085.6	15.5	58.5	12.6	31.4	4
249	MISCELLANEOUS WOOD PRODUCTS	-	-	1.5	3.1	1.2	1.1	468.9	7.4	(D)	4.4	11.1	12
25	FURNITURE AND FIXTURES	-	-	.1	.1	-	(D)	24.4	.5	-	.3	.9	40
251	HOUSEHOLD FURNITURE	-	-	(Z)	(Z)	-	(D)	15.8	.3	-	.2	.7	49
26	PAPER AND ALLIED PRODUCTS	-	-	17.7	36.8	5.1	(D)	3,587.8	36.6	(D)	36.8	74.1	1
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	11.4	22.2	(D)	-	2,350.1	26.1	(D)	22.5	45.8	1
263	PAPERBOARD MILLS	-	-	(D)	(D)	(D)	(Z)	1,073.2	8.1	(D)	11.5	21.9	(X)
265	PAPERBOARD CONTAINERS AND BOXES	-	-	.1	.1	(D)	(D)	6.6	.1	-	.1	.4	1
27	PRINTING AND PUBLISHING	-	-	.2	.4	(D)	(D)	88.6	1.5	-	.5	1.8	37
271	NEWSPAPERS	-	-	(Z)	.1	(D)	(D)	35.3	.6	-	.1	.6	74
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	909.7	7.3	-	7.7	13.2	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	.3	.6	-	(D)	15.9	.2	-	.5	1.0	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	.4	.8	(D)	.1	37.6	.5	-	.8	1.8	1
29	PETROLEUM AND COAL PRODUCTS	-	-	1.3	2.5	(D)	(D)	(S)	(S)	-	2.9	5.0	22
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.6	3.2	(Z)	2.7	220.7	3.2	-	9.5	13.8	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	4.6	10.3	.7	.9	5,029.0	25.3	-	26.7	41.3	2
332	IRON AND STEEL FOUNDRIES	-	-	(D)	(D)	(D)	(D)	140.3	2.4	-	1.7	4.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	144.7	2.8	-	1.5	4.2	(X)
341	METAL CANS, SHIPPING CONTAINERS	-	-	(D)	(D)	(Z)	(Z)	12.5	.2	-	.3	.6	(X)
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	.1	.3	(D)	(D)	34.4	.5	-	.2	.5	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.2	.4	(Z)	(D)	59.3	1.0	-	.4	1.3	16
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	(D)	(D)	(Z)	(D)	3.3	.1	-	(Z)	.1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	OREGON--CON.													
37	TRANSPORTATION EQUIPMENT	1.0	3.3	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	CALIFORNIA	664.4	2,131.2	536.8	1,002.5	2,294.5	34.7	6,151.4	72.5	876.4	24.8	7	1	1
20	FOOD AND KINDRED PRODUCTS	103.6	292.6	90.1	175.3	326.0	4.6	911.8	10.7	-	-	4	1	(X)
201	MEAT PRODUCTS	5.0	19.0	3.5	6.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
202	DAIRY PRODUCTS	6.3	21.6	4.9	9.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	35.1	95.0	31.2	62.7	64.3	1.0	225.4	2.8	-	-	7	1	(X)
204	GRAIN MILL PRODUCTS	4.9	17.0	3.6	6.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
205	BAKERY PRODUCTS	4.9	14.1	4.2	7.2	6.3	.1	(D)	(D)	-	-	1	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	24.1	52.2	23.6	47.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
207	FATS AND OILS	6.6	18.8	5.7	10.8	32.0	.4	(D)	(Z)	-	-	1	1	(X)
208	BEVERAGES	8.5	29.1	6.7	12.4	37.1	.5	47.8	.7	-	-	1	5	(X)
209	MISC. FOODS, KINDRED PRODUCTS	8.2	25.8	6.7	12.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	6.0	18.2	5.0	9.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
225	KNITTING MILLS	1.1	3.4	.9	1.5	-	-	-	-	-	-	(X)	(X)	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	.5	1.3	(D)	(D)	-	-	(D)	(Z)	-	-	(X)	1	(X)
227	FLOOR COVERING MILLS	2.9	7.7	2.6	5.0	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
229	MISCELLANEOUS TEXTILE GOODS	.8	2.6	.7	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	3.1	15.0	1.8	3.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS	.4	2.1	.3	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
233	WOMEN'S AND MISSES' OUTERWEAR	1.5	8.0	.9	1.6	-	-	-	-	-	-	(X)	(X)	(X)
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.8	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	.7	2.8	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	20.3	82.4	14.7	31.9	479.5	8.2	(D)	(D)	-	-	18	(X)	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	2.7	6.5	2.6	6.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
242	SAWMILLS AND PLANING MILLS	8.1	38.6	5.2	11.8	303.4	5.1	84.0	1.1	-	-	25	7	(X)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	3.1	12.9	2.1	4.1	20.3	.4	3.5	.1	-	-	1	11	(X)
244	WOOD CONTAINERS	.5	1.9	.3	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.3	1.5	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	5.7	21.0	4.3	8.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	3.6	15.1	2.4	4.1	-	-	-	-	-	-	(X)	(X)	(X)
251	HOUSEHOLD FURNITURE	2.2	9.4	1.3	2.2	-	-	-	-	-	-	(X)	(X)	(X)
252	OFFICE FURNITURE	.5	2.0	.4	.7	-	-	-	-	-	-	(X)	(X)	(X)
254	PARTITIONS AND FIXTURES	.6	2.1	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
259	MISC. FURNITURE AND FIXTURES	.2	1.0	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	38.2	114.4	32.4	63.9	(D)	(D)	760.3	9.9	-	-	(X)	1	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	6.8	24.4	5.1	10.2	107.6	1.5	-	-	-	-	1	(X)	(X)
263	PAPERBOARD MILLS	20.2	51.6	18.5	37.2	68.3	1.0	(D)	(D)	-	-	1	(X)	(X)
264	MISC. CONVERTED PAPER PRODUCTS	2.9	14.1	1.7	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
265	PAPERBOARD CONTAINERS AND BOXES	4.5	15.9	3.5	6.3	5.4	.1	(D)	(D)	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING	7.5	35.1	4.4	7.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
271	NEWSPAPERS	1.6	9.2	.8	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
274	MISCELLANEOUS PUBLISHING	.1	1.1	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
275	COMMERCIAL PRINTING	4.3	17.5	2.8	4.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
276	MANIFOLD BUSINESS FORMS	.5	2.5	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.2	1.1	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
279	PRINTING TRADE SERVICES	.2	1.4	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	61.0	183.3	49.4	83.8	170.2	2.4	(D)	(D)	-	-	1	(X)	(X)
281	INDUSTRIAL INORGANIC CHEMICALS	14.0	58.4	8.9	16.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
282	PLASTICS MATERIALS, SYNTHETICS	5.7	18.3	4.3	7.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
283	DRUGS	2.0	7.5	1.4	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
284	SOAPS, CLEANERS, TOILET GOODS	4.6	13.3	3.9	7.2	27.0	.3	-	-	-	-	1	(X)	(X)
285	PAINTS AND ALLIED PRODUCTS	1.7	5.2	1.3	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	18.8	38.9	17.8	29.7	37.5	.6	(D)	(D)	-	-	1	(X)	(X)
287	AGRICULTURAL CHEMICALS	9.3	28.8	7.5	11.6	(S)	(S)	(D)	(Z)	-	-	(X)	1	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	4.8	12.9	4.3	7.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	140.6	405.6	119.2	232.1	184.4	2.6	(D)	(D)	-	-	25	(X)	(X)
291	PETROLEUM REFINING	132.5	384.9	111.7	217.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
295	PAVING AND ROOFING MATERIALS	6.0	15.7	5.5	11.1	142.2	2.0	10.5	.1	-	-	33	1	(X)
299	MISC. PETROLEUM, COAL PRODUCTS	2.1	4.9	2.0	3.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	16.5	72.3	10.7	19.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
301	TIRES AND INNER TUBES	4.4	16.5	3.3	6.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
306	FABRICATED RUBBER PRODUCTS, NEC	1.6	6.4	1.1	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	10.3	48.4	6.1	10.7	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
31	LEATHER, LEATHER PRODUCTS	.9	3.7	.6	1.1	-	-	-	-	-	-	(X)	(X)	(X)
311	LEATHER TANNING AND FINISHING	.6	1.8	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
316	LUGGAGE	(Z)	.2	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
317	WOMEN'S HANDBAGS AND PURSES	.1	1.0	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	115.5	268.7	105.8	182.0	421.4	6.7	3,265.8	36.0	(D)	(D)	16	1	(X)
322	GLASS, PRESSED OR BLOWN	20.2	55.1	17.9	34.9	101.1	1.5	-	-	-	-	1	(X)	(X)
324	CEMENT, HYDRAULIC	53.3	104.6	49.4	70.7	(D)	(D)	3,002.9	32.8	(D)	(D)	(X)	1	(X)
325	STRUCTURAL CLAY PRODUCTS	6.9	15.0	6.7	12.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
326	POTTERY AND RELATED PRODUCTS	3.1	6.6	3.0	5.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	OREGON--CON.												
37	TRANSPORTATION EQUIPMENT	-	-	.4	.8	(D)	(D)	99.8	2.0	-	.8	2.3	12
	CALIFORNIA	166.9	12.8	373.6	722.8	42.6	92.4	37,394.5	1,128.8	1,312.0	659.5	1,667.3	1
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	66.7	134.3	6.9	(D)	3,950.9	117.3	204.6	102.6	230.8	1
201	MEAT PRODUCTS	-	-	2.2	4.2	.3	(D)	436.9	12.6	-	6.2	16.7	6
202	DAIRY PRODUCTS	-	-	3.7	7.3	.9	.7	420.7	12.0	(D)	6.1	17.0	7
203	PRESERVED FRUITS AND VEGETABLES	-	-	24.7	51.6	1.3	5.9	1,143.7	32.3	(D)	32.0	69.8	2
204	GRAIN MILL PRODUCTS	-	-	1.9	3.7	.1	2.5	368.9	10.4	(D)	5.5	15.1	4
205	BAKERY PRODUCTS	-	-	3.6	6.3	(D)	(D)	215.9	6.9	-	4.4	10.0	9
206	SUGAR, CONFECTIONERY PRODUCTS	(D)	(D)	18.2	37.7	(D)	.6	139.2	4.9	(S)	28.1	50.8	1
207	FATS AND OILS	-	-	3.8	7.5	(D)	(D)	263.5	8.1	-	5.9	13.0	12
208	BEVERAGES	-	-	5.0	9.1	.8	1.2	527.6	16.8	(S)	7.3	19.5	5
209	MISC. FOODS, KINDRED PRODUCTS	-	-	3.6	6.9	2.4	2.7	434.5	13.3	-	7.1	18.9	2
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	277.2	9.0	(S)	5.1	12.6	(X)
225	KNITTING MILLS	-	-	(D)	(D)	-	(D)	68.0	2.0	(D)	.8	2.1	(X)
226	TEXTILE FINISHING, EXCEPT WOOL	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.6	1.6	(X)
227	FLOOR COVERING MILLS	-	-	(S)	(S)	(D)	(S)	86.0	2.7	-	2.3	4.6	(X)
229	MISCELLANEOUS TEXTILE GOODS	-	-	.4	.6	(D)	(D)	39.1	1.4	(D)	.9	2.5	8
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.6	.9	(D)	(D)	364.2	11.6	(D)	3.2	14.1	16
232	MEN'S AND BOYS' FURNISHINGS	-	-	.1	.2	(D)	(D)	46.6	1.6	(D)	.3	1.7	27
233	WOMEN'S AND MISSES' OUTERWEAR	-	-	.2	.3	(D)	(D)	201.7	6.4	(D)	1.2	6.0	21
234	WOMEN'S, CHILDREN'S UNDERGARMS	-	-	(Z)	(Z)	-	.1	18.0	.7	-	.1	.7	1
239	MISC. FABRICATED TEXTILE PRODS	-	-	.2	.3	(D)	(D)	64.1	1.9	(D)	1.2	3.7	37
24	LUMBER AND WOOD PRODUCTS	-	-	4.6	8.8	6.6	(D)	1,619.4	50.5	80.1	19.9	63.0	7
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	(D)	.7	15.8	.3	-	3.1	6.8	(X)
242	SAWMILLS AND PLANING MILLS	-	-	1.6	2.8	2.3	.5	833.0	26.8	80.1	8.5	30.1	1
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	-	-	1.1	2.0	(D)	(D)	292.5	8.8	(Z)	3.0	10.1	9
244	WOOD CONTAINERS	-	-	(D)	(D)	(S)	(S)	39.1	1.2	-	.4	1.4	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	(Z)	.1	(Z)	.1	36.4	1.1	-	.3	1.0	3
249	MISCELLANEOUS WOOD PRODUCTS	-	-	(D)	(D)	.7	1.2	402.5	12.3	-	4.7	13.5	(X)
25	FURNITURE AND FIXTURES	-	-	1.0	1.6	.8	1.7	367.6	11.0	(D)	2.9	12.0	13
251	HOUSEHOLD FURNITURE	-	-	.5	.8	.3	1.2	249.4	7.1	(D)	1.7	7.2	22
252	OFFICE FURNITURE	-	-	.2	.3	(D)	(D)	41.7	1.4	-	.4	1.6	14
254	PARTITIONS AND FIXTURES	-	-	.2	.3	(D)	(D)	40.7	1.3	-	.6	2.1	23
259	MISC. FURNITURE AND FIXTURES	-	-	.1	.1	(Z)	.1	20.9	.7	-	.2	1.0	52
26	PAPER AND ALLIED PRODUCTS	-	-	20.9	41.1	8.5	(D)	1,713.7	50.5	629.1	36.9	88.8	1
262	PAPERMILLS, EXC. BUILDING PAPER	-	-	4.3	8.6	(D)	(D)	484.6	14.3	-	9.3	23.5	1
263	PAPERBOARD MILLS	-	-	11.7	23.1	(D)	.2	497.6	14.4	(D)	16.0	32.6	1
264	MISC. CONVERTED PAPER PRODUCTS	-	-	1.4	2.7	.5	(Z)	359.2	10.9	(D)	3.2	11.9	3
265	PAPERBOARD CONTAINERS AND BOXES	-	-	2.4	4.4	.2	(D)	304.9	9.6	(D)	4.2	13.0	1
27	PRINTING AND PUBLISHING	-	-	2.4	3.9	(D)	3.0	906.9	27.4	(S)	6.7	28.2	5
271	NEWSPAPERS	-	-	.6	1.0	(Z)	(D)	244.7	7.9	-	1.4	7.4	6
274	MISCELLANEOUS PUBLISHING	-	-	(D)	(D)	-	.1	(D)	(D)	-	.1	.5	(X)
275	COMMERCIAL PRINTING	-	-	1.6	2.4	(D)	2.0	447.4	12.6	(D)	3.8	14.5	6
276	MANIFOLD BUSINESS FORMS	-	-	.1	.2	(D)	(D)	56.8	1.9	-	.4	1.8	8
278	BLANKBOOKS AND BOOKBINDING	-	-	(Z)	.1	-	.1	29.0	.8	-	.2	.9	43
279	PRINTING TRADE SERVICES	-	-	(Z)	(Z)	-	.2	34.6	1.1	-	.3	1.1	79
28	CHEMICALS, ALLIED PRODUCTS	-	-	34.8	61.3	(D)	11.8	3,394.4	99.5	(D)	65.9	157.4	2
281	INDUSTRIAL INORGANIC CHEMICALS	-	-	6.5	12.9	(D)	(D)	1,492.4	42.1	(D)	15.6	51.8	1
282	PLASTICS MATERIALS, SYNTHETICS	-	-	3.1	5.4	(D)	(D)	409.1	11.1	-	5.1	14.8	1
283	DRUGS	-	-	.7	1.2	(Z)	(D)	190.1	5.5	-	2.0	5.9	3
284	SOAPS, CLEANERS, TOILET GOODS	-	-	2.7	5.5	(D)	(D)	202.7	6.1	(D)	5.6	12.9	9
285	PAINTS AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	105.8	3.2	-	1.4	3.9	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	-	-	12.2	19.6	(D)	(D)	288.2	9.2	(D)	17.3	30.5	6
287	AGRICULTURAL CHEMICALS	-	-	(S)	(S)	(S)	(S)	550.9	17.1	(D)	14.0	27.6	(X)
289	MISCELLANEOUS CHEMICAL PRODUCTS	-	-	2.8	5.5	.1	(D)	155.2	5.3	-	4.9	10.0	1
29	PETROLEUM AND COAL PRODUCTS	-	-	114.1	226.7	(D)	.1	6,270.4	173.5	(D)	147.4	291.0	1
291	PETROLEUM REFINING	-	-	(S)	(S)	(D)	(S)	6,078.6	167.5	(D)	140.4	277.0	(X)
295	PAVING AND ROOFING MATERIALS	-	-	4.1	8.2	(D)	(D)	152.8	4.7	-	5.1	10.5	8
299	MISC. PETROLEUM, COAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	39.0	1.4	-	1.9	3.5	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	5.8	10.9	.2	6.5	1,710.7	52.8	(D)	13.6	52.1	6
301	TIRES AND INNER TUBES	-	-	2.4	4.7	(D)	.1	322.4	10.1	-	3.5	10.2	1
306	FABRICATED RUBBER PRODUCTS, NEC.	-	-	.7	1.3	(D)	.7	135.1	4.3	-	1.2	4.6	12
307	MISCELLANEOUS PLASTICS PRODUCTS	-	-	2.6	4.7	(D)	5.7	1,232.0	37.8	(D)	8.6	36.7	13
31	LEATHER, LEATHER PRODUCTS	-	-	(D)	(D)	(D)	(D)	81.0	2.6	-	.8	2.5	(X)
311	LEATHER TANNING AND FINISHING	-	-	(D)	(D)	-	(D)	25.5	.9	-	.6	1.7	(X)
316	LUGGAGE	-	-	-	-	(Z)	(Z)	4.1	.2	-	(Z)	.2	(X)
317	WOMEN'S HANDBAGS AND PURSES	-	-	(Z)	(Z)	-	(Z)	35.0	1.0	-	(Z)	(Z)	1
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	50.3	101.2	4.8	5.7	2,857.8	86.7	(S)	108.7	202.7	6
322	GLASS, PRESSED OR BLOWN	-	-	16.0	31.9	(D)	(D)	684.2	20.2	-	20.7	41.8	1
324	CEMENT, HYDRAULIC	74.0	1.1	5.4	11.8	(D)	(D)	1,125.9	33.9	-	47.5	80.3	1
325	STRUCTURAL CLAY PRODUCTS	-	-	(S)	(S)	(S)	(S)	75.4	2.5	-	5.4	8.8	(X)
326	POTTERY AND RELATED PRODUCTS	-	-	2.3	4.2	(D)	1.0	37.7	1.4	(Z)	3.1	5.3	29

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977										
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		Standard error of estimate (percent) for columns[1]--
						Distillate		Residual				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	
		A	B	C	D	E	F	G	H	I	J	F H J
	CALIFORNIA--CON.											
32	STONE, CLAY, GLASS PRODUCTS--CON.											
327	CONCRETE, GYPSUM, PLASTER PRODS.	14.3	36.2	13.3	27.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
329	MISC. NONMETALLIC MINERAL PRODS.	12.9	37.5	11.2	23.0	47.6	.8	236.6	2.7	-	-	10 1 (X)
33	PRIMARY METAL INDUSTRIES	47.5	161.6	38.1	76.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
331	BLAST FURNACE, BASIC STEEL PROD.	27.5	91.5	22.2	42.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
332	IRON AND STEEL FOUNDRIES	4.1	19.9	3.0	10.3	(D)	(D)	-	-	-	-	(X) (X) (X)
334	SECONDARY NONFERROUS METALS	3.8	8.7	3.6	6.9	(D)	(D)	-	-	-	-	(X) (X) (X)
335	NONFERROUS ROLLING AND DRAWING	6.2	23.1	4.5	8.1	(D)	(D)	(D)	(Z)	-	-	(X) 1 (X)
336	NONFERROUS FOUNDRIES	3.4	10.3	2.7	4.8	-	-	-	-	-	-	(X) (X) (X)
339	MISC. PRIMARY METAL PRODUCTS	2.4	7.0	2.0	3.6	(D)	(D)	-	-	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	29.1	103.4	22.1	39.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
341	METAL CANS, SHIPPING CONTAINERS	6.3	19.0	5.3	9.6	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
342	CUTLERY, HANDTOOLS AND HARDWARE	1.8	7.3	1.3	2.2	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
343	PLUMBING, HEATING, EXCEPT ELEC	1.6	5.4	1.2	2.2	(D)	(D)	-	-	-	-	(X) (X) (X)
344	FABRICATED STRUC. METAL PRODS.	4.5	19.6	3.0	5.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
345	SCREW MACHINE PROD., BOLTS, ETC.	1.2	5.7	.6	1.0	-	-	-	-	-	-	(X) (X) (X)
346	METAL FORGINGS AND STAMPINGS	5.0	14.5	4.3	7.4	6.5	.1	-	-	-	-	1 (X) (X)
347	METAL SERVICES, NEC.	4.8	15.3	3.7	6.1	(D)	(D)	-	-	-	-	(X) (X) (X)
348	ORDNANCE AND ACCESSORIES, NEC.	1.4	6.0	1.0	2.0	(D)	(D)	-	-	-	-	(X) (X) (X)
349	MISC. FABRICATED METAL PRODUCTS.	2.5	10.6	1.7	3.3	(D)	(Z)	(D)	(D)	-	-	18 (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	15.5	74.9	8.9	15.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
351	ENGINES AND TURBINES	.3	2.4	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
352	FARM AND GARDEN MACHINERY	.5	1.8	.3	.6	-	-	(D)	(Z)	-	-	(X) 81 (X)
353	CONSTRUCTION, RELATED MACHINERY	2.5	8.6	1.5	2.7	(D)	(D)	-	-	-	-	(X) (X) (X)
354	METALWORKING MACHINERY	1.2	5.8	.7	1.4	-	-	(D)	(D)	-	-	(X) (X) (X)
356	GENERAL INDUSTRIAL MACHINERY	1.8	9.0	1.0	1.8	(D)	(D)	-	-	-	-	(X) (X) (X)
357	OFFICE AND COMPUTING MACHINES	3.5	24.5	1.2	2.2	(D)	(D)	-	-	-	-	(X) (X) (X)
359	MISC. MACHINERY, EXC. ELEC	3.3	13.4	2.1	3.9	(D)	(D)	-	-	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	19.6	101.9	10.5	18.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
361	ELECTRIC DISTRIBUTING EQUIPMENT	.5	2.5	(S)	(S)	(Z)	(Z)	-	-	-	-	1 (X) (X)
362	ELECTRICAL INDUSTRIAL APPARATUS	1.1	6.2	.6	1.1	(D)	(D)	-	-	-	-	(X) (X) (X)
363	HOUSEHOLD APPLIANCES	.8	2.7	.7	1.2	(D)	(Z)	-	-	-	-	1 (X) (X)
364	ELEC. LIGHTING, WIRING EQUIP	1.3	5.0	.9	1.6	(D)	(D)	-	-	-	-	(X) (X) (X)
365	RADIO, TV RECEIVING EQUIPMENT	1.4	5.6	1.1	1.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
366	COMMUNICATION EQUIPMENT	4.9	30.0	2.0	3.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
367	ELECTRONIC COMPONENTS, ACCESS.	8.2	44.0	4.1	7.5	(D)	(D)	-	-	-	-	(X) (X) (X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	1.4	6.0	(S)	(S)	(D)	(Z)	-	-	-	-	1 (X) (X)
37	TRANSPORTATION EQUIPMENT	27.2	141.2	15.4	29.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
371	MOTOR VEHICLES AND EQUIPMENT	8.9	35.6	6.3	11.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
372	AIRCRAFT AND PARTS	9.2	53.1	4.5	8.6	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
373	SHIP, BOAT BUILDING, REPAIRING	1.5	8.7	.9	1.7	(D)	(Z)	(D)	(D)	-	-	62 (X) (X)
375	MOTORCYCLES, BICYCLES, PARTS	.2	.7	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
376	GUIDED MISSILES, SPACE VEHICLES	6.7	39.9	3.0	5.9	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
379	TRANSPORTATION EQUIPMENT, NEC.	.7	3.0	.5	.9	-	-	-	-	-	-	(X) (X) (X)
38	INSTRUMENTS, RELATED PRODS	5.5	28.1	3.2	5.8	(D)	(D)	(D)	(Z)	-	-	(X) 4 (X)
381	ENGINEERING, SCIENTIFIC INSTRU	.4	2.1	.2	.4	-	-	-	-	-	-	(X) (X) (X)
382	MEASURING, CONTROLLING DEVICES	2.7	14.2	1.6	2.8	(D)	(D)	(D)	(Z)	-	-	(X) 1 (X)
383	OPTICAL INSTRUMENTS AND LENSES	.6	2.8	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
384	MEDICAL INSTRUMENTS, SUPPLIES	1.1	5.8	.6	1.1	(D)	(D)	(D)	(Z)	-	-	(X) 4 (X)
386	PHOTOGRAPHIC EQUIP., SUPPLIES	.5	2.3	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
39	MISC. MANUFACTURING INDUS.	3.1	14.0	1.9	(S)	(D)	(D)	-	-	-	-	(X) (X) (X)
391	JEWELRY, SILVER AND PLATED WARE	.1	.6	(D)	(D)	-	-	-	-	-	-	(X) (X) (X)
393	MUSICAL INSTRUMENTS	.1	.5	(Z)	.1	-	-	-	-	-	-	(X) (X) (X)
395	PENS, OFFICE AND ART GOODS	.3	1.6	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
396	COSTUME JEWELRY AND NOTIONS	.1	.5	.1	.2	-	-	-	-	-	-	(X) (X) (X)
	ALASKA	11.0	25.5	10.2	19.7	360.1	6.7	606.1	7.2	-	-	13 1 (X)
20	FOOD AND KINDRED PRODUCTS	1.9	7.6	1.5	4.5	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
209	MISC. FOODS, KINDRED PRODUCTS	1.8	7.2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
24	LUMBER AND WOOD PRODUCTS	1.1	3.3	1.0	2.6	88.0	1.6	-	-	-	-	23 (X) (X)
241	LOGGING CAMPS, LOG CONTRACTORS	.7	2.0	.7	2.0	79.3	1.5	-	-	-	-	26 (X) (X)
	HAWAII	9.8	32.6	8.2	17.6	166.5	2.6	918.1	12.0	-	-	34 1 (X)
20	FOOD AND KINDRED PRODUCTS	6.3	18.0	5.7	11.5	82.8	1.1	635.3	8.1	-	-	16 1 (X)
203	PRESERVED FRUITS AND VEGETABLES	1.0	3.0	.9	1.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
204	GRAIN MILL PRODUCTS	.1	.4	.1	.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
206	SUGAR, CONFECTIONERY PRODUCTS	4.4	11.3	4.1	8.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
208	BEVERAGES	.1	.5	(Z)	.2	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
209	MISC. FOODS, KINDRED PRODUCTS	.2	.8	.2	.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS	.1	.2	(Z)	(S)	-	-	(D)	(Z)	-	-	(X) 1 (X)
32	STONE, CLAY, GLASS PRODUCTS	2.1	6.7	1.9	4.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	.3	.7	.2	.4	(D)	(D)	-	-	-	-	(X) (X) (X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for States by Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	CALIFORNIA--CON.												
32	STONE, CLAY, GLASS PRODUCTS--CON.												
327	CONCRETE, GYPSUM, PLASTER PRODS.	-	-	8.3	17.0	2.6	2.9	297.1	9.1	(D)	12.2	25.8	7
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	7.3	15.1	.9	(D)	500.0	14.5	(D)	15.7	31.2	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	28.8	54.2	.6	4.6	2,756.7	84.9	(D)	52.6	143.7	4
331	BLAST FURNACE, BASIC STEEL PROD.	(D)	(D)	16.8	32.8	.1	1.9	1,545.6	48.6	(D)	31.5	79.1	3
332	IRON AND STEEL FOUNDRIES	70.4	8.5	2.3	4.0	(D)	(D)	316.8	9.6	-	4.7	20.6	14
334	SECONDARY NONFERROUS METALS	(D)	(D)	2.2	4.0	(D)	(D)	70.8	1.8	-	3.6	6.9	13
335	NONFERROUS ROLLING AND DRAWING	-	-	3.9	7.0	.2	(D)	488.0	15.0	-	5.8	17.4	1
336	NONFERROUS FOUNDRIES	-	-	2.0	3.5	(Z)	1.2	207.4	5.6	(D)	4.7	13.4	19
339	MISC. PRIMARY METAL PRODUCTS	-	-	1.5	2.8	(D)	.8	105.8	3.4	-	2.2	5.8	52
34	FABRICATED METAL PRODUCTS	-	-	16.4	29.1	1.4	8.1	2,055.7	64.4	(S)	26.1	80.9	5
341	METAL CANS, SHIPPING CONTAINERS	-	-	4.7	8.8	.4	.4	313.8	9.4	-	5.8	13.6	1
342	CUTLERY, HANDTOOLS AND HARDWARE	-	-	1.1	1.9	(Z)	.3	145.1	5.1	-	1.6	5.8	21
343	PLUMBING, HEATING, EXCEPT ELEC	-	-	(D)	(D)	(Z)	(D)	101.9	3.1	(D)	1.0	3.4	(X)
344	FABRICATED STRUC. METAL PRODS.	-	-	1.3	2.2	.5	2.5	448.1	14.3	(D)	4.2	16.8	4
345	SCREW MACHINE PROD., BOLTS, ETC.	-	-	.4	.6	(Z)	.4	168.3	4.7	(D)	1.1	5.1	20
346	METAL FORGINGS AND STAMPINGS	-	-	3.3	5.7	.1	1.4	209.8	7.1	(D)	3.8	8.6	10
347	METAL SERVICES, NEC.	-	-	2.6	4.1	(D)	1.8	314.2	9.2	-	5.0	14.8	25
348	ORDNANCE AND ACCESSORIES, NEC.	-	-	(D)	(D)	(D)	(D)	126.3	4.0	(D)	1.5	4.7	(X)
349	MISC. FABRICATED METAL PRODUCTS.	-	-	1.3	2.6	(D)	(D)	228.1	7.4	-	2.0	8.1	24
35	MACHINERY, EXCEPT ELECTRIC	-	-	3.7	6.4	(D)	8.4	1,955.0	59.1	-	14.2	59.1	5
351	ENGINES AND TURBINES	-	-	(D)	(D)	-	(D)	61.9	2.2	-	.7	2.9	(X)
352	FARM AND GARDEN MACHINERY	-	-	(D)	(D)	(Z)	(D)	41.1	1.2	-	.4	1.2	(X)
353	CONSTRUCTION, RELATED MACHINERY	-	-	.9	1.5	.1	(D)	267.7	6.0	-	2.1	6.8	11
354	METALWORKING MACHINERY	-	-	.2	.4	(D)	.7	125.0	4.4	-	1.1	5.3	30
356	GENERAL INDUSTRIAL MACHINERY	-	-	.5	.9	.1	(D)	223.2	7.3	-	1.5	7.0	13
357	OFFICE AND COMPUTING MACHINES	-	-	.8	1.6	(D)	(D)	696.9	22.3	-	3.5	18.9	4
359	MISC. MACHINERY, EXC. ELEC	-	-	.4	.7	.2	(D)	347.8	9.6	-	2.5	9.4	24
36	ELECTRIC, ELECTRONIC EQUIP	(D)	(Z)	5.7	10.2	.7	7.4	2,660.2	83.3	(D)	18.4	79.0	3
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	.2	.3	(Z)	.1	62.4	2.0	-	.6	2.4	16
362	ELECTRICAL INDUSTRIAL APPARATUS	-	-	.4	.7	(Z)	(D)	139.4	5.1	-	.9	4.5	3
363	HOUSEHOLD APPLIANCES	-	-	(D)	(D)	-	(D)	53.1	1.5	-	.7	2.2	(X)
364	ELEC. LIGHTING, WIRING EQUIP	-	-	.4	.6	(Z)	(D)	101.8	3.4	(D)	1.1	4.0	1
365	RADIO, TV RECEIVING EQUIPMENT	-	-	.5	.9	-	(D)	107.5	3.7	-	1.4	3.7	11
366	COMMUNICATION EQUIPMENT	-	-	1.3	2.2	.2	(D)	851.9	26.6	-	4.8	25.2	3
367	ELECTRONIC COMPONENTS, ACCESS.	-	-	1.9	3.5	(D)	(D)	1,184.9	36.5	(D)	7.6	32.5	5
369	MISC. ELEC. EQUIPMENT, SUPPLIES	(D)	(Z)	(S)	(S)	(D)	(S)	159.1	4.5	-	1.3	4.5	(X)
37	TRANSPORTATION EQUIPMENT	-	-	11.5	21.3	1.1	2.9	3,458.5	112.2	(S)	27.3	118.7	4
371	MOTOR VEHICLES AND EQUIPMENT	-	-	5.2	9.9	.3	(D)	748.3	23.9	-	8.0	26.0	6
372	AIRCRAFT AND PARTS	-	-	3.0	5.3	(D)	1.0	1,379.6	44.5	(D)	9.1	44.1	2
373	SHIP, BOAT BUILDING, REPAIRING	-	-	(S)	(S)	(S)	(S)	164.4	7.0	(D)	1.3	6.4	(X)
375	MOTORCYCLES, BICYCLES, PARTS	-	-	(Z)	(Z)	-	.2	12.8	.5	-	.2	.7	1
376	GUIDED MISSILES, SPACE VEHICLES	-	-	2.2	4.1	.3	.1	1,089.4	34.0	(D)	7.5	36.3	1
379	TRANSPORTATION EQUIPMENT, NEC.	-	-	.2	.4	(D)	(D)	61.0	2.1	-	.7	2.9	3
38	INSTRUMENTS, RELATED PRODS	-	-	1.2	2.2	(D)	(D)	670.5	22.3	(S)	4.6	19.7	5
381	ENGINEERING, SCIENTIFIC INSTRU	-	-	.1	.2	-	.2	50.9	1.7	-	.4	2.2	24
382	MEASURING, CONTROLLING DEVICES	-	-	.6	1.1	(D)	(D)	336.2	11.3	(D)	1.7	7.5	2
383	OPTICAL INSTRUMENTS AND LENSES	-	-	(S)	(S)	(Z)	(S)	62.7	2.1	-	.6	2.6	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES	-	-	.3	.5	(Z)	(D)	153.4	4.8	-	1.2	5.0	4
386	PHOTOGRAPHIC EQUIP., SUPPLIES	-	-	(D)	(D)	-	(D)	46.4	1.7	-	.4	1.4	(X)
39	MISC. MANUFACTURING INDUS.	-	-	.7	1.1	.1	(D)	323.5	10.3	(D)	2.7	11.1	15
391	JEWELRY, SILVER AND PLATED WARE	-	-	(Z)	(Z)	-	(D)	(D)	(D)	(D)	.1	.4	41
393	MUSICAL INSTRUMENTS	-	-	(Z)	.1	-	(Z)	15.2	.5	-	.1	.5	14
395	PENS, OFFICE AND ART GOODS	-	-	(S)	(S)	-	(D)	40.0	1.3	-	.3	1.2	(X)
396	COSTUME JEWELRY AND NOTIONS	-	-	(Z)	(Z)	-	.2	9.5	.4	-	.1	.5	1
	ALASKA	-	-	4.0	5.5	.1	.1	232.2	5.7	207.7	9.0	19.7	21
20	FOOD AND KINDRED PRODUCTS	-	-	(Z)	(Z)	(D)	.3	120.1	3.0	(S)	1.6	5.2	1
209	MISC. FOODS, KINDRED PRODUCTS	-	-	-	-	(D)	.5	(D)	(D)	(S)	1.5	4.6	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	-	-	(Z)	1.0	22.2	.7	(S)	1.6	4.3	(X)
241	LOGGING CAMPS, LOG CONTRACTORS	-	-	-	-	(D)	(D)	(S)	(S)	(S)	1.1	2.7	(X)
	HAWAII	-	-	.5	.9	1.8	.3	452.0	15.1	237.8	9.9	28.8	22
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.6	1.3	.4	183.4	6.5	237.8	6.5	16.2	30
203	PRESERVED FRUITS AND VEGETABLES	-	-	-	-	(D)	(D)	39.7	1.3	-	1.0	2.8	(X)
204	GRAIN MILL PRODUCTS	-	-	-	-	(Z)	(D)	6.7	.2	-	.1	.3	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	-	-	(D)	(D)	(D)	(D)	85.9	2.9	237.8	4.3	10.2	(X)
208	BEVERAGES	-	-	(Z)	(Z)	(Z)	(D)	12.3	.4	-	.1	.4	39
209	MISC. FOODS, KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	12.4	.5	-	.2	.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	-	-	(Z)	(D)	3.7	.1	-	(Z)	.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(Z)	(Z)	(D)	(D)	58.5	2.1	-	2.0	5.7	1
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	(S)	(S)	-	.1	.3	(X)

Note: Data presented in this table supersede 1976 published data. Data were revised as a result of adjustments to estimating technique. For a complete discussion of these adjustments see appendix C, Revised Method of Estimation.

- Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (S) Withheld because the estimate did not meet publication standards, either on the basis of the associated standard error of the estimate or on the basis of a consistency review. (X) Not applicable. (Z) Less than half of the unit of measure specified.

[1]Standard error of estimate is described in appendix B. Cost of fuels (col. D) and purchased electric energy (col. Q and R) were collected from all establishments in the 1977 Census of Manufactures. The figures shown for these items are census totals; therefore, sampling standard errors do not apply. Standard errors of estimates for the cost of coke for the 43 States that reported this fuel and standard errors of estimates for "other fuels" are not shown in this table. Standard errors for "other fuels" are generally higher, and may sometimes be considerably higher than those for specified kinds of fuels for which standard errors of estimates are shown. Standard error for cost of coke consumed is less than 1 percent at "all industries" level.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ALL INDUSTRIES, TOTAL.	12,776.3	28,138.5	10,592.0	15,959.5	748.8	640,164.6	12,179.1	63,843.9	1	1
	MAINE.	82.8	186.8	73.4	135.8	3.5	2,763.8	51.2	2,638.0	2	2
20	FOOD AND KINDRED PRODUCTS. . . .	4.5	13.9	3.8	8.5	(S)	214.9	5.4	(D)	14	10
201	MEAT PRODUCTS.	.6	1.8	.5	1.0	.1	29.8	.8	-	5	6
202	DAIRY PRODUCTS	.2	.9	.2	.3	(S)	22.4	.5	-	36	26
203	PRESERVED FRUITS AND VEGETABLES. .	2.2	6.3	1.9	3.8	(D)	101.9	2.5	(D)	3	6
209	MISC. FOODS, KINDRED PRODUCTS. . .	.6	1.7	.5	1.0	.2	21.5	.7	-	54	38
22	TEXTILE MILL PRODUCTS.	3.0	7.9	2.5	5.1	(D)	136.7	2.8	(D)	6	4
222	WEAV'G MILLS, MANMADE FIBER. . . .	.3	.9	.3	.5	(Z)	18.8	.4	(D)	1	1
223	WEAVING, FINISHING MILLS, WOOL . .	1.3	3.5	1.0	2.2	.1	63.0	1.3	-	13	6
228	YARN AND THREAD MILLS.	.4	1.2	.3	.6	(D)	27.2	.6	(D)	18	12
23	APPAREL, OTH. TEXTILE PRODS. . .	(Z)	.3	(Z)	.1	(S)	5.9	.2	-	27	11
24	LUMBER AND WOOD PRODUCTS	4.3	12.1	3.5	7.4	3.5	215.9	4.7	2.1	15	13
241	LOGGING CAMPS, LOG CONTRACTORS . .	2.0	4.5	1.9	4.2	1.3	9.8	.2	(D)	22	9
249	MISCELLANEOUS WOOD PRODUCTS. . . .	.5	2.4	.3	.8	(D)	62.8	1.6	(D)	29	22
25	FURNITURE AND FIXTURES	.1	.3	(Z)	.1	(Z)	7.2	.2	-	36	10
26	PAPER AND ALLIED PRODUCTS. . . .	60.6	121.6	55.6	98.9	(S)	1,460.9	22.7	2,554.5	1	2
262	PAPERMILLS, EXC. BUILDING PAPER. .	49.0	95.7	45.3	80.1	(D)	1,062.0	15.6	2,155.4	1	1
264	MISC. CONVERTED PAPER PRODUCTS . .	3.2	8.4	2.4	4.1	.2	248.2	4.2	(D)	7	5
265	PAPERBOARD CONTAINERS AND BOXES. .	.2	.6	.2	.3	(S)	(S)	(S)	-	44	(X)
27	PRINTING AND PUBLISHING.	.1	.6	(S)	(S)	(S)	13.7	.4	-	(X)	41
30	RUBBER, MISC. PLASTICS PROD. . .	1.2	3.2	1.0	1.8	(D)	62.0	1.3	(D)	9	9
307	MISCELLANEOUS PLASTICS PRODUCTS. .	1.0	2.5	(D)	(D)	.2	(D)	(D)	(D)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	1.9	5.7	1.5	3.1	(S)	100.3	2.6	2.0	3	4
311	LEATHER TANNING AND FINISHING. . .	1.1	2.6	(D)	(D)	(S)	(D)	(D)	(D)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.5	2.2	.3	.8	(D)	47.0	1.4	(Z)	9	3
32	STONE, CLAY, GLASS PRODUCTS. . .	2.7	6.4	2.4	4.9	(S)	79.0	1.5	-	12	13
34	FABRICATED METAL PRODUCTS. . . .	.6	1.9	.4	1.0	.1	51.1	1.0	-	11	13
35	MACHINERY, EXCEPT ELECTRIC . . .	.4	1.6	.2	.6	(S)	42.5	1.0	-	20	10
354	METALWORKING MACHINERY	.1	.3	.1	.1	(S)	4.6	.1	-	42	26
355	SPECIAL INDUSTRY MACHINERY	(Z)	.3	(Z)	.1	(S)	3.8	.1	-	61	41
36	ELECTRIC, ELECTRONIC EQUIP . . .	.6	2.3	.4	.7	.1	75.2	1.6	-	1	1
367	ELECTRONIC COMPONENTS, ACCESS. . .	.4	1.2	.2	.4	(Z)	42.6	.8	-	1	2
	NEW HAMPSHIRE.	27.2	80.5	22.7	42.3	3.1	1,323.0	38.2	273.3	4	3
20	FOOD AND KINDRED PRODUCTS. . . .	1.4	4.5	1.2	2.1	(D)	76.5	2.4	-	12	9
22	TEXTILE MILL PRODUCTS.	2.3	6.4	1.9	3.6	.2	95.3	2.8	(D)	20	10
223	WEAVING, FINISHING MILLS, WOOL . .	.4	1.3	.4	.7	(D)	20.5	.6	(D)	9	5
225	KNITTING MILLS	.2	.7	.1	.3	(Z)	15.6	.5	-	1	18
23	APPAREL, OTH. TEXTILE PRODS. . .	.1	.4	.1	.1	(D)	10.3	.3	(Z)	35	42
233	WOMEN'S AND MISSES' OUTERWEAR. . .	(Z)	.2	(S)	(S)	(D)	6.3	.1	(Z)	(X)	81
24	LUMBER AND WOOD PRODUCTS	1.0	3.9	.9	1.9	.3	56.3	2.0	(D)	31	31
242	SAWMILLS AND PLANING MILLS	.4	1.5	.4	.8	(D)	23.4	.8	-	19	19
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.1	.4	(Z)	.1	(Z)	6.5	.3	-	41	53
245	WOOD BUILDINGS AND MOBILE HOMES. .	.1	.2	.1	.1	(D)	2.2	.1	-	1	1
249	MISCELLANEOUS WOOD PRODUCTS. . . .	.3	1.0	(S)	(S)	(D)	(S)	(S)	(D)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.7	.1	.3	.1	11.9	.4	-	43	31
251	HOUSEHOLD FURNITURE.	.1	.5	.1	.2	.1	8.5	.3	-	45	36
26	PAPER AND ALLIED PRODUCTS. . . .	12.5	27.6	11.5	20.2	(D)	292.9	7.4	269.9	5	5
262	PAPERMILLS, EXC. BUILDING PAPER. .	10.8	22.9	10.1	17.7	(D)	211.4	5.2	(D)	6	6
263	PAPERBOARD MILLS	.6	1.8	.5	1.0	(D)	26.6	.7	(D)	13	22
264	MISC. CONVERTED PAPER PRODUCTS . .	.9	2.5	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
27	PRINTING AND PUBLISHING.	.6	2.3	.4	.8	.5	55.3	1.5	-	16	11
271	NEWSPAPERS	.1	.3	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
275	COMMERCIAL PRINTING.	.3	.9	.2	.3	(D)	27.0	.6	-	26	19
28	CHEMICALS, ALLIED PRODUCTS . . .	.7	2.3	.6	1.0	(D)	37.6	1.2	-	1	1
30	RUBBER, MISC. PLASTICS PROD. . .	1.4	5.4	.9	1.8	.5	128.3	3.6	(Z)	1	3
31	LEATHER, LEATHER PRODUCTS. . . .	1.2	3.6	(D)	(D)	(S)	(D)	(D)	-	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.3	1.5	.2	.5	.2	30.8	1.0	-	17	13
32	STONE, CLAY, GLASS PRODUCTS. . .	1.4	4.1	1.2	2.7	(S)	58.2	1.4	(D)	22	32
329	MISC. NONMETALLIC MINERAL PRODS. .	.3	1.2	.2	.5	(Z)	21.9	.7	(D)	21	12
34	FABRICATED METAL PRODUCTS. . . .	.5	2.1	.4	.9	.3	39.0	1.2	(D)	14	20
344	FABRICATED STRUC. METAL PRODS. . .	.2	.7	.1	.3	(D)	14.5	.5	-	39	40

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	NEW HAMPSHIRE--CON.										
35	MACHINERY, EXCEPT ELECTRIC	1.2	5.3	.7	1.5	(D)	134.6	3.8	-	7	4
354	METALWORKING MACHINERY	.2	.7	.1	.2	.1	15.4	.5	-	2	5
355	SPECIAL INDUSTRY MACHINERY	.3	1.4	.2	.4	(D)	31.7	1.0	-	20	13
356	GENERAL INDUSTRIAL MACHINERY	.2	1.2	.1	.2	(Z)	29.7	1.0	-	1	1
36	ELECTRIC, ELECTRONIC EQUIP	.9	4.6	.5	1.1	.1	112.2	3.5	-	6	3
367	ELECTRONIC COMPONENTS, ACCESS.	.3	1.6	.2	.4	(D)	41.7	1.3	-	2	2
37	TRANSPORTATION EQUIPMENT	.4	1.7	.2	.5	(Z)	39.4	1.2	-	1	1
38	INSTRUMENTS, RELATED PRODS	.5	2.3	.3	.6	.1	55.6	1.7	-	3	4
39	MISC. MANUFACTURING INDUS.	.1	.5	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
394	TOYS AND SPORTING GOODS	.1	.3	(Z)	.1	.1	6.6	.2	-	47	43
	VERMONT	9.9	35.2	7.3	16.2	(S)	762.2	19.1	83.2	8	7
20	FOOD AND KINDRED PRODUCTS	1.4	4.0	1.2	2.6	(D)	59.2	1.5	-	20	16
202	DAIRY PRODUCTS	1.1	2.8	1.0	2.1	(D)	35.7	.8	-	9	29
204	GRAIN MILL PRODUCTS	.1	.6	.1	.1	(Z)	16.2	.5	-	1	1
24	LUMBER AND WOOD PRODUCTS	.5	2.4	.4	.8	.3	55.7	1.6	-	26	37
25	FURNITURE AND FIXTURES	.4	1.7	.3	.8	(S)	31.0	1.0	(D)	19	22
26	PAPER AND ALLIED PRODUCTS	3.1	8.2	2.7	5.3	(Z)	118.4	2.9	(D)	12	19
264	MISC. CONVERTED PAPER PRODUCTS	.1	.5	.1	.2	(S)	10.0	.3	(D)	66	19
27	PRINTING AND PUBLISHING	.2	1.2	.1	.3	(D)	29.7	.9	(D)	21	25
30	RUBBER, MISC. PLASTICS PROD.	.4	1.6	.2	.6	(S)	39.4	1.1	-	23	12
32	STONE, CLAY, GLASS PRODUCTS	.7	2.5	.6	1.3	(D)	48.3	1.2	(D)	24	31
34	FABRICATED METAL PRODUCTS	.3	1.5	.2	.6	(S)	28.7	.9	-	24	10
35	MACHINERY, EXCEPT ELECTRIC	.6	2.8	.4	.9	(S)	67.7	1.9	(D)	10	8
354	METALWORKING MACHINERY	.3	1.5	.2	.4	(S)	40.0	1.1	-	9	11
39	MISC. MANUFACTURING INDUS.	.1	.6	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
	MASSACHUSETTS	134.4	486.7	108.9	226.3	32.4	7,490.7	260.4	498.0	3	2
20	FOOD AND KINDRED PRODUCTS	9.9	35.1	8.3	17.8	3.2	476.0	17.4	(D)	5	7
201	MEAT PRODUCTS	.7	3.1	.6	1.2	(D)	47.4	1.9	-	11	13
202	DAIRY PRODUCTS	1.5	7.2	1.0	2.3	(D)	138.7	4.9	(D)	17	12
203	PRESERVED FRUITS AND VEGETABLES	.5	1.6	.4	.8	(D)	20.3	.7	-	34	27
204	GRAIN MILL PRODUCTS	.2	.9	.2	.4	(S)	12.2	.5	-	1	1
205	BAKERY PRODUCTS	1.6	5.3	(D)	(D)	(S)	(D)	(D)	-	(X)	(X)
206	SUGAR, CONFECTIONERY PRODUCTS	2.7	7.4	2.4	5.1	.3	63.4	2.3	(D)	1	1
208	BEVERAGES	.8	2.6	.7	1.4	(D)	29.7	1.3	-	10	8
209	MISC. FOODS, KINDRED PRODUCTS	1.3	5.5	1.0	2.2	(D)	95.3	3.3	-	19	25
22	TEXTILE MILL PRODUCTS	14.7	43.4	13.1	27.1	(D)	454.7	16.3	9.6	13	8
222	WEAV'G MILLS, MANMADE FIBER	.8	4.3	.5	1.3	(D)	82.9	3.1	-	1	7
223	WEAVING, FINISHING MILLS, WOOL	1.1	3.5	.9	1.8	(D)	46.9	1.8	-	20	27
224	NARROW FABRIC MILLS	.1	.3	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
225	KNITTING MILLS	2.2	6.3	2.0	4.3	(D)	70.8	2.1	-	30	17
226	TEXTILE FINISHING, EXCEPT WOOL	5.2	12.7	4.9	10.1	(D)	76.5	2.6	(D)	5	7
228	YARN AND THREAD MILLS	.3	1.4	.2	.4	.1	29.3	1.1	-	22	4
229	MISCELLANEOUS TEXTILE GOODS	5.0	14.7	4.5	9.2	(S)	144.3	5.6	(D)	34	20
23	APPAREL, OTH. TEXTILE PRODS	1.5	7.1	1.0	2.2	.9	160.2	5.0	(D)	16	7
231	MEN'S AND BOYS' SUITS AND COATS	.5	1.6	.4	.8	.3	27.6	.7	-	38	17
232	MEN'S AND BOYS' FURNISHINGS	.2	.9	.1	.3	.3	17.3	.6	(Z)	14	12
233	WOMEN'S AND MISSES' OUTERWEAR	.5	2.7	.3	.6	(D)	66.7	2.1	(D)	20	13
239	MISC. FABRICATED TEXTILE PRODS	.4	1.5	.3	.6	.3	28.6	.9	-	8	10
24	LUMBER AND WOOD PRODUCTS	1.0	3.3	.8	1.5	.7	55.3	1.8	(D)	9	41
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.1	.5	.1	.2	.2	6.2	.3	(D)	5	31
244	WOOD CONTAINERS	.1	.3	.1	.2	(S)	(S)	(S)	-	69	(X)
25	FURNITURE AND FIXTURES	1.2	4.2	1.0	2.2	.3	52.7	2.0	(D)	12	13
251	HOUSEHOLD FURNITURE	1.0	3.4	.8	1.8	.2	39.2	1.6	(D)	14	14
254	PARTITIONS AND FIXTURES	.1	.4	.1	.2	(D)	6.3	.2	-	26	64
26	PAPER AND ALLIED PRODUCTS	23.4	65.7	20.7	40.3	(S)	788.7	25.4	260.6	4	6
262	PAPERMILLS, EXC. BUILDING PAPER	16.3	43.3	14.6	27.5	6.6	521.3	15.8	198.5	3	4
27	PRINTING AND PUBLISHING	3.0	14.6	2.0	4.3	1.3	292.5	10.3	(D)	6	6
271	NEWSPAPERS	.7	3.5	.4	1.0	(D)	69.4	2.5	-	4	5
273	BOOKS	.5	2.6	.3	.7	(D)	48.6	1.8	-	4	5
275	COMMERCIAL PRINTING	1.0	5.1	.6	1.2	(D)	114.4	3.8	(S)	16	14
277	GREETING CARD PUBLISHING	.2	.7	.1	.2	(D)	10.1	.4	-	1	1
278	BLANKBOOKS AND BOOKBINDING	.4	1.4	.3	.5	(D)	27.8	.9	-	15	20
279	PRINTING TRADE SERVICES	.1	.5	(S)	(S)	(D)	10.5	.4	-	(X)	59

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MASSACHUSETTS--CON.										
28	CHEMICALS, ALLIED PRODUCTS	13.5	37.8	11.8	22.4	1.6	506.0	15.4	(D)	2	4
281	INDUSTRIAL INORGANIC CHEMICALS	.7	3.1	.4	.8	(D)	71.3	2.3	-	1	4
282	PLASTICS MATERIALS, SYNTHETICS	6.2	17.0	5.3	10.3	(D)	255.2	6.7	(D)	2	4
283	DRUGS	.2	1.0	.2	.3	.1	16.2	.7	-	7	5
284	SOAPS, CLEANERS, TOILET GOODS	1.1	3.5	1.0	1.9	(S)	47.7	1.6	.4	9	5
285	PAINTS AND ALLIED PRODUCTS	.4	1.3	.4	.7	.2	14.1	.6	-	20	26
286	INDUSTRIAL ORGANIC CHEMICALS	1.3	3.4	1.2	2.2	.2	35.9	1.2	(D)	11	11
289	MISCELLANEOUS CHEMICAL PRODUCTS	3.6	8.4	3.4	6.1	.5	65.2	2.3	(D)	3	16
29	PETROLEUM AND COAL PRODUCTS	2.8	6.6	2.7	5.0	(D)	37.4	1.6	-	24	38
30	RUBBER, MISC. PLASTICS PROD.	7.9	37.2	5.3	11.1	(D)	749.9	26.1	(S)	4	5
306	FABRICATED RUBBER PRODUCTS, NEC.	1.6	6.5	1.3	2.6	.4	105.4	3.9	-	13	15
307	MISCELLANEOUS PLASTICS PRODUCTS	4.5	24.8	2.6	5.3	(D)	558.6	19.5	(D)	6	5
31	LEATHER, LEATHER PRODUCTS	2.5	9.0	2.1	4.6	1.2	116.8	4.4	(D)	12	9
311	LEATHER TANNING AND FINISHING	1.5	4.5	1.4	3.0	.7	34.1	1.4	(D)	16	22
313	BOOT, SHOE CUT STOCK, FINDINGS	.3	1.0	.2	.5	.2	15.6	.5	.2	28	27
314	FOOTWEAR, EXCEPT RUBBER	.5	3.0	.4	.8	.3	56.8	2.2	-	13	7
317	WOMEN'S HANDBAGS AND PURSES	.1	.3	(Z)	.1	(D)	10.4	.3	-	58	34
32	STONE, CLAY, GLASS PRODUCTS	7.7	23.9	6.8	14.4	(S)	266.4	9.5	(D)	13	7
323	PRODUCTS OF PURCHASED GLASS	.1	(D)	.1	(D)	(D)	6.3	.3	-	(X)	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	3.3	9.2	3.0	6.2	(S)	94.4	3.0	-	19	20
329	MISC. NONMETALLIC MINERAL PRODS.	2.7	8.1	2.3	4.5	(D)	89.8	3.7	(D)	1	5
33	PRIMARY METAL INDUSTRIES	4.3	21.2	3.1	8.1	(D)	361.1	13.1	(D)	15	11
331	BLAST FURNACE, BASIC STEEL PROD.	1.0	4.0	.8	1.9	(D)	57.6	2.1	-	9	8
332	IRON AND STEEL FOUNDRIES	.3	3.5	.1	1.4	(S)	51.1	2.1	-	80	65
335	NONFERROUS ROLLING AND DRAWING	1.8	8.4	1.2	2.6	.4	173.1	5.8	(D)	2	4
34	FABRICATED METAL PRODUCTS	10.7	40.0	8.9	19.8	(D)	545.4	20.2	44.2	4	5
341	METAL CANS, SHIPPING CONTAINERS	.4	1.8	.3	.8	(Z)	26.3	.9	(D)	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE	2.2	7.9	1.9	4.1	.3	91.3	3.8	(D)	2	3
343	PLUMBING, HEATING, EXCEPT ELEC	.3	1.0	.2	.6	(S)	11.3	.4	-	6	15
344	FABRICATED STRUC. METAL PRODS.	.8	3.5	.6	1.4	.2	60.0	2.1	(D)	29	20
345	SCREW MACHINE PROD., BOLTS, ETC.	.7	3.2	.6	1.3	(D)	49.1	1.9	(D)	5	8
346	METAL FORGINGS AND STAMPINGS	3.5	11.6	3.1	6.8	(S)	133.2	4.7	(D)	6	8
347	METAL SERVICES, NEC.	1.0	3.3	.8	1.7	(D)	43.0	1.6	-	26	29
348	ORDNANCE AND ACCESSORIES, NEC.	.6	2.5	.4	1.1	(S)	45.2	1.5	(D)	1	10
349	MISC. FABRICATED METAL PRODUCTS.	1.2	5.1	.9	1.9	(D)	86.1	3.2	-	8	13
35	MACHINERY, EXCEPT ELECTRIC	7.9	37.0	5.3	11.4	(D)	745.4	25.6	85.3	4	5
354	METALWORKING MACHINERY	1.2	6.2	.8	1.7	(D)	137.1	4.5	(D)	14	12
355	SPECIAL INDUSTRY MACHINERY	2.4	9.1	1.9	3.8	(D)	144.3	5.3	(D)	6	14
356	GENERAL INDUSTRIAL MACHINERY	1.0	4.1	.7	1.7	(S)	67.0	2.4	(D)	7	11
357	OFFICE AND COMPUTING MACHINES	1.8	10.7	.8	1.8	.7	276.5	8.9	-	12	6
358	REFRIGERATION AND SERVICE MACH	.3	1.4	.2	.4	.1	25.5	1.0	(D)	14	14
36	ELECTRIC, ELECTRONIC EQUIP	9.0	42.6	5.9	12.1	(D)	897.7	30.5	(D)	2	4
362	ELECTRICAL INDUSTRIAL APPARATUS	1.2	5.5	.8	1.6	.1	116.9	3.9	(D)	3	5
364	ELEC. LIGHTING, WIRING EQUIP	1.3	5.4	1.0	2.3	(D)	91.4	3.1	(D)	3	3
365	RADIO, TV RECEIVING EQUIPMENT	.2	1.0	.1	.2	.1	17.5	.8	(D)	1	3
366	COMMUNICATION EQUIPMENT	2.3	13.5	1.3	2.7	.4	310.3	10.8	-	2	2
367	ELECTRONIC COMPONENTS, ACCESS.	1.9	11.0	1.1	2.2	(D)	243.7	8.8	(D)	8	12
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.2	1.1	.2	.4	.1	17.2	.6	-	4	7
37	TRANSPORTATION EQUIPMENT	4.3	18.0	3.3	7.2	(D)	294.5	10.8	(D)	7	9
371	MOTOR VEHICLES AND EQUIPMENT	1.2	5.1	1.0	2.4	(D)	71.3	2.7	-	19	36
38	INSTRUMENTS, RELATED PRODS	6.2	27.6	4.6	9.8	.9	483.4	17.8	(D)	2	2
381	ENGINEERING, SCIENTIFIC INSTRU	.3	1.8	.2	.3	.2	42.3	1.4	-	1	10
382	MEASURING, CONTROLLING DEVICES	1.1	5.9	.6	1.4	(D)	127.8	4.5	(D)	2	6
384	MEDICAL INSTRUMENTS, SUPPLIES	.3	1.5	.2	.4	.1	25.8	1.1	-	6	6
39	MISC. MANUFACTURING INDUS.	2.9	12.4	2.2	5.1	.6	206.6	7.3	(S)	10	5
391	JEWELRY, SILVER AND PLATED WARE	.7	2.9	.6	1.3	(D)	40.0	1.5	(D)	6	6
394	TOYS AND SPORTING GOODS	1.1	4.4	.8	1.6	(D)	85.3	2.8	-	10	4
396	COSTUME JEWELRY AND NOTIONS	.2	.9	.1	.3	.1	16.2	.6	(D)	42	10
399	MISCELLANEOUS MANUFACTURES	.9	4.0	.7	1.7	(D)	62.0	2.3	(D)	25	12
	RHODE ISLAND	23.2	88.4	18.1	38.1	(D)	1,487.7	50.4	19.7	5	4
20	FOOD AND KINDRED PRODUCTS	1.8	4.8	1.6	3.1	.7	49.9	1.8	(D)	17	26
205	BAKERY PRODUCTS	.2	1.0	.2	.5	(S)	12.1	.4	-	88	96
22	TEXTILE MILL PRODUCTS	4.5	14.9	3.8	7.8	.1	214.5	7.1	(D)	19	9
222	WEAVING MILLS, MANMADE FIBER	.3	1.6	.2	.4	(D)	36.5	1.2	-	16	15
224	NARROW FABRIC MILLS	.5	2.1	.4	.9	(D)	33.6	1.2	(D)	17	17
225	KNITTING MILLS	.8	2.5	.7	1.3	(D)	37.6	1.2	-	31	17
226	TEXTILE FINISHING, EXCEPT WOOL	1.7	4.5	1.6	3.3	(D)	36.5	1.2	(D)	23	21
228	YARN AND THREAD MILLS	.2	1.2	.1	.2	(D)	27.1	1.0	-	22	15
229	MISCELLANEOUS TEXTILE GOODS	.9	2.8	.8	1.7	.6	34.0	1.1	(D)	17	19
23	APPAREL, OTH. TEXTILE PRODS.	.2	.8	.2	.3	(D)	15.8	.5	-	46	49

See footnotes at end of table.

Table 4. **Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)		
		A	B	C	D	E	F	G	H	D	G
	RHODE ISLAND--CON.										
26	PAPER AND ALLIED PRODUCTS. . . .	1.5	4.1	1.3	2.5	.1	46.9	1.6	(D)	11	10
265	PAPERBOARD CONTAINERS AND BOXES. .	.2	.9	.1	.3	.1	17.7	.6	-	26	12
27	PRINTING AND PUBLISHING.	.4	1.8	.3	.6	.1	40.4	1.2	(D)	20	26
275	COMMERCIAL PRINTING.	.2	.9	.1	.3	(D)	20.1	.6	(D)	25	36
28	CHEMICALS, ALLIED PRODUCTS . . .	1.4	4.1	1.2	2.3	.4	54.8	1.8	-	3	4
30	RUBBER, MISC. PLASTICS PROD. . .	1.1	5.5	.6	1.4	.3	130.3	4.1	-	9	12
307	MISCELLANEOUS PLASTICS PRODUCTS. .	.8	4.3	.4	.9	.3	115.2	3.5	-	5	13
32	STONE, CLAY, GLASS PRODUCTS. . .	2.4	6.8	2.2	4.6	(S)	72.9	2.2	(D)	14	24
322	GLASS, PRESSED OR BLOWN.	2.3	5.9	2.0	4.0	(Z)	64.1	1.9	(D)	1	1
33	PRIMARY METAL INDUSTRIES	3.9	16.9	2.8	5.9	(D)	322.0	11.0	-	6	3
335	NONFERROUS ROLLING AND DRAWING . .	1.6	7.6	1.0	2.2	(D)	161.6	5.4	-	11	4
34	FABRICATED METAL PRODUCTS. . . .	1.7	8.0	1.1	2.4	.9	154.6	5.6	(D)	22	14
345	SCREW MACHINE PROD., BOLTS, ETC. .	.2	.8	.2	.3	.2	10.9	.4	-	46	67
346	METAL FORGINGS AND STAMPINGS . . .	.2	.6	.1	.3	(Z)	8.0	.3	(D)	25	55
347	METAL SERVICES, NEC.	.5	2.1	.4	.9	(D)	31.4	1.1	-	52	45
35	MACHINERY, EXCEPT ELECTRIC . . .	.7	3.9	.4	1.2	(D)	(S)	(S)	.1	39	(X)
354	METALWORKING MACHINERY	.4	2.0	.3	.6	(D)	40.8	1.4	(S)	9	8
355	SPECIAL INDUSTRY MACHINERY	.1	.9	(S)	(S)	(D)	20.5	.7	(Z)	(X)	33
36	ELECTRIC, ELECTRONIC EQUIP . . .	.8	3.7	.5	1.2	.1	77.3	2.6	(D)	7	7
364	ELEC. LIGHTING, WIRING EQUIP . . .	.3	1.3	.2	.4	(D)	25.5	.9	-	3	9
367	ELECTRONIC COMPONENTS, ACCESS. . .	.2	1.0	.1	.3	.1	22.4	.7	(D)	23	17
37	TRANSPORTATION EQUIPMENT	.1	1.0	(S)	(S)	(S)	14.4	.7	-	(X)	95
38	INSTRUMENTS, RELATED PRODS . . .	.5	2.3	.3	.7	(D)	47.6	1.5	-	1	1
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.4	1.5	.3	.5	(D)	31.6	.9	-	1	1
39	MISC. MANUFACTURING INDUS. . . .	1.8	8.3	1.3	3.1	.4	(S)	(S)	(D)	8	(X)
394	TOYS AND SPORTING GOODS.	.1	.9	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
396	COSTUME JEWELRY AND NOTIONS. . . .	.7	3.5	.5	1.3	(S)	60.7	2.2	(D)	13	10
399	MISCELLANEOUS MANUFACTURES	.1	(D)	.1	(D)	.1	10.1	.3	(D)	(X)	21
	CONNECTICUT.	85.3	330.4	66.9	151.9	(D)	5,416.7	178.5	253.5	3	2
20	FOOD AND KINDRED PRODUCTS. . . .	2.5	10.5	1.9	4.8	(S)	187.9	5.8	(D)	22	15
202	DAIRY PRODUCTS	.6	3.3	.4	.9	(S)	75.3	2.4	(D)	33	28
205	BAKERY PRODUCTS.	.9	3.3	.7	1.8	(D)	55.7	1.5	-	35	23
208	BEVERAGES.	.2	.9	.2	.4	(Z)	14.4	.4	(D)	32	55
209	MISC. FOODS, KINDRED PRODUCTS. . .	.4	1.4	(D)	(D)	.1	25.1	.8	-	(X)	22
22	TEXTILE MILL PRODUCTS.	5.5	17.2	4.8	10.8	(D)	191.7	6.4	(D)	11	15
222	WEAV'G MILLS, MANMADE FIBER. . . .	.6	1.7	.6	1.2	(Z)	14.9	.5	-	1	1
226	TEXTILE FINISHING, EXCEPT WOOL . .	2.5	8.4	2.2	5.0	.1	97.3	3.4	(D)	5	26
228	YARN AND THREAD MILLS.	.7	2.3	.6	1.3	.1	35.8	1.0	-	2	2
229	MISCELLANEOUS TEXTILE GOODS. . . .	1.1	3.6	1.0	2.4	(D)	37.8	1.2	-	7	12
23	APPAREL, OTH. TEXTILE PRODS. . .	.7	3.1	.6	1.2	.3	50.4	1.9	-	29	23
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.2	1.2	.1	.3	(D)	26.8	.9	-	12	14
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.1	(D)	.1	(D)	(D)	(S)	(S)	-	(X)	(X)
238	MISC. APPAREL AND ACCESSORIES. . .	(Z)	.1	(Z)	.1	.1	(S)	(S)	-	66	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	.2	(D)	.1	(D)	(D)	22.5	.9	-	(X)	44
24	LUMBER AND WOOD PRODUCTS	.2	.9	.2	.4	.2	14.7	.5	-	21	17
25	FURNITURE AND FIXTURES	.5	2.0	.3	.9	(Z)	32.8	1.2	-	22	11
251	HOUSEHOLD FURNITURE.	.2	.9	.2	.4	(S)	15.8	.6	-	48	21
254	PARTITIONS AND FIXTURES.	.1	.3	(Z)	.1	(D)	5.2	.2	-	46	30
26	PAPER AND ALLIED PRODUCTS. . . .	7.5	21.9	6.6	13.8	(S)	272.4	8.2	138.6	9	8
262	PAPERMILLS, EXC. BUILDING PAPER. .	2.1	6.6	1.8	3.8	(D)	101.7	2.9	(D)	1	1
263	PAPERBOARD MILLS	4.2	10.8	3.9	8.1	(S)	91.7	2.7	(D)	15	19
264	MISC. CONVERTED PAPER PRODUCTS . .	.5	2.0	.3	.7	.2	44.2	1.3	-	10	18
265	PAPERBOARD CONTAINERS AND BOXES. .	.7	2.5	.6	1.2	(S)	34.8	1.3	-	4	18
27	PRINTING AND PUBLISHING.	1.8	8.4	1.2	2.6	(D)	176.1	5.8	(D)	22	12
271	NEWSPAPERS	.3	1.3	.2	.3	.1	32.8	1.0	-	22	14
272	PERIODICALS.	(Z)	.2	(Z)	(Z)	(Z)	4.9	.2	(D)	1	12
275	COMMERCIAL PRINTING.	1.2	5.1	.9	1.8	(D)	99.8	3.2	(Z)	30	20
276	MANIFOLD BUSINESS FORMS.	.1	.6	.1	.1	(Z)	15.0	.5	-	11	15
278	BLANKBOOKS AND BOOKBINDING	.1	.3	(Z)	.1	.1	6.0	.2	-	1	12
28	CHEMICALS, ALLIED PRODUCTS . . .	11.3	29.8	10.0	19.6	(D)	373.1	10.2	(D)	1	2
282	PLASTICS MATERIALS, SYNTHETICS . .	1.5	4.6	1.3	2.6	(D)	78.5	2.0	-	1	1
284	SOAPS, CLEANERS, TOILET GOODS. . .	.5	1.6	.3	.6	.1	34.5	1.0	-	18	14
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.4	1.2	.4	.7	(D)	12.2	.5	-	10	13
30	RUBBER, MISC. PLASTICS PROD. . .	3.1	14.2	2.2	4.6	.9	282.5	9.6	(Z)	6	8

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	CONNECTICUT--CON.										
30	RUBBER, MISC. PLASTICS PROD--CON.										
306	FABRICATED RUBBER PRODUCTS, NEC.	.5	2.1	.3	.8	(S)	35.9	1.3	(Z)	30	19
307	MISCELLANEOUS PLASTICS PRODUCTS.	1.9	8.8	1.2	2.4	1.1	190.0	6.4	-	6	12
32	STONE, CLAY, GLASS PRODUCTS.	4.7	14.3	4.2	9.5	(D)	143.7	4.9	(D)	11	12
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.0	3.3	.9	2.1	(D)	25.5	1.2	-	37	43
33	PRIMARY METAL INDUSTRIES	12.2	55.5	9.3	24.2	.9	847.3	31.3	(D)	6	3
331	BLAST FURNACE, BASIC STEEL PROD.	4.4	19.4	3.4	9.2	(D)	293.6	10.2	-	1	1
332	IRON AND STEEL FOUNDRIES	.8	4.8	.6	2.7	(S)	60.0	2.2	-	48	18
335	NONFERROUS ROLLING AND DRAWING	5.5	25.8	4.0	9.6	(Z)	414.9	16.3	(D)	4	2
336	NONFERROUS FOUNDRIES	.6	2.1	.5	1.0	.5	33.6	1.1	-	44	44
339	MISC. PRIMARY METAL PRODUCTS	.6	2.1	.4	1.0	(D)	34.9	1.2	-	12	7
34	FABRICATED METAL PRODUCTS.	8.2	34.6	6.3	15.4	(S)	539.1	19.2	(D)	9	9
342	CUTLERY, HANDTOOLS AND HARDWARE.	2.1	8.8	1.6	3.8	(S)	147.4	5.0	-	3	4
344	FABRICATED STRUC. METAL PRODS.	.2	.9	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
345	SCREW MACHINE PROD., BOLTS, ETC.	1.0	4.3	.7	1.8	.2	72.2	2.5	-	11	11
346	METAL FORGINGS AND STAMPINGS	1.1	4.3	.9	2.1	.1	61.3	2.2	(D)	27	17
347	METAL SERVICES, NEC.	.9	3.4	.7	1.8	(D)	41.3	1.6	-	34	29
348	ORDNANCE AND ACCESSORIES, NEC.	1.2	5.7	.9	2.1	.1	107.3	3.6	(D)	1	1
349	MISC. FABRICATED METAL PRODUCTS.	1.1	5.6	.8	2.1	(D)	96.7	3.6	-	40	26
35	MACHINERY, EXCEPT ELECTRIC	7.4	31.7	5.4	12.1	(D)	590.0	19.7	(D)	4	4
354	METALWORKING MACHINERY	1.6	7.2	1.2	2.5	(D)	137.6	4.7	-	12	10
355	SPECIAL INDUSTRY MACHINERY	.7	3.2	.5	1.3	.1	53.6	1.9	-	9	16
356	GENERAL INDUSTRIAL MACHINERY	3.0	12.2	2.2	5.0	.4	237.2	7.2	-	2	3
357	OFFICE AND COMPUTING MACHINES.	.6	3.5	.4	.8	(Z)	74.0	2.7	-	1	1
358	REFRIGERATION AND SERVICE MACH	.3	1.2	.2	.5	(D)	19.2	.7	-	21	23
359	MISC. MACHINERY, EXC. ELEC	.5	2.1	.4	.9	.2	31.4	1.2	-	27	30
36	ELECTRIC, ELECTRONIC EQUIP	3.8	18.2	2.5	5.8	1.1	372.0	12.5	(Z)	5	3
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.5	2.5	.3	.7	.1	61.2	1.8	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	.1	.6	.1	.2	.1	11.8	.4	-	19	18
364	ELEC. LIGHTING, WIRING EQUIP	.8	4.1	.5	1.1	.1	86.9	3.0	-	19	9
366	COMMUNICATION EQUIPMENT.	.5	2.7	.3	.7	.2	62.5	2.0	-	1	7
367	ELECTRONIC COMPONENTS, ACCESS.	1.0	4.2	.7	1.6	.7	76.9	2.7	(S)	2	4
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.4	1.9	.2	.6	(Z)	37.8	1.3	-	2	3
37	TRANSPORTATION EQUIPMENT	10.9	43.7	7.8	16.4	.3	913.7	27.3	(D)	1	4
371	MOTOR VEHICLES AND EQUIPMENT	.4	1.6	(D)	(D)	.2	(D)	(D)	-	(X)	(X)
372	AIRCRAFT AND PARTS	8.8	34.7	6.4	13.2	(D)	718.6	21.6	(D)	1	5
38	INSTRUMENTS, RELATED PRODS	2.2	10.5	1.4	3.4	(S)	222.0	7.1	-	12	6
381	ENGINEERING, SCIENTIFIC INSTRU	(Z)	(D)	(Z)	(D)	(D)	4.9	.2	-	(X)	40
382	MEASURING, CONTROLLING DEVICES	.5	2.6	.4	.8	.3	48.7	1.7	-	4	5
384	MEDICAL INSTRUMENTS, SUPPLIES.	.7	3.3	.5	1.2	.2	64.2	2.1	-	16	12
386	PHOTOGRAPHIC EQUIP., SUPPLIES.	.2	.8	(D)	(D)	(S)	(D)	(D)	-	(X)	(X)
387	WATCHES, CLOCKS, AND WATCHCASES.	.4	1.9	.2	.6	(D)	40.4	1.3	-	3	4
39	MISC. MANUFACTURING INDUS.	2.7	10.8	2.0	4.7	.5	187.8	6.2	(D)	5	4
394	TOYS AND SPORTING GOODS.	.3	1.1	.2	.5	(D)	19.1	.6	-	24	27
396	COSTUME JEWELRY AND NOTIONS.	1.0	3.7	.7	1.7	(D)	62.4	2.0	(D)	8	6
399	MISCELLANEOUS MANUFACTURES	.2	.7	.1	.3	(D)	12.3	.4	-	23	28
	NEW YORK	464.2	1,267.5	357.8	649.7	(D)	31,180.8	617.8	2,112.6	1	1
20	FOOD AND KINDRED PRODUCTS.	38.4	117.8	30.7	62.9	8.5	2,252.9	54.9	79.3	3	5
201	MEAT PRODUCTS.	2.1	7.5	1.5	2.8	1.1	193.6	4.6	(D)	9	15
202	DAIRY PRODUCTS	7.6	23.5	5.6	11.5	.9	578.6	12.0	(D)	9	18
203	PRESERVED FRUITS AND VEGETABLES.	5.6	15.4	4.8	9.5	1.4	237.9	5.9	-	2	6
204	GRAIN MILL PRODUCTS.	2.7	8.9	1.8	3.4	(D)	270.5	5.4	(D)	4	3
206	SUGAR, CONFECTIONERY PRODUCTS.	6.2	17.2	5.6	12.0	.4	189.1	5.2	(D)	2	7
208	BEVERAGES.	5.4	18.1	4.3	9.4	.2	340.1	8.7	(D)	6	5
209	MISC. FOODS, KINDRED PRODUCTS.	3.9	13.1	3.0	5.9	1.5	288.6	7.2	(D)	5	12
22	TEXTILE MILL PRODUCTS.	11.3	37.4	8.6	17.2	7.4	807.9	20.2	(D)	7	10
222	WEAVING MILLS, MANMADE FIBER.	.9	4.0	.4	.8	(D)	142.3	3.2	-	34	54
223	WEAVING, FINISHING MILLS, WOOL	.5	1.3	.3	.6	(D)	44.6	.7	-	26	28
224	NARROW FABRIC MILLS.	.2	.9	.1	.2	(D)	29.2	.7	-	19	24
225	KNITTING MILLS	4.8	15.8	3.7	7.2	3.9	337.2	8.6	(D)	5	7
226	TEXTILE FINISHING, EXCEPT WOOL	2.2	6.3	2.0	4.3	(D)	73.5	1.9	-	22	21
229	MISCELLANEOUS TEXTILE GOODS.	2.3	7.5	1.9	3.6	1.2	138.5	3.9	-	7	11
23	APPAREL, OTH. TEXTILE PRODS.	10.2	45.2	5.2	10.4	7.2	1,465.4	34.7	64.2	8	5
231	MEN'S AND BOYS' SUITS AND COATS.	1.2	4.6	.9	1.8	.9	86.8	2.8	(D)	3	6
232	MEN'S AND BOYS' FURNISHINGS.	.9	3.5	.5	1.0	(D)	114.7	2.5	(S)	9	17
233	WOMEN'S AND MISSES' OUTERWEAR.	4.1	20.6	1.7	3.4	2.7	687.0	17.3	(D)	21	7
234	WOMEN'S, CHILDREN'S UNDERGARMS	.4	2.2	.2	.4	.2	75.5	1.8	-	18	12
236	CHILDREN'S OUTERWEAR	.4	1.9	.2	.4	.3	68.3	1.6	(D)	18	14
238	MISC. APPAREL AND ACCESSORIES.	.7	3.2	.3	.6	(D)	105.5	2.6	(D)	24	12
239	MISC. FABRICATED TEXTILE PRODS	2.1	7.6	1.2	2.4	1.6	263.7	5.2	(S)	17	12
24	LUMBER AND WOOD PRODUCTS	3.5	11.1	2.4	4.9	(D)	318.9	6.3	(D)	15	13
242	SAWMILLS AND PLANING MILLS	1.1	3.5	.7	1.5	.4	116.7	1.9	(S)	31	30
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.7	2.4	.4	.7	(D)	87.5	1.7	(D)	25	30
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.4	.1	.2	(Z)	8.4	.2	-	20	18

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	NEW YORK--CON.										
24	LUMBER AND WOOD PRODUCTS--CON.										
249	MISCELLANEOUS WOOD PRODUCTS. . . .	1.1	3.5	.8	1.5	.7	95.3	2.0	(D)	13	11
25	FURNITURE AND FIXTURES	2.9	10.2	2.0	4.2	.9	241.5	6.0	(S)	10	9
251	HOUSEHOLD FURNITURE.	1.2	4.4	.8	1.8	.3	112.9	2.6	(S)	20	13
252	OFFICE FURNITURE	.4	1.6	.3	.6	.1	32.1	1.0	-	5	6
254	PARTITIONS AND FIXTURES.	.9	3.1	.6	1.2	(D)	78.8	1.9	-	18	21
26	PAPER AND ALLIED PRODUCTS. . . .	48.2	115.6	41.2	75.4	6.9	2,029.9	40.2	709.4	4	3
262	PAPERMILLS, EXC. BUILDING PAPER. .	28.5	64.4	25.0	45.5	.8	1,035.0	18.9	624.9	2	4
263	PAPERBOARD MILLS	8.6	17.6	8.2	14.7	1.5	121.9	2.9	(S)	16	11
265	PAPERBOARD CONTAINERS AND BOXES. .	4.0	12.2	3.1	5.8	1.8	261.6	6.4	(D)	6	7
27	PRINTING AND PUBLISHING.	11.1	50.9	5.9	12.2	(D)	1,526.7	38.7	(D)	8	7
271	NEWSPAPERS	2.8	14.4	1.9	4.4	.6	238.8	10.0	(D)	3	3
272	PERIODICALS.	.8	4.3	.4	.9	(D)	115.2	3.4	-	8	5
273	BOOKS.	.9	3.8	.2	.5	.1	181.3	3.3	(S)	18	31
274	MISCELLANEOUS PUBLISHING	.2	1.1	.1	.1	(D)	34.9	1.0	(D)	68	20
275	COMMERCIAL PRINTING.	5.1	20.3	2.6	5.1	1.7	712.3	15.2	(D)	18	14
278	BLANKBOOKS AND BOOKBINDING	.4	2.0	.2	.4	(D)	65.7	1.6	-	20	47
279	PRINTING TRADE SERVICES.	.6	3.2	.2	.4	(D)	115.0	2.8	(D)	11	16
28	CHEMICALS, ALLIED PRODUCTS . . .	67.5	137.9	57.7	93.0	(D)	2,879.0	45.0	382.3	5	2
281	INDUSTRIAL INORGANIC CHEMICALS . .	24.2	40.1	20.5	29.4	(D)	1,073.1	10.7	(D)	2	3
282	PLASTICS MATERIALS, SYNTHETICS . .	4.3	10.0	3.8	6.9	.1	150.9	3.1	-	1	1
283	DRUGS.	7.9	24.7	6.6	12.3	(D)	387.5	12.4	-	3	3
285	PAINTS AND ALLIED PRODUCTS	2.0	5.1	1.7	2.8	.4	88.2	2.3	-	7	11
286	INDUSTRIAL ORGANIC CHEMICALS . . .	16.7	32.7	13.6	23.4	2.3	883.8	9.3	(D)	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	4.2	7.5	4.0	5.8	1.1	73.2	1.7	(D)	4	11
29	PETROLEUM AND COAL PRODUCTS. . . .	7.6	19.5	6.2	9.9	(D)	395.8	9.6	(D)	18	4
295	PAVING AND ROOFING MATERIALS . . .	6.1	13.6	5.5	8.9	3.7	157.2	4.7	(D)	20	7
30	RUBBER, MISC. PLASTICS PROD. . . .	11.2	36.5	7.6	13.6	(D)	1,058.9	22.9	(D)	9	11
306	FABRICATED RUBBER PRODUCTS, NEC. .	1.2	1.9	1.0	1.3	(D)	58.3	.6	-	27	76
307	MISCELLANEOUS PLASTICS PRODUCTS. .	8.3	30.9	5.3	10.0	(D)	898.2	20.9	-	12	11
31	LEATHER, LEATHER PRODUCTS.	(D)	(D)	(D)	(D)	1.0	(D)	(D)	(D)	(X)	(X)
311	LEATHER TANNING AND FINISHING. . .	1.2	3.0	1.1	2.1	(D)	37.9	.9	-	43	32
314	FOOTWEAR, EXCEPT RUBBER.	.5	1.9	.4	.9	(D)	36.0	1.0	(D)	5	9
315	LEATHER GLOVES AND MITTENS	(Z)	.1	(Z)	.1	(D)	2.6	.1	-	30	23
316	LUGGAGE.	.2	.9	.1	.2	(D)	42.3	.7	-	37	31
317	WOMEN'S HANDBAGS AND PURSES. . . .	.6	2.5	.2	.5	(D)	116.9	2.0	(D)	32	22
32	STONE, CLAY, GLASS PRODUCTS. . .	44.7	92.8	39.2	55.8	8.3	1,619.6	37.0	(D)	4	3
322	GLASS, PRESSED OR BLOWN.	8.4	18.6	7.3	10.7	(D)	328.0	7.9	(S)	12	3
323	PRODUCTS OF PURCHASED GLASS. . . .	2.0	5.1	1.5	2.6	(D)	120.3	2.5	-	28	28
324	CEMENT, HYDRAULIC.	16.4	25.7	15.1	16.4	(D)	390.3	9.2	-	1	1
326	POTTERY AND RELATED PRODUCTS . . .	1.6	4.0	1.5	2.5	(D)	51.0	1.5	-	4	25
327	CONCRETE, GYPSUM, PLASTER PRODS. .	7.9	18.2	7.2	12.4	5.0	211.6	5.8	(D)	11	8
329	MISC. NONMETALLIC MINERAL PRODS. .	6.8	17.8	5.2	8.8	.7	478.7	9.0	(D)	1	4
33	PRIMARY METAL INDUSTRIES	80.4	189.7	54.6	108.9	(D)	7,569.1	80.8	14.6	1	2
331	BLAST FURNACE, BASIC STEEL PROD. .	39.7	94.5	33.0	66.5	(D)	1,974.0	28.0	(S)	1	2
332	IRON AND STEEL FOUNDRIES	4.4	13.1	3.3	6.5	.7	318.8	6.5	-	14	9
333	PRIMARY NONFERROUS METALS.	18.1	28.2	3.6	7.3	.1	4,254.6	20.9	-	1	1
334	SECONDARY NONFERROUS METALS. . . .	2.1	6.4	1.9	4.3	.7	53.0	2.1	(S)	7	6
335	NONFERROUS ROLLING AND DRAWING . .	11.9	35.8	9.4	17.5	(D)	736.4	18.3	(S)	2	3
34	FABRICATED METAL PRODUCTS. . . .	17.2	56.0	12.4	24.1	6.1	1,427.3	31.9	(D)	6	4
341	METAL CANS, SHIPPING CONTAINERS. .	1.0	2.9	.8	1.5	(Z)	55.3	1.3	-	4	9
342	CUTLERY, HANDTOOLS AND HARDWARE. .	3.2	9.0	2.5	4.7	(S)	202.0	4.3	(D)	8	7
343	PLUMBING, HEATING, EXCEPT ELEC . .	.6	2.2	.5	1.2	(Z)	38.5	1.0	(D)	18	17
344	FABRICATED STRUC. METAL PRODS. . .	3.1	10.1	2.3	4.5	1.7	247.4	5.6	-	10	10
345	SCREW MACHINE PROD., BOLTS, ETC. .	.7	2.9	.4	.7	(D)	99.1	2.1	-	14	17
346	METAL FORGINGS AND STAMPINGS . . .	3.1	10.4	2.1	4.1	.6	282.3	6.3	-	16	6
347	METAL SERVICES, NEC.	2.8	8.5	2.2	4.1	(D)	187.1	4.3	-	26	20
348	ORDNANCE AND ACCESSORIES, NEC. . .	.5	1.7	.3	.5	(S)	51.3	1.2	-	1	2
349	MISC. FABRICATED METAL PRODUCTS. .	2.3	8.4	1.4	2.8	.8	264.3	5.6	(D)	14	10
35	MACHINERY, EXCEPT ELECTRIC . . .	25.6	83.0	18.6	35.1	4.6	2,044.6	48.0	(D)	3	3
353	CONSTRUCTION, RELATED MACHINERY. .	.7	2.7	.5	1.2	(S)	47.3	1.6	-	23	13
354	METALWORKING MACHINERY	2.9	10.1	2.1	4.0	1.4	237.0	6.0	(D)	14	8
355	SPECIAL INDUSTRY MACHINERY	1.9	6.8	1.3	2.7	.5	159.7	4.1	-	8	9
356	GENERAL INDUSTRIAL MACHINERY . . .	4.4	14.1	3.2	5.7	.8	368.3	8.4	-	9	12
357	OFFICE AND COMPUTING MACHINES. . .	2.9	11.2	1.9	3.5	.4	268.5	7.7	-	1	5
358	REFRIGERATION AND SERVICE MACH . .	5.7	15.0	4.3	7.6	.7	406.5	7.5	(S)	2	4
359	MISC. MACHINERY, EXC. ELEC	2.9	10.3	1.8	3.1	1.1	321.3	7.2	(Z)	14	7
36	ELECTRIC, ELECTRONIC EQUIP . . .	24.8	90.8	16.8	32.8	(D)	2,345.0	57.9	(D)	2	2
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.3	.9	.2	.4	.2	23.3	.5	-	6	18
362	ELECTRICAL INDUSTRIAL APPARATUS. .	8.1	22.0	6.1	11.6	.2	588.0	10.4	-	2	4
363	HOUSEHOLD APPLIANCES	.8	2.9	.6	1.1	.2	61.6	1.9	(S)	10	9
364	ELEC. LIGHTING, WIRING EQUIP . . .	2.7	10.4	1.9	4.0	(S)	236.7	6.4	(D)	3	6
365	RADIO, TV RECEIVING EQUIPMENT. . .	1.0	3.8	.7	1.4	(D)	91.3	2.5	(D)	15	10
366	COMMUNICATION EQUIPMENT.	4.1	17.4	2.6	5.3	(D)	427.9	12.1	-	4	4
367	ELECTRONIC COMPONENTS, ACCESS. . .	6.9	30.0	4.1	7.9	.3	816.5	22.1	(D)	1	2

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	NEW YORK--CON.										
36	ELECTRIC, ELECTRONIC EQUIP--CON.										
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	.9	3.2	.6	1.2	(D)	99.6	2.1	-	3	3
37	TRANSPORTATION EQUIPMENT	18.3	68.5	13.7	32.1	(D)	1,369.3	36.4	(D)	1	3
371	MOTOR VEHICLES AND EQUIPMENT . . .	13.1	47.1	10.1	24.5	.7	886.1	22.6	(D)	1	3
372	AIRCRAFT AND PARTS	3.7	16.7	2.5	5.7	.1	337.3	11.0	-	2	5
373	SHIP, BOAT BUILDING, REPAIRING . .	.7	2.3	.4	1.0	(D)	70.3	1.3	-	22	35
38	INSTRUMENTS, RELATED PRODS . . .	31.8	67.5	28.8	44.4	(D)	865.0	23.1	(D)	1	3
381	ENGINEERING, SCIENTIFIC INSTRU . .	.2	1.0	.1	.3	(Z)	22.8	.7	-	23	32
382	MEASURING, CONTROLLING DEVICES . .	.8	3.5	.5	1.1	.3	86.1	2.3	-	7	19
383	OPTICAL INSTRUMENTS AND LENSES . .	.4	1.5	.3	.5	(D)	35.3	1.0	-	4	3
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	1.1	4.4	.8	1.4	.1	104.0	3.0	(D)	9	10
385	OPHTHALMIC GOODS	1.0	3.6	.7	1.5	.2	76.1	2.1	-	1	12
386	PHOTOGRAPHIC EQUIP., SUPPLIES. . .	28.0	52.2	26.3	39.4	.4	511.5	12.8	(D)	1	2
387	WATCHES, CLOCKS, AND WATCHCASES. .	.2	1.3	.1	.2	(D)	29.1	1.1	-	8	2
39	MISC. MANUFACTURING INDUS. . . .	6.5	27.8	4.1	8.7	3.2	713.5	19.1	(D)	8	6
391	JEWELRY, SILVER AND PLATED WARE. .	1.4	5.2	.8	1.7	(D)	153.5	3.5	(D)	9	9
393	MUSICAL INSTRUMENTS.	.3	.9	.3	.7	(D)	7.2	.3	-	18	79
394	TOYS AND SPORTING GOODS.	1.6	8.0	.9	2.0	.7	187.8	6.0	-	9	4
395	PENS, OFFICE AND ART GOODS	.4	1.5	.3	.6	(S)	43.2	.9	-	37	17
396	COSTUME JEWELRY AND NOTIONS. . . .	.9	4.3	.5	1.1	(D)	111.3	3.2	(S)	47	17
399	MISCELLANEOUS MANUFACTURES	2.0	7.9	1.3	2.7	(D)	210.5	5.2	(D)	10	15
	NEW JERSEY	323.2	990.4	271.6	559.0	44.7	15,124.2	431.3	(D)	1	2
20	FOOD AND KINDRED PRODUCTS. . . .	24.6	78.6	20.5	43.6	(D)	1,206.7	35.0	(D)	4	3
201	MEAT PRODUCTS.	1.7	5.1	1.3	2.7	.8	114.4	2.4	-	6	9
202	DAIRY PRODUCTS	1.1	4.6	.8	1.7	(D)	96.2	3.0	-	21	10
203	PRESERVED FRUITS AND VEGETABLES. .	4.1	13.0	3.5	7.5	.2	169.2	5.5	-	8	5
204	GRAIN MILL PRODUCTS.	.5	1.9	.4	.8	.1	38.1	1.1	-	20	10
205	BAKERY PRODUCTS.	3.3	10.1	2.7	5.8	(D)	156.5	4.3	-	20	12
206	SUGAR, CONFECTIONERY PRODUCTS. . .	1.3	4.7	.9	1.6	(D)	113.9	3.0	-	9	6
207	FATS AND OILS.	1.7	6.1	1.5	4.0	(D)	52.1	2.0	(S)	25	38
208	BEVERAGES.	5.1	14.9	4.5	9.0	1.5	196.5	5.9	-	4	3
209	MISC. FOODS, KINDRED PRODUCTS. . .	5.8	18.3	4.9	10.6	.8	269.7	7.7	(D)	1	3
22	TEXTILE MILL PRODUCTS.	10.0	25.6	8.9	18.1	8.3	315.6	7.6	(S)	6	9
221	WEAVING MILLS, COTTON.	.1	.4	(D)	(D)	.1	(D)	(D)	(S)	(X)	(X)
222	WEAV'G MILLS, MANMADE FIBER. . . .	.1	(D)	(Z)	(D)	(Z)	10.5	.3	(S)	(X)	38
225	KNITTING MILLS	1.8	3.6	1.6	3.3	2.1	(S)	(S)	(D)	7	(X)
226	TEXTILE FINISHING, EXCEPT WOOL . .	6.4	16.7	5.8	11.8	5.0	174.2	4.9	(D)	9	9
229	MISCELLANEOUS TEXTILE GOODS. . . .	1.3	4.4	1.0	2.1	1.3	72.2	2.3	-	7	8
23	APPAREL, OTH. TEXTILE PRODS. . .	2.9	12.4	1.8	3.9	1.8	311.9	8.5	(S)	15	8
231	MEN'S AND BOYS' SUITS AND COATS. .	.2	1.0	.2	.4	.1	15.8	.6	(D)	25	8
232	MEN'S AND BOYS' FURNISHINGS. . . .	.2	1.0	.1	.3	(D)	22.9	.7	(Z)	12	15
233	WOMEN'S AND MISSES' OUTERWEAR. . .	1.0	4.9	.5	1.1	.8	146.9	3.8	(D)	11	12
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.2	.9	.1	.3	.2	19.1	.6	-	1	2
236	CHILDREN'S OUTERWEAR	.2	.8	.1	.3	(S)	19.4	.5	(D)	56	40
239	MISC. FABRICATED TEXTILE PRODS . .	.7	3.0	.5	1.1	(D)	69.9	1.8	(D)	45	26
24	LUMBER AND WOOD PRODUCTS	.9	3.2	.8	1.6	(D)	54.8	1.6	.5	24	33
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.4	1.4	.3	.7	(D)	20.3	.7	(D)	36	49
249	MISCELLANEOUS WOOD PRODUCTS. . . .	.3	1.0	.2	.4	(S)	21.5	.6	-	43	67
25	FURNITURE AND FIXTURES	1.1	4.2	.8	1.7	(D)	92.9	2.4	-	9	9
251	HOUSEHOLD FURNITURE.	.5	1.9	.3	.7	(D)	53.6	1.2	-	7	17
252	OFFICE FURNITURE	.3	.9	.2	.4	(Z)	14.8	.5	-	5	4
254	PARTITIONS AND FIXTURES.	.2	.8	.2	.4	(D)	15.0	.5	-	37	16
26	PAPER AND ALLIED PRODUCTS. . . .	28.6	79.8	25.4	52.9	2.2	939.8	26.9	240.7	2	4
262	PAPERMILLS, EXC. BUILDING PAPER. .	10.6	28.1	9.5	19.5	(D)	309.2	8.6	(D)	1	1
263	PAPERBOARD MILLS	9.3	23.6	8.6	17.7	(S)	189.5	5.9	(D)	2	7
264	MISC. CONVERTED PAPER PRODUCTS . .	2.9	8.8	2.4	5.0	.8	157.6	3.8	(D)	5	24
265	PAPERBOARD CONTAINERS AND BOXES. .	2.9	11.4	2.2	4.9	(D)	215.5	6.5	(D)	10	7
266	BUILDING PAPER AND BOARD MILLS . .	2.5	6.7	2.3	5.0	-	58.0	1.7	(D)	1	1
27	PRINTING AND PUBLISHING.	3.0	14.7	1.7	3.7	.7	382.0	11.0	(D)	8	11
271	NEWSPAPERS	.5	2.9	.3	.6	(D)	64.8	2.3	(Z)	16	11
273	BOOKS.	.2	.8	.1	.1	.1	29.8	.7	-	27	14
274	MISCELLANEOUS PUBLISHING	.1	.7	.1	.1	.1	17.6	.5	-	34	20
275	COMMERCIAL PRINTING.	1.6	6.9	1.0	2.0	(D)	178.3	4.9	(D)	11	21
276	MANIFOLD BUSINESS FORMS.	.2	.7	.1	.1	.1	22.2	.5	-	45	57
278	BLANKBOOKS AND BOOKBINDING	.4	1.8	.3	.6	(Z)	34.2	1.2	-	14	15
28	CHEMICALS, ALLIED PRODUCTS . . .	90.7	268.1	77.8	164.6	4.3	3,805.3	103.4	110.8	1	2
281	INDUSTRIAL INORGANIC CHEMICALS . .	11.9	42.0	9.3	19.4	1.2	772.4	22.6	(D)	1	7
282	PLASTICS MATERIALS, SYNTHETICS . .	9.8	32.1	8.1	17.3	1.1	504.2	14.7	(D)	2	4
283	DRUGS.	14.9	49.4	12.3	27.0	(S)	768.7	22.3	(D)	1	2
284	SOAPS, CLEANERS, TOILET GOODS. . .	5.4	18.9	4.5	9.9	(D)	291.9	9.0	(D)	4	4
285	PAINTS AND ALLIED PRODUCTS	1.9	5.8	1.5	3.0	.8	107.8	2.9	(D)	5	11
286	INDUSTRIAL ORGANIC CHEMICALS . . .	43.6	107.6	39.6	81.9	(D)	1,166.0	25.7	(D)	2	3
287	AGRICULTURAL CHEMICALS	.6	2.9	.5	1.5	(S)	44.8	1.3	(D)	18	14
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	2.5	9.4	2.0	4.6	(S)	149.5	4.8	-	13	10

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	NEW JERSEY--CON.										
29	PETROLEUM AND COAL PRODUCTS	40.2	87.7	37.3	64.3	1.1	847.9	23.4	(D)	2	2
299	MISC. PETROLEUM, COAL PRODUCTS	.4	1.3	.4	.8	.1	16.6	.5	-	24	60
30	RUBBER, MISC. PLASTICS PROD.	11.3	48.9	7.4	15.8	(D)	1,130.2	33.1	(D)	4	5
306	FABRICATED RUBBER PRODUCTS, NEC.	1.0	4.1	.8	1.9	(D)	67.8	2.2	-	22	22
307	MISCELLANEOUS PLASTICS PRODUCTS.	8.9	40.2	5.6	11.7	3.3	964.5	28.6	(D)	3	6
31	LEATHER, LEATHER PRODUCTS.	.6	2.6	.5	1.3	(S)	44.4	1.3	-	27	17
311	LEATHER TANNING AND FINISHING.	.4	1.5	.3	.8	(S)	21.2	.6	-	39	27
316	LUGGAGE.	.1	.5	.1	.2	(Z)	7.4	.3	-	43	42
317	WOMEN'S HANDBAGS AND PURSES.	.1	.6	.1	.2	.1	12.6	.4	-	28	14
32	STONE, CLAY, GLASS PRODUCTS.	45.9	120.2	41.3	81.7	5.3	1,346.9	38.5	(D)	1	2
322	GLASS, PRESSED OR BLOWN.	24.3	63.3	22.1	44.4	.6	668.5	18.9	(S)	1	1
326	POTTERY AND RELATED PRODUCTS	1.4	4.2	1.2	2.6	(D)	52.3	1.6	(Z)	17	27
327	CONCRETE, GYPSUM, PLASTER PRODS.	5.0	10.5	4.6	7.2	2.1	114.2	3.3	(D)	10	9
329	MISC. NONMETALLIC MINERAL PRODS.	11.5	33.1	10.1	21.0	(D)	411.6	12.1	(D)	1	2
33	PRIMARY METAL INDUSTRIES	19.9	69.7	16.0	37.5	2.6	1,142.6	32.2	(D)	4	6
331	BLAST FURNACE, BASIC STEEL PROD.	1.7	6.3	1.3	2.6	(D)	126.1	3.7	-	4	8
333	PRIMARY NONFERROUS METALS.	4.8	15.5	4.0	9.6	.1	212.7	5.9	(D)	1	1
334	SECONDARY NONFERROUS METALS.	2.0	5.4	1.8	3.5	.6	67.2	1.8	-	1	1
335	NONFERROUS ROLLING AND DRAWING	4.6	18.4	3.3	7.3	.2	384.0	11.1	(D)	4	6
339	MISC. PRIMARY METAL PRODUCTS	2.3	7.7	1.8	3.9	(S)	129.5	3.9	-	33	41
34	FABRICATED METAL PRODUCTS.	12.2	47.2	9.0	19.8	(D)	930.0	27.5	(D)	7	11
341	METAL CANS, SHIPPING CONTAINERS.	3.5	12.9	2.8	6.4	.5	195.2	6.5	(Z)	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE.	1.2	5.8	.8	1.8	(S)	128.2	4.1	-	4	3
344	FABRICATED STRUC. METAL PRODS.	1.9	6.4	1.4	2.7	.5	133.3	3.7	(S)	17	12
345	SCREW MACHINE PROD., BOLTS, ETC.	.8	3.3	.5	1.2	.1	84.1	2.0	-	78	38
346	METAL FORGINGS AND STAMPINGS	1.3	4.6	1.0	2.4	(S)	74.6	2.2	(D)	26	16
347	METAL SERVICES, NEC.	1.2	4.1	.8	1.7	(D)	(S)	(S)	-	25	(X)
349	MISC. FABRICATED METAL PRODUCTS.	2.1	9.3	1.4	3.1	.5	195.5	6.1	(D)	10	15
35	MACHINERY, EXCEPT ELECTRIC	10.4	41.7	7.6	16.7	(D)	827.5	25.0	(D)	7	4
353	CONSTRUCTION, RELATED MACHINERY.	.5	2.3	.4	1.0	(D)	40.8	1.3	-	5	4
354	METALWORKING MACHINERY	.9	4.2	.6	1.2	.9	93.7	2.9	(D)	20	16
355	SPECIAL INDUSTRY MACHINERY	1.6	6.1	1.3	2.7	(D)	114.2	3.5	-	35	8
356	GENERAL INDUSTRIAL MACHINERY	3.1	11.7	2.3	4.9	.5	239.7	6.9	(D)	4	6
357	OFFICE AND COMPUTING MACHINES.	.6	2.9	(D)	(D)	.3	(D)	(D)	-	(X)	(X)
358	REFRIGERATION AND SERVICE MACH	1.2	4.6	1.0	2.1	.5	71.0	2.5	-	1	1
359	MISC. MACHINERY, EXC. ELEC	.6	3.3	.3	.7	(S)	103.9	2.6	-	39	30
36	ELECTRIC, ELECTRONIC EQUIP	9.2	39.8	6.3	13.3	2.4	855.6	26.5	(D)	3	5
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.5	2.4	.4	.8	.1	46.4	1.5	-	9	6
362	ELECTRICAL INDUSTRIAL APPARATUS.	.4	2.0	.3	.7	(D)	36.0	1.4	-	24	15
363	HOUSEHOLD APPLIANCES	.8	3.0	.6	1.3	(D)	61.6	1.7	(Z)	5	9
364	ELEC. LIGHTING, WIRING EQUIP	1.4	5.9	1.0	2.1	.4	116.2	3.8	(Z)	5	3
365	RADIO, TV RECEIVING EQUIPMENT.	1.1	3.3	.9	1.8	.9	48.7	1.5	-	1	1
366	COMMUNICATION EQUIPMENT.	2.6	12.2	1.6	3.1	.2	290.9	9.1	(D)	9	14
367	ELECTRONIC COMPONENTS, ACCESS.	1.1	5.6	.6	1.4	.2	133.8	4.2	(D)	11	10
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	1.4	5.5	.9	2.1	.1	122.1	3.5	-	3	3
37	TRANSPORTATION EQUIPMENT	5.7	21.5	4.4	9.3	1.3	369.0	12.2	(D)	7	7
371	MOTOR VEHICLES AND EQUIPMENT	4.3	15.8	3.4	7.1	.3	260.1	8.6	(D)	3	3
372	AIRCRAFT AND PARTS	.3	1.5	.2	.4	.2	35.6	1.1	(S)	15	30
373	SHIP, BOAT BUILDING, REPAIRING	1.0	3.9	.8	1.7	.8	66.0	2.2	(D)	34	33
38	INSTRUMENTS, RELATED PRODS	3.3	13.9	2.3	4.9	(Z)	297.2	9.0	-	5	7
381	ENGINEERING, SCIENTIFIC INSTRU	.6	2.6	.4	.9	(D)	52.1	1.6	-	9	11
382	MEASURING, CONTROLLING DEVICES	.1	.9	(Z)	.1	(S)	29.9	.8	-	49	36
384	MEDICAL INSTRUMENTS, SUPPLIES.	1.1	5.4	.6	1.5	(D)	126.4	4.0	-	12	11
386	PHOTOGRAPHIC EQUIP., SUPPLIES.	1.3	4.2	1.1	2.2	(D)	71.2	2.0	-	7	15
387	WATCHES, CLOCKS, AND WATCHCASES.	.1	.3	(Z)	.1	(Z)	7.6	.2	-	70	34
39	MISC. MANUFACTURING INDUS.	2.6	10.2	1.8	4.1	1.6	222.0	6.1	(D)	11	12
394	TOYS AND SPORTING GOODS.	.7	2.7	.4	1.0	(D)	67.0	1.7	-	19	29
395	PENS, OFFICE AND ART GOODS	.3	1.0	.2	.5	.2	16.8	.6	-	11	16
396	COSTUME JEWELRY AND NOTIONS.	.2	.9	.1	.3	(D)	22.1	.6	-	9	20
399	MISCELLANEOUS MANUFACTURES	1.1	4.2	.8	1.9	.6	86.6	2.3	(D)	17	18
	PENNSYLVANIA	873.1	2,093.2	756.1	1,297.4	(D)	34,293.2	795.8	2,753.5	1	1
20	FOOD AND KINDRED PRODUCTS.	39.8	119.5	33.2	67.1	7.1	1,950.8	52.3	(D)	3	3
201	MEAT PRODUCTS.	3.7	12.9	2.7	5.5	(D)	290.9	7.4	(Z)	7	5
202	DAIRY PRODUCTS	4.5	14.6	3.5	6.8	.5	317.9	7.8	(Z)	16	11
203	PRESERVED FRUITS AND VEGETABLES.	5.7	15.6	4.9	9.5	1.6	209.8	6.0	(D)	2	3
204	GRAIN MILL PRODUCTS.	5.1	14.6	4.3	8.7	.8	239.9	5.9	-	8	6
205	BAKERY PRODUCTS.	3.7	12.2	3.0	7.0	(S)	187.2	5.2	(Z)	11	5
206	SUGAR, CONFECTIONERY PRODUCTS.	8.9	26.4	7.8	16.2	(S)	333.1	10.1	(D)	2	4
207	FATS AND OILS.	1.7	3.9	1.6	2.6	(D)	46.6	1.3	(D)	23	14
208	BEVERAGES.	3.8	10.9	3.2	6.3	(D)	176.8	4.6	(D)	8	7
209	MISC. FOODS, KINDRED PRODUCTS.	2.6	8.4	2.1	4.6	.4	148.6	3.9	(D)	14	22
21	TOBACCO PRODUCTS	.7	2.7	.5	1.0	(D)	63.5	1.7	-	5	3
212	CIGARS	.3	1.2	.2	.4	(D)	28.6	.8	-	1	1
214	TOBACCO STEMMING AND REDRYING.	.3	1.4	.2	.5	(D)	33.8	.8	-	1	1

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	PENNSYLVANIA--CON.										
22	TEXTILE MILL PRODUCTS.	13.4	44.1	10.3	21.4	(D)	921.4	22.7	(D)	6	6
222	WEAV'G MILLS, MANMADE FIBER. . . .	1.1	3.9	.7	1.6	.2	103.7	2.3	-	6	11
224	NARROW FABRIC MILLS.	.5	1.8	.3	.7	(D)	41.6	1.1	-	16	22
225	KNITTING MILLS	5.6	18.7	4.3	9.3	(D)	388.1	9.4	(S)	11	5
226	TEXTILE FINISHING, EXCEPT WOOL . .	1.2	3.4	1.1	2.3	(S)	41.3	1.1	-	30	20
227	FLOOR COVERING MILLS	1.7	4.1	1.5	2.6	(Z)	59.2	1.5	(D)	4	3
228	YARN AND THREAD MILLS.	1.4	6.0	.7	1.4	.5	194.4	4.6	-	23	24
229	MISCELLANEOUS TEXTILE GOODS. . . .	1.6	4.9	1.3	2.8	(D)	75.5	2.1	-	14	6
23	APPAREL, OTH. TEXTILE PRODS. . .	6.5	24.7	4.6	9.5	3.7	547.6	15.2	(S)	7	6
231	MEN'S AND BOYS' SUITS AND COATS. .	1.1	4.4	.8	1.7	(D)	89.0	2.8	(D)	3	4
232	MEN'S AND BOYS' FURNISHINGS. . . .	1.1	4.7	.7	1.5	.4	116.9	3.2	.6	20	12
233	WOMEN'S AND MISSES' OUTERWEAR. . .	2.3	8.7	1.6	3.4	1.8	204.5	5.3	(D)	9	10
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.4	1.7	.2	.5	(D)	41.9	1.2	(D)	30	15
235	HATS, CAPS, AND MILLINERY.	.2	.7	.2	.3	(D)	7.6	.3	-	84	57
236	CHILDREN'S OUTERWEAR	.4	1.3	.3	.6	.3	23.3	.7	-	32	20
238	MISC. APPAREL AND ACCESSORIES. . .	.1	.3	(Z)	.1	(Z)	7.3	.3	(D)	39	27
239	MISC. FABRICATED TEXTILE PRODS . .	.8	2.9	.6	1.4	(D)	57.0	1.5	(S)	27	26
24	LUMBER AND WOOD PRODUCTS	5.7	18.4	4.1	8.8	.5	459.7	9.6	(D)	27	12
242	SAWMILLS AND PLANING MILLS	1.5	5.5	.9	2.5	(S)	184.1	3.0	-	53	30
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	.9	3.2	.7	1.3	.3	75.3	2.0	-	13	21
245	WOOD BUILDINGS AND MOBILE HOMES. .	.5	1.9	.4	.9	(D)	37.5	1.0	-	4	3
249	MISCELLANEOUS WOOD PRODUCTS. . . .	2.0	5.5	1.6	2.7	(D)	130.5	2.8	-	8	8
25	FURNITURE AND FIXTURES	2.9	9.9	2.3	4.7	1.1	187.4	5.2	(D)	7	6
251	HOUSEHOLD FURNITURE.	1.4	4.3	1.1	2.1	.7	84.9	2.3	(D)	11	11
252	OFFICE FURNITURE	.8	2.7	.7	1.4	(D)	43.7	1.3	-	10	8
254	PARTITIONS AND FIXTURES.	.5	2.2	.4	.9	(S)	44.6	1.3	-	21	14
259	MISC. FURNITURE AND FIXTURES . . .	.1	.5	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	55.2	114.7	48.8	72.4	.4	1,860.5	42.3	646.1	2	2
262	PAPERMILLS, EXC. BUILDING PAPER. .	37.9	65.9	34.1	42.8	(S)	1,117.7	23.1	553.7	1	2
263	PAPERBOARD MILLS	8.8	20.7	8.2	16.1	(D)	185.3	4.6	(D)	8	11
264	MISC. CONVERTED PAPER PRODUCTS . .	3.0	10.9	2.2	4.5	(D)	256.3	6.4	(D)	8	5
265	PAPERBOARD CONTAINERS AND BOXES. .	3.8	13.3	3.0	6.4	(S)	240.4	6.9	(D)	11	8
266	BUILDING PAPER AND BOARD MILLS . .	1.6	3.9	1.4	2.6	.2	60.9	1.3	-	10	9
27	PRINTING AND PUBLISHING.	5.9	25.2	3.7	7.8	(D)	624.0	17.4	(D)	10	5
271	NEWSPAPERS	1.1	5.1	.7	1.5	(Z)	127.1	3.6	(D)	25	9
272	PERIODICALS.	.3	1.3	.2	.3	.1	33.2	1.0	-	5	10
273	BOOKS.	.5	2.3	.3	.7	(D)	59.3	1.6	-	17	6
275	COMMERCIAL PRINTING.	3.2	12.7	2.2	4.6	(D)	297.1	8.1	(Z)	15	10
276	MANIFOLD BUSINESS FORMS.	.4	1.9	.2	.3	(Z)	56.4	1.6	-	6	6
28	CHEMICALS, ALLIED PRODUCTS . . .	63.7	139.2	54.5	81.4	4.2	2,702.1	57.8	185.7	1	2
281	INDUSTRIAL INORGANIC CHEMICALS . .	15.6	41.7	10.7	15.8	(D)	1,417.3	25.9	-	4	2
282	PLASTICS MATERIALS, SYNTHETICS . .	19.4	30.1	18.0	20.9	(D)	389.9	9.2	(D)	1	1
283	DRUGS.	6.3	17.2	5.0	7.8	.6	363.4	9.4	(D)	2	10
284	SOAPS, CLEANERS, TOILET GOODS. . .	1.7	4.8	1.5	3.2	(D)	63.4	1.6	-	8	11
285	PAINTS AND ALLIED PRODUCTS	1.2	3.3	1.0	1.9	(D)	46.5	1.4	-	6	6
286	INDUSTRIAL ORGANIC CHEMICALS . . .	16.3	34.0	15.2	26.4	.7	319.3	7.5	(D)	1	1
287	AGRICULTURAL CHEMICALS	.4	1.3	.4	.8	(Z)	15.7	.5	-	18	20
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	2.9	6.9	2.6	4.5	.7	86.6	2.4	-	13	11
29	PETROLEUM AND COAL PRODUCTS. . .	36.1	76.1	31.2	42.7	(S)	1,422.3	33.4	(D)	9	3
291	PETROLEUM REFINING	32.4	63.0	27.9	33.1	(D)	1,303.5	29.9	(D)	3	1
295	PAVING AND ROOFING MATERIALS . . .	2.5	10.5	2.2	7.8	(S)	94.4	2.7	(D)	44	29
299	MISC. PETROLEUM, COAL PRODUCTS . .	1.2	2.6	1.1	1.8	(D)	24.4	.8	1.5	28	13
30	RUBBER, MISC. PLASTICS PROD. . .	15.9	51.1	12.3	23.5	(D)	1,064.0	27.5	(D)	3	4
301	TIRES AND INNER TUBES.	4.0	12.6	3.1	6.0	(Z)	252.2	6.5	-	1	1
302	RUBBER AND PLASTICS FOOTWEAR . . .	.1	.4	(Z)	.1	(Z)	10.4	.3	-	19	39
307	MISCELLANEOUS PLASTICS PRODUCTS. .	10.2	33.6	7.8	15.1	(D)	721.1	18.5	(D)	3	6
31	LEATHER, LEATHER PRODUCTS. . . .	2.1	5.4	1.7	2.2	.2	125.4	3.3	-	10	6
311	LEATHER TANNING AND FINISHING. . .	1.2	1.3	1.1	.9	(S)	9.2	.3	-	21	22
314	FOOTWEAR, EXCEPT RUBBER.	.7	3.3	.3	.7	(S)	103.1	2.6	-	8	7
317	WOMEN'S HANDBAGS AND PURSES. . . .	.1	.3	.1	.2	.1	5.4	.1	-	3	8
32	STONE, CLAY, GLASS PRODUCTS. . .	110.1	196.9	101.0	138.4	11.0	2,684.2	58.5	(D)	3	6
322	GLASS, PRESSED OR BLOWN.	23.0	42.9	20.6	29.7	1.1	701.8	13.2	(S)	2	2
323	PRODUCTS OF PURCHASED GLASS. . . .	2.7	5.8	2.1	2.5	(D)	162.1	3.3	(D)	5	3
324	CEMENT, HYDRAULIC.	37.3	54.4	34.0	34.4	(D)	952.4	19.9	(D)	1	1
325	STRUCTURAL CLAY PRODUCTS	11.9	22.8	11.3	18.3	(D)	169.1	4.4	-	2	1
327	CONCRETE, GYPSUM, PLASTER PRODS. .	14.7	24.3	14.1	19.2	(S)	192.2	5.1	(S)	21	19
329	MISC. NONMETALLIC MINERAL PRODS. .	10.5	25.9	9.6	18.1	1.1	284.1	7.9	(D)	3	37
33	PRIMARY METAL INDUSTRIES	420.0	952.0	375.9	681.3	5.8	12,925.6	270.7	1,628.1	1	1
331	BLAST FURNACE, BASIC STEEL PROD. .	371.4	832.5	333.6	607.1	1.5	11,089.7	225.4	(D)	1	1
332	IRON AND STEEL FOUNDRIES	13.3	41.7	10.8	21.8	(D)	729.5	19.9	(D)	5	10
333	PRIMARY NONFERROUS METALS. . . .	20.7	33.6	20.0	29.2	.1	214.8	4.4	(D)	1	3
334	SECONDARY NONFERROUS METALS. . . .	2.0	6.3	1.7	3.7	.9	81.3	2.6	(D)	6	3
335	NONFERROUS ROLLING AND DRAWING . .	8.1	24.7	6.3	12.8	(D)	525.8	11.9	-	1	3
34	FABRICATED METAL PRODUCTS. . . .	28.9	91.7	23.3	47.2	3.4	1,634.2	44.6	(Z)	4	3

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

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SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	PENNSYLVANIA--CON.										
34	FABRICATED METAL PRODUCTS--CON.										
341	METAL CANS, SHIPPING CONTAINERS.	2.1	6.4	1.8	3.7	(S)	91.3	2.7	(D)	5	3
342	CUTLERY, HANDTOOLS AND HARDWARE.	1.2	4.0	.9	1.9	(S)	73.0	2.1	-	21	12
343	PLUMBING, HEATING, EXCEPT ELEC	1.4	4.6	1.2	2.8	(D)	51.9	1.8	-	10	18
344	FABRICATED STRUC. METAL PRODS.	6.2	19.9	5.0	9.2	.6	364.7	10.7	-	4	6
345	SCREW MACHINE PROD., BOLTS, ETC.	1.7	5.7	1.4	2.7	.3	106.9	3.1	-	3	8
346	METAL FORGINGS AND STAMPINGS	6.9	21.3	5.6	11.1	(D)	383.7	10.2	-	8	4
347	METAL SERVICES, NEC.	1.8	5.5	1.5	3.3	(S)	99.1	2.2	(S)	33	32
348	ORDNANCE AND ACCESSORIES, NEC.	1.1	3.3	.9	1.6	(D)	63.4	1.7	(Z)	9	8
349	MISC. FABRICATED METAL PRODUCTS.	6.5	20.8	5.1	10.8	.4	400.2	10.1	(S)	7	6
35	MACHINERY, EXCEPT ELECTRIC	20.7	75.4	14.8	28.7	1.3	1,711.7	46.7	(D)	3	3
353	CONSTRUCTION, RELATED MACHINERY.	3.9	14.2	2.7	5.0	(D)	342.4	9.2	1.0	7	9
354	METALWORKING MACHINERY	4.5	13.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)
355	SPECIAL INDUSTRY MACHINERY	1.1	5.2	.7	1.7	(S)	116.9	3.5	1.3	25	13
356	GENERAL INDUSTRIAL MACHINERY	4.3	16.3	3.1	6.6	(S)	361.4	9.7	-	5	7
357	OFFICE AND COMPUTING MACHINES.	.6	3.3	.2	.4	.1	112.8	2.9	.7	11	5
358	REFRIGERATION AND SERVICE MACH	1.7	6.0	1.3	2.6	(D)	126.3	3.4	-	8	13
359	MISC. MACHINERY, EXC. ELEC	1.5	6.0	1.0	1.9	.7	145.2	4.1	(S)	11	15
36	ELECTRIC, ELECTRONIC EQUIP	20.0	69.2	13.6	25.2	1.5	1,855.5	44.0	(D)	3	2
361	ELECTRIC DISTRIBUTING EQUIPMENT.	3.6	11.4	2.7	4.4	.1	269.4	7.0	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	4.1	12.1	2.8	4.4	.3	388.8	7.7	(D)	3	3
363	HOUSEHOLD APPLIANCES	1.2	4.0	.9	1.8	.1	86.1	2.2	-	3	4
364	ELEC. LIGHTING, WIRING EQUIP	2.3	8.7	1.7	3.7	(D)	178.7	5.0	-	20	9
365	RADIO, TV RECEIVING EQUIPMENT.	.7	2.0	.6	1.1	(D)	33.7	.9	-	1	2
366	COMMUNICATION EQUIPMENT.	.9	3.6	.6	1.1	(S)	87.5	2.5	-	19	8
367	ELECTRONIC COMPONENTS, ACCESS.	5.4	21.0	3.1	5.9	(D)	673.3	15.1	(S)	2	4
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	1.7	6.4	1.2	2.9	.1	137.9	3.6	(Z)	2	3
37	TRANSPORTATION EQUIPMENT	16.1	43.6	13.3	20.0	(D)	826.1	23.6	(D)	2	2
371	MOTOR VEHICLES AND EQUIPMENT	4.3	13.8	3.5	6.6	.3	254.1	7.2	-	4	3
372	AIRCRAFT AND PARTS	2.0	7.7	1.5	3.0	(D)	153.6	4.6	-	8	3
373	SHIP, BOAT BUILDING, REPAIRING	.9	3.5	.7	1.3	(Z)	83.1	2.3	-	1	1
374	RAILROAD EQUIPMENT	7.4	12.6	6.8	7.3	.1	189.7	5.3	(D)	3	1
379	TRANSPORTATION EQUIPMENT, NEC.	.4	1.8	.3	.7	(D)	36.7	1.1	-	17	10
38	INSTRUMENTS, RELATED PRODS	3.5	14.5	2.3	4.5	(D)	354.4	10.0	(D)	9	5
381	ENGINEERING, SCIENTIFIC INSTRU	.5	1.8	.4	.7	(D)	33.2	1.2	-	56	34
382	MEASURING, CONTROLLING DEVICES	1.5	6.5	.8	1.7	.1	179.1	4.8	-	7	5
383	OPTICAL INSTRUMENTS AND LENSES	.1	.4	(Z)	.1	(Z)	15.6	.4	-	1	40
384	MEDICAL INSTRUMENTS, SUPPLIES.	1.0	3.9	.7	1.3	(D)	85.3	2.6	(D)	6	5
385	OPHTHALMIC GOODS	.1	(D)	.1	(D)	(D)	15.5	.5	-	(X)	15
39	MISC. MANUFACTURING INDUS.	6.1	18.9	4.8	9.5	(D)	372.7	9.4	(S)	6	6
394	TOYS AND SPORTING GOODS.	1.3	4.0	1.0	2.2	(S)	68.9	1.9	-	23	20
395	PENS, OFFICE AND ART GOODS	.5	1.7	.4	.8	(D)	30.1	.9	-	4	6
396	COSTUME JEWELRY AND NOTIONS.	.3	1.1	.2	.4	.2	26.2	.7	-	20	17
399	MISCELLANEOUS MANUFACTURES	3.9	11.6	3.1	6.0	(D)	237.0	5.6	1.9	4	6
	OHIO	930.8	2,215.8	735.6	1,228.2	27.0	57,191.3	987.6	2,294.4	1	1
20	FOOD AND KINDRED PRODUCTS.	35.2	89.3	29.5	49.6	(D)	1,657.0	39.7	39.4	3	4
201	MEAT PRODUCTS.	3.7	10.4	2.8	4.9	.9	238.1	5.5	(D)	9	6
202	DAIRY PRODUCTS	5.1	14.8	4.1	7.1	(D)	303.8	7.7	(D)	10	18
203	PRESERVED FRUITS AND VEGETABLES.	4.9	11.7	4.3	7.0	(S)	191.8	4.7	(D)	6	6
204	GRAIN MILL PRODUCTS.	5.0	14.7	4.0	7.8	.9	286.6	6.9	(D)	3	4
205	BAKERY PRODUCTS.	3.2	8.0	2.6	4.4	.5	163.6	3.6	(Z)	8	9
206	SUGAR, CONFECTIONERY PRODUCTS.	2.5	5.2	2.4	4.1	.1	47.2	1.1	(Z)	1	3
207	FATS AND OILS.	5.0	9.0	4.6	6.0	(S)	125.5	3.0	(D)	15	11
208	BEVERAGES.	4.0	10.5	3.4	6.0	.6	180.5	4.5	(D)	4	5
209	MISC. FOODS, KINDRED PRODUCTS.	1.8	5.0	1.4	2.3	(Z)	119.8	2.7	-	18	13
22	*TEXTILE MILL PRODUCTS.	3.0	7.1	2.5	3.8	.3	130.1	3.3	(Z)	5	4
225	KNITTING MILLS	.3	.9	.3	.4	.1	17.2	.5	-	1	6
229	MISCELLANEOUS TEXTILE GOODS.	2.2	5.0	1.9	2.7	(D)	92.2	2.3	-	4	5
23	APPAREL, OTH. TEXTILE PRODS.	1.3	4.4	.9	1.6	.3	102.6	2.8	(D)	7	6
231	MEN'S AND BOYS' SUITS AND COATS.	.3	1.1	.3	.5	(D)	17.4	.5	(D)	1	3
232	MEN'S AND BOYS' FURNISHINGS.	.1	.3	.1	.1	(Z)	9.3	.2	-	14	19
233	WOMEN'S AND MISSES' OUTERWEAR.	.2	.8	.1	.2	.1	27.4	.6	(Z)	17	9
239	MISC. FABRICATED TEXTILE PRODS	.5	1.5	.3	.5	.2	36.0	1.0	-	10	14
24	LUMBER AND WOOD PRODUCTS	3.3	9.2	2.2	3.7	.8	328.9	5.5	(D)	21	26
242	SAWMILLS AND PLANING MILLS	1.6	4.5	.8	1.5	(S)	241.6	3.0	(D)	33	47
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.6	1.8	.4	.7	(D)	38.5	1.1	-	32	18
245	WOOD BUILDINGS AND MOBILE HOMES.	.2	.6	.2	.3	(D)	10.0	.3	-	15	7
249	MISCELLANEOUS WOOD PRODUCTS.	1.0	2.4	.9	1.3	(S)	37.6	1.1	-	36	21
25	FURNITURE AND FIXTURES	2.9	7.8	2.3	3.7	.5	164.4	4.1	(D)	6	6
252	OFFICE FURNITURE	.8	1.8	.7	1.0	(D)	41.0	.8	(D)	1	3
253	PUBLIC BLDG., RELATED FURNITURE.	.2	.6	.1	.2	(S)	(S)	.3	-	56	49
26	PAPER AND ALLIED PRODUCTS.	50.2	87.6	45.9	59.1	(S)	1,252.4	28.5	740.6	3	4
262	PAPERMILLS, EXC. BUILDING PAPER.	25.4	35.9	24.1	26.3	(D)	375.1	9.6	584.5	2	4

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		A	B	C	D	E	F	G	H	D	G
	OHIO--CON.										
26	PAPER AND ALLIED PRODUCTS--CON.										
263	PAPERBOARD MILLS	17.9	32.8	16.3	23.5	(D)	474.7	9.2	(S)	7	11
264	MISC. CONVERTED PAPER PRODUCTS	2.2	6.4	1.6	2.8	.3	165.8	3.6	(S)	7	6
265	PAPERBOARD CONTAINERS AND BOXES	4.2	11.1	3.5	5.5	(D)	212.4	5.6	(D)	6	5
27	PRINTING AND PUBLISHING	6.1	21.8	4.2	7.3	1.5	553.1	14.5	(D)	7	5
271	NEWSPAPERS	1.0	4.2	.6	1.1	.2	115.7	3.1	(D)	5	4
272	PERIODICALS	.1	.4	(Z)	.1	(Z)	11.3	.3	-	8	5
273	BOOKS	.4	1.2	.2	.5	(Z)	33.0	.8	(D)	5	9
275	COMMERCIAL PRINTING	3.7	12.1	2.7	4.7	1.0	283.9	7.4	(D)	10	9
276	MANIFOLD BUSINESS FORMS	.3	1.5	.2	.4	(Z)	44.7	1.2	-	8	11
278	BLANKBOOKS AND BOOKBINDING	(Z)	.2	(S)	(S)	(D)	4.1	.1	-	(X)	53
279	PRINTING TRADE SERVICES	.3	.8	.2	.3	(D)	20.2	.5	-	48	22
28	CHEMICALS, ALLIED PRODUCTS	140.8	312.7	75.8	100.5	(D)	19,058.1	212.2	476.9	2	1
281	INDUSTRIAL INORGANIC CHEMICALS	83.8	201.8	25.6	29.9	(S)	17,071.3	171.8	(D)	4	1
282	PLASTICS MATERIALS, SYNTHETICS	12.9	29.4	10.7	16.7	.4	643.7	12.7	-	1	1
283	DRUGS	.6	1.6	.4	.7	(D)	39.7	.9	-	1	1
284	SOAPS, CLEANERS, TOILET GOODS	4.7	9.9	4.0	5.6	.2	178.5	4.4	(D)	3	4
285	PAINTS AND ALLIED PRODUCTS	1.9	5.3	1.5	2.5	.8	102.1	2.8	-	4	6
286	INDUSTRIAL ORGANIC CHEMICALS	11.9	24.7	10.5	16.7	(S)	409.8	8.0	-	2	2
287	AGRICULTURAL CHEMICALS	14.2	22.0	13.0	16.1	.2	361.7	5.9	(D)	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	10.8	17.9	10.0	12.3	(D)	251.3	5.6	(D)	2	4
29	PETROLEUM AND COAL PRODUCTS	22.4	52.2	18.0	28.3	(S)	1,278.6	24.0	(D)	5	3
291	PETROLEUM REFINING	18.5	42.5	14.5	21.3	.1	1,180.7	21.2	(D)	1	1
295	PAVING AND ROOFING MATERIALS	4.0	9.5	3.7	6.8	(S)	96.7	2.7	(D)	20	26
30	RUBBER, MISC. PLASTICS PROD.	44.3	110.7	35.3	50.1	4.3	2,636.1	60.5	(D)	1	3
301	TIRES AND INNER TUBES	19.0	34.6	17.0	21.7	.3	595.2	12.9	(D)	1	1
304	RUBBER, PLASTICS HOSE, BELTING	3.9	7.6	3.2	3.5	(D)	190.3	4.1	-	2	3
306	FABRICATED RUBBER PRODUCTS, NEC.	8.5	22.4	6.8	10.8	(D)	502.7	11.7	(D)	5	6
307	MISCELLANEOUS PLASTICS PRODUCTS	12.9	45.8	8.3	14.1	(D)	1,342.9	31.8	(D)	2	4
31	LEATHER, LEATHER PRODUCTS	.3	.9	.2	.4	.3	18.2	.6	-	22	10
314	FOOTWEAR, EXCEPT RUBBER	.1	.6	.1	.2	.1	11.9	.4	-	1	1
32	STONE, CLAY, GLASS PRODUCTS	101.3	186.6	93.4	135.9	(S)	2,313.5	50.7	(D)	7	3
322	GLASS, PRESSED OR BLOWN	21.2	43.5	19.2	30.7	.4	580.4	12.8	(S)	1	1
323	PRODUCTS OF PURCHASED GLASS	.9	3.2	.6	1.0	.3	101.2	2.2	(Z)	6	15
324	CEMENT, HYDRAULIC	13.1	15.4	12.1	9.7	(Z)	283.2	5.7	(D)	1	1
325	STRUCTURAL CLAY PRODUCTS	15.9	28.2	15.2	22.8	.9	204.5	5.4	-	19	14
326	POTTERY AND RELATED PRODUCTS	4.3	8.6	4.0	6.2	(D)	95.9	2.4	(Z)	4	11
327	CONCRETE, GYPSUM, PLASTER PRODS.	17.9	31.6	17.3	27.0	(D)	193.9	4.6	(D)	28	13
329	MISC. NONMETALLIC MINERAL PRODS.	18.6	38.0	16.5	25.3	(S)	616.4	12.7	(S)	3	6
33	PRIMARY METAL INDUSTRIES	365.8	876.1	310.0	597.5	4.0	16,350.1	278.6	(D)	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	301.6	681.7	265.4	495.8	1.0	10,615.4	185.9	948.4	1	1
332	IRON AND STEEL FOUNDRIES	29.5	103.5	24.2	68.9	1.9	1,569.4	34.5	(D)	1	2
334	SECONDARY NONFERROUS METALS	3.5	6.8	3.4	5.7	(D)	41.3	1.1	-	8	15
335	NONFERROUS ROLLING AND DRAWING	8.2	20.1	6.5	10.2	(D)	508.1	10.0	-	2	3
336	NONFERROUS FOUNDRIES	6.7	16.8	5.6	9.2	2.0	327.8	7.6	-	8	8
34	FABRICATED METAL PRODUCTS	49.2	136.0	38.5	62.3	5.5	3,142.4	73.6	(D)	2	3
341	METAL CANS, SHIPPING CONTAINERS	2.8	7.8	2.1	3.8	.5	177.6	4.0	-	2	3
342	CUTLERY, HANDTOOLS AND HARDWARE	4.1	11.3	3.3	5.0	.2	263.2	6.3	-	3	3
344	FABRICATED STRUC. METAL PRODS.	8.7	23.4	7.1	11.1	(D)	487.5	12.4	(Z)	5	7
345	SCREW MACHINE PROD., BOLTS, ETC.	3.5	10.2	2.7	4.3	.3	244.1	5.9	(S)	7	9
346	METAL FORGINGS AND STAMPINGS	19.9	51.4	15.9	25.1	1.6	1,188.9	26.3	(D)	4	4
347	METAL SERVICES, NEC.	2.5	7.4	1.9	3.3	1.5	163.2	4.1	-	14	17
349	MISC. FABRICATED METAL PRODUCTS	5.3	18.0	3.6	5.9	(D)	507.1	12.1	(D)	8	6
35	MACHINERY, EXCEPT ELECTRIC	40.1	120.9	29.6	48.4	(D)	3,085.5	72.6	(D)	5	6
353	CONSTRUCTION, RELATED MACHINERY	5.9	16.3	4.7	7.2	.2	374.2	9.1	(S)	2	5
354	METALWORKING MACHINERY	8.9	30.4	6.0	10.3	1.0	845.7	20.0	(D)	20	19
355	SPECIAL INDUSTRY MACHINERY	1.9	7.0	1.2	2.0	(D)	203.7	5.1	(D)	9	7
356	GENERAL INDUSTRIAL MACHINERY	9.6	26.7	7.4	12.5	(D)	622.2	14.2	(D)	5	4
357	OFFICE AND COMPUTING MACHINES	1.8	4.6	1.4	2.3	.1	97.1	2.3	(D)	6	2
358	REFRIGERATION AND SERVICE MACH	7.5	19.9	5.9	9.4	(Z)	469.2	10.5	-	2	1
359	MISC. MACHINERY, EXC. ELEC	2.7	10.8	1.6	2.5	(D)	324.1	8.3	(D)	14	21
36	ELECTRIC, ELECTRONIC EQUIP	20.2	59.9	14.9	23.5	.9	1,575.0	36.5	(D)	2	1
361	ELECTRIC DISTRIBUTING EQUIPMENT	.5	1.7	(D)	(D)	.1	(D)	(D)	-	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS	4.8	14.7	3.5	5.7	(D)	377.8	9.0	(D)	1	2
363	HOUSEHOLD APPLIANCES	7.1	17.4	5.6	8.0	(D)	437.2	9.4	(S)	1	1
364	ELEC. LIGHTING, WIRING EQUIP	4.0	11.6	3.0	4.7	(D)	292.7	6.9	-	6	3
365	RADIO, TV RECEIVING EQUIPMENT	.1	.4	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
366	COMMUNICATION EQUIPMENT	.7	3.2	.4	.9	.1	87.6	2.2	-	3	5
367	ELECTRONIC COMPONENTS, ACCESS.	1.3	5.2	.8	1.4	(D)	165.2	3.8	-	5	2
369	MISC. ELEC. EQUIPMENT, SUPPLIES	1.7	5.7	1.1	1.9	(D)	167.2	3.8	-	6	5
37	TRANSPORTATION EQUIPMENT	41.0	123.3	29.5	48.1	1.6	3,390.1	75.2	(S)	1	1
371	MOTOR VEHICLES AND EQUIPMENT	32.7	97.0	23.6	38.0	(D)	2,668.9	58.9	(D)	1	1
372	AIRCRAFT AND PARTS	6.3	20.2	4.3	7.5	(D)	576.2	12.7	-	1	2
374	RAILROAD EQUIPMENT	.9	2.4	.7	1.1	(D)	49.5	1.3	-	5	8
376	GUIDED MISSILES, SPACE VEHICLES	.2	1.0	.1	.2	(S)	34.4	.8	(Z)	1	1

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	OHIO--CON.										
37	TRANSPORTATION EQUIPMENT--CON.										
379	TRANSPORTATION EQUIPMENT, NEC.	.6	1.7	.5	.9	.2	34.2	.9	-	10	10
38	INSTRUMENTS, RELATED PRODS	.8	1.8	.7	1.2	(D)	5.0	.6	-	12	76
382	MEASURING, CONTROLLING DEVICES	.9	3.9	.5	.8	(D)	118.5	3.1	-	9	8
384	MEDICAL INSTRUMENTS, SUPPLIES	.3	1.3	.2	.4	(D)	30.5	.9	-	18	9
39	MISC. MANUFACTURING INDUS.	2.6	7.2	2.1	3.2	(D)	148.2	4.1	(D)	10	8
394	TOYS AND SPORTING GOODS	.7	2.4	.5	1.0	(D)	48.5	1.3	(D)	1	10
395	PENS, OFFICE AND ART GOODS	.3	.6	.2	.3	.1	9.7	.3	-	9	6
399	MISCELLANEOUS MANUFACTURES	1.3	3.0	1.2	1.5	(D)	53.2	1.5	(D)	20	20
	INDIANA	559.9	1,181.6	473.0	739.0	13.7	25,470.6	442.6	2,905.3	1	1
20	FOOD AND KINDRED PRODUCTS	29.8	57.4	26.1	36.2	1.0	1,060.8	21.2	(D)	3	4
201	MEAT PRODUCTS	2.3	6.0	1.8	2.9	(D)	158.3	3.1	(D)	14	12
202	DAIRY PRODUCTS	1.9	5.1	1.4	2.3	.4	134.7	2.8	-	13	13
203	PRESERVED FRUITS AND VEGETABLES	3.0	5.7	2.8	4.4	.5	57.5	1.3	(D)	4	1
204	GRAIN MILL PRODUCTS	11.2	17.9	10.2	12.2	(Z)	310.1	5.7	(D)	3	2
205	BAKERY PRODUCTS	1.0	2.6	.8	1.2	.1	60.6	1.4	-	21	37
206	SUGAR, CONFECTIONERY PRODUCTS	.4	1.1	.3	.5	(D)	30.6	.6	-	1	1
207	FATS AND OILS	4.3	8.1	3.9	5.7	(S)	114.5	2.3	(D)	9	8
208	BEVERAGES	4.5	7.7	4.1	5.5	(D)	110.8	2.2	(Z)	4	4
209	MISC. FOODS, KINDRED PRODUCTS	1.2	3.1	.9	1.4	(S)	83.7	1.7	-	10	7
22	TEXTILE MILL PRODUCTS	.1	.7	(S)	(S)	(S)	31.5	.7	-	(X)	4
23	APPAREL, OTH. TEXTILE PRODS.	.6	2.1	.5	.8	.1	50.7	(D)	(Z)	11	(X)
231	MEN'S AND BOYS' SUITS AND COATS	(Z)	.1	(Z)	(Z)	(Z)	2.3	.1	-	27	45
232	MEN'S AND BOYS' FURNISHINGS	.2	.5	.1	.2	(Z)	9.2	.3	-	13	6
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.3	.1	.1	(D)	8.0	.2	(Z)	42	41
239	MISC. FABRICATED TEXTILE PRODS	.3	.8	.2	.3	.1	21.8	.5	-	19	16
24	LUMBER AND WOOD PRODUCTS	4.1	10.9	3.2	5.4	2.1	238.2	5.5	-	11	8
242	SAWMILLS AND PLANING MILLS	.8	2.2	.7	1.2	(D)	39.2	.9	-	23	30
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.6	4.7	1.2	2.0	.8	121.8	2.8	-	9	7
244	WOOD CONTAINERS	.1	.3	.1	.2	(D)	(S)	(S)	-	85	(X)
245	WOOD BUILDINGS AND MOBILE HOMES	.6	1.5	.5	.8	.1	29.9	.8	-	8	5
249	MISCELLANEOUS WOOD PRODUCTS	.7	1.8	.5	.8	(S)	42.9	1.0	-	14	26
25	FURNITURE AND FIXTURES	3.1	8.3	2.4	3.6	(D)	194.9	4.7	(D)	6	6
251	HOUSEHOLD FURNITURE	2.1	5.8	1.6	2.4	(D)	143.7	3.4	(D)	8	8
253	PUBLIC BLDG., RELATED FURNITURE	.1	.2	.1	.1	(D)	3.3	.1	-	35	28
254	PARTITIONS AND FIXTURES	.3	.7	.3	.4	(S)	13.5	.3	-	7	9
26	PAPER AND ALLIED PRODUCTS	10.4	23.0	8.5	12.3	(S)	551.5	10.7	(D)	3	5
263	PAPERBOARD MILLS	6.9	13.9	5.8	8.0	(S)	334.7	5.9	(D)	4	9
264	MISC. CONVERTED PAPER PRODUCTS	1.5	3.8	1.2	1.5	(S)	100.1	2.3	-	9	6
265	PAPERBOARD CONTAINERS AND BOXES	1.4	4.1	1.1	2.1	(S)	88.8	2.0	-	7	6
27	PRINTING AND PUBLISHING	2.7	9.3	1.7	2.6	.4	295.7	6.7	-	8	8
271	NEWSPAPERS	.4	1.8	.2	.4	(Z)	56.7	1.5	-	29	18
273	BOOKS	.7	1.9	.5	.6	(D)	65.3	1.3	-	1	1
275	COMMERCIAL PRINTING	1.2	4.2	.8	1.3	.2	129.9	2.9	-	12	14
276	MANIFOLD BUSINESS FORMS	.1	.4	.1	.1	(D)	11.2	.3	-	1	1
278	BLANKBOOKS AND BOOKBINDING	(Z)	.2	(S)	(S)	(S)	7.3	.2	-	(X)	94
28	CHEMICALS, ALLIED PRODUCTS	38.4	86.9	29.1	40.2	.7	2,743.2	46.7	(D)	4	1
281	INDUSTRIAL INORGANIC CHEMICALS	11.8	34.7	6.5	8.4	(D)	1,551.4	26.4	(S)	1	1
283	DRUGS	10.1	22.6	8.3	13.8	(S)	516.6	8.8	(D)	1	1
285	PAINTS AND ALLIED PRODUCTS	.3	.7	.3	.4	(D)	13.1	.3	-	7	8
286	INDUSTRIAL ORGANIC CHEMICALS	2.7	5.1	2.5	3.6	(S)	86.4	1.5	-	40	16
287	AGRICULTURAL CHEMICALS	6.2	10.9	5.1	5.8	(D)	307.7	5.2	-	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	.8	1.9	.8	1.4	.2	22.6	.5	-	1	6
29	PETROLEUM AND COAL PRODUCTS	8.2	16.2	7.0	9.6	(D)	366.4	6.6	(D)	5	3
291	PETROLEUM REFINING	6.3	12.5	5.2	6.6	(D)	337.6	5.9	(D)	5	3
295	PAVING AND ROOFING MATERIALS	1.6	3.1	1.5	2.6	(D)	25.3	.6	-	15	12
30	RUBBER, MISC. PLASTICS PROD.	12.3	30.4	9.3	12.5	.7	904.4	17.8	(D)	3	3
306	FABRICATED RUBBER PRODUCTS, NEC.	4.6	10.2	3.7	5.1	.1	257.7	5.1	-	6	5
307	MISCELLANEOUS PLASTICS PRODUCTS	6.1	16.2	4.2	5.2	(D)	555.9	11.1	(D)	4	4
31	LEATHER, LEATHER PRODUCTS	.2	.6	.1	.2	(D)	12.0	.3	-	42	17
32	STONE, CLAY, GLASS PRODUCTS	51.5	81.7	47.6	60.4	(D)	1,162.4	21.3	(S)	3	3
322	GLASS, PRESSED OR BLOWN	14.8	27.6	13.4	21.3	(Z)	394.8	6.3	(S)	1	1
324	CEMENT, HYDRAULIC	17.0	20.7	15.6	13.1	(Z)	415.3	7.6	-	1	1
325	STRUCTURAL CLAY PRODUCTS	2.4	3.6	2.3	3.0	(D)	31.3	.7	-	20	33
326	POTTERY AND RELATED PRODUCTS	.5	.8	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	10.7	16.3	10.3	13.8	(D)	111.2	2.5	-	12	18
329	MISC. NONMETALLIC MINERAL PRODS.	5.7	11.1	5.1	7.8	(D)	176.7	3.3	(S)	1	3
33	PRIMARY METAL INDUSTRIES	308.3	632.7	268.6	455.4	(D)	11,633.0	177.2	2,133.6	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	257.8	507.1	238.3	405.0	.6	5,725.5	102.1	(S)	1	1

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	INDIANA--CON.										
33	PRIMARY METAL INDUSTRIES--CON.										
332	IRON AND STEEL FOUNDRIES	8.1	27.4	6.3	16.5	(D)	514.6	10.9	-	5	14
334	SECONDARY NONFERROUS METALS	2.8	4.9	2.6	3.8	(S)	80.4	1.2	-	7	17
335	NONFERROUS ROLLING AND DRAWING	19.5	40.5	15.6	22.0	(D)	1,120.9	18.5	(D)	1	2
339	MISC. PRIMARY METAL PRODUCTS	1.3	3.3	1.1	2.0	(D)	58.5	1.2	-	3	5
34	FABRICATED METAL PRODUCTS	19.9	47.0	16.3	23.3	(D)	1,057.8	23.7	(D)	4	4
341	METAL CANS, SHIPPING CONTAINERS	1.0	2.5	.8	1.2	(D)	63.2	1.3	-	6	6
342	CUTLERY, HANDTOOLS AND HARDWARE	1.2	2.8	1.0	1.2	(S)	70.4	1.6	-	32	13
343	PLUMBING, HEATING, EXCEPT ELEC	1.6	3.9	1.3	2.2	(D)	67.2	1.7	-	13	11
344	FABRICATED STRUC. METAL PRODS	3.5	9.0	2.8	4.1	(S)	201.4	4.9	1.4	5	7
345	SCREW MACHINE PROD., BOLTS, ETC.	.6	1.6	(D)	(D)	-	(D)	(D)	-	(X)	(X)
346	METAL FORGINGS AND STAMPINGS	5.8	12.5	4.7	6.1	(S)	309.0	6.4	-	4	8
347	METAL SERVICES, NEC	2.8	5.8	2.4	3.6	(D)	111.2	2.2	(D)	13	30
348	ORDNANCE AND ACCESSORIES, NEC	.4	1.0	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	3.1	7.7	2.5	3.4	.6	183.2	4.3	-	3	5
35	MACHINERY, EXCEPT ELECTRIC	14.1	38.4	10.3	15.2	1.1	1,126.8	23.2	(S)	2	3
352	FARM AND GARDEN MACHINERY	1.5	3.2	1.3	1.8	.4	60.9	1.4	(D)	3	9
353	CONSTRUCTION, RELATED MACHINERY	1.4	3.7	1.1	1.5	.3	107.5	2.2	-	2	3
354	METALWORKING MACHINERY	1.1	3.9	.7	1.3	.3	117.7	2.7	(D)	12	13
355	SPECIAL INDUSTRY MACHINERY	.8	2.5	.6	.8	.2	77.8	1.8	-	3	9
356	GENERAL INDUSTRIAL MACHINERY	3.6	9.7	2.4	3.3	.1	324.6	6.4	-	3	3
358	REFRIGERATION AND SERVICE MACH	2.0	4.5	1.6	2.2	.1	114.5	2.3	-	3	4
359	MISC. MACHINERY, EXC. ELEC	1.2	3.6	.8	1.2	(S)	116.3	2.4	-	21	21
36	ELECTRIC, ELECTRONIC EQUIP	22.1	53.7	15.8	20.9	.2	1,838.4	32.8	(D)	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS	2.2	6.1	1.6	2.4	.2	194.3	3.7	-	4	4
364	ELEC. LIGHTING, WIRING EQUIP	3.2	6.5	2.3	2.7	(S)	247.6	3.8	-	1	2
365	RADIO, TV RECEIVING EQUIPMENT	2.6	7.7	1.8	3.0	(Z)	241.5	4.7	-	1	1
366	COMMUNICATION EQUIPMENT	1.6	4.1	1.0	1.3	.1	158.3	2.8	-	1	2
367	ELECTRONIC COMPONENTS, ACCESS	2.9	7.6	2.0	2.8	(Z)	270.3	4.8	(D)	1	2
369	MISC. ELEC. EQUIPMENT, SUPPLIES	6.2	13.8	4.5	5.5	.1	485.0	8.3	(D)	3	2
37	TRANSPORTATION EQUIPMENT	31.6	75.0	24.7	37.3	1.2	2,024.7	37.7	(D)	3	2
371	MOTOR VEHICLES AND EQUIPMENT	22.0	49.9	17.4	25.1	(D)	1,345.8	24.8	(Z)	4	2
373	SHIP, BOAT BUILDING, REPAIRING	.2	.7	.2	.3	(Z)	21.2	.5	-	35	23
374	RAILROAD EQUIPMENT	.8	1.9	.6	.9	(Z)	37.4	1.0	-	1	1
379	TRANSPORTATION EQUIPMENT, NEC	2.8	6.8	2.4	3.7	(S)	128.8	3.1	-	5	5
38	INSTRUMENTS, RELATED PRODS	1.4	4.2	1.0	1.9	.2	103.4	2.3	-	4	8
382	MEASURING, CONTROLLING DEVICES	.3	1.0	.2	.3	.1	27.5	.7	-	4	10
384	MEDICAL INSTRUMENTS, SUPPLIES	.2	.9	.1	.2	(D)	24.9	.6	-	15	23
39	MISC. MANUFACTURING INDUS.	1.0	3.1	.7	1.1	.3	72.2	1.9	2.7	9	11
393	MUSICAL INSTRUMENTS	.2	.7	.1	.2	(Z)	18.8	.5	-	10	11
394	TOYS AND SPORTING GOODS	.2	.6	.1	.2	(D)	16.6	.4	-	13	36
399	MISCELLANEOUS MANUFACTURES	.5	1.4	.4	.6	(D)	31.2	.9	-	15	14
	ILLINOIS	642.1	1,594.9	540.3	921.0	30.8	29,844.3	674.0	1,140.9	1	1
20	FOOD AND KINDRED PRODUCTS	85.5	186.5	75.3	117.2	.8	3,010.6	69.3	(D)	2	2
201	MEAT PRODUCTS	5.7	16.5	4.6	8.0	.5	343.8	8.5	9.0	3	3
202	DAIRY PRODUCTS	4.5	12.4	3.6	5.8	(D)	270.3	6.6	(S)	8	6
203	PRESERVED FRUITS AND VEGETABLES	4.6	12.5	3.8	7.6	(D)	225.9	5.0	(D)	5	4
204	GRAIN MILL PRODUCTS	32.3	51.5	29.9	35.9	(S)	712.1	15.7	(D)	1	3
205	BAKERY PRODUCTS	4.2	10.6	3.5	5.8	(D)	206.3	4.8	-	7	10
206	SUGAR, CONFECTIONERY PRODUCTS	5.1	14.2	4.0	6.7	.2	304.9	7.5	-	6	5
207	FATS AND OILS	19.8	43.9	17.9	32.9	(Z)	554.3	11.0	(D)	2	3
208	BEVERAGES	5.1	13.2	4.4	7.8	(D)	208.3	5.4	(D)	3	9
209	MISC. FOODS, KINDRED PRODUCTS	4.2	11.6	3.6	6.6	(D)	184.6	5.0	-	15	5
22	TEXTILE MILL PRODUCTS	1.3	3.5	1.1	1.8	(D)	67.5	1.6	-	16	11
229	MISCELLANEOUS TEXTILE GOODS	.6	1.7	.5	.8	(D)	35.6	.9	-	16	10
23	APPAREL, OTH. TEXTILE PRODS	1.0	3.6	.7	1.2	(S)	104.0	2.4	-	26	18
231	MEN'S AND BOYS' SUITS AND COATS	.1	.2	(S)	(S)	(D)	8.4	.2	-	(X)	41
232	MEN'S AND BOYS' FURNISHINGS	.2	.7	.1	.2	(Z)	19.1	.5	-	93	69
233	WOMEN'S AND MISSES' OUTERWEAR	.2	1.0	.1	.2	(Z)	31.1	.7	-	19	23
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.2	(Z)	.1	(D)	5.3	.2	-	1	8
238	MISC. APPAREL AND ACCESSORIES	.2	.5	.1	.2	(D)	9.6	.3	-	12	15
239	MISC. FABRICATED TEXTILE PRODS	.4	1.0	.3	.5	(Z)	27.2	.5	-	53	34
24	LUMBER AND WOOD PRODUCTS	2.8	7.1	2.3	3.9	.5	151.7	3.2	(D)	9	20
242	SAWMILLS AND PLANING MILLS	.1	.7	(Z)	.1	(D)	27.9	.6	-	64	30
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.4	.1	.2	.1	7.1	.2	-	46	12
249	MISCELLANEOUS WOOD PRODUCTS	1.4	3.9	1.2	2.2	(D)	61.3	1.7	(D)	7	10
25	FURNITURE AND FIXTURES	3.2	9.6	2.4	4.2	(S)	210.9	5.4	(D)	6	7
251	HOUSEHOLD FURNITURE	1.4	4.6	1.1	1.9	.6	105.9	2.6	(D)	9	12
252	OFFICE FURNITURE	.4	1.3	.3	.6	.2	30.6	.7	-	5	8
253	PUBLIC BLDG., RELATED FURNITURE	.1	.3	.1	.2	(Z)	6.2	.2	-	56	43
254	PARTITIONS AND FIXTURES	.8	2.1	.7	.9	(S)	43.6	1.2	-	14	12
259	MISC. FURNITURE AND FIXTURES	.4	1.3	.3	.6	.1	24.5	.7	-	8	7
26	PAPER AND ALLIED PRODUCTS	26.0	58.2	22.2	32.6	(Z)	1,108.4	25.5	142.7	4	5
262	PAPERMILLS, EXC. BUILDING PAPER	2.3	4.9	2.0	2.9	.2	91.3	2.0	(D)	1	1

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ILLINOIS--CON.										
26	PAPER AND ALLIED PRODUCTS--CON.										
263	PAPERBOARD MILLS	6.5	9.7	6.0	7.7	(D)	123.4	2.0	101.5	4	14
264	MISC. CONVERTED PAPER PRODUCTS	4.3	13.8	3.0	5.1	(D)	393.0	8.7	(D)	14	8
265	PAPERBOARD CONTAINERS AND BOXES	6.0	17.7	4.8	8.2	1.1	349.6	9.5	(D)	3	3
266	BUILDING PAPER AND BOARD MILLS	6.9	12.1	6.4	8.7	(D)	151.1	3.4	(D)	12	28
27	PRINTING AND PUBLISHING	11.5	42.0	8.1	14.0	3.0	1,002.2	28.0	(D)	4	3
271	NEWSPAPERS	1.0	4.6	.6	1.0	.3	135.7	3.5	(D)	23	10
272	PERIODICALS	.6	2.4	.3	.5	(D)	83.1	2.0	(Z)	13	3
273	BOOKS	.3	1.4	.2	.4	.1	30.5	1.0	-	12	14
275	COMMERCIAL PRINTING	7.8	25.6	6.0	10.4	1.7	553.7	15.2	(D)	4	4
276	MANIFOLD BUSINESS FORMS	.4	1.4	.2	.3	.1	39.4	1.1	-	7	17
278	BLANKBOOKS AND BOOKBINDING	.6	2.4	.5	.8	(D)	53.2	1.6	(S)	11	13
279	PRINTING TRADE SERVICES	.5	3.1	.2	.3	(S)	80.0	2.8	-	19	6
28	CHEMICALS, ALLIED PRODUCTS	94.4	173.9	83.2	105.5	(D)	3,288.2	68.4	(S)	7	2
281	INDUSTRIAL INORGANIC CHEMICALS	15.1	33.2	12.4	17.9	1.0	797.3	15.3	(D)	7	3
282	PLASTICS MATERIALS, SYNTHETICS	15.0	32.6	12.5	18.2	(Z)	739.1	14.3	(D)	1	1
283	DRUGS	4.6	12.0	3.7	6.2	(S)	262.8	5.9	-	5	4
284	SOAPS, CLEANERS, TOILET GOODS	7.1	16.3	6.1	9.8	.4	269.3	6.5	(D)	3	5
285	PAINTS AND ALLIED PRODUCTS	2.5	7.2	2.1	3.6	(D)	120.3	3.6	(Z)	8	8
286	INDUSTRIAL ORGANIC CHEMICALS	29.2	41.4	26.8	27.5	.8	693.7	13.9	(D)	1	1
287	AGRICULTURAL CHEMICALS	12.1	14.5	11.7	11.9	(S)	130.6	2.6	(D)	55	14
289	MISCELLANEOUS CHEMICAL PRODUCTS	8.8	16.8	7.9	10.5	(D)	275.2	6.2	(D)	5	9
29	PETROLEUM AND COAL PRODUCTS	25.6	67.3	17.3	23.4	(D)	2,405.0	43.9	(D)	1	1
291	PETROLEUM REFINING	18.6	54.5	10.7	13.6	(D)	2,291.9	40.9	(D)	1	1
295	PAVING AND ROOFING MATERIALS	5.2	9.1	4.9	6.9	1.7	85.4	2.2	(D)	3	5
299	MISC. PETROLEUM, COAL PRODUCTS	1.8	3.7	1.7	2.8	(D)	27.7	.8	-	3	5
30	RUBBER, MISC. PLASTICS PROD.	14.7	49.8	9.7	16.1	1.7	1,462.2	33.7	(D)	6	8
301	TIRES AND INNER TUBES	3.4	9.2	2.4	4.2	(Z)	272.5	5.0	-	1	1
306	FABRICATED RUBBER PRODUCTS, NEC	.8	2.5	.6	1.0	.4	42.8	1.5	(D)	14	12
307	MISCELLANEOUS PLASTICS PRODUCTS	9.6	35.4	6.0	9.8	1.3	1,069.2	25.6	(D)	9	10
31	LEATHER, LEATHER PRODUCTS	.7	2.4	.6	1.1	(D)	38.1	1.2	-	4	4
311	LEATHER TANNING AND FINISHING	.4	1.0	.3	.6	(D)	11.2	.4	-	1	1
32	STONE, CLAY, GLASS PRODUCTS	54.7	92.5	50.7	67.4	3.2	1,173.4	25.1	(D)	3	3
322	GLASS, PRESSED OR BLOWN	20.3	34.2	18.5	24.4	(S)	516.1	9.9	(S)	4	1
323	PRODUCTS OF PURCHASED GLASS	4.4	6.7	4.2	5.4	.4	57.1	1.3	(D)	2	27
324	CEMENT, HYDRAULIC	7.3	10.7	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	2.3	3.9	2.2	3.1	(D)	25.5	.7	-	26	21
326	POTTERY AND RELATED PRODUCTS	1.1	2.2	1.0	1.5	(D)	23.6	.8	-	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	12.4	19.9	12.2	17.9	(D)	75.5	2.1	-	5	13
329	MISC. NONMETALLIC MINERAL PRODS.	5.4	12.6	4.5	7.0	(S)	245.3	5.6	(D)	4	7
33	PRIMARY METAL INDUSTRIES	194.4	530.9	168.7	373.7	4.7	7,540.2	157.1	77.2	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	154.3	420.4	138.4	325.0	1.8	4,643.1	95.5	(D)	1	1
332	IRON AND STEEL FOUNDRIES	13.1	46.4	8.6	16.2	(D)	1,339.3	30.2	(D)	6	3
333	PRIMARY NONFERROUS METALS	2.3	7.0	1.1	2.0	(Z)	330.8	5.1	-	1	1
334	SECONDARY NONFERROUS METALS	4.1	8.3	3.8	6.0	.9	97.1	2.4	-	5	3
335	NONFERROUS ROLLING AND DRAWING	15.1	34.1	12.2	16.8	.1	853.7	17.3	(D)	2	3
336	NONFERROUS FOUNDRIES	3.1	8.5	2.6	4.3	(D)	153.9	4.2	(D)	14	12
339	MISC. PRIMARY METAL PRODUCTS	2.5	6.1	2.1	3.5	(D)	122.4	2.5	-	34	49
34	FABRICATED METAL PRODUCTS	41.7	114.5	33.7	55.6	1.6	2,351.5	58.9	(D)	3	4
341	METAL CANS, SHIPPING CONTAINERS	3.4	9.5	2.9	5.1	.2	163.3	4.4	(S)	2	4
342	CUTLERY, HANDTOOLS AND HARDWARE	3.0	8.6	2.3	3.7	(S)	193.1	4.8	-	13	12
344	FABRICATED STRUC. METAL PRODS.	4.1	13.0	3.0	5.2	(D)	316.1	7.8	(S)	9	7
345	SCREW MACHINE PROD., BOLTS, ETC.	4.3	12.6	3.2	5.1	.5	305.0	7.6	(D)	4	16
346	METAL FORGINGS AND STAMPINGS	13.3	33.0	11.4	18.5	(D)	576.1	14.4	3.2	6	4
347	METAL SERVICES, NEC	4.9	12.7	4.0	6.3	.5	263.5	6.4	(D)	14	18
349	MISC. FABRICATED METAL PRODUCTS	6.6	19.3	5.2	8.6	(D)	421.0	10.7	(D)	4	4
35	MACHINERY, EXCEPT ELECTRIC	42.5	124.3	32.3	48.9	3.9	2,990.8	75.5	(D)	2	2
351	ENGINES AND TURBINES	4.8	14.3	3.4	5.2	.1	407.2	9.1	-	1	2
352	FARM AND GARDEN MACHINERY	8.1	17.7	7.1	10.6	.3	296.0	7.1	(D)	2	2
353	CONSTRUCTION, RELATED MACHINERY	14.3	39.4	10.7	14.5	.3	1,049.1	24.9	(D)	1	1
354	METALWORKING MACHINERY	4.1	15.3	2.9	4.8	.9	374.7	10.5	.3	6	11
355	SPECIAL INDUSTRY MACHINERY	2.0	6.7	1.5	2.5	.4	145.9	4.1	-	8	8
356	GENERAL INDUSTRIAL MACHINERY	4.4	14.2	3.2	5.2	1.1	336.1	9.0	(D)	6	4
357	OFFICE AND COMPUTING MACHINES	.9	3.2	.7	1.2	.2	75.9	2.0	-	4	4
358	REFRIGERATION AND SERVICE MACH	2.0	6.2	1.6	2.7	.3	127.4	3.5	(D)	10	6
359	MISC. MACHINERY, EXC. ELEC	1.9	7.3	1.3	2.1	.4	178.5	5.2	(D)	9	14
36	ELECTRIC, ELECTRONIC EQUIP	22.6	66.3	17.3	27.7	2.6	1,553.3	38.6	(D)	2	2
361	ELECTRIC DISTRIBUTING EQUIPMENT	1.1	4.3	.7	1.4	(D)	107.2	3.0	-	4	5
362	ELECTRICAL INDUSTRIAL APPARATUS	1.1	3.9	.8	1.3	(S)	103.9	2.7	-	23	11
363	HOUSEHOLD APPLIANCES	5.8	14.8	4.9	8.0	(D)	274.5	6.8	(D)	1	1
364	ELEC. LIGHTING, WIRING EQUIP	2.7	9.6	1.9	3.3	(D)	242.6	6.3	(D)	4	5
365	RADIO, TV RECEIVING EQUIPMENT	1.7	5.7	1.2	2.1	.4	150.9	3.6	-	3	4
366	COMMUNICATION EQUIPMENT	6.3	14.2	5.4	7.6	(D)	266.9	6.6	(D)	1	2
367	ELECTRONIC COMPONENTS, ACCESS.	2.7	10.0	1.6	2.6	(D)	317.3	7.4	(D)	16	7
369	MISC. ELEC. EQUIPMENT, SUPPLIES	1.1	3.8	.8	1.4	.4	90.0	2.4	-	4	5

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ILLINOIS--CON.										
37	TRANSPORTATION EQUIPMENT	11.0	34.1	8.5	16.0	.7	739.9	18.1	(D)	1	3
371	MOTOR VEHICLES AND EQUIPMENT	6.4	19.7	4.9	9.3	(D)	415.3	10.4	(D)	1	3
372	AIRCRAFT AND PARTS	.7	2.6	.3	.6	(D)	98.1	2.1	-	12	12
374	RAILROAD EQUIPMENT	3.5	9.7	2.8	5.4	(D)	181.7	4.3	(D)	2	10
38	INSTRUMENTS, RELATED PRODS	4.9	16.8	3.6	6.1	(D)	392.8	10.8	-	3	3
381	ENGINEERING, SCIENTIFIC INSTRU	.2	.9	.1	.2	(D)	26.6	.7	-	8	12
382	MEASURING, CONTROLLING DEVICES	1.9	6.7	1.3	2.1	(D)	167.6	4.6	-	1	1
384	MEDICAL INSTRUMENTS, SUPPLIES	1.2	3.8	.9	1.6	(D)	76.2	2.2	-	7	5
385	OPHTHALMIC GOODS	.1	.3	(S)	(S)	(D)	6.4	.2	-	(X)	49
386	PHOTOGRAPHIC EQUIP., SUPPLIES	1.2	3.8	.9	1.4	.2	88.0	2.3	-	6	7
39	MISC. MANUFACTURING INDUS.	3.3	11.4	2.4	4.4	.3	246.5	7.1	(D)	7	8
393	MUSICAL INSTRUMENTS	.3	1.1	.2	.5	(D)	19.8	.7	-	1	1
394	TOYS AND SPORTING GOODS	1.3	4.1	1.0	1.6	(D)	96.2	2.5	-	11	17
395	PENS, OFFICE AND ART GOODS	.2	.9	.2	.3	(S)	19.7	.6	(D)	51	23
399	MISCELLANEOUS MANUFACTURES	1.2	4.5	.9	1.6	.3	95.8	2.8	(Z)	10	10
	MICHIGAN	622.7	1,686.9	526.9	951.5	44.4	28,092.5	735.4	2,769.0	1	1
20	FOOD AND KINDRED PRODUCTS	25.8	67.6	22.0	38.1	3.8	1,110.5	29.5	40.2	4	4
201	MEAT PRODUCTS	3.4	10.1	2.6	4.1	1.7	257.6	6.0	(S)	10	7
202	DAIRY PRODUCTS	2.9	8.5	2.3	3.9	(D)	176.9	4.5	-	13	8
203	PRESERVED FRUITS AND VEGETABLES	3.5	9.2	3.0	4.9	(D)	143.0	4.3	(D)	12	18
204	GRAIN MILL PRODUCTS	4.6	12.2	3.9	6.7	(D)	208.9	5.5	(D)	2	5
205	BAKERY PRODUCTS	2.5	6.6	2.2	3.6	1.1	106.9	3.0	-	11	10
207	FATS AND OILS	.6	1.6	.5	.9	(D)	29.7	.7	-	83	52
208	BEVERAGES	2.4	6.8	2.1	3.8	.6	103.5	3.1	(Z)	2	2
22	TEXTILE MILL PRODUCTS	1.0	3.0	.8	1.3	(D)	56.8	1.7	-	4	9
229	MISCELLANEOUS TEXTILE GOODS	.8	2.4	.6	1.0	(D)	48.9	1.4	-	1	1
23	APPAREL, OTH. TEXTILE PRODS	1.9	6.7	1.4	2.5	(D)	136.0	4.2	(Z)	8	7
232	MEN'S AND BOYS' FURNISHINGS	(Z)	.2	(Z)	(Z)	-	3.8	.1	-	69	20
238	MISC. APPAREL AND ACCESSORIES	.1	.2	.1	.1	(D)	(S)	(S)	-	42	(X)
239	MISC. FABRICATED TEXTILE PRODS	1.6	5.9	1.2	2.2	(D)	116.1	3.7	(Z)	5	5
24	LUMBER AND WOOD PRODUCTS	6.1	15.7	5.3	9.1	(D)	243.9	6.6	(D)	12	8
241	LOGGING CAMPS, LOG CONTRACTORS	.6	1.4	.6	1.3	(D)	1.3	(Z)	-	37	1
242	SAWMILLS AND PLANING MILLS	1.5	4.1	1.2	2.0	(S)	81.3	2.1	(S)	47	23
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.3	1.1	.3	.5	(D)	24.0	.6	(S)	14	19
244	WOOD CONTAINERS	(Z)	.4	(S)	(S)	(D)	14.3	.4	-	(X)	20
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.6	.2	.3	(D)	9.1	.3	(D)	22	19
249	MISCELLANEOUS WOOD PRODUCTS	3.5	8.2	3.1	5.0	.6	113.9	3.2	(D)	3	5
25	FURNITURE AND FIXTURES	3.8	11.2	3.1	4.9	(D)	208.7	6.3	(Z)	7	5
251	HOUSEHOLD FURNITURE	.8	2.5	.6	1.0	(D)	46.3	1.5	(Z)	8	6
252	OFFICE FURNITURE	1.2	3.3	1.0	1.4	(D)	66.5	1.9	-	3	3
253	PUBLIC BLDG., RELATED FURNITURE	.8	1.9	.7	1.0	(D)	28.6	.9	-	26	15
254	PARTITIONS AND FIXTURES	.7	2.2	.5	.9	(D)	44.7	1.4	-	19	17
259	MISC. FURNITURE AND FIXTURES	.5	1.2	.4	.6	(D)	22.6	.6	-	5	7
26	PAPER AND ALLIED PRODUCTS	55.1	107.2	51.0	76.2	1.5	1,198.0	31.1	1,190.8	2	2
262	PAPERMILLS, EXC. BUILDING PAPER	30.0	57.1	27.9	42.0	(D)	617.6	15.1	817.8	2	3
263	PAPERBOARD MILLS	19.9	36.1	18.7	26.9	(D)	338.6	9.2	(D)	3	4
264	MISC. CONVERTED PAPER PRODUCTS	2.3	6.1	1.9	3.1	.4	116.1	3.1	(D)	4	10
265	PAPERBOARD CONTAINERS AND BOXES	2.9	7.9	2.5	4.3	(D)	125.8	3.6	(D)	3	4
27	PRINTING AND PUBLISHING	3.5	14.1	2.3	4.1	.5	348.3	10.0	2.7	16	12
271	NEWSPAPERS	1.2	4.7	.7	1.4	(D)	126.2	3.4	(D)	5	18
273	BOOKS	.2	.7	.1	.2	(D)	22.5	.5	-	23	31
275	COMMERCIAL PRINTING	1.3	5.8	.8	1.5	(S)	133.0	4.4	(D)	40	23
276	MANIFOLD BUSINESS FORMS	.2	.6	.1	.2	.1	13.6	.5	(D)	1	1
278	BLANKBOOKS AND BOOKBINDING	.2	.6	.1	.2	(D)	8.3	.3	(S)	35	60
279	PRINTING TRADE SERVICES	.2	.6	.1	.2	.1	10.5	.4	-	57	67
28	CHEMICALS, ALLIED PRODUCTS	71.3	146.5	62.6	91.0	(D)	2,545.4	55.5	691.8	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	19.3	44.6	15.6	24.2	(D)	1,102.3	20.4	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	11.9	20.6	11.2	15.8	(S)	195.1	4.8	-	1	6
285	PAINTS AND ALLIED PRODUCTS	1.3	3.7	1.0	1.5	(D)	74.5	2.2	(S)	6	5
286	INDUSTRIAL ORGANIC CHEMICALS	26.4	51.0	23.8	33.5	.5	766.3	17.5	(D)	1	1
287	AGRICULTURAL CHEMICALS	.1	.6	.1	.1	(S)	17.8	.4	-	25	34
289	MISCELLANEOUS CHEMICAL PRODUCTS	7.0	11.6	6.7	9.3	(D)	88.4	2.3	(D)	8	12
29	PETROLEUM AND COAL PRODUCTS	7.2	17.0	6.0	8.3	(D)	348.7	8.6	-	2	1
291	PETROLEUM REFINING	5.0	12.9	4.0	5.4	(D)	309.0	7.5	-	1	1
295	PAVING AND ROOFING MATERIALS	1.9	3.2	1.8	2.5	(D)	24.3	.7	-	6	8
299	MISC. PETROLEUM, COAL PRODUCTS	.3	.9	.2	.5	(D)	15.4	.5	-	15	12
30	RUBBER, MISC. PLASTICS PROD.	9.8	34.6	7.0	11.7	2.7	799.8	22.9	(D)	6	10
307	MISCELLANEOUS PLASTICS PRODUCTS	6.2	23.9	4.2	7.2	2.1	589.3	16.8	(D)	10	14
31	LEATHER, LEATHER PRODUCTS	.9	2.1	.7	1.0	(D)	37.3	1.1	(S)	2	5
311	LEATHER TANNING AND FINISHING	.7	1.6	(D)	(D)	(D)	(D)	(D)	(S)	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER	.1	.4	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MICHIGAN--CON.										
32	STONE, CLAY, GLASS PRODUCTS	57.9	96.7	54.4	69.7	4.0	1,015.0	26.9	(D)	2	2
323	PRODUCTS OF PURCHASED GLASS	1.6	4.2	1.3	2.3	.2	65.0	2.0	-	1	4
324	CEMENT, HYDRAULIC	30.3	41.0	28.9	31.0	(Z)	409.3	10.1	(D)	1	2
326	POTTERY AND RELATED PRODUCTS	.7	1.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	9.8	17.1	9.3	13.5	2.8	124.4	3.6	(D)	9	9
329	MISC. NONMETALLIC MINERAL PRODS.	7.3	15.5	6.6	9.9	(D)	202.8	5.6	(S)	7	2
33	PRIMARY METAL INDUSTRIES	179.9	545.9	156.8	378.1	11.3	6,763.0	167.9	(D)	1	1
331	BLAST FURNACE, BASIC STEEL PROD.	123.3	342.8	112.9	267.6	(D)	3,059.1	75.1	(D)	1	1
332	IRON AND STEEL FOUNDRIES	37.7	152.8	28.4	84.7	(D)	2,730.3	68.1	(S)	1	1
335	NONFERROUS ROLLING AND DRAWING	5.0	15.8	3.8	5.9	.2	341.7	9.9	(D)	1	2
336	NONFERROUS FOUNDRIES	4.1	10.6	3.5	5.5	1.4	196.5	5.1	-	7	11
339	MISC. PRIMARY METAL PRODUCTS	5.8	13.9	4.9	8.6	(D)	256.8	5.3	(S)	20	29
34	FABRICATED METAL PRODUCTS	42.6	132.1	33.2	55.3	7.8	2,758.0	76.7	(D)	5	6
342	CUTLERY, HANDTOOLS AND HARDWARE	4.6	13.6	3.6	5.2	.5	294.5	8.4	-	6	3
343	PLUMBING, HEATING, EXCEPT ELEC	.6	1.4	.5	.8	(D)	24.5	.6	-	22	18
344	FABRICATED STRUC. METAL PRODS.	2.4	5.7	2.1	3.6	(D)	79.7	2.1	(D)	13	17
345	SCREW MACHINE PROD., BOLTS, ETC.	2.5	9.1	1.9	3.3	.8	178.8	5.8	(D)	8	10
346	METAL FORGINGS AND STAMPINGS	22.8	74.6	17.4	30.5	(D)	1,596.0	44.0	(S)	7	10
347	METAL SERVICES, NEC.	4.6	13.0	3.8	6.2	(D)	223.3	6.8	(S)	17	12
349	MISC. FABRICATED METAL PRODUCTS.	3.8	12.2	3.0	5.0	1.3	242.7	7.2	(D)	11	7
35	MACHINERY, EXCEPT ELECTRIC	26.0	89.3	19.4	33.2	(D)	1,931.9	56.1	(S)	3	4
351	ENGINES AND TURBINES	3.3	10.8	2.5	3.7	(D)	246.1	7.0	-	1	1
352	FARM AND GARDEN MACHINERY	1.5	4.9	1.2	2.4	(D)	93.1	2.6	-	5	5
353	CONSTRUCTION, RELATED MACHINERY.	3.4	9.1	2.8	4.3	(S)	169.7	4.7	-	4	5
354	METALWORKING MACHINERY	7.6	27.6	5.5	10.0	2.6	620.9	17.6	(S)	8	7
355	SPECIAL INDUSTRY MACHINERY	1.0	3.6	.8	1.4	(D)	70.6	2.2	-	6	5
356	GENERAL INDUSTRIAL MACHINERY	2.8	10.3	2.2	3.8	.8	195.0	6.5	-	5	5
357	OFFICE AND COMPUTING MACHINES.	.5	2.1	.3	.6	(Z)	47.9	1.5	-	1	1
358	REFRIGERATION AND SERVICE MACH	2.4	7.3	1.9	3.1	(D)	144.6	4.2	-	7	7
359	MISC. MACHINERY, EXC. ELEC	3.4	13.6	2.2	3.8	.8	344.0	9.8	(D)	13	13
36	ELECTRIC, ELECTRONIC EQUIP	6.1	19.6	4.5	7.4	.6	453.0	12.3	(S)	3	3
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.2	.6	.2	.3	(D)	9.3	.3	-	21	16
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.2	4.1	1.0	1.6	(D)	77.7	2.4	-	9	11
363	HOUSEHOLD APPLIANCES	1.9	5.3	1.6	2.5	(D)	98.1	2.7	(Z)	3	5
364	ELEC. LIGHTING, WIRING EQUIP	.2	.9	.2	.3	(D)	20.2	.6	-	23	12
365	RADIO, TV RECEIVING EQUIPMENT.	.2	.5	.1	.2	(D)	9.2	.3	-	1	1
366	COMMUNICATION EQUIPMENT.	.2	.7	.1	.2	(D)	14.2	.4	-	11	15
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	2.0	7.2	1.3	2.1	.2	214.9	5.2	(S)	4	4
37	TRANSPORTATION EQUIPMENT	121.3	368.1	94.2	156.3	1.2	7,936.2	211.8	(S)	1	1
371	MOTOR VEHICLES AND EQUIPMENT	118.8	360.8	92.2	152.8	(D)	7,806.0	208.0	(S)	1	1
372	AIRCRAFT AND PARTS	.4	1.5	.3	.5	(D)	32.8	1.0	(Z)	22	32
373	SHIP, BOAT BUILDING, REPAIRING	.2	.4	.1	.3	(Z)	10.5	.2	-	66	40
379	TRANSPORTATION EQUIPMENT, NEC.	1.1	2.9	1.0	1.7	.3	38.4	1.2	-	21	15
38	INSTRUMENTS, RELATED PRODS	1.2	4.9	.9	1.5	(D)	112.9	3.4	.1	9	10
381	ENGINEERING, SCIENTIFIC INSTRU	.4	1.8	.3	.6	(D)	39.8	1.2	.1	2	10
382	MEASURING, CONTROLLING DEVICES	.2	1.1	.1	.3	(Z)	25.6	.8	-	26	25
384	MEDICAL INSTRUMENTS, SUPPLIES.	.1	.7	.1	.1	(D)	19.1	.6	-	56	19
39	MISC. MANUFACTURING INDUS.	1.4	4.6	1.1	1.9	.4	89.0	2.7	(D)	8	8
391	JEWELRY, SILVER AND PLATED WARE.	(Z)	(Z)	(S)	(S)	(Z)	.6	(Z)	-	(X)	89
394	TOYS AND SPORTING GOODS.	.7	2.4	.5	.8	.1	54.0	1.6	(Z)	9	6
399	MISCELLANEOUS MANUFACTURES	.4	1.5	.4	.6	(D)	24.9	.8	-	19	25
	WISCONSIN	252.4	599.1	213.0	326.6	21.7	11,524.0	272.6	1,757.6	1	1
20	FOOD AND KINDRED PRODUCTS	41.0	94.1	35.7	57.5	(D)	1,525.2	36.6	134.1	3	3
201	MEAT PRODUCTS	4.6	11.3	3.8	6.0	(D)	209.4	5.3	(D)	7	11
202	DAIRY PRODUCTS	15.1	34.2	13.5	22.4	2.3	462.6	11.8	(S)	4	5
203	PRESERVED FRUITS AND VEGETABLES.	4.5	10.8	4.0	6.3	(D)	162.3	4.4	-	4	3
204	GRAIN MILL PRODUCTS	1.9	4.8	1.5	2.3	.4	94.2	2.5	(Z)	3	4
205	BAKERY PRODUCTS	1.1	2.7	1.0	1.6	.2	51.9	1.1	-	18	28
208	BEVERAGES	11.3	24.2	9.8	15.1	(D)	437.3	9.1	(D)	6	5
209	MISC. FOODS, KINDRED PRODUCTS.	1.4	3.2	1.2	2.3	(S)	43.8	.9	(D)	21	21
22	TEXTILE MILL PRODUCTS	1.1	3.0	.8	1.3	(D)	67.8	1.7	-	4	4
225	KNITTING MILLS	.4	1.1	.3	.4	.1	26.5	.7	-	6	5
23	APPAREL, OTH. TEXTILE PRODS.	.5	1.6	.3	.6	(D)	35.5	1.0	(S)	7	28
232	MEN'S AND BOYS' FURNISHINGS.	.1	.2	(Z)	.1	(D)	4.1	.2	-	1	1
239	MISC. FABRICATED TEXTILE PRODS	.2	.5	.1	.3	.1	8.1	.3	(S)	13	19
24	LUMBER AND WOOD PRODUCTS	4.3	13.6	3.4	6.1	1.0	265.9	7.5	(D)	12	9
241	LOGGING CAMPS, LOG CONTRACTORS	.3	.8	.3	.7	(D)	1.9	.1	-	52	1
242	SAWMILLS AND PLANING MILLS	.5	2.2	.3	.7	(D)	52.9	1.4	-	70	26
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.5	4.4	1.3	2.1	.1	77.0	2.4	-	11	14
244	WOOD CONTAINERS	.2	.6	.2	.3	(D)	5.9	.3	(D)	37	63
245	WOOD BUILDINGS AND MOBILE HOMES.	.3	.9	.2	.4	(D)	17.1	.5	-	7	9
249	MISCELLANEOUS WOOD PRODUCTS.	1.4	4.6	1.1	1.8	.7	111.0	2.8	-	5	11
25	FURNITURE AND FIXTURES	1.4	4.1	1.2	2.0	(D)	79.0	2.2	(D)	13	7

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	WISCONSIN--CON.										
25	FURNITURE AND FIXTURES--CON.										
251	HOUSEHOLD FURNITURE.	.9	2.5	.8	1.3	(Z)	45.8	1.2	(D)	18	9
253	PUBLIC BLDG., RELATED FURNITURE.	.2	.5	.1	.2	(D)	10.3	.3	-	26	29
259	MISC. FURNITURE AND FIXTURES	.2	.6	.1	.2	(D)	12.8	.4	-	4	4
26	PAPER AND ALLIED PRODUCTS.	99.4	189.5	88.9	123.6	(D)	3,101.1	65.9	1,624.2	1	1
262	PAPERMILLS, EXC. BUILDING PAPER.	77.9	147.2	70.0	98.8	.6	2,312.7	48.4	1,328.0	1	1
264	MISC. CONVERTED PAPER PRODUCTS	3.8	10.9	2.9	4.8	(D)	281.6	6.1	(D)	2	2
265	PAPERBOARD CONTAINERS AND BOXES.	1.8	5.0	1.4	2.3	.3	103.2	2.7	-	4	4
27	PRINTING AND PUBLISHING.	3.1	10.4	2.2	3.6	(D)	268.7	6.8	(S)	8	8
271	NEWSPAPERS	.5	1.8	.3	.5	(D)	48.3	1.3	(D)	18	18
273	BOOKS.	.6	2.0	.4	.6	(S)	60.0	1.4	-	1	1
275	COMMERCIAL PRINTING.	1.7	5.4	1.2	2.0	(D)	133.5	3.4	(S)	10	12
276	MANIFOLD BUSINESS FORMS.	.2	.7	.1	.2	(S)	16.0	.5	-	47	38
278	BLANKBOOKS AND BOOKBINDING	.1	.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
279	PRINTING TRADE SERVICES.	(Z)	.1	(D)	(D)	(D)	(D)	(D)	(S)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	6.0	17.0	4.6	7.9	(S)	406.7	9.1	(D)	22	3
282	PLASTICS MATERIALS, SYNTHETICS	.6	1.5	.5	.8	(D)	31.5	.8	-	1	1
283	DRUGS.	.2	.6	.2	.2	(D)	13.0	.4	-	19	20
284	SOAPS, CLEANERS, TOILET GOODS.	1.4	3.3	1.1	1.8	(D)	66.7	1.5	-	4	1
286	INDUSTRIAL ORGANIC CHEMICALS	.4	1.0	.4	.6	(D)	15.8	.4	(S)	10	22
289	MISCELLANEOUS CHEMICAL PRODUCTS.	1.6	3.9	1.5	3.1	(S)	29.8	.8	(D)	54	24
30	RUBBER, MISC. PLASTICS PROD.	4.3	14.3	2.9	4.7	(D)	393.6	9.6	-	6	9
306	FABRICATED RUBBER PRODUCTS, NEC.	.2	.7	.2	.3	(D)	20.2	.5	-	37	34
307	MISCELLANEOUS PLASTICS PRODUCTS.	2.6	10.1	1.5	2.5	(D)	301.6	7.7	-	10	11
31	LEATHER, LEATHER PRODUCTS.	2.6	7.0	2.2	3.8	.6	111.5	3.2	(D)	9	6
311	LEATHER TANNING AND FINISHING.	2.1	5.0	1.9	3.1	.3	66.3	1.9	(D)	10	9
314	FOOTWEAR, EXCEPT RUBBER.	.3	1.3	.2	.4	.1	29.7	.9	(Z)	3	4
32	STONE, CLAY, GLASS PRODUCTS.	7.8	15.7	7.3	11.1	4.4	174.0	4.6	(D)	10	6
326	POTTERY AND RELATED PRODUCTS	.6	1.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	4.5	8.9	4.2	7.2	4.0	61.3	1.7	-	15	13
329	MISC. NONMETALLIC MINERAL PRODS.	1.2	2.7	1.1	1.7	(D)	35.5	1.0	-	6	9
33	PRIMARY METAL INDUSTRIES	18.5	58.3	14.3	28.6	(S)	1,221.5	29.7	(D)	4	4
331	BLAST FURNACE, BASIC STEEL PROD.	2.3	4.8	2.0	2.8	(D)	86.8	2.0	(D)	4	4
332	IRON AND STEEL FOUNDRIES	10.9	39.8	8.0	18.9	1.9	864.0	20.9	-	1	2
335	NONFERROUS ROLLING AND DRAWING	1.3	3.9	1.0	1.8	.1	95.0	2.2	(S)	2	1
336	NONFERROUS FOUNDRIES	2.5	6.1	2.1	3.0	(D)	112.2	3.1	-	39	31
34	FABRICATED METAL PRODUCTS.	18.0	43.9	15.1	23.1	.9	847.3	20.9	(D)	4	4
341	METAL CANS, SHIPPING CONTAINERS.	2.4	5.6	1.8	2.7	(Z)	163.1	2.9	-	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE.	.8	2.5	.6	.9	(D)	60.1	1.6	-	1	1
343	PLUMBING, HEATING, EXCEPT ELEC	1.5	4.6	1.1	1.8	(D)	102.0	2.8	(D)	3	4
344	FABRICATED STRUC. METAL PRODS.	2.0	5.6	1.6	2.6	.6	114.5	3.0	-	9	13
346	METAL FORGINGS AND STAMPINGS	8.6	17.4	7.9	11.2	(Z)	225.9	6.2	(S)	2	5
347	METAL SERVICES, NEC.	.8	2.2	.7	1.3	(D)	31.1	1.0	-	47	36
349	MISC. FABRICATED METAL PRODUCTS.	.9	3.0	.7	1.2	(D)	66.9	1.8	-	29	24
35	MACHINERY, EXCEPT ELECTRIC	21.1	61.8	16.2	25.8	2.9	1,435.9	36.1	(S)	2	1
351	ENGINES AND TURBINES	5.9	16.4	4.7	7.6	(D)	345.1	8.8	(D)	1	1
352	FARM AND GARDEN MACHINERY.	2.9	7.7	2.2	3.8	(D)	201.5	3.9	(S)	4	4
353	CONSTRUCTION, RELATED MACHINERY.	4.4	12.0	3.5	5.3	.7	270.1	6.6	(D)	3	4
354	METALWORKING MACHINERY	1.0	3.9	.7	1.0	.3	106.3	2.8	-	19	11
355	SPECIAL INDUSTRY MACHINERY	1.7	5.7	1.2	2.0	(D)	132.2	3.7	(S)	5	3
356	GENERAL INDUSTRIAL MACHINERY	2.7	8.0	2.0	2.9	(D)	198.8	5.1	(S)	6	9
358	REFRIGERATION AND SERVICE MACH	1.6	4.1	1.3	2.0	(D)	82.0	2.1	-	4	5
36	ELECTRIC, ELECTRONIC EQUIP	8.5	25.3	6.2	9.9	1.3	665.3	15.4	(D)	1	4
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.8	2.6	.6	1.0	(D)	58.7	1.6	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	4.3	12.0	3.3	4.9	.3	306.4	7.1	(D)	1	3
363	HOUSEHOLD APPLIANCES	1.8	5.5	1.3	2.3	(D)	128.7	3.2	(D)	3	2
364	ELEC. LIGHTING, WIRING EQUIP	.3	1.1	(D)	(D)	.1	(D)	(D)	-	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	.1	.3	.1	.1	(Z)	9.2	.1	-	1	44
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	1.0	3.4	.6	1.0	(D)	109.4	2.4	-	4	20
37	TRANSPORTATION EQUIPMENT	10.7	27.0	8.6	12.3	.2	630.6	14.8	(D)	1	2
371	MOTOR VEHICLES AND EQUIPMENT	9.9	24.0	8.0	11.2	(D)	558.9	12.8	(D)	1	1
373	SHIP, BOAT BUILDING, REPAIRING	.3	1.5	.2	.5	(D)	34.3	1.0	-	22	28
379	TRANSPORTATION EQUIPMENT, NEC.	.1	.4	.1	.1	(D)	9.5	.2	-	21	12
38	INSTRUMENTS, RELATED PRODS	1.2	4.0	.8	1.3	(D)	110.8	2.7	(Z)	4	14
382	MEASURING, CONTROLLING DEVICES	.2	.8	.1	.1	(D)	38.3	.7	-	7	4
386	PHOTOGRAPHIC EQUIP., SUPPLIES.	.1	.3	.1	.2	(D)	2.8	.1	-	23	53
39	MISC. MANUFACTURING INDUS.	1.6	5.1	1.2	2.2	.7	102.0	2.9	-	9	9
394	TOYS AND SPORTING GOODS.	.3	.9	.2	.4	(D)	19.2	.6	-	25	8
399	MISCELLANEOUS MANUFACTURES	1.2	3.5	.9	1.6	(D)	61.9	1.8	-	10	14
	MINNESOTA.	138.3	304.0	116.8	163.2	5.6	6,286.8	140.8	455.9	3	3
20	FOOD AND KINDRED PRODUCTS.	42.6	73.2	38.5	45.0	(S)	1,187.7	28.1	105.3	6	4
201	MEAT PRODUCTS.	6.2	13.1	5.4	7.9	.2	223.8	5.2	(D)	2	4
202	DAIRY PRODUCTS	10.3	21.5	9.2	14.4	(D)	307.8	7.1	(S)	17	11
203	PRESERVED FRUITS AND VEGETABLES.	2.5	5.8	2.1	3.0	(D)	102.5	2.8	-	12	5

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MINNESOTA--CON.										
20	FOOD AND KINDRED PRODUCTS--CON.										
204	GRAIN MILL PRODUCTS	1.7	6.0	1.0	1.4	.3	190.6	4.6	-	10	3
205	BAKERY PRODUCTS	.7	1.5	.5	.8	.2	33.3	.7	(S)	26	26
206	SUGAR, CONFECTIONERY PRODUCTS	11.3	6.2	11.2	5.4	(D)	26.7	.7	(D)	3	21
207	FATS AND OILS	4.8	9.6	4.2	5.7	(D)	173.8	3.9	-	1	3
208	BEVERAGES	4.5	7.6	4.2	5.6	(D)	87.4	2.0	(D)	5	18
209	MISC. FOODS, KINDRED PRODUCTS	.7	1.9	.5	.8	(D)	41.8	1.1	-	5	6
22	TEXTILE MILL PRODUCTS	.5	1.5	.5	.7	(D)	28.5	.8	-	27	15
24	LUMBER AND WOOD PRODUCTS	6.3	16.0	5.1	9.3	.3	357.3	6.6	-	11	8
242	SAWMILLS AND PLANING MILLS	.3	1.0	(S)	(S)	(D)	20.1	.6	-	(X)	78
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.5	1.9	.3	.5	(D)	52.2	1.3	-	14	7
244	WOOD CONTAINERS	.1	.3	(S)	(S)	(S)	5.6	.1	-	(X)	40
249	MISCELLANEOUS WOOD PRODUCTS	4.8	11.2	3.9	6.9	(D)	269.3	4.4	-	10	5
25	FURNITURE AND FIXTURES	.4	1.2	.3	.5	(D)	39.1	.8	-	19	16
254	PARTITIONS AND FIXTURES	.1	.4	.1	.1	(D)	14.4	.3	-	31	20
26	PAPER AND ALLIED PRODUCTS	25.4	50.4	22.2	31.9	1.1	935.8	18.5	337.4	1	5
262	PAPERMILLS, EXC. BUILDING PAPER	18.3	36.5	15.8	23.3	(D)	730.2	13.3	(D)	1	1
265	PAPERBOARD CONTAINERS AND BOXES	.8	2.4	.7	1.0	(D)	49.6	1.4	-	1	1
27	PRINTING AND PUBLISHING	2.5	8.5	1.7	2.6	.8	231.2	5.9	(D)	11	7
271	NEWSPAPERS	.6	1.8	.4	.6	(D)	50.9	1.2	-	44	21
275	COMMERCIAL PRINTING	1.5	5.0	1.1	1.6	(D)	130.1	3.4	(D)	8	8
279	PRINTING TRADE SERVICES	.1	.2	(Z)	.1	(Z)	5.2	.1	(Z)	19	45
28	CHEMICALS, ALLIED PRODUCTS	5.0	9.9	4.3	5.2	.7	224.1	4.7	(D)	11	6
284	SOAPS, CLEANERS, TOILET GOODS	.3	1.1	.2	.4	(D)	23.5	.6	-	19	6
285	PAINTS AND ALLIED PRODUCTS	.1	.3	.1	.2	(D)	7.5	.2	-	1	1
29	PETROLEUM AND COAL PRODUCTS	17.0	31.3	15.6	24.0	(D)	406.5	7.3	(Z)	2	1
30	RUBBER, MISC. PLASTICS PROD.	2.0	8.7	.9	1.4	(S)	319.4	7.3	-	11	23
307	MISCELLANEOUS PLASTICS PRODUCTS	1.8	8.1	.8	1.2	.7	303.8	6.9	-	5	24
31	LEATHER, LEATHER PRODUCTS	.4	.9	.3	.5	(D)	16.5	.4	-	2	2
32	STONE, CLAY, GLASS PRODUCTS	8.7	18.0	7.6	11.3	(S)	313.7	6.7	(S)	31	15
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.7	5.0	1.5	3.5	(S)	52.7	1.5	(D)	62	47
329	MISC. NONMETALLIC MINERAL PRODS.	4.3	8.6	3.8	5.7	(S)	138.9	2.9	-	11	6
33	PRIMARY METAL INDUSTRIES	6.5	18.6	4.7	6.9	(D)	543.7	11.6	(D)	21	13
332	IRON AND STEEL FOUNDRIES	1.1	4.9	.7	1.9	(D)	105.8	3.0	-	55	8
336	NONFERROUS FOUNDRIES	1.4	2.5	1.2	1.4	(D)	47.8	1.2	(D)	32	31
34	FABRICATED METAL PRODUCTS	6.5	18.1	5.1	8.0	(S)	411.2	10.2	(S)	9	7
341	METAL CANS, SHIPPING CONTAINERS	.8	2.0	.7	1.1	(D)	34.8	.9	(Z)	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE	.6	1.7	.4	.8	.2	34.4	1.0	-	4	5
344	FABRICATED STRUC. METAL PRODS.	1.0	3.3	.8	1.4	.2	69.3	1.9	-	22	10
346	METAL FORGINGS AND STAMPINGS	.6	1.7	.4	.7	(D)	36.2	1.1	(S)	9	19
348	ORDNANCE AND ACCESSORIES, NEC	2.3	6.3	1.8	2.9	(D)	151.6	3.4	(S)	5	2
349	MISC. FABRICATED METAL PRODUCTS	.5	1.6	.4	.6	(D)	41.2	1.0	-	40	18
35	MACHINERY, EXCEPT ELECTRIC	7.7	25.0	5.4	8.3	1.5	689.4	16.7	(S)	6	4
352	FARM AND GARDEN MACHINERY	.7	1.9	.6	.9	.3	35.9	1.0	-	20	18
353	CONSTRUCTION, RELATED MACHINERY	1.6	3.9	1.3	2.0	(D)	76.4	1.9	(Z)	4	8
354	METALWORKING MACHINERY	.5	1.7	.4	.6	(D)	49.5	1.2	(S)	20	12
356	GENERAL INDUSTRIAL MACHINERY	.6	2.3	.4	.7	(Z)	54.6	1.6	-	13	10
357	OFFICE AND COMPUTING MACHINES	2.0	7.6	1.0	1.4	(D)	292.8	6.2	-	1	1
358	REFRIGERATION AND SERVICE MACH	1.2	3.4	1.0	1.6	(D)	69.6	1.9	-	15	10
359	MISC. MACHINERY, EXC. ELEC	.8	3.0	.5	.8	.2	83.9	2.2	(S)	40	21
36	ELECTRIC, ELECTRONIC EQUIP	3.0	9.9	2.2	3.5	(D)	242.5	6.4	(S)	6	5
362	ELECTRICAL INDUSTRIAL APPARATUS	.7	2.2	.6	1.0	(D)	44.3	1.2	-	4	7
364	ELEC. LIGHTING, WIRING EQUIP	.3	1.2	.3	.5	.2	26.2	.7	(S)	36	23
366	COMMUNICATION EQUIPMENT	.3	.9	.2	.2	(D)	25.4	.7	-	30	30
367	ELECTRONIC COMPONENTS, ACCESS.	.4	1.7	.2	.3	.2	56.4	1.5	(Z)	13	7
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.5	1.5	.4	.6	(D)	38.7	1.0	(S)	2	2
37	TRANSPORTATION EQUIPMENT	1.6	4.2	1.3	2.1	.4	75.7	2.1	(D)	3	7
371	MOTOR VEHICLES AND EQUIPMENT	1.0	2.5	.9	1.4	.1	35.3	1.0	(D)	4	15
373	SHIP, BOAT BUILDING, REPAIRING	.2	.6	.2	.3	(D)	11.6	.3	-	1	1
38	INSTRUMENTS, RELATED PRODS	1.1	4.3	.7	1.1	(D)	125.6	3.2	-	1	1
39	MISC. MANUFACTURING INDUS.	.8	2.6	.6	.8	.1	68.4	1.7	-	10	6
394	TOYS AND SPORTING GOODS	.6	1.8	.4	.6	(D)	48.2	1.2	-	9	7
399	MISCELLANEOUS MANUFACTURES	.2	.6	.1	.2	(D)	15.9	.4	-	28	10
	IOWA	175.7	330.7	154.1	191.1	6.6	6,330.6	139.6	502.2	2	2
20	FOOD AND KINDRED PRODUCTS	62.0	110.0	55.9	68.4	4.0	1,786.9	41.6	232.0	1	1
201	MEAT PRODUCTS	12.7	26.0	10.9	14.2	(D)	528.5	11.8	(D)	2	2
202	DAIRY PRODUCTS	3.5	7.5	3.0	4.4	.6	125.9	3.1	(S)	9	9
204	GRAIN MILL PRODUCTS	36.8	57.7	34.0	38.5	(D)	836.6	19.2	(D)	1	1
205	BAKERY PRODUCTS	.5	1.3	.4	.6	(D)	23.1	.6	-	21	24

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	IOWA--CON.										
20	FOOD AND KINDRED PRODUCTS--CON.										
207	FATS AND OILS	6.0	12.4	5.4	7.5	(D)	196.0	4.9	-	4	4
208	BEVERAGES	1.2	2.2	1.2	1.8	(D)	16.7	.5	-	6	15
23	APPAREL, OTH. TEXTILE PRODS.	.2	.6	.1	.2	.1	16.3	.4	-	24	28
232	MEN'S AND BOYS' FURNISHINGS	(Z)	(Z)	(Z)	(Z)	(Z)	.5	(Z)	-	1	1
24	LUMBER AND WOOD PRODUCTS	.8	2.0	.6	1.0	.4	46.2	1.0	-	16	7
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.3	1.0	.3	.4	(D)	24.2	.6	-	6	6
245	WOOD BUILDINGS AND MOBILE HOMES.	.2	.3	.2	.2	(D)	4.5	.1	-	41	29
25	FURNITURE AND FIXTURES	.5	1.2	.4	.6	(Z)	21.6	.6	-	11	13
251	HOUSEHOLD FURNITURE	.2	.4	.1	.2	(Z)	6.6	.2	-	22	27
26	PAPER AND ALLIED PRODUCTS	3.6	7.4	3.1	3.8	(D)	155.1	3.5	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.2	2.7	1.0	1.3	(D)	58.2	1.4	(D)	1	1
265	PAPERBOARD CONTAINERS AND BOXES.	.6	1.8	.5	.7	(D)	40.5	1.1	-	1	1
27	PRINTING AND PUBLISHING	1.7	5.3	1.2	1.5	(D)	154.8	3.8	(S)	18	12
271	NEWSPAPERS	.3	1.2	.1	.2	(D)	39.3	1.0	(S)	17	25
275	COMMERCIAL PRINTING	.5	1.3	.3	.4	(D)	37.4	.9	-	58	39
276	MANIFOLD BUSINESS FORMS	.1	.4	.1	.1	.1	10.7	.3	-	1	1
28	CHEMICALS, ALLIED PRODUCTS	30.9	49.5	27.5	32.2	(S)	973.4	17.3	-	1	2
283	DRUGS	.5	1.1	.4	.6	(Z)	20.9	.5	-	3	40
284	SOAPS, CLEANERS, TOILET GOODS	.3	.8	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
287	AGRICULTURAL CHEMICALS	21.1	29.6	19.7	22.3	.2	417.3	7.2	-	1	2
30	RUBBER, MISC. PLASTICS PROD.	8.4	17.3	7.0	8.6	.8	414.6	8.7	(D)	5	10
307	MISCELLANEOUS PLASTICS PRODUCTS.	4.7	9.1	4.0	4.8	.8	208.9	4.3	(D)	8	20
31	LEATHER, LEATHER PRODUCTS.	.3	.5	.2	.2	(D)	13.8	.3	-	50	59
32	STONE, CLAY, GLASS PRODUCTS.	28.8	37.9	27.2	28.3	(D)	473.2	9.6	(D)	7	3
324	CEMENT, HYDRAULIC	19.5	24.3	18.3	17.7	(Z)	338.9	6.6	(D)	1	1
325	STRUCTURAL CLAY PRODUCTS	3.1	3.2	3.1	2.8	(D)	11.7	.4	-	63	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	5.8	9.5	5.5	7.3	(D)	107.8	2.2	-	9	11
33	PRIMARY METAL INDUSTRIES	10.5	25.0	8.3	13.6	(S)	643.1	11.5	-	8	12
332	IRON AND STEEL FOUNDRIES	2.2	8.3	1.8	4.9	(S)	116.3	3.4	-	22	34
34	FABRICATED METAL PRODUCTS.	4.2	11.8	3.4	5.2	(D)	254.7	6.6	-	5	9
342	CUTLERY, HANDTOOLS AND HARDWARE.	.2	.6	.1	.2	(D)	12.9	.4	-	1	1
343	PLUMBING, HEATING, EXCEPT ELEC	.1	.2	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	1.0	3.0	.7	1.2	.4	73.8	1.8	-	18	7
345	SCREW MACHINE PROD., BOLTS, ETC.	.1	.2	(Z)	.1	(Z)	3.7	.1	-	44	53
349	MISC. FABRICATED METAL PRODUCTS.	1.0	3.8	.6	.9	(D)	114.0	2.9	-	6	7
35	MACHINERY, EXCEPT ELECTRIC	17.4	41.9	14.4	20.4	(D)	869.9	21.5	(D)	2	2
351	ENGINES AND TURBINES	.4	1.9	.2	.3	(D)	56.5	1.7	-	1	1
352	FARM AND GARDEN MACHINERY	9.9	22.5	8.4	12.2	.6	433.7	10.3	(D)	3	3
353	CONSTRUCTION, RELATED MACHINERY.	5.5	11.6	4.7	6.1	(Z)	230.8	5.5	(D)	1	2
354	METALWORKING MACHINERY	.2	.9	.2	.2	(D)	21.2	.6	(Z)	17	17
355	SPECIAL INDUSTRY MACHINERY	.2	.8	.1	.2	(D)	21.9	.6	-	19	19
356	GENERAL INDUSTRIAL MACHINERY	.5	1.8	.3	.4	(D)	54.1	1.4	-	4	9
358	REFRIGERATION AND SERVICE MACH	.4	1.4	.3	.5	(D)	28.5	.9	-	1	3
359	MISC. MACHINERY, EXC. ELEC	.3	.9	.2	.3	(D)	22.3	.6	-	95	53
36	ELECTRIC, ELECTRONIC EQUIP	3.7	11.5	2.6	3.7	.1	313.4	7.9	(D)	4	2
363	HOUSEHOLD APPLIANCES	2.2	5.9	1.7	2.4	(D)	148.9	3.5	(Z)	1	1
367	ELECTRONIC COMPONENTS, ACCESS.	.2	.7	.1	.1	(Z)	19.3	.6	-	1	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.3	1.1	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.5	4.4	1.2	2.0	(D)	80.2	2.4	-	7	6
371	MOTOR VEHICLES AND EQUIPMENT	1.4	4.1	1.2	1.9	(D)	72.8	2.2	-	7	6
38	INSTRUMENTS, RELATED PRODS	.3	1.0	.2	.3	(Z)	25.4	.7	-	30	13
39	MISC. MANUFACTURING INDUS.	.8	2.5	.5	.6	(D)	75.5	1.9	-	23	9
394	TOYS AND SPORTING GOODS	.4	1.3	.3	.4	(S)	32.5	.9	-	39	9
399	MISCELLANEOUS MANUFACTURES	.2	.5	.1	.1	(D)	20.4	.4	-	36	29
	MISSOURI	188.8	395.3	154.9	202.7	16.9	9,944.4	192.7	392.4	2	2
20	FOOD AND KINDRED PRODUCTS	24.8	54.2	21.0	28.6	5.4	1,102.3	25.6	(D)	4	4
202	DAIRY PRODUCTS	3.4	7.3	2.8	3.4	(D)	167.5	3.9	(S)	8	4
204	GRAIN MILL PRODUCTS	6.7	14.3	5.7	8.0	(D)	282.6	6.4	(D)	2	2
205	BAKERY PRODUCTS	1.4	3.1	1.1	1.5	.4	74.5	1.6	-	22	14
206	SUGAR, CONFECTIONERY PRODUCTS	.5	1.5	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
207	FATS AND OILS	2.8	5.8	2.4	3.5	(S)	106.1	2.3	-	23	37
208	BEVERAGES	4.5	8.8	4.0	5.3	(D)	142.0	3.5	(D)	5	8
209	MISC. FOODS, KINDRED PRODUCTS	1.1	2.6	.9	1.1	(D)	59.9	1.6	(D)	6	10
22	TEXTILE MILL PRODUCTS	.2	.6	.2	.3	.1	8.9	.3	-	9	26
23	APPAREL, OTH. TEXTILE PRODS.	1.3	4.3	.9	1.4	.6	112.4	2.9	-	9	9

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MISSOURI--CON.										
23	APPAREL, OTH. TEXTILE PRODS--CON.										
231	MEN'S AND BOYS' SUITS AND COATS.	(Z)	.1	(Z)	(Z)	(Z)	4.1	.1	-	1	9
232	MEN'S AND BOYS' FURNISHINGS.	.5	1.7	.3	.5	(D)	54.1	1.1	-	10	8
233	WOMEN'S AND MISSES' OUTERWEAR.	.3	1.1	.2	.3	.2	26.7	.8	-	31	19
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	.1	(Z)	(Z)	(Z)	2.4	.1	-	18	52
235	HATS, CAPS, AND MILLINERY.	.2	.6	.2	.3	(D)	11.6	.3	-	17	49
239	MISC. FABRICATED TEXTILE PRODS	.2	.6	.2	.3	(D)	11.3	.4	-	26	13
24	LUMBER AND WOOD PRODUCTS	1.7	5.5	1.1	2.2	(D)	163.0	3.3	(S)	53	20
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.6	.2	.3	.2	18.6	.3	(Z)	58	86
244	WOOD CONTAINERS.	.1	.6	(S)	(S)	(D)	27.7	.6	(S)	(X)	52
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.2	.1	.1	(D)	4.0	.1	-	1	1
25	FURNITURE AND FIXTURES	1.1	3.1	.9	1.4	.6	64.5	1.8	(D)	10	12
251	HOUSEHOLD FURNITURE.	.6	1.9	.5	.7	.3	46.3	1.2	(D)	14	13
259	MISC. FURNITURE AND FIXTURES	.2	.4	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	3.8	9.6	2.9	3.8	1.0	248.6	5.8	(D)	5	4
264	MISC. CONVERTED PAPER PRODUCTS	.9	3.4	.6	.9	(D)	107.4	2.5	-	5	5
265	PAPERBOARD CONTAINERS AND BOXES.	1.5	4.4	1.2	1.7	.3	107.0	2.7	(Z)	9	7
27	PRINTING AND PUBLISHING.	2.2	9.0	1.2	1.8	(D)	293.1	7.3	(D)	15	7
271	NEWSPAPERS	.4	1.7	.3	.4	.2	47.4	1.3	-	44	6
272	PERIODICALS.	.2	.5	.1	.1	(S)	14.7	.4	-	37	16
273	BOOKS.	.1	.6	(S)	(S)	(S)	26.6	.5	-	(X)	23
275	COMMERCIAL PRINTING.	.9	3.9	.5	.7	(D)	115.2	3.1	(D)	11	12
276	MANIFOLD BUSINESS FORMS.	.1	.3	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
278	BLANKBOOKS AND BOOKBINDING	.2	.6	.1	.1	(Z)	20.8	.5	-	27	19
279	PRINTING TRADE SERVICES.	.1	.5	.1	.1	(D)	16.6	.4	-	60	51
28	CHEMICALS, ALLIED PRODUCTS	28.2	52.0	24.8	32.1	1.9	974.9	19.9	(D)	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	7.1	12.6	6.4	8.3	(Z)	205.9	4.3	(D)	1	1
283	DRUGS.	2.1	4.5	1.8	2.2	(D)	91.6	2.3	-	1	2
284	SOAPS, CLEANERS, TOILET GOODS.	1.6	4.0	1.3	1.7	(D)	89.5	2.3	(D)	2	2
286	INDUSTRIAL ORGANIC CHEMICALS	4.0	7.6	3.5	5.0	(D)	122.2	2.6	(D)	1	1
287	AGRICULTURAL CHEMICALS	7.6	13.4	6.9	9.3	.1	211.8	4.1	(D)	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS.	4.7	7.6	4.1	4.4	.4	202.7	3.1	-	1	2
29	PETROLEUM AND COAL PRODUCTS.	5.0	7.1	4.7	4.9	(D)	94.4	2.1	(D)	1	3
295	PAVING AND ROOFING MATERIALS	2.7	4.3	2.6	3.2	(D)	46.7	1.1	-	1	1
30	RUBBER, MISC. PLASTICS PROD.	3.0	10.4	1.8	2.4	(D)	356.0	7.9	(S)	5	17
307	MISCELLANEOUS PLASTICS PRODUCTS.	2.1	8.1	1.1	1.6	.8	292.2	6.5	(S)	8	20
31	LEATHER, LEATHER PRODUCTS.	.8	3.3	.5	.8	.1	90.7	2.5	(Z)	22	4
314	FOOTWEAR, EXCEPT RUBBER.	.5	2.2	.2	.4	(Z)	67.1	1.8	-	6	5
317	WOMEN'S HANDBAGS AND PURSES.	.1	.3	(Z)	.1	(Z)	7.6	.2	-	1	1
32	STONE, CLAY, GLASS PRODUCTS.	57.6	83.2	54.2	64.0	(D)	973.8	19.2	(S)	4	4
324	CEMENT, HYDRAULIC.	30.0	35.8	28.0	25.7	(Z)	572.2	10.1	-	1	1
325	STRUCTURAL CLAY PRODUCTS	6.8	14.7	6.5	12.5	(D)	91.3	2.2	-	6	6
327	CONCRETE, GYPSUM, PLASTER PRODS.	16.1	23.5	15.5	19.9	(S)	182.1	3.6	-	11	19
329	MISC. NONMETALLIC MINERAL PRODS.	2.0	4.4	1.8	2.7	(D)	65.7	1.7	-	17	9
33	PRIMARY METAL INDUSTRIES	26.0	65.1	16.2	27.9	.8	2,865.8	37.2	(D)	3	4
332	IRON AND STEEL FOUNDRIES	2.1	6.6	1.4	2.1	(D)	196.2	4.6	-	13	23
333	PRIMARY NONFERROUS METALS.	11.5	29.1	5.5	13.9	(D)	1,785.7	15.2	-	1	1
335	NONFERROUS ROLLING AND DRAWING	.9	2.5	.6	.8	.1	69.6	1.7	-	1	1
336	NONFERROUS FOUNDRIES	1.0	1.6	.9	.8	(D)	29.2	.8	-	45	54
34	FABRICATED METAL PRODUCTS.	10.1	22.9	8.0	9.0	(D)	618.3	13.9	(S)	5	7
341	METAL CANS, SHIPPING CONTAINERS.	2.4	3.7	2.1	1.8	(D)	83.0	1.9	-	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE.	.2	.8	.2	.3	.1	13.7	.5	-	12	37
343	PLUMBING, HEATING, EXCEPT ELEC	.1	.3	.1	.1	(Z)	5.9	.2	-	49	86
344	FABRICATED STRUC. METAL PRODS.	1.7	5.4	1.1	1.7	(D)	163.4	3.7	-	8	5
345	SCREW MACHINE PROD., BOLTS, ETC.	.2	.5	.1	.2	.1	14.1	.4	-	42	36
347	METAL SERVICES, NEC.	1.2	2.2	1.0	1.1	(S)	55.6	1.1	-	33	80
349	MISC. FABRICATED METAL PRODUCTS.	.6	1.8	.5	.7	(D)	44.8	1.1	-	12	17
35	MACHINERY, EXCEPT ELECTRIC	4.7	15.1	3.2	4.7	(D)	430.1	10.4	.8	5	5
352	FARM AND GARDEN MACHINERY.	.4	.9	.3	.3	(D)	28.0	.6	-	15	10
353	CONSTRUCTION, RELATED MACHINERY.	.4	1.0	.3	.4	(D)	25.6	.6	-	10	11
354	METALWORKING MACHINERY	.6	2.2	.4	.6	(D)	61.7	1.5	-	11	6
355	SPECIAL INDUSTRY MACHINERY	.2	.7	.1	.2	.1	11.8	.5	-	20	72
356	GENERAL INDUSTRIAL MACHINERY	.4	1.5	.2	.3	.2	54.4	1.2	(S)	8	4
358	REFRIGERATION AND SERVICE MACH	1.4	4.0	1.1	1.5	(D)	103.2	2.5	-	2	2
359	MISC. MACHINERY, EXC. ELEC	1.2	4.3	.8	1.1	(D)	127.9	3.2	-	14	7
36	ELECTRIC, ELECTRONIC EQUIP	4.3	13.1	2.8	3.8	.2	440.2	9.4	(D)	2	2
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.3	.9	.2	.3	(Z)	19.7	.6	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS.	.6	1.7	.3	.4	(S)	65.2	1.3	-	17	6
364	ELEC. LIGHTING, WIRING EQUIP	1.1	3.0	.8	1.2	(D)	70.6	1.9	-	3	3
366	COMMUNICATION EQUIPMENT.	.3	1.2	.2	.2	.1	42.5	1.0	(D)	8	6
367	ELECTRONIC COMPONENTS, ACCESS.	.8	2.3	.4	.4	(D)	98.7	1.9	-	1	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	.5	1.5	.3	.4	.1	49.2	1.1	-	1	5

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MISSOURI--CON.										
37	TRANSPORTATION EQUIPMENT	12.9	32.9	9.5	12.3	.3	992.0	20.6	(S)	1	1
371	MOTOR VEHICLES AND EQUIPMENT	9.7	22.1	7.7	9.6	.2	605.0	12.5	(S)	1	1
38	INSTRUMENTS, RELATED PRODS	.6	2.0	.4	.6	(D)	60.2	1.4	-	18	6
382	MEASURING, CONTROLLING DEVICES	.2	.6	.1	.1	(D)	18.0	.4	-	36	14
384	MEDICAL INSTRUMENTS, SUPPLIES	.3	1.0	.2	.3	(D)	25.1	.7	-	31	5
386	PHOTOGRAPHIC EQUIP., SUPPLIES	.1	.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.7	2.1	.5	.7	(D)	55.2	1.3	-	38	25
394	TOYS AND SPORTING GOODS	.3	.9	(S)	(S)	(S)	30.0	.6	-	(X)	36
395	PENS, OFFICE AND ART GOODS	.1	.3	.1	.1	.1	6.9	.2	-	1	1
399	MISCELLANEOUS MANUFACTURES	.3	.7	.2	.3	(D)	15.9	.5	-	92	53
	NORTH DAKOTA	11.9	19.1	10.9	13.0	.2	269.5	6.2	(D)	11	8
20	FOOD AND KINDRED PRODUCTS	8.2	10.2	7.8	7.9	(D)	122.3	2.3	(D)	5	14
202	DAIRY PRODUCTS	.5	1.3	.4	.8	.1	27.4	.5	-	24	32
203	PRESERVED FRUITS AND VEGETABLES	.5	.9	.4	.8	(D)	7.4	.2	-	1	1
35	MACHINERY, EXCEPT ELECTRIC	.5	1.8	.3	.6	.2	44.2	1.2	-	2	5
	SOUTH DAKOTA	7.5	17.7	6.3	9.8	(D)	350.3	7.9	.3	6	6
20	FOOD AND KINDRED PRODUCTS	3.5	8.4	2.9	4.6	(D)	172.4	3.8	-	9	8
201	MEAT PRODUCTS	1.7	3.5	1.4	1.7	(D)	87.7	1.7	-	4	5
202	DAIRY PRODUCTS	1.1	2.8	1.0	2.0	(D)	33.5	.8	-	20	31
24	LUMBER AND WOOD PRODUCTS	.4	1.2	.4	.7	(D)	23.0	.6	-	4	4
27	PRINTING AND PUBLISHING	.1	.4	(Z)	.1	(Z)	9.0	.3	-	31	39
32	STONE, CLAY, GLASS PRODUCTS	2.0	3.7	1.9	2.8	(D)	35.2	.9	.3	6	20
327	CONCRETE, GYPSUM, PLASTER PRODS.	.4	.7	.4	.5	(D)	6.3	.2	.3	30	26
35	MACHINERY, EXCEPT ELECTRIC	.3	1.0	.2	.3	(D)	28.1	.6	-	39	17
352	FARM AND GARDEN MACHINERY	.1	.4	.1	.2	(D)	10.2	.2	-	78	44
	NEBRASKA	59.4	104.1	51.2	56.9	6.7	2,410.4	47.3	(D)	5	3
20	FOOD AND KINDRED PRODUCTS	23.7	40.6	21.2	25.6	(D)	743.5	14.9	(D)	11	6
201	MEAT PRODUCTS	5.4	12.1	4.4	6.4	(D)	299.1	5.7	(D)	2	4
202	DAIRY PRODUCTS	1.1	2.4	.9	1.3	.9	52.2	1.1	(Z)	46	5
204	GRAIN MILL PRODUCTS	7.6	13.0	6.9	8.1	(D)	225.8	4.9	(S)	33	15
205	BAKERY PRODUCTS	.3	.5	.3	.2	(D)	11.8	.3	-	44	39
209	MISC. FOODS, KINDRED PRODUCTS	.2	.4	.2	.3	(D)	8.6	.2	-	1	58
23	APPAREL, OTH. TEXTILE PRODS.	(Z)	.1	(Z)	(Z)	(Z)	3.2	.1	-	16	22
26	PAPER AND ALLIED PRODUCTS	.3	.7	.2	.3	.1	15.4	.4	-	4	6
264	MISC. CONVERTED PAPER PRODUCTS	.1	.2	.1	.1	(Z)	5.3	.1	-	13	18
265	PAPERBOARD CONTAINERS AND BOXES	.2	.4	.1	.2	.1	10.0	.2	-	1	1
27	PRINTING AND PUBLISHING	.3	1.4	(S)	(S)	(D)	66.4	1.3	-	(X)	39
271	NEWSPAPERS	.1	.3	(S)	(S)	(D)	9.6	.3	-	(X)	59
28	CHEMICALS, ALLIED PRODUCTS	15.3	21.1	13.4	12.2	.4	544.5	9.0	-	1	1
283	DRUGS	.3	.8	.2	.3	(D)	22.0	.5	-	1	2
287	AGRICULTURAL CHEMICALS	14.2	18.8	12.6	11.0	(D)	486.2	7.8	-	1	1
29	PETROLEUM AND COAL PRODUCTS	.4	.6	.4	.3	(D)	17.2	.3	-	12	9
30	RUBBER, MISC. PLASTICS PROD.	1.2	2.8	.9	1.1	(D)	78.2	1.7	-	1	1
307	MISCELLANEOUS PLASTICS PRODUCTS	.2	.9	(D)	(D)	.2	(D)	(D)	-	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	9.0	11.4	8.5	8.2	.2	156.1	3.2	-	11	19
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.5	2.3	1.4	1.7	(D)	22.5	.6	-	30	37
33	PRIMARY METAL INDUSTRIES	2.9	8.0	2.1	2.9	(D)	244.5	5.1	-	1	2
34	FABRICATED METAL PRODUCTS	1.1	2.6	.9	1.2	(S)	62.2	1.5	-	16	15
344	FABRICATED STRUC. METAL PRODS.	.4	.9	(S)	(S)	(S)	14.6	.4	-	(X)	17
349	MISC. FABRICATED METAL PRODUCTS	.2	.7	.1	.2	(D)	23.7	.5	-	1	1
35	MACHINERY, EXCEPT ELECTRIC	2.3	6.3	1.6	2.2	(S)	201.9	4.2	-	5	5
352	FARM AND GARDEN MACHINERY	1.6	4.0	1.3	1.8	.6	104.0	2.2	-	5	8
356	GENERAL INDUSTRIAL MACHINERY	.3	1.0	.1	.2	(Z)	39.4	.8	-	7	4
36	ELECTRIC, ELECTRONIC EQUIP	.8	2.4	.5	.6	(D)	95.5	1.8	-	5	5
367	ELECTRONIC COMPONENTS, ACCESS.	.2	.7	.1	.1	(Z)	31.4	.7	-	1	1
38	INSTRUMENTS, RELATED PRODS	.6	2.0	.4	.5	(D)	71.6	1.5	-	9	11
39	MISC. MANUFACTURING INDUS.	.2	.5	.2	.2	(D)	13.9	.3	-	36	34

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		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	KANSAS	130.0	206.1	112.8	105.8	6.4	5,043.2	100.3	105.3	2	2
20	FOOD AND KINDRED PRODUCTS	12.8	25.4	10.5	10.9	1.7	651.3	14.4	(D)	4	4
201	MEAT PRODUCTS	2.7	5.9	2.2	2.3	(D)	165.4	3.6	(D)	2	5
202	DAIRY PRODUCTS	.8	2.2	.6	.8	.3	67.2	1.4	(S)	20	21
204	GRAIN MILL PRODUCTS	3.0	8.6	2.2	2.8	(D)	253.0	5.8	-	12	5
205	BAKERY PRODUCTS	.5	1.1	.4	.4	(S)	31.5	.7	-	21	17
207	FATS AND OILS	1.8	2.5	1.6	1.4	(S)	54.1	1.1	(D)	8	10
208	BEVERAGES	2.1	2.4	1.9	1.3	(D)	51.0	1.1	-	4	8
23	APPAREL, OTH. TEXTILE PRODS.	.3	1.0	.1	.3	.2	31.8	.7	-	3	14
232	MEN'S AND BOYS' FURNISHINGS	.1	.3	(Z)	(Z)	(Z)	10.0	.3	-	1	34
233	WOMEN'S AND MISSES' OUTERWEAR	(Z)	.1	(Z)	(Z)	(Z)	5.4	.1	-	11	17
239	MISC. FABRICATED TEXTILE PRODS	.1	.5	.1	.2	.2	14.9	.4	-	2	10
24	LUMBER AND WOOD PRODUCTS	.4	1.1	.3	.3	(D)	27.1	.8	-	25	22
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.3	.1	.1	(Z)	8.1	.2	-	1	2
25	FURNITURE AND FIXTURES	.2	.5	.1	.2	(D)	14.4	.4	(D)	21	22
26	PAPER AND ALLIED PRODUCTS	2.8	5.5	2.4	2.8	(D)	131.5	2.8	(D)	32	30
265	PAPERBOARD CONTAINERS AND BOXES	.5	1.3	.4	.5	(Z)	32.2	.9	(S)	8	4
27	PRINTING AND PUBLISHING	1.0	4.1	.6	.7	.2	130.3	3.4	-	17	17
271	NEWSPAPERS	.2	.8	.1	.1	(Z)	27.4	.7	-	18	22
273	BOOKS	.1	.3	(Z)	.1	(Z)	11.1	.3	-	57	22
275	COMMERCIAL PRINTING	.4	1.3	.2	.3	(D)	40.1	1.0	-	40	47
276	MANIFOLD BUSINESS FORMS	.1	.4	(Z)	(Z)	(Z)	11.0	.3	-	34	64
28	CHEMICALS, ALLIED PRODUCTS	31.3	44.9	27.2	25.1	(S)	1,195.5	19.8	30.4	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	8.7	17.7	6.1	5.9	(D)	760.2	11.8	(D)	1	1
285	PAINTS AND ALLIED PRODUCTS	.1	.2	.1	.1	.1	4.5	.1	-	14	45
289	MISCELLANEOUS CHEMICAL PRODUCTS	3.6	4.3	3.4	3.3	(S)	45.1	1.0	(D)	1	2
29	PETROLEUM AND COAL PRODUCTS	37.0	40.0	34.4	27.2	(D)	764.2	12.8	(D)	1	1
291	PETROLEUM REFINING	36.0	38.5	33.5	26.3	(D)	733.0	12.2	(D)	1	1
30	RUBBER, MISC. PLASTICS PROD.	4.7	12.0	3.7	5.7	.3	293.4	6.3	-	3	7
32	STONE, CLAY, GLASS PRODUCTS	24.9	31.6	22.8	19.7	1.4	614.3	11.9	(D)	5	3
324	CEMENT, HYDRAULIC	12.9	13.7	12.1	9.9	(D)	208.6	3.8	(D)	4	6
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.4	3.5	2.2	2.5	(D)	42.5	1.0	-	19	7
33	PRIMARY METAL INDUSTRIES	1.7	5.6	1.2	2.2	(D)	144.4	3.4	(S)	36	7
332	IRON AND STEEL FOUNDRIES	1.3	4.6	.8	1.6	(D)	127.9	3.0	(S)	48	8
34	FABRICATED METAL PRODUCTS	2.0	4.9	1.6	2.1	(D)	103.3	2.8	(Z)	16	26
343	PLUMBING, HEATING, EXCEPT ELEC	.1	.1	(Z)	(Z)	(Z)	2.6	.1	-	1	1
344	FABRICATED STRUC. METAL PRODS.	.8	2.1	.7	.9	(D)	40.8	1.2	(Z)	10	15
35	MACHINERY, EXCEPT ELECTRIC	3.6	11.2	2.5	3.3	(D)	336.5	7.9	-	15	8
352	FARM AND GARDEN MACHINERY	.8	2.6	.6	.9	.2	77.5	1.8	-	7	12
353	CONSTRUCTION, RELATED MACHINERY	.5	1.3	.4	.4	(D)	37.9	.9	-	18	13
355	SPECIAL INDUSTRY MACHINERY	.2	.8	.1	.1	(Z)	29.1	.7	-	40	38
356	GENERAL INDUSTRIAL MACHINERY	.6	2.2	.4	.6	.1	65.3	1.6	-	2	7
359	MISC. MACHINERY, EXC. ELEC	.7	2.0	.6	.9	(D)	38.7	1.1	-	52	43
36	ELECTRIC, ELECTRONIC EQUIP	1.5	4.3	.9	.8	(D)	155.3	3.6	(S)	2	4
37	TRANSPORTATION EQUIPMENT	5.5	12.6	4.1	4.4	.2	394.5	8.2	-	3	3
372	AIRCRAFT AND PARTS	3.6	8.2	2.7	2.7	(D)	270.0	5.5	-	2	3
38	INSTRUMENTS, RELATED PRODS	.2	.8	.1	.1	(D)	26.3	.6	-	23	12
39	MISC. MANUFACTURING INDUS.	.2	.8	.1	.2	(D)	28.9	.6	-	16	8
399	MISCELLANEOUS MANUFACTURES	.2	.6	.1	.1	(D)	22.9	.5	-	21	9
	DELAWARE	46.3	130.1	38.3	69.4	(D)	2,334.5	60.7	142.4	3	2
20	FOOD AND KINDRED PRODUCTS	2.4	9.0	1.9	3.7	(Z)	156.5	5.3	(Z)	10	10
201	MEAT PRODUCTS	.4	2.0	.3	.7	(D)	34.0	1.3	-	28	9
203	PRESERVED FRUITS AND VEGETABLES	.5	1.9	.4	1.1	(S)	29.7	.8	-	18	6
204	GRAIN MILL PRODUCTS	.2	.6	.1	.3	(S)	9.9	.4	-	10	21
22	TEXTILE MILL PRODUCTS	.9	2.8	.8	1.7	(D)	26.6	1.1	(D)	19	35
23	APPAREL, OTH. TEXTILE PRODS.	.1	.3	(Z)	.1	(D)	5.3	.2	-	20	9
26	PAPER AND ALLIED PRODUCTS	1.4	4.5	1.2	2.4	.3	63.2	2.1	(D)	2	7
265	PAPERBOARD CONTAINERS AND BOXES	.2	.8	.2	.4	(Z)	13.4	.5	-	11	32
27	PRINTING AND PUBLISHING	.1	.6	.1	.1	(D)	13.3	.4	-	1	15
28	CHEMICALS, ALLIED PRODUCTS	26.4	65.4	22.6	39.1	(D)	1,108.3	26.2	(D)	4	3
281	INDUSTRIAL INORGANIC CHEMICALS	7.0	24.0	4.7	8.4	(D)	678.6	15.6	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	8.9	20.4	8.2	14.7	(D)	216.2	5.7	(D)	1	1

See footnotes at end of table.

Table 4. **Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	DELAWARE--CON.										
33	PRIMARY METAL INDUSTRIES	2.7	9.7	2.0	3.5	(D)	216.2	6.2	-	5	3
34	FABRICATED METAL PRODUCTS	.1	.5	.1	.3	(D)	8.0	.2	-	8	92
35	MACHINERY, EXCEPT ELECTRIC	.3	1.3	.2	.5	(D)	28.5	.8	-	48	24
38	INSTRUMENTS, RELATED PRODS	.1	.7	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
	MARYLAND	133.2	356.4	105.7	179.5	7.7	8,078.1	176.9	810.6	3	3
20	FOOD AND KINDRED PRODUCTS	13.1	38.5	11.1	21.8	1.3	571.0	16.7	(D)	6	6
201	MEAT PRODUCTS	1.6	5.4	1.2	2.5	.4	101.7	2.9	-	3	4
202	DAIRY PRODUCTS	1.5	5.9	1.0	2.2	(D)	139.1	3.7	-	8	12
203	PRESERVED FRUITS AND VEGETABLES	1.1	3.5	1.0	2.1	(D)	48.8	1.5	(D)	27	9
204	GRAIN MILL PRODUCTS	.3	1.0	.2	.4	(D)	17.1	.6	(S)	11	23
207	FATS AND OILS	1.3	3.4	1.2	2.7	(D)	24.8	.7	-	33	12
208	BEVERAGES	2.7	8.0	2.3	4.4	(D)	118.8	3.6	-	2	2
209	MISC. FOODS, KINDRED PRODUCTS	1.1	4.3	.9	1.6	(D)	75.5	2.7	(Z)	8	21
22	TEXTILE MILL PRODUCTS	.3	1.0	.2	.4	(D)	26.3	.6	-	13	18
23	APPAREL, OTH. TEXTILE PRODS	.7	3.1	.4	.9	(D)	76.0	2.2	(Z)	14	7
232	MEN'S AND BOYS' FURNISHINGS	.1	.5	.1	.2	.1	11.2	.3	-	26	8
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.6	.1	.1	.1	16.9	.5	-	4	16
238	MISC. APPAREL AND ACCESSORIES	.2	.8	.1	.3	(D)	16.8	.5	(Z)	1	1
239	MISC. FABRICATED TEXTILE PRODS	.1	.3	(Z)	.1	.1	7.8	.2	-	1	1
24	LUMBER AND WOOD PRODUCTS	.6	3.2	.4	1.2	(S)	60.2	2.1	-	95	27
242	SAWMILLS AND PLANING MILLS	(Z)	.5	(S)	(S)	(D)	18.9	.6	-	(X)	50
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	1.0	.2	(D)	(D)	19.9	.7	-	(X)	6
245	WOOD BUILDINGS AND MOBILE HOMES	(Z)	.2	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.5	1.5	.4	.8	(D)	(S)	(S)	-	45	(X)
25	FURNITURE AND FIXTURES	.3	1.3	.2	.5	(D)	26.0	.8	-	20	15
251	HOUSEHOLD FURNITURE	.2	.6	.1	.3	(D)	12.1	.3	-	31	18
26	PAPER AND ALLIED PRODUCTS	13.1	22.0	12.0	14.9	(D)	298.7	7.1	(D)	6	6
265	PAPERBOARD CONTAINERS AND BOXES	1.2	5.4	.7	1.6	(Z)	132.4	3.9	-	6	9
27	PRINTING AND PUBLISHING	1.5	7.3	.8	1.6	.2	191.4	5.7	(D)	16	11
271	NEWSPAPERS	.2	1.1	.1	.2	(D)	29.4	.9	-	31	13
273	BOOKS	.2	.9	(Z)	.1	(D)	38.2	.8	(D)	42	15
275	COMMERCIAL PRINTING	.8	3.5	.5	1.0	(S)	80.6	2.5	-	23	21
276	MANIFOLD BUSINESS FORMS	.1	.8	.1	(D)	(Z)	(D)	(D)	-	(X)	(X)
279	PRINTING TRADE SERVICES	.1	(D)	(S)	(S)	(Z)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	19.8	52.8	16.7	30.7	(D)	899.2	22.2	(D)	11	19
281	INDUSTRIAL INORGANIC CHEMICALS	8.8	22.0	7.3	14.4	(S)	446.7	7.6	-	1	1
282	PLASTICS MATERIALS, SYNTHETICS	2.5	7.2	2.0	3.2	.1	158.6	4.0	(D)	1	1
284	SOAPS, CLEANERS, TOILET GOODS	4.5	12.5	4.0	6.3	(D)	151.7	6.2	-	52	66
289	MISCELLANEOUS CHEMICAL PRODUCTS	.8	2.0	.7	1.3	(Z)	19.8	.7	-	16	28
29	PETROLEUM AND COAL PRODUCTS	2.6	5.2	2.5	4.1	1.3	37.0	1.1	-	1	1
295	PAVING AND ROOFING MATERIALS	1.8	3.1	1.7	2.4	1.3	25.2	.7	-	1	1
30	RUBBER, MISC. PLASTICS PROD	4.0	12.8	3.0	5.5	(D)	286.3	7.3	(D)	3	5
306	FABRICATED RUBBER PRODUCTS, NEC	.2	.9	.1	(D)	(Z)	(D)	(D)	-	(X)	(X)
307	MISCELLANEOUS PLASTICS PRODUCTS	1.3	6.1	.8	1.7	(D)	162.7	4.4	-	4	4
31	LEATHER, LEATHER PRODUCTS	.2	.8	.2	.4	(Z)	9.9	.3	(D)	46	29
314	FOOTWEAR, EXCEPT RUBBER	(Z)	.2	(Z)	.1	(Z)	3.3	.1	(D)	16	25
32	STONE, CLAY, GLASS PRODUCTS	19.8	37.2	18.1	25.4	(Z)	489.4	11.7	(D)	7	5
324	CEMENT, HYDRAULIC	8.8	11.6	8.1	7.6	(Z)	203.9	4.1	-	1	1
325	STRUCTURAL CLAY PRODUCTS	1.1	2.5	1.1	2.0	(D)	18.7	.5	-	35	46
327	CONCRETE, GYPSUM, PLASTER PRODS	2.7	7.4	2.5	5.3	.5	74.7	2.1	-	31	24
329	MISC. NONMETALLIC MINERAL PRODS	3.4	7.4	3.0	4.6	(D)	106.3	2.8	-	3	5
33	PRIMARY METAL INDUSTRIES	43.3	119.3	29.8	52.7	(D)	3,933.5	66.6	(D)	3	1
34	FABRICATED METAL PRODUCTS	3.8	12.2	3.0	5.3	(D)	258.7	6.9	(Z)	6	6
341	METAL CANS, SHIPPING CONTAINERS	1.9	5.4	1.5	2.4	(D)	110.1	3.0	-	2	1
344	FABRICATED STRUC. METAL PRODS	.6	2.4	.5	.9	.4	45.2	1.5	-	9	8
35	MACHINERY, EXCEPT ELECTRIC	3.3	11.5	2.4	4.4	(D)	273.1	7.1	-	5	2
355	SPECIAL INDUSTRY MACHINERY	.6	2.1	.4	.9	(D)	38.6	1.2	-	20	4
358	REFRIGERATION AND SERVICE MACH	.5	1.6	.4	.7	(D)	29.9	.9	-	18	12
36	ELECTRIC, ELECTRONIC EQUIP	2.7	12.2	1.6	3.0	(D)	321.8	9.2	-	1	2
362	ELECTRICAL INDUSTRIAL APPARATUS	.2	.9	.2	.3	(D)	16.9	.6	-	1	1
366	COMMUNICATION EQUIPMENT	1.5	7.8	(D)	(D)	(D)	223.5	6.5	-	(X)	2
367	ELECTRONIC COMPONENTS, ACCESS	.1	.6	.1	.1	.1	13.6	.4	-	1	3
37	TRANSPORTATION EQUIPMENT	3.6	13.4	2.7	5.9	(D)	262.9	7.5	(D)	1	3
38	INSTRUMENTS, RELATED PRODS	.2	1.2	.1	.2	.1	30.3	.9	-	6	21

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MARYLAND--CON.										
39	MISC. MANUFACTURING INDUS.	.4	1.5	.3	.6	(S)	26.2	.9	-	15	20
	DISTRICT OF COLUMBIA	1.9	8.6	1.3	2.8	.4	188.6	5.8	(D)	35	18
20	FOOD AND KINDRED PRODUCTS.	.3	1.1	.2	.5	(S)	14.2	.6	-	39	46
202	DAIRY PRODUCTS	(Z)	.2	(D)	(D)	(S)	(D)	(D)	-	(X)	(X)
27	PRINTING AND PUBLISHING.	.9	4.5	.4	.9	(D)	123.9	3.6	-	12	6
275	COMMERCIAL PRINTING.	.3	1.1	.2	.4	(D)	31.2	.7	-	25	23
	VIRGINIA	214.3	508.9	183.2	302.8	8.9	9,122.8	206.0	1,904.2	2	1
20	FOOD AND KINDRED PRODUCTS.	14.4	43.4	11.5	22.3	4.6	852.1	21.1	(D)	8	3
201	MEAT PRODUCTS.	3.1	10.0	2.2	4.5	.1	249.9	5.5	-	6	6
202	DAIRY PRODUCTS	1.0	3.6	.7	1.4	.1	77.2	2.1	(D)	4	5
203	PRESERVED FRUITS AND VEGETABLES.	1.1	3.3	.9	1.8	(D)	64.9	1.6	-	12	7
204	GRAIN MILL PRODUCTS.	.7	2.9	.5	.9	.5	69.3	2.0	-	9	10
208	BEVERAGES.	1.7	4.8	1.4	2.7	.2	80.9	2.1	-	13	9
209	MISC. FOODS, KINDRED PRODUCTS.	1.0	3.2	.7	1.3	.4	80.8	1.9	-	22	17
21	TOBACCO PRODUCTS	6.3	19.1	4.8	8.5	(Z)	429.7	10.6	(D)	1	1
22	TEXTILE MILL PRODUCTS.	19.8	53.9	15.1	26.0	.6	1,383.5	27.9	(D)	2	2
221	WEAVING MILLS, COTTON.	1.1	3.6	.7	1.3	(D)	116.7	2.3	(D)	3	6
222	WEAV'G MILLS, MANMADE FIBER.	6.8	16.2	5.2	7.0	.1	476.6	9.1	(D)	1	1
224	NARROW FABRIC MILLS.	.3	1.0	.2	.3	(Z)	32.3	.7	-	1	16
225	KNITTING MILLS	3.1	9.7	2.3	4.8	.2	228.9	4.9	(Z)	8	7
226	TEXTILE FINISHING, EXCEPT WOOL	5.2	12.1	4.5	8.3	(D)	184.6	3.8	-	2	2
228	YARN AND THREAD MILLS.	2.4	8.3	1.4	2.6	(D)	287.2	5.7	-	1	1
23	APPAREL, OTH. TEXTILE PRODS.	1.6	5.9	1.1	2.0	.4	144.5	3.9	-	4	4
231	MEN'S AND BOYS' SUITS AND COATS.	.1	.4	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS.	.2	1.2	.1	.2	(Z)	35.3	1.0	-	1	3
233	WOMEN'S AND MISSES' OUTERWEAR.	.4	1.8	.2	.5	.1	47.1	1.3	-	7	7
236	CHILDREN'S OUTERWEAR	(Z)	.1	(Z)	(S)	(Z)	3.6	.1	-	(X)	78
239	MISC. FABRICATED TEXTILE PRODS	.6	1.6	.5	.8	.1	27.8	.8	-	6	6
24	LUMBER AND WOOD PRODUCTS	7.7	22.5	6.1	12.2	(D)	446.9	10.2	1.0	22	9
241	LOGGING CAMPS, LOG CONTRACTORS	1.5	3.1	1.5	2.8	(D)	15.5	.3	-	81	31
242	SAWMILLS AND PLANING MILLS	2.1	7.1	1.5	3.3	1.1	169.4	3.8	(D)	38	23
249	MISCELLANEOUS WOOD PRODUCTS.	2.8	8.2	2.1	4.0	(D)	193.6	4.2	-	9	3
25	FURNITURE AND FIXTURES	2.8	11.2	1.9	3.7	.4	271.0	7.5	(D)	4	3
251	HOUSEHOLD FURNITURE.	2.5	10.1	1.6	3.2	(D)	247.9	6.8	(D)	3	3
26	PAPER AND ALLIED PRODUCTS.	45.2	81.7	42.1	62.6	(S)	899.4	19.1	1,149.6	1	1
263	PAPERBOARD MILLS	34.2	58.2	32.2	46.3	(Z)	580.0	11.9	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	.3	.8	.2	.5	(Z)	7.9	.3	-	18	24
265	PAPERBOARD CONTAINERS AND BOXES.	.9	2.8	.7	1.4	.4	49.8	1.4	-	3	3
27	PRINTING AND PUBLISHING.	1.6	6.8	1.0	1.9	.3	189.5	4.9	-	15	6
271	NEWSPAPERS	.3	1.5	.1	.3	.1	44.5	1.3	-	7	8
273	BOOKS.	.2	.8	.1	.2	(D)	22.8	.6	-	6	5
275	COMMERCIAL PRINTING.	1.0	3.7	.7	1.4	.3	95.2	2.4	-	20	10
276	MANIFOLD BUSINESS FORMS.	.1	(D)	.1	.1	(D)	(D)	(D)	-	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	65.2	120.9	59.7	88.8	.1	1,612.5	32.1	588.0	1	2
281	INDUSTRIAL INORGANIC CHEMICALS	2.7	7.7	1.8	3.2	.1	253.3	4.5	(D)	8	9
282	PLASTICS MATERIALS, SYNTHETICS	39.8	67.5	36.9	51.1	(Z)	839.6	16.4	(D)	1	1
285	PAINTS AND ALLIED PRODUCTS	.1	.3	.1	.1	(D)	6.2	.2	-	29	32
287	AGRICULTURAL CHEMICALS	.2	.7	.1	.3	(D)	11.5	.4	-	43	40
30	RUBBER, MISC. PLASTICS PROD.	9.9	23.8	8.5	15.2	(D)	407.0	8.6	(D)	1	6
32	STONE, CLAY, GLASS PRODUCTS.	16.7	33.5	15.2	23.6	(D)	438.4	9.9	(D)	14	11
325	STRUCTURAL CLAY PRODUCTS	2.0	4.6	1.8	3.3	(S)	48.9	1.2	-	83	62
327	CONCRETE, GYPSUM, PLASTER PRODS.	9.5	18.2	9.0	14.3	(Z)	148.0	3.9	(D)	12	16
329	MISC. NONMETALLIC MINERAL PRODS.	1.2	3.0	.9	1.6	(D)	67.1	1.4	(Z)	7	16
33	PRIMARY METAL INDUSTRIES	9.1	31.7	7.3	19.8	(D)	539.0	11.9	-	1	5
332	IRON AND STEEL FOUNDRIES	4.8	18.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	2.4	7.5	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
34	FABRICATED METAL PRODUCTS.	2.6	9.6	1.7	3.0	(D)	256.0	6.5	(D)	11	7
341	METAL CANS, SHIPPING CONTAINERS.	.5	1.2	.3	.5	(Z)	36.2	.7	-	1	1
344	FABRICATED STRUC. METAL PRODS.	1.0	4.3	.6	1.2	.2	107.2	3.0	-	5	7
349	MISC. FABRICATED METAL PRODUCTS.	.4	1.7	.3	.4	(D)	47.4	1.2	-	30	23
35	MACHINERY, EXCEPT ELECTRIC	2.2	8.6	1.3	2.4	.5	241.0	6.2	-	5	5
353	CONSTRUCTION, RELATED MACHINERY.	.5	1.7	.3	.6	.2	47.3	1.1	-	12	14
355	SPECIAL INDUSTRY MACHINERY	.2	.9	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.6	2.0	.4	.5	(Z)	60.2	1.5	-	1	1
357	OFFICE AND COMPUTING MACHINES.	.2	.8	.1	(D)	(Z)	(D)	(D)	-	(X)	(X)

See footnotes at end of table.

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(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	VIRGINIA--CON.										
35	MACHINERY, EXCEPT ELECTRIC--CON.										
358	REFRIGERATION AND SERVICE MACH	.3	1.2	.2	.4	.1	29.1	.8	-	3	8
359	MISC. MACHINERY, EXC. ELEC	.3	1.2	.2	.4	(D)	26.6	.9	-	26	24
36	ELECTRIC, ELECTRONIC EQUIP	3.1	13.2	1.8	3.4	.1	391.5	9.8	(Z)	1	1
361	ELECTRIC DISTRIBUTING EQUIPMENT	.3	.9	.2	.3	(D)	22.6	.6	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS	.4	1.5	.2	.4	(Z)	49.0	1.1	-	2	3
364	ELEC. LIGHTING, WIRING EQUIP	.1	.5	.1	(D)	(Z)	(D)	(D)	-	(X)	(X)
366	COMMUNICATION EQUIPMENT	1.5	7.1	.8	1.7	(Z)	210.0	5.4	-	2	2
367	ELECTRONIC COMPONENTS, ACCESS.	.1	.6	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
37	TRANSPORTATION EQUIPMENT	4.2	15.6	2.9	5.5	(S)	380.1	10.1	(D)	2	3
39	MISC. MANUFACTURING INDUS.	.4	1.3	.3	.5	(D)	33.1	.8	-	1	11
399	MISCELLANEOUS MANUFACTURES	.2	.6	.1	(D)	.1	(D)	(D)	-	(X)	(X)
	WEST VIRGINIA	202.8	405.0	171.8	241.5	(D)	9,063.0	163.5	2,343.7	2	1
20	FOOD AND KINDRED PRODUCTS	1.3	3.7	1.0	1.8	.6	78.0	1.8	-	12	12
22	TEXTILE MILL PRODUCTS	.1	.4	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.7	.1	.2	(Z)	21.4	.6	-	33	12
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.3	(Z)	.1	(Z)	(S)	(S)	-	90	(X)
24	LUMBER AND WOOD PRODUCTS	1.4	4.5	1.1	2.3	.2	82.7	2.1	(D)	26	22
242	SAWMILLS AND PLANING MILLS	.7	2.6	.5	1.2	(D)	57.3	1.4	(D)	41	29
249	MISCELLANEOUS WOOD PRODUCTS	.1	.4	.1	.2	(D)	7.2	.2	-	8	21
26	PAPER AND ALLIED PRODUCTS	(D)	(D)	(D)	(D)	(D)	25.2	.7	(S)	(X)	56
264	MISC. CONVERTED PAPER PRODUCTS	.1	(D)	.1	.1	(D)	(D)	(D)	-	1	(X)
265	PAPERBOARD CONTAINERS AND BOXES	.2	.4	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
27	PRINTING AND PUBLISHING	.5	1.8	.4	.7	.2	47.6	1.2	-	10	15
271	NEWSPAPERS	.2	(D)	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	98.1	179.1	85.2	112.6	(S)	3,781.6	66.5	(D)	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	20.2	41.4	15.2	15.7	(D)	1,464.5	25.8	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	14.0	23.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)
286	INDUSTRIAL ORGANIC CHEMICALS	62.8	111.1	56.5	79.1	(D)	1,858.6	32.0	(D)	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	1.0	2.5	(D)	(D)	(Z)	(D)	(D)	(Z)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	5.9	11.5	5.6	9.4	(D)	102.1	2.2	(S)	3	3
30	RUBBER, MISC. PLASTICS PROD.	.2	.9	.1	.2	(D)	24.4	.7	-	9	17
32	STONE, CLAY, GLASS PRODUCTS	25.2	44.1	23.3	32.3	1.2	555.6	11.9	(S)	5	2
321	FLAT GLASS	2.0	3.6	1.8	2.8	.2	40.0	.8	(Z)	1	1
322	GLASS, PRESSED OR BLOWN	13.9	23.3	12.8	17.2	(D)	302.8	6.0	(S)	9	2
326	POTTERY AND RELATED PRODUCTS	1.3	2.5	1.3	2.0	.1	22.6	.6	(Z)	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	.8	1.6	.7	1.3	.6	11.4	.3	-	31	27
329	MISC. NONMETALLIC MINERAL PRODS.	1.7	3.4	1.6	2.3	(D)	53.2	1.0	-	9	13
33	PRIMARY METAL INDUSTRIES	60.5	132.1	47.8	70.5	(D)	3,717.2	61.6	(D)	3	1
331	BLAST FURNACE, BASIC STEEL PROD.	43.1	85.5	37.2	51.7	(D)	1,744.4	33.8	(D)	1	1
332	IRON AND STEEL FOUNDRIES	1.0	3.4	(S)	(S)	(D)	39.3	1.2	-	(X)	35
34	FABRICATED METAL PRODUCTS	2.2	6.7	1.6	2.8	.6	158.0	4.0	-	14	6
342	CUTLERY, HANDTOOLS AND HARDWARE	.8	1.9	.7	1.0	(D)	30.0	.9	-	38	13
349	MISC. FABRICATED METAL PRODUCTS	.5	1.5	.3	.6	(D)	39.9	.8	-	3	18
35	MACHINERY, EXCEPT ELECTRIC	1.3	3.8	1.0	1.8	(D)	90.1	2.0	-	33	11
353	CONSTRUCTION, RELATED MACHINERY	.6	1.6	.4	.7	(D)	47.3	.9	-	90	17
36	ELECTRIC, ELECTRONIC EQUIP	2.7	7.7	1.9	2.4	(Z)	258.3	5.3	-	2	2
38	INSTRUMENTS, RELATED PRODS	.2	.6	(D)	(D)	(D)	12.7	.4	-	(X)	1
	NORTH CAROLINA	293.5	825.0	219.2	391.1	(D)	21,775.7	433.9	1,547.5	1	1
20	FOOD AND KINDRED PRODUCTS	12.4	37.2	9.7	19.6	1.9	792.1	17.7	(D)	4	4
201	MEAT PRODUCTS	1.7	7.0	1.1	2.7	(S)	200.7	4.3	(Z)	11	7
202	DAIRY PRODUCTS	.9	3.8	.6	1.2	.3	104.6	2.6	-	9	12
204	GRAIN MILL PRODUCTS	1.0	3.4	.7	1.6	.3	91.5	1.9	(Z)	12	15
205	BAKERY PRODUCTS	1.8	4.7	1.5	2.8	(D)	89.1	1.8	-	3	6
207	FATS AND OILS	3.4	7.9	3.1	5.9	(D)	94.2	2.0	-	1	1
208	BEVERAGES	1.8	5.2	1.4	2.8	(S)	102.9	2.4	-	20	15
21	TOBACCO PRODUCTS	8.5	21.1	7.3	12.3	.5	365.9	8.8	(D)	1	1
22	TEXTILE MILL PRODUCTS	87.8	284.7	57.3	106.2	4.4	8,933.6	178.5	106.9	2	2
221	WEAVING MILLS, COTTON	10.0	30.9	6.4	10.1	.1	1,056.1	20.8	(D)	1	1
222	WEAV'G MILLS, MANMADE FIBER	14.5	51.1	8.5	15.9	.5	1,760.2	35.2	(D)	1	1
225	KNITTING MILLS	22.6	68.1	17.1	34.7	3.7	1,619.5	33.5	(S)	3	4
226	TEXTILE FINISHING, EXCEPT WOOL	12.9	27.4	11.9	21.3	(S)	290.2	6.1	(D)	2	5
228	YARN AND THREAD MILLS	22.7	89.6	10.1	17.7	.3	3,675.2	71.9	(D)	2	2
229	MISCELLANEOUS TEXTILE GOODS	2.4	8.0	1.6	3.3	(D)	230.0	4.7	(D)	4	3
23	APPAREL, OTH. TEXTILE PRODS.	3.0	12.5	1.7	3.4	(D)	388.1	9.1	(D)	10	4

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D		E F	G	H	D	G
	NORTH CAROLINA--CON.										
23	APPAREL, OTH. TEXTILE PRODS--CON.										
232	MEN'S AND BOYS' FURNISHINGS. . . .	.7	2.9	.4	.8	(D)	93.3	2.1	(Z)	8	7
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.6	2.8	.3	.7	.3	84.3	2.1	(D)	3	3
238	MISC. APPAREL AND ACCESSORIES. . .	.2	.5	(D)	(D)	(D)	10.0	.2	-	(X)	13
239	MISC. FABRICATED TEXTILE PRODS . .	1.6	5.0	1.1	2.0	(D)	135.7	3.0	-	16	9
24	LUMBER AND WOOD PRODUCTS	11.7	35.4	8.9	18.1	5.2	811.1	17.3	(D)	12	7
241	LOGGING CAMPS, LOG CONTRACTORS . .	1.7	3.5	1.6	3.1	1.9	16.4	.4	-	48	4
242	SAWMILLS AND PLANING MILLS	4.6	14.5	3.3	7.1	2.4	389.2	7.5	(S)	22	15
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	1.9	6.4	1.4	2.9	.4	150.0	3.5	(Z)	2	9
244	WOOD CONTAINERS.	.2	.8	.2	.3	(D)	16.1	.4	(D)	25	27
245	WOOD BUILDINGS AND MOBILE HOMES. .	.1	.4	.1	.2	(D)	11.3	.3	-	1	1
249	MISCELLANEOUS WOOD PRODUCTS. . . .	3.2	9.8	2.4	4.5	(D)	228.2	5.2	-	12	4
25	FURNITURE AND FIXTURES	6.9	27.0	4.4	9.0	.6	742.3	18.0	(D)	4	2
251	HOUSEHOLD FURNITURE.	6.2	24.3	3.9	8.1	(D)	681.5	16.3	(D)	4	2
252	OFFICE FURNITURE	.3	1.5	.2	.5	(D)	37.2	1.0	-	12	4
253	PUBLIC BLDG., RELATED FURNITURE. .	.2	(D)	(D)	(D)	.1	(D)	(D)	-	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	51.3	100.4	47.4	75.5	.6	1,151.6	24.9	1,182.3	1	3
262	PAPERMILLS, EXC. BUILDING PAPER. .	25.1	40.2	23.1	29.0	(D)	558.9	11.3	(D)	1	1
265	PAPERBOARD CONTAINERS AND BOXES. .	1.4	4.5	1.1	2.2	.5	95.0	2.4	-	1	2
27	PRINTING AND PUBLISHING.	1.1	4.6	.6	1.1	.6	155.1	3.5	(D)	14	11
271	NEWSPAPERS	.5	2.1	.2	.4	(D)	70.0	1.6	-	26	14
275	COMMERCIAL PRINTING.	.4	1.8	.2	.4	(D)	63.5	1.4	(D)	18	21
276	MANIFOLD BUSINESS FORMS.	(Z)	.2	(Z)	.1	(D)	4.9	.1	-	56	80
28	CHEMICALS, ALLIED PRODUCTS . . .	50.0	127.6	39.4	70.2	.8	3,090.6	57.5	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS . .	25.4	66.3	18.6	32.5	(S)	1,994.7	33.7	(D)	1	1
283	DRUGS.	1.8	5.6	1.4	2.9	(D)	116.0	2.7	-	1	1
284	SOAPS, CLEANERS, TOILET GOODS. . .	.5	1.3	.4	.7	(D)	26.2	.7	(D)	8	6
287	AGRICULTURAL CHEMICALS	6.6	13.1	6.1	10.0	(S)	130.2	3.1	-	2	4
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.5	1.4	.3	.6	.2	39.6	.8	(Z)	10	28
29	PETROLEUM AND COAL PRODUCTS. . .	1.8	4.2	1.7	3.3	(D)	35.0	.8	-	14	27
295	PAVING AND ROOFING MATERIALS . . .	1.4	3.7	1.3	3.0	(D)	31.5	.8	-	16	30
30	RUBBER, MISC. PLASTICS PROD. . .	6.8	23.9	4.4	8.4	.5	706.3	15.4	-	4	4
301	TIRES AND INNER TUBES.	3.4	10.8	2.4	4.5	(D)	294.0	6.2	-	1	1
306	FABRICATED RUBBER PRODUCTS, NEC. .	.3	1.0	.2	.4	(S)	23.3	.6	-	1	1
307	MISCELLANEOUS PLASTICS PRODUCTS. .	2.1	9.0	1.0	1.9	.3	322.2	7.0	-	18	7
31	LEATHER, LEATHER PRODUCTS. . . .	.4	1.3	.3	.5	(D)	30.3	.8	-	9	10
314	FOOTWEAR, EXCEPT RUBBER.	.1	.7	(Z)	(Z)	(Z)	25.2	.6	-	9	12
32	STONE, CLAY, GLASS PRODUCTS. . .	23.7	49.6	21.5	35.8	7.6	663.4	13.8	(D)	5	6
322	GLASS, PRESSED OR BLOWN.	8.1	18.2	6.8	11.5	(Z)	363.6	6.7	(D)	1	1
325	STRUCTURAL CLAY PRODUCTS	7.8	15.2	7.4	12.8	(D)	109.3	2.5	(Z)	11	15
327	CONCRETE, GYPSUM, PLASTER PRODS. .	1.4	3.0	1.3	2.3	(D)	27.2	.8	-	25	23
33	PRIMARY METAL INDUSTRIES	9.1	27.4	3.2	6.6	(S)	(S)	(S)	-	16	(X)
332	IRON AND STEEL FOUNDRIES	.6	2.5	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	4.1	13.8	3.0	5.9	1.0	336.3	7.8	(D)	24	8
341	METAL CANS, SHIPPING CONTAINERS. .	.4	1.4	.3	.6	(D)	42.1	.8	-	2	2
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.4	1.7	.3	.5	(D)	56.4	1.3	-	9	5
344	FABRICATED STRUC. METAL PRODS. . .	1.4	4.6	1.1	2.2	.8	85.5	2.4	-	33	9
347	METAL SERVICES, NEC.	.8	2.3	.6	1.5	(D)	46.9	.8	-	79	63
349	MISC. FABRICATED METAL PRODUCTS. .	.6	2.3	.3	.6	(D)	72.6	1.7	(D)	4	7
35	MACHINERY, EXCEPT ELECTRIC . . .	3.9	15.4	2.2	4.1	1.5	517.5	11.3	(S)	15	6
352	FARM AND GARDEN MACHINERY. . . .	.8	2.1	.6	1.1	(D)	48.4	1.0	-	50	19
353	CONSTRUCTION, RELATED MACHINERY. .	.1	.7	.1	.1	(D)	15.6	.5	-	41	8
354	METALWORKING MACHINERY	.3	1.5	.1	.3	(D)	58.6	1.2	-	61	8
355	SPECIAL INDUSTRY MACHINERY	.8	3.7	.4	.9	(D)	114.3	2.8	(S)	13	12
356	GENERAL INDUSTRIAL MACHINERY . . .	.4	1.5	.2	.4	(D)	47.7	1.1	-	10	9
36	ELECTRIC, ELECTRONIC EQUIP . . .	7.1	24.6	4.1	6.2	.2	886.4	18.4	-	2	1
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.5	2.4	(D)	(D)	.1	(D)	(D)	-	(X)	(X)
362	ELECTRICAL INDUSTRIAL APPARATUS. .	3.5	9.0	2.2	2.1	.1	372.2	6.8	-	5	3
363	HOUSEHOLD APPLIANCES	.4	2.0	.2	.4	(Z)	66.2	1.7	-	1	1
364	ELEC. LIGHTING, WIRING EQUIP . . .	.8	2.8	.5	1.2	(D)	75.4	1.6	-	1	1
367	ELECTRONIC COMPONENTS, ACCESS. . .	.9	3.6	.4	.9	(Z)	121.9	2.7	-	1	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	.4	1.8	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.1	4.4	.6	1.3	.3	126.9	3.1	-	3	2
371	MOTOR VEHICLES AND EQUIPMENT . . .	.9	3.5	.5	1.1	.2	103.2	2.4	-	4	2
38	INSTRUMENTS, RELATED PRODS . . .	1.6	5.0	1.1	2.1	(D)	138.7	2.8	(D)	1	3
382	MEASURING, CONTROLLING DEVICES . .	.3	1.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.1	.6	(D)	(D)	(Z)	(D)	(D)	(D)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	1.2	4.9	.6	1.3	(D)	157.1	3.6	-	29	19
393	MUSICAL INSTRUMENTS.	.1	.2	(Z)	.1	(D)	4.0	.1	-	37	25
399	MISCELLANEOUS MANUFACTURES	.7	3.0	.4	.8	(D)	97.2	2.1	-	45	32

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	SOUTH CAROLINA	226.2	544.7	173.6	269.8	4.5	15,381.5	284.9	1,585.4	2	1
20	FOOD AND KINDRED PRODUCTS	3.6	9.9	2.7	4.7	.5	232.3	5.2	-	5	4
202	DAIRY PRODUCTS	.6	1.6	.4	.7	(D)	41.4	1.0	-	4	12
205	BAKERY PRODUCTS	.4	.9	.3	.5	.2	18.9	.4	-	3	6
207	FATS AND OILS	1.3	2.8	1.2	1.9	(D)	39.1	.9	-	1	1
22	TEXTILE MILL PRODUCTS	64.9	187.0	43.4	71.5	1.3	6,316.0	115.6	(D)	1	1
221	WEAVING MILLS, COTTON	7.5	29.8	2.8	5.0	(D)	1,367.4	24.8	(D)	1	1
222	WEAV'G MILLS, MANMADE FIBER	17.6	66.3	7.3	12.5	(S)	3,013.6	53.8	(D)	1	1
225	KNITTING MILLS	4.9	13.0	3.6	5.9	(S)	379.4	7.1	(Z)	1	2
226	TEXTILE FINISHING, EXCEPT WOOL	27.1	50.1	25.3	39.7	(D)	531.0	10.4	128.1	1	1
227	FLOOR COVERING MILLS	1.7	4.3	1.4	2.6	(D)	77.7	1.7	(D)	1	1
228	YARN AND THREAD MILLS	3.5	14.3	1.4	2.7	(D)	619.3	11.7	-	4	5
229	MISCELLANEOUS TEXTILE GOODS	2.0	6.7	(D)	(D)	.5	237.1	4.6	-	(X)	2
23	APPAREL, OTH. TEXTILE PRODS	4.5	13.2	3.2	5.5	(D)	377.3	7.7	(D)	4	5
231	MEN'S AND BOYS' SUITS AND COATS	.1	(D)	.1	.1	(D)	(D)	(D)	-	1	(X)
232	MEN'S AND BOYS' FURNISHINGS	.3	1.6	(Z)	.1	(S)	75.0	1.5	(D)	96	18
233	WOMEN'S AND MISSES' OUTERWEAR	.5	2.3	.2	.4	(D)	83.8	1.9	(Z)	6	5
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.5	(Z)	.1	(D)	18.7	.4	-	1	1
236	CHILDREN'S OUTERWEAR	.2	.9	.1	.1	(Z)	36.5	.8	-	1	1
239	MISC. FABRICATED TEXTILE PRODS	3.3	7.5	2.8	4.7	.2	148.5	2.8	(D)	4	7
24	LUMBER AND WOOD PRODUCTS	6.0	19.3	4.5	10.4	(D)	425.6	8.9	(D)	27	9
242	SAWMILLS AND PLANING MILLS	2.1	7.0	1.3	2.8	(D)	220.3	4.2	(D)	17	16
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.0	3.7	.6	1.2	.6	114.0	2.5	-	33	12
249	MISCELLANEOUS WOOD PRODUCTS	1.7	5.0	1.4	2.8	(D)	93.2	2.2	-	2	4
25	FURNITURE AND FIXTURES	.4	1.6	.2	.3	.1	56.0	1.3	-	24	13
26	PAPER AND ALLIED PRODUCTS	42.2	88.7	36.7	59.6	1.0	1,611.2	29.1	778.3	1	1
263	PAPERBOARD MILLS	30.1	55.9	28.6	46.6	(D)	442.2	9.3	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.0	3.4	.6	1.0	(D)	128.3	2.5	-	4	3
265	PAPERBOARD CONTAINERS AND BOXES	1.3	3.2	1.0	1.7	.2	64.2	1.4	(D)	1	2
28	CHEMICALS, ALLIED PRODUCTS	53.3	109.1	44.1	61.4	1.8	2,706.3	47.7	672.8	1	1
282	PLASTICS MATERIALS, SYNTHETICS	32.1	68.2	26.1	37.3	(D)	1,732.6	30.9	(D)	1	1
284	SOAPS, CLEANERS, TOILET GOODS	.5	1.3	.4	.8	(D)	25.7	.6	-	3	4
287	AGRICULTURAL CHEMICALS	.5	1.1	.4	.6	(D)	18.7	.4	-	3	4
30	RUBBER, MISC. PLASTICS PROD	5.7	16.6	3.9	6.3	(Z)	533.4	10.3	(D)	3	1
307	MISCELLANEOUS PLASTICS PRODUCTS	3.9	10.8	2.7	4.1	(Z)	342.8	6.7	(D)	4	2
32	STONE, CLAY, GLASS PRODUCTS	23.3	40.8	20.9	28.2	2.0	691.9	12.6	(D)	4	3
327	CONCRETE, GYPSUM, PLASTER PRODS	1.0	2.2	.9	1.6	.6	27.0	.6	-	27	21
33	PRIMARY METAL INDUSTRIES	11.5	29.5	7.7	10.7	(S)	1,122.7	18.8	(D)	11	5
331	BLAST FURNACE, BASIC STEEL PROD	5.8	20.8	2.4	4.3	(D)	1,008.9	16.5	-	1	2
335	NONFERROUS ROLLING AND DRAWING	.3	1.3	.2	.3	(D)	38.2	.9	(D)	1	1
34	FABRICATED METAL PRODUCTS	2.1	6.9	1.4	2.5	.2	199.8	4.4	(S)	11	6
344	FABRICATED STRUC. METAL PRODS	.6	2.0	.4	.8	.2	60.3	1.2	(D)	8	13
35	MACHINERY, EXCEPT ELECTRIC	4.1	14.8	2.3	4.2	.2	521.1	10.6	(Z)	5	4
352	FARM AND GARDEN MACHINERY	.1	.7	.1	.2	(S)	18.4	.5	-	8	9
353	CONSTRUCTION, RELATED MACHINERY	.3	1.1	.2	.3	(Z)	35.4	.8	-	5	11
354	METALWORKING MACHINERY	.3	1.3	.1	.3	(Z)	48.0	1.0	-	6	11
356	GENERAL INDUSTRIAL MACHINERY	1.4	4.5	.8	1.5	(Z)	166.6	3.0	-	3	4
357	OFFICE AND COMPUTING MACHINES	.2	(D)	.1	(D)	(Z)	19.7	.4	-	(X)	1
358	REFRIGERATION AND SERVICE MACH	.1	.5	.1	.1	(Z)	13.9	.4	(Z)	6	5
36	ELECTRIC, ELECTRONIC EQUIP	2.1	8.3	1.0	1.7	(Z)	316.0	6.6	(D)	1	2
362	ELECTRICAL INDUSTRIAL APPARATUS	.4	1.8	.2	.4	(Z)	61.5	1.4	-	4	6
363	HOUSEHOLD APPLIANCES	.4	1.4	.2	.4	(Z)	44.8	1.1	(Z)	1	1
366	COMMUNICATION EQUIPMENT	.2	.8	.1	.2	(Z)	26.7	.7	-	1	1
367	ELECTRONIC COMPONENTS, ACCESS	.8	3.2	.3	.6	(Z)	142.8	2.6	-	1	1
37	TRANSPORTATION EQUIPMENT	.6	2.2	.4	.7	.4	57.7	1.5	(Z)	14	11
371	MOTOR VEHICLES AND EQUIPMENT	.2	(D)	.1	.1	(Z)	(D)	(D)	-	1	(X)
38	INSTRUMENTS, RELATED PRODS	.8	2.8	.5	1.0	(D)	87.8	1.8	-	2	2
39	MISC. MANUFACTURING INDUS	.4	1.6	.2	.4	(D)	52.1	1.2	-	12	5
394	TOYS AND SPORTING GOODS	.2	.6	.1	.2	(D)	21.6	.4	-	1	1
	GEORGIA	253.8	631.0	206.7	311.2	22.6	13,840.9	319.8	2,415.7	1	1
20	FOOD AND KINDRED PRODUCTS	17.8	48.6	14.2	22.6	3.0	1,073.0	25.9	(D)	5	3
201	MEAT PRODUCTS	3.5	10.7	2.6	4.2	1.3	301.1	6.5	(D)	6	5
202	DAIRY PRODUCTS	.7	2.7	.5	.7	(D)	75.5	2.0	-	7	8
203	PRESERVED FRUITS AND VEGETABLES	1.3	3.7	1.0	1.5	(D)	84.3	2.2	-	11	10
204	GRAIN MILL PRODUCTS	1.0	4.0	.6	1.0	(D)	132.2	3.0	(D)	14	8
205	BAKERY PRODUCTS	1.6	4.0	1.2	1.6	(S)	110.9	2.4	-	3	4
206	SUGAR, CONFECTIONERY PRODUCTS	2.8	6.1	2.5	3.7	(D)	83.5	2.4	(D)	1	1
207	FATS AND OILS	3.7	8.4	3.4	5.7	(D)	100.2	2.6	-	12	1
208	BEVERAGES	2.5	6.6	2.1	3.4	(S)	123.7	3.1	(D)	19	13
209	MISC. FOODS, KINDRED PRODUCTS	.7	2.4	.5	.8	.3	61.6	1.7	-	2	11

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	GEORGIA--CON.										
22	TEXTILE MILL PRODUCTS	48.4	140.9	34.9	51.9	4.8	3,951.0	89.1	93.9	2	1
221	WEAVING MILLS, COTTON	8.5	26.3	5.7	7.6	.1	828.7	18.7	67.9	1	1
222	WEAV'G MILLS, MANMADE FIBER	5.5	20.4	2.9	4.0	(D)	763.8	16.3	(D)	1	1
227	FLOOR COVERING MILLS	18.7	41.7	16.4	25.8	(D)	648.1	15.9	(D)	2	2
228	YARN AND THREAD MILLS	7.5	29.3	3.9	6.1	.5	1,037.0	23.2	(D)	2	2
229	MISCELLANEOUS TEXTILE GOODS	3.3	11.6	2.1	3.4	(D)	359.3	8.2	-	21	4
23	APPAREL, OTH. TEXTILE PRODS	4.6	17.2	2.8	4.6	(D)	507.6	12.6	(Z)	4	5
231	MEN'S AND BOYS' SUITS AND COATS	.3	1.4	.2	.2	(Z)	41.0	1.2	-	16	14
234	WOMEN'S, CHILDREN'S UNDERGARMS	.3	1.5	(Z)	(Z)	(Z)	69.1	1.5	(Z)	1	9
236	CHILDREN'S OUTERWEAR	.2	.8	.1	.3	(D)	18.4	.5	-	1	1
238	MISC. APPAREL AND ACCESSORIES	.1	.4	.1	.1	.1	9.4	.2	-	22	24
239	MISC. FABRICATED TEXTILE PRODS	2.0	5.8	(D)	(D)	.2	(D)	(D)	-	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	7.7	24.3	5.4	10.1	1.2	664.8	14.2	(D)	14	8
241	LOGGING CAMPS, LOG CONTRACTORS	1.5	3.4	1.5	3.2	.6	12.2	(S)	-	34	(X)
242	SAWMILLS AND PLANING MILLS	3.4	11.1	2.1	3.9	(D)	396.9	7.3	-	19	14
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.3	5.3	.9	1.6	.1	140.1	3.7	(D)	23	9
244	WOOD CONTAINERS	.1	.4	.1	.2	(D)	6.0	.3	-	55	25
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.6	.1	.1	(Z)	13.8	.5	-	19	22
249	MISCELLANEOUS WOOD PRODUCTS	1.1	3.5	.8	1.2	.3	95.6	2.3	-	1	2
25	FURNITURE AND FIXTURES	.7	2.6	.5	.8	.3	61.1	1.7	-	14	18
251	HOUSEHOLD FURNITURE	.4	1.9	.3	.5	.3	47.9	1.4	-	15	9
254	PARTITIONS AND FIXTURES	.1	(Z)	.1	.1	(Z)	(S)	(S)	-	52	(X)
259	MISC. FURNITURE AND FIXTURES	.1	(D)	.1	.1	(Z)	(D)	(D)	-	68	(X)
26	PAPER AND ALLIED PRODUCTS	79.4	156.1	72.1	109.9	2.6	2,131.2	46.3	2,237.1	1	2
263	PAPERBOARD MILLS	49.4	84.1	47.1	68.8	.9	666.0	15.3	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.6	6.2	.7	.9	.1	248.3	5.3	-	1	3
265	PAPERBOARD CONTAINERS AND BOXES	1.7	6.2	1.3	2.2	(D)	143.4	4.0	-	13	11
27	PRINTING AND PUBLISHING	1.3	5.6	.7	1.2	(D)	152.1	4.4	(D)	23	14
271	NEWSPAPERS	.3	1.6	.1	.1	(D)	53.5	1.5	(D)	6	28
275	COMMERCIAL PRINTING	.8	3.0	.5	.9	.4	73.3	2.1	-	30	12
276	MANIFOLD BUSINESS FORMS	.1	.4	(Z)	(Z)	(Z)	11.0	.3	-	81	18
28	CHEMICALS, ALLIED PRODUCTS	29.9	74.6	23.9	34.8	(D)	1,743.0	39.9	(D)	1	2
281	INDUSTRIAL INORGANIC CHEMICALS	10.0	32.7	6.6	10.6	(D)	1,011.0	22.1	(D)	3	1
282	PLASTICS MATERIALS, SYNTHETICS	2.1	3.6	1.9	2.0	(D)	70.1	1.6	(D)	1	1
285	PAINTS AND ALLIED PRODUCTS	.4	1.7	.3	.4	(D)	49.3	1.3	-	3	37
287	AGRICULTURAL CHEMICALS	7.7	17.0	6.7	9.0	(D)	306.3	8.0	-	1	4
289	MISCELLANEOUS CHEMICAL PRODUCTS	1.0	2.7	.9	1.5	(D)	46.9	1.2	(S)	7	18
29	PETROLEUM AND COAL PRODUCTS	2.8	5.0	2.7	3.6	(D)	43.7	1.4	-	16	19
295	PAVING AND ROOFING MATERIALS	1.7	3.2	1.6	2.3	(D)	31.7	1.0	-	4	4
30	RUBBER, MISC. PLASTICS PROD.	3.9	13.6	2.6	3.9	1.0	400.3	9.6	(D)	13	9
306	FABRICATED RUBBER PRODUCTS, NEC.	.6	2.0	.4	.7	.3	51.1	1.3	(D)	9	9
307	MISCELLANEOUS PLASTICS PRODUCTS	1.7	6.8	1.0	1.6	.6	208.5	5.1	-	30	17
31	LEATHER, LEATHER PRODUCTS	.2	.9	.1	.2	.1	24.8	.7	-	3	3
314	FOOTWEAR, EXCEPT RUBBER	.1	.5	(Z)	.1	(Z)	15.1	.4	-	1	1
32	STONE, CLAY, GLASS PRODUCTS	31.7	58.1	28.8	38.9	1.0	854.7	19.2	(D)	4	4
323	PRODUCTS OF PURCHASED GLASS	(Z)	.1	(S)	(S)	(Z)	3.4	.1	-	(X)	11
324	CEMENT, HYDRAULIC	4.9	8.0	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
325	STRUCTURAL CLAY PRODUCTS	9.2	14.4	8.8	11.2	.5	123.4	3.2	(D)	10	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	5.5	10.9	5.1	7.9	.2	122.2	3.0	-	8	15
328	CUT STONE AND STONE PRODUCTS	.4	1.4	.2	.4	(D)	50.5	1.0	-	60	46
329	MISC. NONMETALLIC MINERAL PRODS.	7.4	15.4	6.4	9.1	(D)	302.0	6.3	(D)	5	7
33	PRIMARY METAL INDUSTRIES	9.2	28.3	6.8	10.9	1.4	709.7	17.4	-	2	1
332	IRON AND STEEL FOUNDRIES	.4	1.8	(S)	(S)	(D)	(D)	(D)	-	(X)	(X)
335	NONFERROUS ROLLING AND DRAWING	4.0	11.0	3.0	4.5	(D)	301.5	6.5	-	3	3
34	FABRICATED METAL PRODUCTS	3.5	11.9	2.3	3.9	1.0	323.6	8.1	(D)	8	8
341	METAL CANS, SHIPPING CONTAINERS	.5	1.4	.4	.7	(S)	30.1	.7	(D)	4	6
343	PLUMBING, HEATING, EXCEPT ELEC	.1	.3	.1	.1	(D)	6.4	.2	-	9	15
344	FABRICATED STRUC. METAL PRODS.	1.4	5.1	.9	1.6	(D)	135.6	3.5	(D)	4	9
346	METAL FORGINGS AND STAMPINGS	.3	1.3	.2	.4	(D)	33.3	.9	(D)	1	1
348	ORDNANCE AND ACCESSORIES, NEC.	(Z)	(Z)	(Z)	(Z)	(Z)	.3	(Z)	-	1	1
349	MISC. FABRICATED METAL PRODUCTS	.5	2.1	.2	.4	(Z)	79.1	1.7	-	38	9
35	MACHINERY, EXCEPT ELECTRIC	2.0	7.8	1.3	2.3	.8	206.0	5.5	(D)	10	6
352	FARM AND GARDEN MACHINERY	.5	1.5	.3	.6	(D)	30.3	1.0	-	36	15
353	CONSTRUCTION, RELATED MACHINERY	.3	.8	.2	.3	.1	15.8	.5	-	3	5
355	SPECIAL INDUSTRY MACHINERY	.3	1.0	(D)	(D)	.2	24.3	.7	-	(X)	14
356	GENERAL INDUSTRIAL MACHINERY	.4	1.7	.2	.4	.1	57.9	1.3	-	3	7
358	REFRIGERATION AND SERVICE MACH	.2	.6	.1	.2	(D)	11.4	.4	-	3	2
359	MISC. MACHINERY, EXC. ELEC	.1	.8	.1	.1	(D)	23.3	.7	-	32	15
36	ELECTRIC, ELECTRONIC EQUIP	2.8	9.7	1.8	2.7	(S)	296.6	7.0	(D)	7	3
361	ELECTRIC DISTRIBUTING EQUIPMENT	1.0	3.4	.6	1.0	(Z)	94.2	2.4	-	2	2
364	ELEC. LIGHTING, WIRING EQUIP	.4	1.2	.3	.4	(D)	30.9	.8	-	42	19
366	COMMUNICATION EQUIPMENT	.1	(D)	(Z)	(Z)	(Z)	(D)	(D)	(D)	1	(X)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.8	2.9	.4	.6	(D)	100.3	2.3	(Z)	1	1

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)		
		A	B	C	D	E	F	G	H	D	G
	GEORGIA--CON.										
37	TRANSPORTATION EQUIPMENT	6.6	20.8	4.8	7.8	.3	550.2	13.0	(D)	2	1
379	TRANSPORTATION EQUIPMENT, NEC.	.1	.3	(Z)	.1	(Z)	7.3	.2	-	8	8
38	INSTRUMENTS, RELATED PRODS	.4	1.3	.3	.4	(D)	35.4	1.0	-	4	10
384	MEDICAL INSTRUMENTS, SUPPLIES.	.2	.7	.2	.3	(D)	12.5	.4	-	5	6
39	MISC. MANUFACTURING INDUS.	.8	3.6	.5	.8	.3	110.6	2.8	-	3	15
394	TOYS AND SPORTING GOODS.	.3	(D)	.2	.4	.1	(D)	(D)	-	3	(X)
395	PENS, OFFICE AND ART GOODS	.2	.7	.1	.2	(Z)	19.5	.5	-	13	4
399	MISCELLANEOUS MANUFACTURES	.2	.8	.1	.2	.1	26.0	.7	-	1	60
	FLORIDA.	198.4	504.9	169.0	275.9	(D)	8,628.5	229.0	2,430.9	2	2
20	FOOD AND KINDRED PRODUCTS.	27.0	76.8	22.6	38.8	3.6	1,298.2	38.0	(D)	4	3
201	MEAT PRODUCTS.	1.4	5.1	1.0	1.6	.3	114.2	3.5	(Z)	1	3
202	DAIRY PRODUCTS	1.2	5.5	.8	1.3	(D)	134.3	4.2	(D)	10	12
203	PRESERVED FRUITS AND VEGETABLES.	12.6	32.3	10.8	16.8	(S)	555.3	15.5	(D)	6	5
204	GRAIN MILL PRODUCTS.	1.0	2.8	.8	1.5	(D)	41.2	1.3	-	58	15
205	BAKERY PRODUCTS.	1.0	3.3	.8	1.5	(D)	62.5	1.8	(D)	27	23
206	SUGAR, CONFECTIONERY PRODUCTS.	4.0	9.8	3.8	8.4	(D)	47.0	1.4	59.5	1	7
207	FATS AND OILS.	1.1	2.4	1.0	1.6	(D)	30.0	.8	-	26	25
208	BEVERAGES.	2.9	9.5	2.3	3.9	.6	179.4	5.6	(D)	2	3
209	MISC. FOODS, KINDRED PRODUCTS.	1.8	6.0	1.4	2.2	.6	134.3	3.8	-	11	9
21	TOBACCO PRODUCTS	.3	1.0	.2	.2	(D)	23.9	.7	-	15	9
212	CIGARS	.3	1.0	.2	.2	(D)	23.7	.7	-	15	9
22	TEXTILE MILL PRODUCTS.	.5	2.2	.2	.4	.3	81.9	1.8	-	19	11
225	KNITTING MILLS	.5	1.9	.2	.5	.4	69.2	1.5	-	10	8
23	APPAREL, OTH. TEXTILE PRODS.	1.0	4.6	.5	1.0	(D)	144.4	3.6	(S)	17	19
232	MEN'S AND BOYS' FURNISHINGS.	.1	.4	.1	.3	(D)	(S)	(S)	-	8	(X)
233	WOMEN'S AND MISSES' OUTERWEAR.	.5	2.5	.2	.4	.4	87.4	2.1	(S)	17	28
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	.3	(Z)	(Z)	(D)	8.0	.2	-	1	24
236	CHILDREN'S OUTERWEAR	.1	.4	(Z)	(Z)	(Z)	16.5	.4	-	1	58
24	LUMBER AND WOOD PRODUCTS	2.9	9.6	2.1	4.0	2.0	219.2	5.6	-	16	10
241	LOGGING CAMPS, LOG CONTRACTORS	.6	1.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
242	SAWMILLS AND PLANING MILLS	.7	3.0	.4	1.0	(D)	77.1	2.0	-	49	22
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.6	.1	.1	.1	14.4	.5	-	9	6
249	MISCELLANEOUS WOOD PRODUCTS.	.8	2.0	.6	.9	(D)	38.3	1.1	-	21	10
25	FURNITURE AND FIXTURES	.6	2.8	.4	.7	.6	72.0	2.0	-	17	12
251	HOUSEHOLD FURNITURE.	.4	1.9	.2	.5	.4	49.4	1.4	-	25	15
254	PARTITIONS AND FIXTURES.	.1	.3	.1	.1	(D)	6.6	.2	-	15	57
26	PAPER AND ALLIED PRODUCTS.	59.2	108.2	57.6	94.5	.3	455.8	13.7	2,238.0	1	3
263	PAPERBOARD MILLS	25.9	47.8	25.3	41.9	(D)	186.4	5.9	1,076.0	1	1
264	MISC. CONVERTED PAPER PRODUCTS	.3	1.4	.2	.4	(D)	31.8	1.0	(D)	6	29
265	PAPERBOARD CONTAINERS AND BOXES.	1.1	3.7	.9	1.4	.2	75.2	2.3	(Z)	3	8
27	PRINTING AND PUBLISHING.	1.7	9.8	.6	1.1	.6	304.3	8.6	-	26	12
271	NEWSPAPERS	.7	5.0	.1	.2	.1	159.1	4.8	-	1	9
275	COMMERCIAL PRINTING.	.8	3.8	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	63.7	158.5	52.6	84.1	4.3	3,250.9	74.4	126.2	1	3
281	INDUSTRIAL INORGANIC CHEMICALS	2.6	13.7	.4	.9	.1	619.9	12.8	-	1	1
287	AGRICULTURAL CHEMICALS	22.4	68.8	16.3	25.8	(D)	1,792.9	43.0	(D)	1	4
289	MISCELLANEOUS CHEMICAL PRODUCTS.	2.0	3.7	1.9	2.8	(D)	33.6	.9	-	2	6
29	PETROLEUM AND COAL PRODUCTS.	1.5	3.3	(D)	(D)	.4	(D)	(D)	-	(X)	(X)
295	PAVING AND ROOFING MATERIALS	.6	1.7	.6	1.5	(S)	(S)	(S)	-	65	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.3	6.1	.8	1.3	1.1	158.9	4.8	(S)	10	25
307	MISCELLANEOUS PLASTICS PRODUCTS.	1.0	4.7	.6	1.0	.9	122.3	3.7	(S)	7	32
31	LEATHER, LEATHER PRODUCTS.	.1	(D)	(Z)	.1	.1	(D)	(D)	(D)	14	(X)
314	FOOTWEAR, EXCEPT RUBBER.	(Z)	(D)	(Z)	(Z)	(Z)	(D)	(D)	-	1	(X)
317	WOMEN'S HANDBAGS AND PURSES.	(Z)	.2	(Z)	(Z)	(Z)	7.2	.2	(D)	1	36
32	STONE, CLAY, GLASS PRODUCTS.	21.1	43.6	19.4	28.8	4.5	491.6	14.8	(S)	8	3
322	GLASS, PRESSED OR BLOWN.	4.7	9.1	4.3	5.6	(D)	118.6	3.5	(S)	2	2
327	CONCRETE, GYPSUM, PLASTER PRODS.	6.1	13.8	5.7	10.2	4.1	115.3	3.7	(Z)	22	9
33	PRIMARY METAL INDUSTRIES	4.5	15.3	3.3	5.4	1.7	348.0	10.0	(S)	10	4
335	NONFERROUS ROLLING AND DRAWING	.3	1.1	.2	.3	(D)	27.7	.8	-	14	11
34	FABRICATED METAL PRODUCTS.	4.0	15.6	2.8	4.9	1.9	355.0	10.7	(S)	7	6
341	METAL CANS, SHIPPING CONTAINERS.	1.2	4.7	.8	1.4	(Z)	105.3	3.4	-	2	1
344	FABRICATED STRUC. METAL PRODS.	1.3	5.2	.8	1.5	.9	130.6	3.7	-	15	10
346	METAL FORGINGS AND STAMPINGS	.3	1.2	.3	.5	.3	19.8	.7	-	23	23
348	ORDNANCE AND ACCESSORIES, NEC.	(Z)	(D)	(Z)	(Z)	-	(D)	(D)	(Z)	1	(X)
349	MISC. FABRICATED METAL PRODUCTS.	.4	1.6	.3	.5	(D)	38.8	1.1	(S)	40	19
35	MACHINERY, EXCEPT ELECTRIC	1.8	9.5	.8	1.5	1.0	284.2	7.9	(S)	13	6

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	FLORIDA--CON.										
35	MACHINERY, EXCEPT ELECTRIC--CON.										
353	CONSTRUCTION, RELATED MACHINERY.	.1	(D)	.1	.2	.1	(D)	(D)	-	35	(X)
355	SPECIAL INDUSTRY MACHINERY	.3	1.7	.1	.2	(D)	52.6	1.6	-	4	14
357	OFFICE AND COMPUTING MACHINES.	.5	3.1	.1	.2	(D)	116.3	2.9	-	1	6
358	REFRIGERATION AND SERVICE MACH	.2	.7	.1	.2	(D)	13.5	.5	-	1	7
359	MISC. MACHINERY, EXC. ELEC	.2	1.1	.1	.3	(D)	23.3	.7	-	53	32
37	TRANSPORTATION EQUIPMENT	3.2	13.8	2.0	3.7	(S)	354.8	10.1	(S)	5	6
372	AIRCRAFT AND PARTS	1.6	6.0	1.1	1.9	(Z)	159.2	4.2	(D)	1	4
373	SHIP, BOAT BUILDING, REPAIRING	1.0	4.2	.8	1.5	.9	77.6	2.7	-	6	17
376	GUIDED MISSILES, SPACE VEHICLES.	.4	2.5	.1	.1	(D)	84.9	2.4	(S)	1	1
38	INSTRUMENTS, RELATED PRODS	.6	4.2	.2	.3	.3	141.9	3.9	-	10	8
381	ENGINEERING, SCIENTIFIC INSTRU	(Z)	(D)	(Z)	(Z)	(Z)	(D)	(D)	-	1	(X)
382	MEASURING, CONTROLLING DEVICES	(Z)	.2	(Z)	(Z)	(Z)	10.2	.2	-	1	82
39	MISC. MANUFACTURING INDUS.	.4	2.0	.3	.6	(D)	50.5	1.4	-	1	11
399	MISCELLANEOUS MANUFACTURES	.2	1.0	.1	.3	(D)	26.4	.7	-	1	22
	KENTUCKY	258.0	689.3	149.8	236.4	(S)	31,702.1	452.9	23.5	2	1
20	FOOD AND KINDRED PRODUCTS.	13.4	24.4	11.9	15.8	(S)	437.5	8.6	(D)	9	7
201	MEAT PRODUCTS.	1.1	2.6	.8	1.2	.1	84.7	1.4	(D)	1	6
202	DAIRY PRODUCTS	1.4	3.4	1.2	1.9	(S)	74.6	1.5	(D)	14	26
204	GRAIN MILL PRODUCTS.	.2	.5	.1	.2	.1	16.7	.3	-	3	4
205	BAKERY PRODUCTS.	.8	1.5	.7	1.0	(D)	21.3	.5	-	13	6
207	FATS AND OILS.	2.8	4.2	2.6	3.0	(D)	70.8	1.1	-	17	19
208	BEVERAGES.	6.1	10.0	5.7	7.3	(S)	121.7	2.7	(D)	9	8
209	MISC. FOODS, KINDRED PRODUCTS.	.6	1.7	.5	.8	(D)	42.9	.9	-	11	9
21	TOBACCO PRODUCTS	3.3	7.7	2.7	4.2	(D)	191.3	3.5	-	2	3
211	CIGARETTES	2.4	5.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
214	TOBACCO STEMMING AND REDRYING.	.7	1.7	.6	1.0	(D)	32.2	.8	-	7	11
22	TEXTILE MILL PRODUCTS.	2.2	5.5	1.6	2.2	.1	174.8	3.3	-	8	2
23	APPAREL, OTH. TEXTILE PRODS.	1.2	3.9	.8	1.3	(D)	112.4	2.6	-	3	4
231	MEN'S AND BOYS' SUITS AND COATS.	.2	.6	.2	.3	.2	9.9	.3	-	1	1
232	MEN'S AND BOYS' FURNISHINGS.	.5	1.9	.3	.5	.1	67.5	1.5	-	4	5
233	WOMEN'S AND MISSES' OUTERWEAR.	.1	.4	.1	.1	(D)	14.3	.3	-	15	11
239	MISC. FABRICATED TEXTILE PRODS	.1	(D)	.1	.1	(D)	(D)	(D)	-	14	(X)
24	LUMBER AND WOOD PRODUCTS	1.7	4.7	1.2	1.7	(S)	151.7	3.0	(D)	51	23
242	SAWMILLS AND PLANING MILLS	1.2	3.2	.8	1.5	1.0	94.7	1.7	-	48	32
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.3	.6	(S)	(S)	(S)	18.1	.4	-	(X)	37
249	MISCELLANEOUS WOOD PRODUCTS.	.2	.8	.2	.3	(D)	23.1	.5	(D)	21	38
25	FURNITURE AND FIXTURES	.6	1.9	.4	.7	.3	51.4	1.2	-	17	12
251	HOUSEHOLD FURNITURE.	.4	1.3	.2	.4	.2	37.4	.9	-	9	12
26	PAPER AND ALLIED PRODUCTS.	9.1	15.2	7.5	8.3	.1	464.3	6.9	-	1	1
264	MISC. CONVERTED PAPER PRODUCTS	.5	1.7	.3	.5	(D)	61.6	1.2	-	1	1
265	PAPERBOARD CONTAINERS AND BOXES.	.7	2.2	.5	.8	(D)	80.8	1.5	-	8	4
27	PRINTING AND PUBLISHING.	1.6	5.1	1.1	1.7	(D)	162.0	3.4	(S)	8	11
271	NEWSPAPERS	.3	1.0	.1	.2	(Z)	37.9	.8	-	8	33
275	COMMERCIAL PRINTING.	1.0	2.8	.7	1.0	(D)	85.9	1.8	(D)	9	16
276	MANIFOLD BUSINESS FORMS.	.1	(D)	(Z)	(Z)	-	(D)	(D)	-	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	98.3	321.0	30.6	36.1	(S)	19,849.1	284.9	-	2	1
282	PLASTICS MATERIALS, SYNTHETICS	15.9	24.8	14.2	17.5	(D)	513.6	7.3	-	1	1
285	PAINTS AND ALLIED PRODUCTS	.3	.7	.2	.3	(D)	15.6	.4	-	17	23
287	AGRICULTURAL CHEMICALS	.5	.8	.4	.4	(D)	16.4	.4	-	16	21
30	RUBBER, MISC. PLASTICS PROD.	3.9	11.3	2.8	5.1	(D)	328.3	6.2	-	2	6
307	MISCELLANEOUS PLASTICS PRODUCTS.	1.1	4.1	.6	1.0	.2	154.3	3.1	-	10	11
31	LEATHER, LEATHER PRODUCTS.	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
314	FOOTWEAR, EXCEPT RUBBER.	.1	.6	(Z)	.1	(D)	20.8	.5	-	1	1
32	STONE, CLAY, GLASS PRODUCTS.	10.9	18.9	9.9	13.3	(S)	295.6	5.6	(D)	12	6
322	GLASS, PRESSED OR BLOWN.	2.8	5.0	2.6	3.9	(Z)	55.3	1.1	-	1	1
325	STRUCTURAL CLAY PRODUCTS	2.6	4.0	2.5	3.0	(S)	42.0	1.0	-	47	29
326	POTTERY AND RELATED PRODUCTS	.4	.8	.3	.6	.1	10.5	.2	-	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	.8	1.9	.8	1.4	(D)	25.0	.6	-	50	32
33	PRIMARY METAL INDUSTRIES	79.1	192.7	54.8	110.9	(S)	7,128.9	81.8	(D)	1	1
335	NONFERROUS ROLLING AND DRAWING	6.6	13.1	5.3	7.1	(D)	372.2	6.0	-	1	1
34	FABRICATED METAL PRODUCTS.	6.6	13.7	5.5	7.2	1.0	320.9	6.5	(Z)	6	5
342	CUTLERY, HANDTOOLS AND HARDWARE.	.2	.8	.1	.2	(Z)	30.2	.6	-	1	1
344	FABRICATED STRUC. METAL PRODS.	.4	1.2	.3	.5	(D)	29.0	.7	(Z)	17	13
346	METAL FORGINGS AND STAMPINGS	.7	1.4	.6	.8	(D)	22.8	.6	-	11	23
347	METAL SERVICES, NEC.	.3	.6	.2	.3	(Z)	14.7	.3	-	45	84
349	MISC. FABRICATED METAL PRODUCTS.	2.8	5.7	2.4	3.1	(D)	123.2	2.5	-	11	7
35	MACHINERY, EXCEPT ELECTRIC	8.0	21.8	5.9	10.0	(S)	626.7	11.7	(D)	7	6

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	KENTUCKY--CON.										
35	MACHINERY, EXCEPT ELECTRIC--CON.										
353	CONSTRUCTION, RELATED MACHINERY.	.8	2.9	.5	1.0	(S)	86.3	1.9	-	12	15
354	METALWORKING MACHINERY	.2	.6	.1	.2	(D)	15.8	.4	(Z)	34	18
356	GENERAL INDUSTRIAL MACHINERY	.7	2.1	.4	.5	(Z)	71.8	1.6	-	5	2
358	REFRIGERATION AND SERVICE MACH	2.0	5.0	1.4	1.9	(Z)	175.9	3.1	-	1	1
359	MISC. MACHINERY, EXC. ELEC	.2	1.0	(S)	(S)	(S)	32.0	.7	-	(X)	20
36	ELECTRIC, ELECTRONIC EQUIP	7.7	18.7	5.5	7.3	(S)	649.5	11.5	(D)	2	2
361	ELECTRIC DISTRIBUTING EQUIPMENT.	.5	1.6	.3	.4	(Z)	58.9	1.1	-	3	8
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.1	2.9	.7	.7	(S)	119.0	2.2	-	1	1
363	HOUSEHOLD APPLIANCES	4.5	9.4	3.3	4.1	(Z)	345.1	5.3	(D)	1	1
364	ELEC. LIGHTING, WIRING EQUIP	1.0	2.5	.9	1.5	.1	47.7	1.0	-	1	1
37	TRANSPORTATION EQUIPMENT	4.0	9.3	3.0	4.5	(D)	277.8	4.8	-	1	1
371	MOTOR VEHICLES AND EQUIPMENT	3.7	8.4	2.8	4.1	.1	258.7	4.3	-	1	1
38	INSTRUMENTS, RELATED PRODS	.2	.8	.1	.2	(D)	24.9	.6	-	10	7
382	MEASURING, CONTROLLING DEVICES	.1	.5	(Z)	.1	(D)	17.5	.4	-	1	1
39	MISC. MANUFACTURING INDUS.	.4	1.3	.2	.4	(D)	42.4	.9	-	20	10
394	TOYS AND SPORTING GOODS.	.1	.5	.1	.1	(D)	20.2	.4	-	67	22
399	MISCELLANEOUS MANUFACTURES	.1	.4	.1	.2	(D)	10.3	.2	-	1	10
	TENNESSEE.	351.0	826.1	233.1	296.1	12.8	34,542.6	530.1	1,677.0	1	1
20	FOOD AND KINDRED PRODUCTS.	20.8	43.2	17.3	25.4	(D)	1,000.0	17.9	(D)	2	3
201	MEAT PRODUCTS.	2.4	5.8	1.7	2.7	(D)	179.5	3.2	(D)	3	4
202	DAIRY PRODUCTS	1.5	4.2	1.2	2.3	(D)	92.2	1.9	(D)	4	11
203	PRESERVED FRUITS AND VEGETABLES.	1.9	4.5	1.6	3.2	(D)	70.7	1.3	(D)	3	4
204	GRAIN MILL PRODUCTS.	1.8	4.7	1.3	2.0	.3	156.6	2.7	-	16	14
205	BAKERY PRODUCTS.	1.4	2.9	1.2	1.7	(D)	68.5	1.2	-	3	4
206	SUGAR, CONFECTIONERY PRODUCTS.	.3	.7	.2	.3	(D)	25.4	.4	-	40	24
207	FATS AND OILS.	8.5	13.3	7.7	9.6	(D)	214.9	3.7	-	2	4
208	BEVERAGES.	2.2	5.0	1.7	2.8	(S)	125.1	2.2	(Z)	8	9
209	MISC. FOODS, KINDRED PRODUCTS.	.9	2.2	.7	.9	(D)	67.1	1.3	-	1	4
21	TOBACCO PRODUCTS	.2	.5	.2	.3	(S)	6.8	.2	-	37	17
213	CHEWING AND SMOKING TOBACCO.	.1	(D)	.1	(D)	(S)	(D)	(D)	-	(X)	(X)
22	TEXTILE MILL PRODUCTS.	7.7	23.0	5.0	8.4	1.8	801.5	14.6	(D)	2	1
229	WEAV'G MILLS, MANMADE FIBER.	.6	2.3	.3	.5	(D)	101.9	1.8	-	4	5
225	KNITTING MILLS	2.6	7.2	1.9	3.4	.8	201.2	3.8	-	4	3
226	TEXTILE FINISHING, EXCEPT WOOL	1.0	2.3	.8	1.3	.4	50.9	1.0	-	1	1
227	FLOOR COVERING MILLS	.9	1.4	.8	1.1	(D)	20.3	.4	-	1	1
228	YARN AND THREAD MILLS.	1.5	5.8	.5	.9	(D)	284.2	4.9	-	3	2
229	MISCELLANEOUS TEXTILE GOODS.	.6	2.0	.4	.9	.1	53.4	1.1	(D)	1	1
23	APPAREL, OTH. TEXTILE PRODS.	3.2	12.4	1.7	3.0	1.5	453.7	9.5	1.1	2	2
231	MEN'S AND BOYS' SUITS AND COATS.	.2	1.0	.1	.2	.2	34.6	.7	-	1	1
232	MEN'S AND BOYS' FURNISHINGS.	1.5	5.9	.8	1.3	(D)	216.4	4.6	.6	2	2
233	WOMEN'S AND MISSES' OUTERWEAR.	.7	3.4	.3	.5	.3	143.0	2.9	(D)	2	1
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	(D)	(Z)	(Z)	-	(D)	(D)	(Z)	1	(X)
238	MISC. APPAREL AND ACCESSORIES.	(Z)	.2	(Z)	(Z)	(Z)	5.1	.1	(Z)	32	33
239	MISC. FABRICATED TEXTILE PRODS	.6	1.6	.5	.9	(D)	32.4	.7	-	1	5
24	LUMBER AND WOOD PRODUCTS	4.5	12.1	3.5	6.0	1.5	286.2	6.1	(D)	17	10
242	SAWMILLS AND PLANING MILLS	2.2	6.3	1.7	3.2	(D)	147.1	3.1	(D)	28	15
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.4	1.0	.3	.4	.2	31.1	.6	-	17	27
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.3	.1	.2	(D)	7.7	.2	-	1	1
249	MISCELLANEOUS WOOD PRODUCTS.	1.3	3.1	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
25	FURNITURE AND FIXTURES	2.1	6.6	1.4	2.5	(D)	204.6	4.1	(D)	10	5
251	HOUSEHOLD FURNITURE.	1.6	5.0	1.0	1.7	(D)	166.8	3.3	(Z)	7	4
253	PUBLIC BLDG., RELATED FURNITURE.	.2	.5	.2	.3	(S)	8.2	.2	-	60	56
26	PAPER AND ALLIED PRODUCTS.	32.9	61.8	27.1	35.0	(D)	1,696.3	26.8	(D)	4	3
262	PAPERMILLS, EXC. BUILDING PAPER.	14.7	27.3	12.0	14.5	(D)	774.6	12.8	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.2	3.5	.8	1.1	.1	127.4	2.4	-	3	8
265	PAPERBOARD CONTAINERS AND BOXES.	1.1	3.0	.9	1.4	(D)	80.9	1.6	-	3	7
27	PRINTING AND PUBLISHING.	1.7	5.6	.9	1.5	(Z)	212.8	4.1	-	10	10
271	NEWSPAPERS	.3	1.1	.1	.1	(D)	47.4	.9	-	14	2
275	COMMERCIAL PRINTING.	.7	2.1	.4	.6	(D)	74.9	1.5	-	20	23
28	CHEMICALS, ALLIED PRODUCTS	172.8	387.8	109.2	119.2	1.3	18,628.9	268.7	1,074.7	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	76.0	258.6	19.4	25.0	.3	16,583.5	233.6	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	34.8	52.7	30.7	32.0	(D)	1,213.8	20.7	(D)	1	1
284	SOAPS, CLEANERS, TOILET GOODS.	.2	.5	.2	.3	(D)	10.3	.2	(Z)	14	28
287	AGRICULTURAL CHEMICALS	16.1	23.1	15.0	17.5	.1	326.9	5.6	(D)	2	1
29	PETROLEUM AND COAL PRODUCTS.	2.5	4.7	2.2	3.1	(D)	90.1	1.6	-	1	1
295	PAVING AND ROOFING MATERIALS	1.6	2.5	1.5	1.9	(D)	29.1	.7	-	1	1
30	RUBBER, MISC. PLASTICS PROD.	8.9	21.8	6.6	9.6	.9	678.9	12.2	-	4	2
301	TIRES AND INNER TUBES.	5.0	11.4	3.9	5.6	(S)	328.3	5.8	-	4	1
306	FABRICATED RUBBER PRODUCTS, NEC.	1.4	3.8	1.1	1.8	(D)	101.2	2.0	-	3	2
307	MISCELLANEOUS PLASTICS PRODUCTS.	1.7	4.9	1.1	1.5	(D)	195.0	3.4	-	20	5

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	TENNESSEE--CON.										
31	LEATHER, LEATHER PRODUCTS. . . .	1.0	3.3	.6	1.0	(S)	106.5	2.3	-	29	7
311	LEATHER TANNING AND FINISHING. . .	.4	.9	.3	.5	(D)	18.5	.3	-	23	32
314	FOOTWEAR, EXCEPT RUBBER.	.4	2.0	.2	.2	(D)	83.0	1.8	-	1	1
32	STONE, CLAY, GLASS PRODUCTS. . .	29.8	48.9	26.2	30.5	1.9	1,046.7	18.4	(D)	2	2
323	PRODUCTS OF PURCHASED GLASS. . . .	.3	.7	.2	.3	(D)	19.5	.4	-	26	15
324	CEMENT, HYDRAULIC.	10.8	13.3	10.1	9.2	.3	220.2	4.1	-	1	1
326	POTTERY AND RELATED PRODUCTS . . .	.6	1.4	.5	.8	(D)	32.5	.6	-	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS. .	1.6	3.3	1.5	2.7	.8	30.5	.7	(Z)	20	24
329	MISC. NONMETALLIC MINERAL PRODS. .	1.2	3.7	.6	.9	(S)	164.4	2.8	(D)	30	6
33	PRIMARY METAL INDUSTRIES	39.0	124.0	15.3	25.6	(S)	6,948.9	98.4	(D)	6	1
332	IRON AND STEEL FOUNDRIES	2.7	9.3	1.9	4.5	(D)	261.3	4.8	-	14	5
335	NONFERROUS ROLLING AND DRAWING . .	8.6	17.4	7.1	10.1	(S)	463.6	7.3	-	1	2
339	MISC. PRIMARY METAL PRODUCTS . . .	.6	1.4	.5	.7	(D)	41.1	.7	-	8	24
34	FABRICATED METAL PRODUCTS. . . .	7.1	18.3	5.2	7.9	.7	554.0	10.4	-	6	4
341	METAL CANS, SHIPPING CONTAINERS. .	.2	.4	.1	.2	.1	8.7	.2	-	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.5	1.6	.3	.5	.1	61.1	1.2	-	1	7
343	PLUMBING, HEATING, EXCEPT ELEC . .	.5	1.2	.4	.9	(Z)	15.6	.3	-	1	1
344	FABRICATED STRUC. METAL PRODS. . .	3.0	6.4	2.4	3.5	.2	162.7	3.0	-	12	8
345	SCREW MACHINE PROD., BOLTS, ETC. .	.1	.4	.1	.1	(Z)	14.1	.3	-	19	33
346	METAL FORGINGS AND STAMPINGS . . .	.8	1.9	.6	.9	(D)	51.9	1.0	-	17	12
349	MISC. FABRICATED METAL PRODUCTS. .	.9	3.1	.5	.7	(D)	125.2	2.3	-	12	6
35	MACHINERY, EXCEPT ELECTRIC . . .	4.2	13.0	2.6	3.8	.4	469.3	9.2	-	4	5
354	METALWORKING MACHINERY	.3	1.4	.1	.3	.1	55.5	1.1	-	15	33
355	SPECIAL INDUSTRY MACHINERY	.4	1.1	.3	.3	.1	37.5	.8	-	20	19
356	GENERAL INDUSTRIAL MACHINERY . . .	.6	1.9	.4	.7	(D)	61.6	1.2	-	10	6
358	REFRIGERATION AND SERVICE MACH . .	1.3	4.1	.8	1.3	(Z)	147.4	2.8	-	1	1
359	MISC. MACHINERY, EXC. ELEC	.1	.8	(S)	(S)	(S)	36.1	.8	-	(X)	23
36	ELECTRIC, ELECTRONIC EQUIP . . .	8.1	23.8	5.3	8.7	.5	834.2	15.0	-	2	1
364	ELEC. LIGHTING, WIRING EQUIP . . .	.6	1.8	.5	.7	(D)	55.7	1.1	-	4	7
365	RADIO, TV RECEIVING EQUIPMENT. . .	.2	.8	.1	.2	(D)	27.2	.6	-	2	9
366	COMMUNICATION EQUIPMENT.	.2	.8	.1	.1	(D)	31.4	.6	-	5	5
367	ELECTRONIC COMPONENTS, ACCESS. . .	.2	.6	.1	.1	(D)	24.6	.5	-	6	2
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	.2	.8	.1	.2	(D)	28.7	.6	-	1	1
37	TRANSPORTATION EQUIPMENT	3.2	10.3	2.0	3.0	.6	371.7	7.3	-	5	2
371	MOTOR VEHICLES AND EQUIPMENT . . .	1.9	6.5	1.0	1.6	(D)	258.9	5.0	-	1	1
373	SHIP, BOAT BUILDING, REPAIRING . .	.2	.7	.1	.2	(D)	22.0	.5	-	41	19
38	INSTRUMENTS, RELATED PRODS . . .	.4	1.3	.2	.4	(D)	38.7	.9	-	7	17
382	MEASURING, CONTROLLING DEVICES . .	.1	(D)	.1	.1	(Z)	(D)	(D)	-	18	(X)
384	MEDICAL INSTRUMENTS, SUPPLIES. . .	.1	.5	.1	.3	(D)	9.0	.2	-	9	35
39	MISC. MANUFACTURING INDUS. . . .	1.1	3.6	.7	1.2	.1	112.7	2.4	(Z)	26	17
394	TOYS AND SPORTING GOODS.	.1	.4	.1	.1	(D)	13.5	.3	(Z)	11	33
395	PENS, OFFICE AND ART GOODS	.3	1.1	.2	.3	(D)	39.3	.8	-	11	19
399	MISCELLANEOUS MANUFACTURES	.5	1.5	.4	.6	(D)	40.1	.9	-	47	37
	ALABAMA.	332.4	732.4	261.6	367.0	15.0	20,779.6	365.4	2,484.0	1	2
20	FOOD AND KINDRED PRODUCTS. . . .	8.2	20.3	6.4	9.4	1.0	538.1	10.8	-	9	6
201	MEAT PRODUCTS.	2.2	5.9	1.7	2.4	(D)	171.3	3.3	-	5	6
202	DAIRY PRODUCTS	.8	2.4	.5	.8	(D)	65.6	1.6	-	15	13
203	PRESERVED FRUITS AND VEGETABLES. .	.3	.7	.2	.3	(D)	20.1	.4	-	19	19
204	GRAIN MILL PRODUCTS.	1.1	2.9	.8	1.2	(D)	89.6	1.7	-	19	16
205	BAKERY PRODUCTS.	.5	1.3	.5	.6	(D)	28.0	.7	-	8	6
207	FATS AND OILS.	2.5	4.6	2.1	3.1	(S)	105.1	1.6	-	23	27
208	BEVERAGES.	.4	(D)	.3	(D)	(D)	(D)	(D)	-	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS. . .	.3	1.0	.2	.3	.2	27.2	.7	-	9	10
22	TEXTILE MILL PRODUCTS.	16.8	51.9	9.9	13.0	.6	2,042.2	38.9	(S)	1	1
221	WEAVING MILLS, COTTON.	4.0	14.5	1.9	2.6	.2	610.9	11.9	-	1	1
222	WEAV'G MILLS, MANMADE FIBER. . . .	2.6	8.8	1.3	1.8	(Z)	386.2	7.0	-	1	1
224	NARROW FABRIC MILLS.	.3	.4	.3	.2	(D)	8.8	.2	-	71	72
227	FLOOR COVERING MILLS	.5	.9	.4	.5	(Z)	16.6	.4	-	4	3
228	YARN AND THREAD MILLS.	3.6	14.3	1.4	1.9	(D)	627.8	12.4	-	1	1
229	MISCELLANEOUS TEXTILE GOODS. . . .	1.6	5.1	.9	1.2	.1	211.6	3.9	-	1	4
23	APPAREL, OTH. TEXTILE PRODS. . .	2.4	9.3	1.3	2.0	(D)	310.3	7.2	(D)	6	4
232	MEN'S AND BOYS' FURNISHINGS. . . .	.7	3.4	.3	.5	(D)	121.5	2.9	(D)	21	6
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.4	1.6	.2	.3	.3	53.6	1.3	-	5	19
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.8	2.6	.5	.8	(D)	79.1	1.8	-	1	1
236	CHILDREN'S OUTERWEAR	.1	.5	(Z)	.1	(D)	20.3	.4	-	12	1
238	MISC. APPAREL AND ACCESSORIES. . .	.1	(D)	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS . .	.2	.5	.1	.1	(D)	15.6	.4	(D)	13	8
24	LUMBER AND WOOD PRODUCTS	9.8	24.3	7.7	12.6	3.7	610.6	11.7	(S)	14	7
241	LOGGING CAMPS, LOG CONTRACTORS . .	1.5	3.4	1.4	3.0	(D)	19.2	.4	-	41	38
242	SAWMILLS AND PLANING MILLS	3.4	9.6	2.2	3.8	2.0	343.4	5.8	(S)	20	12
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	3.1	6.8	2.6	3.6	(D)	152.9	3.2	(Z)	26	11
245	WOOD BUILDINGS AND MOBILE HOMES. .	.3	.9	.2	.3	(D)	21.8	.6	-	5	3

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ALABAMA--CON.										
25	FURNITURE AND FIXTURES	.7	2.5	.5	.7	.3	69.6	1.8	(D)	6	11
251	HOUSEHOLD FURNITURE	.5	1.9	.3	.5	.3	53.6	1.3	-	7	14
254	PARTITIONS AND FIXTURES	.1	.3	.1	.1	(Z)	4.4	.1	-	20	34
26	PAPER AND ALLIED PRODUCTS	80.2	138.5	72.6	100.2	.2	2,247.0	38.3	2,107.7	1	1
262	PAPERMILLS, EXC. BUILDING PAPER	37.7	70.7	32.6	45.7	.1	1,508.4	25.0	868.0	1	1
263	PAPERBOARD MILLS	33.3	53.0	31.6	44.6	(Z)	496.5	8.3	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.3	2.2	1.2	1.3	(Z)	41.0	.9	(D)	13	10
265	PAPERBOARD CONTAINERS AND BOXES	.3	.9	.2	.3	.1	23.2	.5	(D)	1	10
27	PRINTING AND PUBLISHING	.9	2.5	.5	.6	.1	93.6	1.9	-	17	26
271	NEWSPAPERS	.1	.5	.1	(S)	.1	17.6	.4	-	(X)	22
28	CHEMICALS, ALLIED PRODUCTS	61.9	130.0	48.1	64.1	(D)	4,044.0	65.9	(D)	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	12.3	37.2	6.9	10.7	.4	1,606.4	26.5	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	18.0	29.7	15.1	16.3	(Z)	856.9	13.3	-	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS	.5	1.1	.4	.6	(D)	29.5	.5	(Z)	1	1
30	RUBBER, MISC. PLASTICS PROD.	7.8	19.4	5.8	8.5	(D)	579.0	10.9	(D)	2	4
301	TIRES AND INNER TUBES	5.1	12.6	3.8	5.4	(D)	384.9	7.3	(D)	1	1
32	STONE, CLAY, GLASS PRODUCTS	32.5	55.6	30.1	40.7	(D)	697.4	14.8	(D)	8	7
324	CEMENT, HYDRAULIC	13.2	23.4	12.0	16.4	-	353.3	7.0	-	1	1
325	STRUCTURAL CLAY PRODUCTS	5.4	9.0	5.1	7.0	1.1	79.2	2.0	-	19	23
327	CONCRETE, GYPSUM, PLASTER PRODS.	6.2	10.5	5.9	8.4	5.5	93.9	2.1	-	6	7
329	MISC. NONMETALLIC MINERAL PRODS.	5.7	9.2	5.3	6.8	(D)	103.0	2.5	-	38	32
33	PRIMARY METAL INDUSTRIES	94.7	234.1	66.2	97.0	.3	8,361.7	137.1	(D)	2	4
331	BLAST FURNACE, BASIC STEEL PROD.	48.7	85.7	42.6	53.8	(D)	1,778.4	31.9	(D)	1	1
332	IRON AND STEEL FOUNDRIES	9.8	30.5	8.9	24.8	(S)	264.9	5.6	(Z)	6	18
334	SECONDARY NONFERROUS METALS	1.6	3.1	1.4	2.5	(S)	39.2	.6	-	39	38
339	MISC. PRIMARY METAL PRODUCTS	.3	1.2	.2	.4	.1	(S)	(S)	-	32	(X)
34	FABRICATED METAL PRODUCTS	5.2	13.5	4.0	5.9	.9	345.9	7.6	(S)	4	7
344	FABRICATED STRUC. METAL PRODS.	1.4	4.4	.9	1.3	(Z)	132.2	3.1	(D)	10	16
345	SCREW MACHINE PROD., BOLTS, ETC.	.6	.9	.5	.4	.1	26.8	.5	-	1	1
346	METAL FORGINGS AND STAMPINGS	.6	1.7	.4	.6	.2	50.9	1.1	-	10	3
349	MISC. FABRICATED METAL PRODUCTS	1.9	5.2	1.4	2.4	.1	136.8	2.8	-	6	5
35	MACHINERY, EXCEPT ELECTRIC	1.7	5.8	1.0	1.5	.5	191.1	4.3	-	10	13
353	CONSTRUCTION, RELATED MACHINERY	.4	1.3	.2	.3	(D)	45.5	1.0	-	7	9
356	GENERAL INDUSTRIAL MACHINERY	.3	1.0	.2	.2	(D)	34.0	.8	-	43	17
358	REFRIGERATION AND SERVICE MACH	.3	1.1	.2	.3	(D)	39.0	.9	-	12	6
359	MISC. MACHINERY, EXC. ELEC	.3	1.0	.2	.3	(D)	31.5	.7	-	9	48
36	ELECTRIC, ELECTRONIC EQUIP	1.8	6.2	1.1	1.5	(D)	223.4	4.7	-	4	4
364	ELEC. LIGHTING, WIRING EQUIP	.3	.9	.2	.3	.1	26.8	.6	-	15	7
366	COMMUNICATION EQUIPMENT	.4	1.4	.2	.3	(Z)	63.6	1.1	-	10	12
37	TRANSPORTATION EQUIPMENT	2.8	8.9	1.9	3.2	.3	254.2	5.7	(S)	2	2
371	MOTOR VEHICLES AND EQUIPMENT	1.1	3.9	.7	1.3	.1	120.7	2.6	-	1	2
373	SHIP, BOAT BUILDING, REPAIRING	.5	1.4	.3	.6	.2	38.5	.9	(D)	9	11
376	GUIDED MISSILES, SPACE VEHICLES	.3	.8	.2	.4	(Z)	22.4	.5	(Z)	1	1
38	INSTRUMENTS, RELATED PRODS	.2	.8	.1	.1	(Z)	31.2	.7	-	40	6
39	MISC. MANUFACTURING INDUS.	.5	1.7	.3	.5	(D)	53.7	1.2	(Z)	9	5
	MISSISSIPPI	140.5	260.2	120.7	135.2	(D)	5,790.5	125.0	(D)	2	2
20	FOOD AND KINDRED PRODUCTS	7.3	18.9	5.8	7.6	(Z)	434.8	11.3	(D)	12	8
201	MEAT PRODUCTS	2.2	6.0	1.6	2.1	.4	177.1	3.9	-	2	2
202	DAIRY PRODUCTS	.5	1.4	.4	.5	(D)	34.8	.9	-	9	3
204	GRAIN MILL PRODUCTS	.9	2.1	.7	.9	(D)	38.9	1.2	(D)	67	39
207	FATS AND OILS	2.7	6.4	2.3	3.0	(D)	125.4	3.5	-	21	18
208	BEVERAGES	.2	.8	.1	.2	(S)	17.4	.5	-	68	36
22	TEXTILE MILL PRODUCTS	2.2	5.9	1.6	2.0	(Z)	161.0	3.9	-	2	2
225	KNITTING MILLS	.5	1.4	.4	.5	(Z)	34.7	.9	-	1	6
23	APPAREL, OTH. TEXTILE PRODS.	1.4	5.8	.7	.9	.1	190.3	4.9	(D)	12	7
232	MEN'S AND BOYS' FURNISHINGS	.9	3.6	.5	.7	(D)	114.5	2.9	(D)	1	1
233	WOMEN'S AND MISSES' OUTERWEAR	.1	.6	.1	.1	(Z)	23.2	.5	(Z)	1	28
234	WOMEN'S, CHILDREN'S UNDERGARMS	.1	.4	(Z)	(Z)	(D)	15.1	.4	-	1	1
239	MISC. FABRICATED TEXTILE PRODS	.1	.7	.1	.1	(D)	19.8	.6	-	19	40
24	LUMBER AND WOOD PRODUCTS	18.6	44.7	15.3	22.4	(S)	957.1	22.4	(D)	6	3
241	LOGGING CAMPS, LOG CONTRACTORS	.6	1.8	.6	1.6	(D)	13.8	.3	-	65	25
242	SAWMILLS AND PLANING MILLS	4.1	12.0	3.1	4.7	1.2	283.9	7.3	(D)	9	9
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.8	4.9	1.4	1.9	(D)	117.7	3.0	-	3	4
244	WOOD CONTAINERS	.1	.7	(Z)	.1	(S)	19.5	.6	-	62	39
245	WOOD BUILDINGS AND MOBILE HOMES	.1	.2	(Z)	.1	.1	5.2	.2	-	1	1
249	MISCELLANEOUS WOOD PRODUCTS	12.0	25.2	10.2	14.1	(S)	517.0	11.1	-	3	2
25	FURNITURE AND FIXTURES	1.4	5.0	.8	1.2	(D)	160.7	3.8	(D)	7	13
26	PAPER AND ALLIED PRODUCTS	26.1	41.1	25.5	36.4	(D)	187.6	4.7	(D)	1	5
264	MISC. CONVERTED PAPER PRODUCTS	.8	1.8	.7	.7	(D)	39.9	1.1	-	1	2

See footnotes at end of table.

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		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	MISSISSIPPI--CON.										
26	PAPER AND ALLIED PRODUCTS--CON.										
265	PAPERBOARD CONTAINERS AND BOXES. .	.3	.8	.3	.4	(D)	19.4	.5	-	7	9
27	PRINTING AND PUBLISHING.	.2	1.4	(S)	(S)	(Z)	58.9	1.3	(D)	(X)	18
28	CHEMICALS, ALLIED PRODUCTS . . .	26.4	50.6	21.6	24.4	(D)	1,389.1	26.2	(D)	3	2
282	PLASTICS MATERIALS, SYNTHETICS . .	3.9	6.8	3.5	4.3	1.1	109.7	2.5	(D)	1	1
29	PETROLEUM AND COAL PRODUCTS. . . .	(D)	(D)	(D)	(D)	(S)	(D)	(D)	-	(X)	(X)
295	PAVING AND ROOFING MATERIALS . . .	.9	1.5	.9	.9	(D)	25.8	.6	-	24	18
30	RUBBER, MISC. PLASTICS PROD. . .	2.3	6.8	1.6	1.9	.6	207.9	4.9	(Z)	3	6
307	MISCELLANEOUS PLASTICS PRODUCTS. .	.4	1.5	.3	.4	(D)	44.1	1.1	(Z)	8	21
31	LEATHER, LEATHER PRODUCTS. . . .	.1	.4	(Z)	(Z)	(D)	16.3	.4	-	1	1
32	STONE, CLAY, GLASS PRODUCTS. . .	17.9	26.9	16.7	18.7	(D)	336.2	8.3	(S)	7	4
322	GLASS, PRESSED OR BLOWN.	2.1	3.4	1.9	2.3	(Z)	47.9	1.1	(Z)	1	1
325	STRUCTURAL CLAY PRODUCTS	3.2	4.1	3.1	3.1	(D)	43.7	1.0	-	24	29
327	CONCRETE, GYPSUM, PLASTER PRODS. .	2.1	3.9	2.0	3.1	(Z)	31.9	.9	(D)	34	11
329	MISC. NONMETALLIC MINERAL PRODS. .	4.9	8.1	4.5	4.7	(D)	121.4	3.3	-	1	2
34	FABRICATED METAL PRODUCTS. . . .	1.5	5.2	1.0	1.5	.5	149.8	3.7	(D)	19	5
341	METAL CANS, SHIPPING CONTAINERS. .	.1	.2	(Z)	(Z)	(Z)	8.4	.2	-	9	2
344	FABRICATED STRUC. METAL PRODS. . .	.5	1.7	.3	.4	.3	58.6	1.3	-	56	13
346	METAL FORGINGS AND STAMPINGS . . .	.5	1.8	.4	.5	(Z)	50.5	1.3	-	3	4
349	MISC. FABRICATED METAL PRODUCTS. .	.2	.4	.1	.2	(Z)	12.7	.3	(D)	92	29
35	MACHINERY, EXCEPT ELECTRIC . . .	1.2	4.2	.8	1.1	(D)	122.3	3.1	(Z)	6	5
352	FARM AND GARDEN MACHINERY.	.4	1.0	.3	.4	(D)	23.5	.6	(Z)	4	7
353	CONSTRUCTION, RELATED MACHINERY. .	.3	1.0	.1	.2	(D)	34.2	.8	-	24	5
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.3	7.5	1.5	1.9	.3	231.9	5.6	-	4	2
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	.4	1.7	.3	.3	(D)	45.1	1.4	-	1	1
362	ELECTRICAL INDUSTRIAL APPARATUS. .	.6	1.6	.4	.5	(D)	57.2	1.0	-	1	1
363	HOUSEHOLD APPLIANCES	.4	1.6	.2	.3	(Z)	53.4	1.3	-	1	1
364	ELEC. LIGHTING, WIRING EQUIP . . .	.6	1.6	.5	.6	(D)	32.0	.9	-	1	1
369	MISC. ELEC. EQUIPMENT, SUPPLIES. .	.1	(D)	(Z)	.1	(D)	(D)	(D)	-	55	(X)
37	TRANSPORTATION EQUIPMENT	1.9	9.6	.8	1.4	(D)	318.7	8.2	-	12	5
38	INSTRUMENTS, RELATED PRODS . . .	.1	.7	.1	.1	(Z)	21.5	.6	-	11	22
39	MISC. MANUFACTURING INDUS. . . .	.5	1.6	.4	.4	(D)	46.3	1.1	-	6	7
	ARKANSAS	177.9	306.8	154.4	168.8	9.1	6,892.4	138.0	1,563.3	3	3
20	FOOD AND KINDRED PRODUCTS. . . .	11.6	26.6	9.3	10.6	(D)	672.8	16.0	(D)	5	11
201	MEAT PRODUCTS.	2.2	6.8	1.5	1.8	.1	208.4	5.0	-	10	15
202	DAIRY PRODUCTS	.5	1.1	.4	.5	(D)	24.8	.6	-	43	21
203	PRESERVED FRUITS AND VEGETABLES. .	2.3	4.1	2.0	1.9	(Z)	99.4	2.1	-	9	5
204	GRAIN MILL PRODUCTS.	1.5	4.5	1.1	1.3	(D)	139.3	3.2	(D)	1	7
205	BAKERY PRODUCTS.	.4	.8	.4	.3	(S)	19.9	.5	-	28	8
207	FATS AND OILS.	4.1	7.8	3.6	4.2	(D)	154.2	3.6	-	3	3
22	TEXTILE MILL PRODUCTS.	2.5	4.9	2.0	2.1	.1	122.3	2.9	-	1	1
23	APPAREL, OTH. TEXTILE PRODS. . .	.3	1.5	.2	.2	(D)	45.2	1.3	-	51	4
232	MEN'S AND BOYS' FURNISHINGS. . . .	.3	1.3	.2	.3	(D)	40.2	1.1	-	1	1
233	WOMEN'S AND MISSES' OUTERWEAR. . .	.2	.5	.1	.2	(Z)	11.3	.4	-	76	13
24	LUMBER AND WOOD PRODUCTS	11.0	28.0	8.9	14.0	4.9	639.5	14.0	(D)	21	15
241	LOGGING CAMPS, LOG CONTRACTORS . .	2.1	4.0	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
242	SAWMILLS AND PLANING MILLS	5.3	14.4	3.8	5.5	(D)	424.8	8.8	(D)	31	22
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	2.1	5.2	1.7	2.8	(D)	111.4	2.5	(D)	4	4
244	WOOD CONTAINERS.	.4	1.3	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
245	WOOD BUILDINGS AND MOBILE HOMES. .	(Z)	.1	(Z)	.1	(Z)	2.7	.1	-	1	2
249	MISCELLANEOUS WOOD PRODUCTS. . . .	1.2	3.0	1.0	1.3	.3	70.0	1.6	-	9	8
25	FURNITURE AND FIXTURES	1.3	3.6	1.0	1.0	.1	105.0	2.6	(D)	7	4
251	HOUSEHOLD FURNITURE.	.9	2.7	.7	.7	.1	78.0	2.0	(D)	7	3
253	PUBLIC BLDG., RELATED FURNITURE. .	.3	.7	.2	.2	(Z)	19.4	.5	-	28	19
26	PAPER AND ALLIED PRODUCTS. . . .	37.9	64.3	34.9	46.7	.2	868.7	17.6	769.7	1	1
262	PAPERMILLS, EXC. BUILDING PAPER. .	20.9	35.5	19.1	25.6	-	530.7	9.9	(D)	1	1
265	PAPERBOARD CONTAINERS AND BOXES. .	.5	1.4	.3	.4	.1	44.4	1.0	-	1	1
27	PRINTING AND PUBLISHING.	.5	1.7	.3	.3	.1	57.6	1.4	-	18	27
271	NEWSPAPERS	.1	.6	.1	.1	(Z)	19.0	.6	-	20	38
28	CHEMICALS, ALLIED PRODUCTS . . .	57.3	66.0	55.4	54.9	(S)	560.0	11.1	(D)	2	12
281	INDUSTRIAL INORGANIC CHEMICALS . .	32.5	33.0	32.0	30.9	(D)	162.2	2.2	(D)	3	60
287	AGRICULTURAL CHEMICALS	19.6	21.8	19.3	19.6	(S)	97.8	2.2	(D)	3	14
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.5	.9	.5	.4	(D)	20.2	.5	(Z)	1	1
29	PETROLEUM AND COAL PRODUCTS. . .	6.3	7.5	5.9	5.0	(D)	114.1	2.6	-	9	12
295	PAVING AND ROOFING MATERIALS . . .	1.4	1.8	1.3	1.2	(S)	18.7	.5	-	34	54

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ARKANSAS--CON.										
30	RUBBER, MISC. PLASTICS PROD.	2.6	8.1	1.7	2.0	.1	274.7	6.1	-	1	2
301	TIRES AND INNER TUBES	1.4	3.3	1.0	1.2	(Z)	108.9	2.1	-	1	1
307	MISCELLANEOUS PLASTICS PRODUCTS	.7	3.3	.3	.4	.1	120.7	2.9	-	2	3
31	LEATHER, LEATHER PRODUCTS	.2	1.2	.1	.2	(D)	42.0	1.1	-	6	3
32	STONE, CLAY, GLASS PRODUCTS	17.6	19.9	16.8	14.9	(D)	242.4	5.0	(S)	3	4
325	STRUCTURAL CLAY PRODUCTS	3.1	3.5	3.0	2.7	(D)	32.5	.8	-	5	19
327	CONCRETE, GYPSUM, PLASTER PRODS.	3.3	4.2	3.2	3.1	(D)	46.6	1.1	(S)	14	2
329	MISC. NONMETALLIC MINERAL PRODS.	1.3	1.9	1.2	1.2	(D)	26.1	.6	-	1	1
33	PRIMARY METAL INDUSTRIES	20.5	49.9	12.4	10.7	(D)	2,391.3	39.3	(D)	25	4
335	NONFERROUS ROLLING AND DRAWING	1.7	4.4	1.2	1.1	(D)	136.0	3.3	-	1	1
336	NONFERROUS FOUNDRIES	.4	1.0	.3	.4	.1	20.9	.6	-	9	17
34	FABRICATED METAL PRODUCTS	2.8	8.3	2.0	2.5	.9	235.3	5.8	(S)	8	4
344	FABRICATED STRUC. METAL PRODS.	.5	1.4	.4	.4	(D)	32.5	.9	-	2	9
348	ORDNANCE AND ACCESSORIES, NEC.	.4	1.2	.3	.3	(D)	46.5	1.0	-	1	1
349	MISC. FABRICATED METAL PRODUCTS.	.9	2.9	.6	.7	.2	92.0	2.3	(Z)	6	4
35	MACHINERY, EXCEPT ELECTRIC	1.3	4.1	.9	1.0	.2	132.1	3.1	(Z)	14	6
353	CONSTRUCTION, RELATED MACHINERY.	.1	.3	.1	.1	.1	10.4	.3	-	2	6
354	METALWORKING MACHINERY	.2	.8	.2	.2	(Z)	22.4	.6	(Z)	7	18
358	REFRIGERATION AND SERVICE MACH	.4	1.1	.3	.3	(Z)	32.9	.8	-	19	12
36	ELECTRIC, ELECTRONIC EQUIP	2.6	6.7	1.7	1.5	(Z)	259.2	5.2	(Z)	1	3
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.1	2.4	.8	.6	(Z)	111.0	1.8	-	1	3
363	HOUSEHOLD APPLIANCES	.7	1.5	.5	.4	(D)	52.4	1.1	(Z)	1	1
364	ELEC. LIGHTING, WIRING EQUIP	.3	.8	.2	.2	(Z)	25.7	.6	-	2	2
367	ELECTRONIC COMPONENTS, ACCESS.	(Z)	.2	(Z)	(Z)	(Z)	6.1	.2	-	1	1
37	TRANSPORTATION EQUIPMENT	.7	2.1	.5	.7	(D)	62.6	1.5	-	23	8
371	MOTOR VEHICLES AND EQUIPMENT	.4	1.2	.3	.4	.1	40.0	.9	-	3	1
38	INSTRUMENTS, RELATED PRODS	.4	1.3	.3	.3	(Z)	41.6	1.0	-	3	5
	LOUISIANA	831.4	873.6	763.4	628.2	(D)	19,933.2	245.4	9,222.2	1	2
20	FOOD AND KINDRED PRODUCTS	20.0	35.7	17.7	22.7	(D)	692.1	13.0	66.3	16	22
202	DAIRY PRODUCTS	.6	1.8	.4	.5	(Z)	71.7	1.3	-	20	8
203	PRESERVED FRUITS AND VEGETABLES.	.5	1.0	.4	.5	(D)	27.9	.5	-	6	13
204	GRAIN MILL PRODUCTS	1.2	2.7	1.0	1.1	(D)	80.8	1.6	(D)	45	13
205	BAKERY PRODUCTS	.7	2.0	.5	.6	.3	79.5	1.4	-	10	48
206	SUGAR, CONFECTIONERY PRODUCTS.	16.5	23.6	16.3	22.3	(D)	77.7	1.3	(S)	16	11
208	BEVERAGES	.6	1.7	.4	.6	.1	62.8	1.1	(D)	10	13
209	MISC. FOODS, KINDRED PRODUCTS.	2.0	6.4	1.3	1.6	.1	228.5	4.9	(S)	16	57
22	TEXTILE MILL PRODUCTS	.5	1.0	.4	.5	(D)	26.6	.6	-	1	5
229	MISCELLANEOUS TEXTILE GOODS.	(Z)	.3	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.6	1.9	.4	.5	.2	80.4	1.4	-	31	20
231	MEN'S AND BOYS' SUITS AND COATS.	(Z)	.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
232	MEN'S AND BOYS' FURNISHINGS.	.2	.7	.1	.1	(D)	24.1	.5	-	1	20
233	WOMEN'S AND MISSES' OUTERWEAR.	.1	.4	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	8.7	18.0	7.1	10.8	1.8	444.9	7.2	(Z)	6	7
241	LOGGING CAMPS, LOG CONTRACTORS	.8	1.5	.7	1.5	.9	(S)	(S)	-	36	(X)
242	SAWMILLS AND PLANING MILLS	2.2	5.3	1.5	2.2	(D)	205.1	3.2	(Z)	14	14
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	5.1	9.7	4.5	6.6	(D)	165.7	3.1	-	2	3
249	MISCELLANEOUS WOOD PRODUCTS.	.5	1.2	.3	.3	(D)	65.0	.9	-	37	22
26	PAPER AND ALLIED PRODUCTS.	76.3	114.8	69.2	86.5	.3	2,067.9	28.4	1,711.1	1	1
262	PAPERMILLS, EXC. BUILDING PAPER.	32.7	51.9	(D)	(D)	(Z)	1,125.1	16.9	781.3	(X)	1
263	PAPERBOARD MILLS	37.8	52.7	35.7	45.7	(D)	627.2	7.0	929.8	1	1
264	MISC. CONVERTED PAPER PRODUCTS	.5	1.2	.3	.4	(D)	57.8	.8	-	1	1
265	PAPERBOARD CONTAINERS AND BOXES.	.6	1.2	.4	.6	(D)	41.8	.6	-	1	2
27	PRINTING AND PUBLISHING.	.5	2.0	.2	.3	.2	90.2	1.8	-	10	22
271	NEWSPAPERS	.2	.9	.1	.1	.1	36.0	.8	-	30	24
275	COMMERCIAL PRINTING.	.2	1.0	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	500.7	462.8	460.4	325.6	2.1	11,817.0	137.2	3,286.6	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	73.3	91.6	59.8	43.7	(Z)	3,944.1	47.9	(D)	1	1
282	PLASTICS MATERIALS, SYNTHETICS	19.2	41.7	15.3	25.9	(D)	1,154.0	15.8	(D)	1	1
286	INDUSTRIAL ORGANIC CHEMICALS	300.1	256.2	281.4	198.0	(D)	5,479.9	58.1	(D)	1	1
287	AGRICULTURAL CHEMICALS	98.1	60.2	94.7	49.2	(D)	991.9	11.0	(D)	1	2
289	MISCELLANEOUS CHEMICAL PRODUCTS.	9.7	12.3	9.0	8.4	(D)	227.7	3.9	(D)	1	2
29	PETROLEUM AND COAL PRODUCTS.	137.0	166.1	125.9	135.3	(D)	3,241.2	30.8	(D)	1	1
291	PETROLEUM REFINING	135.2	163.8	124.2	133.6	(D)	3,204.8	30.3	(D)	1	1
295	PAVING AND ROOFING MATERIALS	.9	1.4	.9	1.0	(D)	22.8	.3	-	1	1
299	MISC. PETROLEUM, COAL PRODUCTS	.9	.9	.8	.7	(D)	13.6	.2	-	1	1
32	STONE, CLAY, GLASS PRODUCTS.	18.6	29.9	17.1	21.1	2.5	427.6	8.7	(S)	4	6
322	GLASS, PRESSED OR BLOWN.	4.2	6.1	3.9	4.7	(Z)	99.9	1.4	(S)	1	1
324	CEMENT, HYDRAULIC.	6.9	10.0	6.5	6.8	(S)	121.5	3.2	-	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	4.9	9.2	4.5	6.8	(D)	119.7	2.4	-	11	20

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	LOUISIANA--CON.										
32	STONE, CLAY, GLASS PRODUCTS--CON.										
329	MISC. NONMETALLIC MINERAL PRODS.	1.6	3.1	1.4	1.8	(D)	66.9	1.3	-	1	1
33	PRIMARY METAL INDUSTRIES	61.4	21.8	60.4	17.9	(D)	297.3	4.0	(D)	1	3
34	FABRICATED METAL PRODUCTS	2.5	5.8	2.0	3.0	1.0	159.1	2.7	(D)	10	11
341	METAL CANS, SHIPPING CONTAINERS	.5	1.2	.4	.5	(Z)	27.6	.7	-	11	4
344	FABRICATED STRUC. METAL PRODS.	1.1	2.7	.9	1.5	.5	79.7	1.2	(D)	20	15
347	METAL SERVICES, NEC	.3	.5	.2	.4	.2	11.7	.2	-	3	14
35	MACHINERY, EXCEPT ELECTRIC	.9	2.6	.5	.8	(D)	101.9	1.8	(D)	18	14
353	CONSTRUCTION, RELATED MACHINERY	.4	1.0	.2	.3	(D)	43.0	.7	-	25	25
36	ELECTRIC, ELECTRONIC EQUIP	1.5	4.0	.8	1.2	(D)	182.9	2.8	-	3	4
37	TRANSPORTATION EQUIPMENT	1.7	5.5	.9	1.5	(D)	248.4	4.0	-	7	3
371	MOTOR VEHICLES AND EQUIPMENT	.1	.3	.1	.1	(D)	11.9	.2	-	72	25
373	SHIP, BOAT BUILDING, REPAIRING	1.6	5.1	.8	1.4	(D)	235.5	3.7	-	6	3
39	MISC. MANUFACTURING INDUS.	.2	.4	.2	.2	(Z)	(S)	(S)	-	46	(X)
	OKLAHOMA	141.6	219.8	125.0	137.8	9.5	4,874.8	82.1	(D)	2	2
20	FOOD AND KINDRED PRODUCTS	4.8	10.7	3.7	4.5	.6	333.0	6.2	-	8	8
201	MEAT PRODUCTS	1.1	2.2	.9	1.0	.2	55.3	1.2	-	6	18
202	DAIRY PRODUCTS	.5	1.4	.4	.6	(Z)	40.0	.9	-	9	1
203	PRESERVED FRUITS AND VEGETABLES	.5	1.1	.3	.4	(Z)	46.0	.6	-	10	9
204	GRAIN MILL PRODUCTS	.9	2.3	.6	.8	(D)	88.4	1.6	-	37	15
205	BAKERY PRODUCTS	.4	.8	.3	.3	.1	19.7	.4	-	9	10
207	FATS AND OILS	.8	1.3	.7	.7	(D)	32.8	.6	-	19	62
209	MISC. FOODS, KINDRED PRODUCTS	.2	.5	(S)	(S)	(D)	15.0	.3	-	(X)	37
22	TEXTILE MILL PRODUCTS	1.3	2.3	1.1	1.1	.2	65.8	1.2	-	5	6
227	FLOOR COVERING MILLS	.9	1.2	.8	.7	(Z)	27.2	.5	-	1	1
23	APPAREL, OTH. TEXTILE PRODS.	.4	1.6	.2	.3	.1	60.1	1.3	-	9	11
232	MEN'S AND BOYS' FURNISHINGS	.2	.9	.1	.1	(Z)	35.3	.8	-	1	1
239	MISC. FABRICATED TEXTILE PRODS	.1	.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	2.1	3.9	1.9	2.2	.6	83.0	1.6	-	14	10
25	FURNITURE AND FIXTURES	.2	.5	.1	.2	.1	12.5	.3	-	47	24
251	HOUSEHOLD FURNITURE	.1	.3	.1	.2	(D)	9.4	.2	-	57	27
254	PARTITIONS AND FIXTURES	.1	.1	(Z)	(Z)	(D)	2.9	.1	-	50	46
27	PRINTING AND PUBLISHING	.8	2.6	.4	.6	.1	104.8	2.0	(D)	20	19
271	NEWSPAPERS	.3	1.0	.1	.2	(D)	46.3	.8	(D)	25	31
276	MANIFOLD BUSINESS FORMS	.1	.3	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	20.8	27.7	18.8	20.0	(S)	569.8	7.7	(Z)	7	13
285	PAINTS AND ALLIED PRODUCTS	.2	.4	.2	.2	(D)	7.1	.2	-	32	41
29	PETROLEUM AND COAL PRODUCTS	57.4	70.6	54.1	55.0	(D)	980.7	15.6	(D)	1	1
291	PETROLEUM REFINING	54.3	66.9	51.1	52.0	2.2	940.3	14.9	(D)	1	1
30	RUBBER, MISC. PLASTICS PROD.	4.7	10.1	3.4	4.0	(D)	389.8	6.1	(D)	2	4
301	TIRES AND INNER TUBES	3.8	7.6	2.8	3.3	(D)	278.5	4.3	-	1	1
307	MISCELLANEOUS PLASTICS PRODUCTS	.6	1.6	.3	.5	(D)	76.8	1.1	(D)	16	22
32	STONE, CLAY, GLASS PRODUCTS	21.6	30.6	19.7	21.5	(D)	557.9	9.1	(S)	3	2
322	GLASS, PRESSED OR BLOWN	6.8	10.1	6.1	6.7	(D)	205.2	3.4	(S)	1	1
324	CEMENT, HYDRAULIC	7.9	10.1	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
327	CONCRETE, GYPSUM, PLASTER PRODS.	1.8	3.1	1.7	2.5	(D)	42.3	.6	-	22	18
33	PRIMARY METAL INDUSTRIES	5.4	11.3	4.0	4.5	(D)	400.5	6.8	-	2	2
34	FABRICATED METAL PRODUCTS	3.0	7.4	2.4	3.4	1.3	195.0	4.0	(S)	10	8
344	FABRICATED STRUC. METAL PRODS.	1.7	4.1	1.3	1.8	(D)	118.4	2.4	-	9	5
349	MISC. FABRICATED METAL PRODUCTS	.7	1.7	.5	.9	(D)	44.2	.8	(D)	6	10
35	MACHINERY, EXCEPT ELECTRIC	3.3	10.0	2.1	2.8	.7	369.5	7.2	(Z)	6	4
352	FARM AND GARDEN MACHINERY	.1	.2	.1	.1	(Z)	5.0	.1	-	8	10
353	CONSTRUCTION, RELATED MACHINERY	1.4	3.9	.8	1.1	(D)	148.6	2.8	-	4	2
356	GENERAL INDUSTRIAL MACHINERY	.7	2.2	.4	.6	(D)	73.9	1.6	-	18	10
358	REFRIGERATION AND SERVICE MACH	.6	1.8	.4	.6	.3	59.6	1.2	-	14	12
359	MISC. MACHINERY, EXC. ELEC	.2	.6	.1	.2	(S)	19.5	.4	(Z)	34	29
36	ELECTRIC, ELECTRONIC EQUIP	1.1	3.1	.7	.8	(D)	123.1	2.3	-	11	10
362	ELECTRICAL INDUSTRIAL APPARATUS	.3	.8	.2	.2	(D)	28.9	.6	-	1	1
366	COMMUNICATION EQUIPMENT	.6	1.6	.4	.4	(Z)	65.6	1.2	-	19	20
39	MISC. MANUFACTURING INDUS.	.1	.5	.1	.1	.1	14.9	.4	-	29	18
399	MISCELLANEOUS MANUFACTURES	.1	.3	.1	.1	(Z)	6.1	.2	-	48	36
	TEXAS	1,816.8	3,101.1	1,658.1	2,316.2	(D)	46,523.4	784.9	9,476.0	1	1
20	FOOD AND KINDRED PRODUCTS	43.3	105.2	35.3	57.8	4.0	2,327.1	47.5	71.8	3	4
201	MEAT PRODUCTS	6.9	18.1	5.0	7.3	1.7	559.0	10.8	-	2	5

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	TEXAS--CON.										
20	FOOD AND KINDRED PRODUCTS--CON.										
202	DAIRY PRODUCTS	2.4	7.5	1.6	2.6	(D)	223.3	4.9	-	17	7
203	PRESERVED FRUITS AND VEGETABLES	3.5	7.9	3.0	4.6	(D)	145.3	3.3	-	10	13
204	GRAIN MILL PRODUCTS	7.7	18.9	6.5	11.6	(S)	353.6	7.3	(D)	9	11
205	BAKERY PRODUCTS	2.8	6.9	2.2	3.6	.3	154.0	3.3	(D)	7	4
206	SUGAR, CONFECTIONERY PRODUCTS	3.3	5.5	3.3	5.9	(Z)	(S)	(S)	(D)	1	(X)
207	FATS AND OILS	6.8	14.1	5.9	8.6	(D)	257.4	5.5	(D)	6	15
208	BEVERAGES	5.4	14.2	4.2	7.1	(D)	360.3	7.2	(S)	6	6
209	MISC. FOODS, KINDRED PRODUCTS	4.5	12.1	3.6	6.4	(D)	291.1	5.6	(Z)	3	8
22	TEXTILE MILL PRODUCTS	2.7	9.4	1.7	2.8	(D)	269.6	6.5	-	4	3
221	WEAVING MILLS, COTTON	.7	2.5	.3	.3	(D)	94.4	2.2	-	22	5
225	KNITTING MILLS	.1	.5	.1	.1	(D)	15.1	.4	-	17	15
23	APPAREL, OTH. TEXTILE PRODS.	3.0	12.3	1.6	2.5	(D)	408.8	9.8	(D)	6	7
232	MEN'S AND BOYS' FURNISHINGS	1.1	4.2	.6	.8	.1	141.5	3.5	(D)	5	4
233	WOMEN'S AND MISSES' OUTERWEAR	1.0	4.4	.5	.9	(D)	138.1	3.5	(D)	10	16
234	WOMEN'S, CHILDREN'S UNDERGARMS	.2	1.1	(Z)	.1	(D)	44.0	1.0	-	16	6
235	HATS, CAPS, AND MILLINERY	.2	.4	.1	.2	(D)	7.3	.2	-	4	9
236	CHILDREN'S OUTERWEAR	.3	1.0	.1	.2	(D)	43.7	.8	-	2	7
24	LUMBER AND WOOD PRODUCTS	8.2	20.9	6.3	9.9	(S)	582.8	11.0	(S)	13	8
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	3.3	8.9	2.5	4.1	1.0	245.3	4.8	(D)	9	9
244	WOOD CONTAINERS	.3	.9	.2	.4	.4	14.3	.4	-	38	32
245	WOOD BUILDINGS AND MOBILE HOMES	.4	1.4	.2	.5	(D)	35.8	.9	-	9	6
249	MISCELLANEOUS WOOD PRODUCTS	1.1	2.7	.8	1.4	.7	81.4	1.4	(D)	11	21
25	FURNITURE AND FIXTURES	1.5	5.1	1.1	2.0	.9	130.2	3.1	(S)	15	10
251	HOUSEHOLD FURNITURE	1.0	3.2	.7	1.2	.4	79.2	1.9	(S)	23	14
252	OFFICE FURNITURE	.1	.3	.1	.1	(D)	5.0	.2	-	34	57
26	PAPER AND ALLIED PRODUCTS	47.9	91.6	42.2	63.9	1.4	1,686.2	27.7	1,589.4	1	2
263	PAPERBOARD MILLS	17.5	33.1	16.2	27.7	(D)	399.6	5.4	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	1.1	3.8	.6	1.0	.4	151.2	2.8	(D)	1	8
266	BUILDING PAPER AND BOARD MILLS	3.2	6.9	2.6	3.7	(D)	179.4	3.2	(D)	1	1
27	PRINTING AND PUBLISHING	3.5	13.7	1.8	2.9	1.0	479.6	10.8	(D)	9	8
271	NEWSPAPERS	1.2	5.0	.7	1.1	.4	168.0	4.0	-	12	11
275	COMMERCIAL PRINTING	1.5	5.5	.9	1.4	(D)	181.2	4.1	(D)	11	15
276	MANIFOLD BUSINESS FORMS	.4	1.4	.2	.2	(D)	54.2	1.2	-	45	17
278	BLANKBOOKS AND BOOKBINDING	.1	.5	.1	.1	.1	18.7	.4	-	1	21
279	PRINTING TRADE SERVICES	.1	.6	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	800.2	1,274.3	738.3	988.2	(D)	18,128.4	286.0	4,605.1	1	1
281	INDUSTRIAL INORGANIC CHEMICALS	108.9	196.2	96.4	133.1	.1	3,667.1	63.1	1,224.5	1	1
282	PLASTICS MATERIALS, SYNTHETICS	63.9	140.2	53.4	96.0	(D)	3,081.7	44.2	-	1	1
284	SOAPS, CLEANERS, TOILET GOODS	1.2	2.8	1.0	1.6	(D)	52.9	1.2	(D)	4	11
285	PAINTS AND ALLIED PRODUCTS	.9	2.4	.6	1.0	.5	66.8	1.5	-	6	10
286	INDUSTRIAL ORGANIC CHEMICALS	568.1	850.0	533.3	691.8	(D)	10,183.1	158.2	3,358.1	1	1
287	AGRICULTURAL CHEMICALS	38.2	57.3	35.7	45.9	(S)	716.7	11.4	(D)	3	3
289	MISCELLANEOUS CHEMICAL PRODUCTS	18.8	24.5	17.7	18.7	1.8	325.2	5.8	9.3	1	2
29	PETROLEUM AND COAL PRODUCTS	634.7	982.9	612.9	882.5	(D)	6,405.3	100.4	2,221.1	1	1
291	PETROLEUM REFINING	630.0	974.7	608.4	875.6	(D)	6,340.0	99.0	2,221.1	1	1
30	RUBBER, MISC. PLASTICS PROD.	8.3	25.0	5.4	8.6	1.5	851.1	16.4	(S)	4	3
307	MISCELLANEOUS PLASTICS PRODUCTS	4.9	15.4	2.9	4.6	1.3	579.9	10.8	-	7	5
32	STONE, CLAY, GLASS PRODUCTS	100.0	168.2	93.4	130.3	(D)	1,937.7	37.9	49.2	2	2
322	GLASS, PRESSED OR BLOWN	6.1	12.2	5.4	8.7	.2	198.2	3.5	(S)	1	1
323	PRODUCTS OF PURCHASED GLASS	.7	1.2	.7	1.0	(D)	12.9	.3	(D)	1	6
324	CEMENT, HYDRAULIC	51.4	77.8	48.4	60.8	(S)	882.3	17.0	(D)	2	3
325	STRUCTURAL CLAY PRODUCTS	8.0	13.6	7.6	11.5	(S)	94.2	2.1	(D)	16	17
326	POTTERY AND RELATED PRODUCTS	1.1	1.9	1.1	1.3	(S)	23.1	.5	-	18	12
327	CONCRETE, GYPSUM, PLASTER PRODS.	20.2	35.5	19.2	28.8	(D)	289.8	6.6	(D)	5	4
328	CUT STONE AND STONE PRODUCTS	.1	.5	(S)	(S)	(D)	27.7	.4	-	(X)	52
329	MISC. NONMETALLIC MINERAL PRODS.	9.1	20.1	8.0	13.7	(D)	321.5	6.3	(D)	9	4
33	PRIMARY METAL INDUSTRIES	101.5	214.4	76.0	98.1	(D)	7,474.8	116.3	(D)	2	1
331	BLAST FURNACE, BASIC STEEL PROD.	46.8	75.9	40.1	41.9	(D)	1,956.6	33.9	(D)	1	1
332	IRON AND STEEL FOUNDRIES	5.4	18.2	4.0	10.1	.2	393.6	8.1	-	13	7
333	PRIMARY NONFERROUS METALS	43.1	104.2	26.7	36.7	(D)	4,801.0	67.5	(D)	1	1
334	SECONDARY NONFERROUS METALS	1.8	3.9	1.6	3.0	(D)	44.8	.9	-	1	3
335	NONFERROUS ROLLING AND DRAWING	2.5	7.5	1.8	3.0	(D)	221.0	4.5	-	2	1
34	FABRICATED METAL PRODUCTS	22.1	60.5	16.7	26.6	3.4	1,592.5	34.0	(S)	11	16
341	METAL CANS, SHIPPING CONTAINERS	2.5	6.4	1.9	3.2	(D)	176.7	3.2	(D)	3	3
343	PLUMBING, HEATING, EXCEPT ELEC	.3	1.0	.2	.4	.1	28.1	.6	-	4	24
344	FABRICATED STRUC. METAL PRODS.	7.0	22.6	4.8	7.8	1.1	645.7	14.8	(S)	24	27
346	METAL FORGINGS AND STAMPINGS	3.3	6.4	3.1	5.1	(S)	60.7	1.3	-	26	9
347	METAL SERVICES, NEC	3.3	9.8	2.4	4.0	1.0	276.3	5.9	(D)	36	58
348	ORDNANCE AND ACCESSORIES, NEC	2.1	3.7	1.8	2.2	(D)	83.9	1.5	(Z)	1	1
349	MISC. FABRICATED METAL PRODUCTS	2.9	8.7	2.0	3.3	(D)	258.3	5.4	(D)	13	9
35	MACHINERY, EXCEPT ELECTRIC	21.6	60.7	14.2	22.6	3.6	2,163.6	38.1	5.7	3	3
353	CONSTRUCTION, RELATED MACHINERY	15.0	36.6	10.4	16.5	1.3	1,356.5	20.1	(S)	2	3
354	METALWORKING MACHINERY	.2	1.1	(S)	(S)	(D)	50.2	1.1	-	(X)	46

See footnotes at end of table.

Table 4. **Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised**—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	TEXAS--CON.										
35	MACHINERY, EXCEPT ELECTRIC--CON.										
355	SPECIAL INDUSTRY MACHINERY	.9	2.9	.6	.9	.7	102.0	2.0	-	38	24
356	GENERAL INDUSTRIAL MACHINERY	.9	2.8	.6	.9	(D)	90.8	1.9	(D)	11	12
357	OFFICE AND COMPUTING MACHINES	1.0	5.9	.3	.5	.1	203.4	5.4	-	1	2
358	REFRIGERATION AND SERVICE MACH	1.9	5.6	1.3	2.0	1.0	174.5	3.6	(Z)	3	2
359	MISC. MACHINERY, EXC. ELEC	1.3	4.3	.8	1.2	(D)	141.0	3.0	-	25	20
36	ELECTRIC, ELECTRONIC EQUIP	6.3	22.1	3.3	5.1	(D)	884.7	16.9	(Z)	14	5
361	ELECTRIC DISTRIBUTING EQUIPMENT	.2	.9	.1	.2	(Z)	33.0	.7	-	17	40
362	ELECTRICAL INDUSTRIAL APPARATUS	.2	.7	.1	.1	(S)	26.4	.6	-	15	37
363	HOUSEHOLD APPLIANCES	.1	.3	.1	.1	(Z)	9.4	.2	(Z)	27	12
364	ELEC. LIGHTING, WIRING EQUIP	.3	1.0	.2	.4	(D)	23.3	.6	-	11	10
366	COMMUNICATION EQUIPMENT	2.0	7.5	1.0	1.6	.5	300.1	6.0	-	10	6
367	ELECTRONIC COMPONENTS, ACCESS.	2.6	8.6	1.2	1.7	(D)	405.9	6.9	-	1	4
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.8	2.5	.6	.9	(D)	67.1	1.6	-	75	32
37	TRANSPORTATION EQUIPMENT	9.9	27.4	6.6	10.4	.7	964.5	17.0	(Z)	7	10
371	MOTOR VEHICLES AND EQUIPMENT	2.8	6.7	2.2	3.4	(S)	190.9	3.3	(Z)	10	10
372	AIRCRAFT AND PARTS	4.7	12.7	3.0	4.2	(D)	505.6	8.5	(Z)	2	4
373	SHIP, BOAT BUILDING, REPAIRING	1.5	5.2	1.1	2.1	(S)	127.0	3.1	-	30	25
379	TRANSPORTATION EQUIPMENT, NEC.	.5	1.7	.1	.2	(D)	104.4	1.4	(D)	13	97
38	INSTRUMENTS, RELATED PRODS	.8	3.3	.5	.8	(D)	110.7	2.5	-	2	5
381	ENGINEERING, SCIENTIFIC INSTRU	.1	.3	(Z)	(Z)	(Z)	10.6	.2	-	1	44
382	MEASURING, CONTROLLING DEVICES	.1	.6	(S)	(S)	(S)	22.8	.5	-	(X)	9
39	MISC. MANUFACTURING INDUS.	1.0	3.1	.7	1.1	.5	87.9	2.0	(Z)	19	13
391	JEWELRY, SILVER AND PLATED WARE	.1	.4	(Z)	.1	.1	14.6	.3	-	1	3
	MONTANA	49.3	70.7	33.4	46.1	(S)	4,642.5	24.6	(D)	5	3
20	FOOD AND KINDRED PRODUCTS	4.6	6.6	4.2	5.0	(D)	102.9	1.6	(D)	10	26
201	MEAT PRODUCTS	.3	.7	(S)	(S)	(S)	42.8	.6	-	(X)	67
202	DAIRY PRODUCTS	(Z)	.1	(S)	(S)	(S)	(S)	(S)	-	(X)	(X)
204	GRAIN MILL PRODUCTS	.2	.5	.1	.2	(D)	23.3	.3	-	3	1
24	LUMBER AND WOOD PRODUCTS	3.9	9.4	2.7	5.1	(S)	363.8	4.3	(S)	11	5
242	SAWMILLS AND PLANING MILLS	1.6	4.4	1.0	2.1	(Z)	185.6	2.4	(S)	16	9
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.9	2.1	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
27	PRINTING AND PUBLISHING	.1	.3	.1	(Z)	(S)	11.0	.3	-	27	66
29	PETROLEUM AND COAL PRODUCTS	6.2	7.3	5.2	5.0	(S)	289.4	2.4	-	26	3
291	PETROLEUM REFINING	6.1	7.1	5.1	4.8	(S)	286.4	2.3	-	26	3
32	STONE, CLAY, GLASS PRODUCTS	6.9	9.7	6.5	8.4	(D)	108.2	1.2	-	18	23
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.2	3.4	2.2	2.9	(D)	24.1	.4	-	51	63
	IDAHO	58.2	108.2	41.7	65.1	2.8	4,844.0	43.1	(D)	3	1
20	FOOD AND KINDRED PRODUCTS	22.5	34.9	20.7	28.9	(S)	517.1	6.0	(D)	3	4
201	MEAT PRODUCTS	.4	.8	.3	.5	.2	21.1	.2	-	44	99
202	DAIRY PRODUCTS	.7	1.6	.6	1.2	(D)	32.3	.5	(D)	10	4
203	PRESERVED FRUITS AND VEGETABLES	11.0	21.0	9.6	16.4	(D)	409.4	4.6	-	3	2
24	LUMBER AND WOOD PRODUCTS	5.9	13.2	4.5	8.7	(D)	419.0	4.5	(D)	16	6
241	LOGGING CAMPS, LOG CONTRACTORS	2.1	4.6	2.0	4.4	(D)	10.6	.2	-	31	15
242	SAWMILLS AND PLANING MILLS	1.9	5.1	1.0	2.0	(D)	283.2	3.0	(D)	12	8
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.5	2.7	1.2	1.8	(D)	96.9	.9	-	16	5
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.4	.1	(D)	.1	(D)	(D)	-	(X)	(X)
249	MISCELLANEOUS WOOD PRODUCTS	.2	.4	.1	(S)	(D)	(D)	(D)	(D)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	13.7	32.4	3.6	7.0	(D)	2,965.1	25.3	-	1	1
32	STONE, CLAY, GLASS PRODUCTS	2.9	3.5	2.8	2.7	1.0	55.4	.8	-	15	23
327	CONCRETE, GYPSUM, PLASTER PRODS.	.8	1.6	.7	1.1	.8	27.3	.5	-	34	36
34	FABRICATED METAL PRODUCTS	.2	.5	.1	.2	(D)	16.7	.3	-	11	9
344	FABRICATED STRUC. METAL PRODS.	.1	.2	.1	.1	(D)	6.0	.1	-	27	18
35	MACHINERY, EXCEPT ELECTRIC	.5	1.3	.3	.7	(Z)	40.7	.6	(D)	30	16
39	MISC. MANUFACTURING INDUS.	(Z)	.1	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
	WYOMING	24.0	29.5	22.8	24.6	2.1	356.2	4.9	(D)	2	5
20	FOOD AND KINDRED PRODUCTS	3.6	4.7	3.5	4.1	(D)	28.0	.5	(D)	5	14
29	PETROLEUM AND COAL PRODUCTS	15.0	18.2	14.4	16.3	(D)	150.3	2.0	(D)	2	6
291	PETROLEUM REFINING	14.5	17.3	14.1	15.7	(D)	132.3	1.7	(D)	2	7
32	STONE, CLAY, GLASS PRODUCTS	3.7	3.3	3.5	2.6	(D)	61.5	.7	-	5	2

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	COLORADO	72.7	116.9	62.6	60.6	9.0	2,934.5	56.3	188.8	3	3
20	FOOD AND KINDRED PRODUCTS	21.8	34.8	19.9	23.1	1.6	540.5	11.7	97.4	1	4
201	MEAT PRODUCTS	2.9	5.8	2.2	2.1	.2	185.8	3.6	-	3	7
202	DAIRY PRODUCTS	.6	1.4	.4	.5	(D)	41.1	.9	-	13	26
205	BAKERY PRODUCTS	.6	.8	.5	.3	(D)	29.1	.5	-	29	34
23	APPAREL, OTH. TEXTILE PRODS.	.1	.3	.1	(D)	.1	(D)	(D)	-	(X)	(X)
239	MISC. FABRICATED TEXTILE PRODS	(Z)	.1	(Z)	(D)	(Z)	(D)	(D)	-	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	2.0	4.4	1.7	2.9	2.5	74.5	1.5	-	49	26
242	SAWMILLS AND PLANING MILLS	1.3	3.1	1.1	2.1	(D)	53.4	1.0	-	68	36
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.4	.1	.1	.1	12.3	.3	-	36	43
245	WOOD BUILDINGS AND MOBILE HOMES	.2	.3	.1	.2	(D)	4.8	.1	-	12	31
26	PAPER AND ALLIED PRODUCTS	.9	1.7	.8	.7	(D)	47.2	1.0	-	3	6
265	PAPERBOARD CONTAINERS AND BOXES	.3	.7	.3	.3	(D)	17.2	.4	-	7	15
27	PRINTING AND PUBLISHING	.8	2.5	.5	.6	(D)	78.9	1.8	(S)	14	16
271	NEWSPAPERS	.2	1.0	.1	.2	(D)	29.6	.8	-	23	28
275	COMMERCIAL PRINTING	.3	.9	.3	.3	.1	23.9	.6	(S)	19	23
28	CHEMICALS, ALLIED PRODUCTS	2.7	5.4	2.1	1.9	(D)	179.8	3.5	(D)	9	12
29	PETROLEUM AND COAL PRODUCTS	4.3	5.5	(D)	(D)	.2	(D)	(D)	-	(X)	(X)
291	PETROLEUM REFINING	3.8	4.9	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	15.3	18.2	14.0	11.2	1.7	379.5	7.0	-	6	6
325	STRUCTURAL CLAY PRODUCTS	2.2	2.0	2.1	1.4	(D)	33.6	.6	-	39	44
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.0	3.7	1.9	2.6	1.6	36.9	1.1	-	7	27
329	MISC. NONMETALLIC MINERAL PRODS.	.9	2.1	.8	1.6	(D)	22.4	.5	-	1	1
33	PRIMARY METAL INDUSTRIES	10.9	16.6	8.9	6.9	(D)	602.3	9.7	(D)	3	11
34	FABRICATED METAL PRODUCTS	1.9	4.8	1.3	1.4	.3	164.2	3.4	(S)	16	10
344	FABRICATED STRUC. METAL PRODS.	.2	.7	.2	(D)	(S)	(D)	(D)	(S)	(X)	(X)
349	MISC. FABRICATED METAL PRODUCTS	.5	1.5	.4	.5	.2	45.5	1.0	-	13	13
35	MACHINERY, EXCEPT ELECTRIC	2.7	5.6	2.2	2.3	.9	148.1	3.3	(Z)	17	8
352	FARM AND GARDEN MACHINERY	.2	.5	.2	.2	.1	11.7	.3	-	14	26
353	CONSTRUCTION, RELATED MACHINERY	.7	1.5	.6	.5	(D)	43.8	1.0	(Z)	1	1
354	METALWORKING MACHINERY	.1	.3	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
356	GENERAL INDUSTRIAL MACHINERY	.1	.4	.1	.1	(Z)	10.1	.3	(Z)	18	12
359	MISC. MACHINERY, EXC. ELEC	1.2	1.8	1.0	1.1	(D)	30.6	.7	-	34	32
36	ELECTRIC, ELECTRONIC EQUIP	.6	1.8	.4	.4	(D)	73.1	1.5	(D)	11	6
369	MISC. ELEC. EQUIPMENT, SUPPLIES	.1	.3	.1	.1	.1	7.3	.2	(D)	1	1
37	TRANSPORTATION EQUIPMENT	1.3	3.2	.9	.8	.1	117.4	2.4	(D)	16	12
371	MOTOR VEHICLES AND EQUIPMENT	.2	.5	.1	.1	(D)	12.4	.3	-	22	45
38	INSTRUMENTS, RELATED PRODS	3.0	6.1	2.1	1.8	(D)	254.2	4.3	(D)	1	1
384	MEDICAL INSTRUMENTS, SUPPLIES	.1	.3	.1	.1	(Z)	10.2	.2	-	1	1
39	MISC. MANUFACTURING INDUS.	.3	.9	.2	.3	.1	28.6	.7	-	41	20
	NEW MEXICO	23.8	43.2	20.7	25.1	4.6	871.1	18.1	(D)	5	4
20	FOOD AND KINDRED PRODUCTS	1.4	3.0	1.1	1.4	(D)	74.5	1.7	1.0	11	13
201	MEAT PRODUCTS	.3	.7	.3	.2	(D)	23.7	.6	-	12	19
205	BAKERY PRODUCTS	.1	.3	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
209	MISC. FOODS, KINDRED PRODUCTS	.2	.3	.1	.1	(S)	9.8	.2	-	92	28
24	LUMBER AND WOOD PRODUCTS	.5	1.6	.3	.5	(D)	49.3	1.1	-	21	15
242	SAWMILLS AND PLANING MILLS	.2	.9	.1	.2	(D)	28.8	.7	-	35	12
32	STONE, CLAY, GLASS PRODUCTS	3.8	5.6	3.6	4.4	(D)	53.9	1.2	(D)	18	35
327	CONCRETE, GYPSUM, PLASTER PRODS.	.9	1.4	.9	1.3	(D)	(S)	(S)	(D)	31	(X)
34	FABRICATED METAL PRODUCTS	.1	.2	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
344	FABRICATED STRUC. METAL PRODS.	.1	.2	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.4	1.2	.3	(D)	(D)	(D)	(D)	-	(X)	(X)
	ARIZONA	65.3	128.1	55.6	64.0	(D)	2,846.7	64.0	419.1	2	3
20	FOOD AND KINDRED PRODUCTS	4.6	11.3	4.0	5.9	.7	179.5	5.2	(D)	8	17
201	MEAT PRODUCTS	.4	1.4	.3	.5	(D)	32.5	.8	-	10	11
202	DAIRY PRODUCTS	.2	1.1	.1	.2	(D)	31.3	.9	-	1	1
203	PRESERVED FRUITS AND VEGETABLES	.2	.5	.2	(D)	(D)	(D)	(D)	-	(X)	(X)
205	BAKERY PRODUCTS	.2	.7	.2	.4	(D)	10.4	.3	-	2	22
207	FATS AND OILS	.6	1.7	.5	.6	(S)	41.0	1.1	-	41	53
208	BEVERAGES	.3	1.1	.2	.4	(D)	17.9	.7	-	10	48

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A.

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	ARIZONA--CON.										
23	APPAREL, OTH. TEXTILE PRODS.	.2	1.3	.1	.2	.1	36.3	1.0	-	20	13
232	MEN'S AND BOYS' FURNISHINGS.	.1	.7	.1	.1	.1	19.7	.6	-	1	8
234	WOMEN'S, CHILDREN'S UNDERGARMS	(Z)	.1	(D)	(D)	(Z)	(D)	(D)	-	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.9	3.4	.6	.9	(D)	100.7	2.5	-	26	15
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	.2	.7	.1	.3	(D)	16.6	.4	-	55	26
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.2	(Z)	.1	(D)	5.2	.1	-	67	23
27	PRINTING AND PUBLISHING.	.4	2.1	.2	.3	.2	70.5	1.8	(D)	23	32
28	CHEMICALS, ALLIED PRODUCTS	3.7	7.1	2.9	3.2	(D)	243.6	3.9	(D)	4	6
289	MISCELLANEOUS CHEMICAL PRODUCTS.	.6	1.3	.5	.8	(D)	21.2	.5	(D)	15	43
29	PETROLEUM AND COAL PRODUCTS.	.3	.7	.3	.5	(D)	5.5	.2	-	32	22
32	STONE, CLAY, GLASS PRODUCTS.	8.4	17.0	7.6	9.9	.5	225.3	7.0	(D)	8	7
33	PRIMARY METAL INDUSTRIES	33.7	50.3	30.4	32.3	(D)	985.5	18.0	147.0	1	1
333	PRIMARY NONFERROUS METALS.	30.4	40.1	28.4	29.5	(D)	604.6	10.6	147.0	1	1
335	NONFERROUS ROLLING AND DRAWING	1.8	5.5	1.0	1.3	(Z)	221.1	4.2	-	1	1
34	FABRICATED METAL PRODUCTS.	.6	2.2	.4	.7	(D)	54.4	1.5	(D)	18	18
344	FABRICATED STRUC. METAL PRODS.	.3	1.4	.2	.4	(D)	34.8	1.0	-	25	22
35	MACHINERY, EXCEPT ELECTRIC	1.0	5.1	.5	.7	(S)	159.6	4.4	-	13	7
36	ELECTRIC, ELECTRONIC EQUIP	2.1	9.1	.7	1.2	(D)	414.3	7.9	(Z)	5	5
366	COMMUNICATION EQUIPMENT.	.3	1.4	.1	(D)	(Z)	(D)	(D)	-	(X)	(X)
367	ELECTRONIC COMPONENTS, ACCESS.	1.7	6.9	.5	1.0	(S)	337.5	5.9	(Z)	1	5
37	TRANSPORTATION EQUIPMENT	1.3	5.9	.7	1.3	.1	160.7	4.6	(Z)	1	3
39	MISC. MANUFACTURING INDUS.	.2	.6	.1	.2	(Z)	18.5	.5	-	53	16
	UTAH	54.7	84.0	49.0	52.9	(D)	1,657.9	31.1	(D)	5	4
20	FOOD AND KINDRED PRODUCTS.	3.9	7.6	3.3	3.9	.4	178.5	3.7	(D)	8	10
201	MEAT PRODUCTS.	.4	1.3	.3	.3	(D)	40.4	1.0	(D)	35	25
202	DAIRY PRODUCTS	1.1	1.8	.9	1.0	(D)	42.3	.9	-	25	28
204	GRAIN MILL PRODUCTS.	.3	1.0	.2	.2	(D)	40.1	.8	-	7	7
23	APPAREL, OTH. TEXTILE PRODS.	.3	.9	.2	.2	.1	26.9	.6	-	10	8
232	MEN'S AND BOYS' FURNISHINGS.	.1	.3	(Z)	(Z)	(Z)	13.5	.3	-	1	1
233	WOMEN'S AND MISSES' OUTERWEAR.	.1	.3	.1	.1	.1	7.1	.2	-	18	20
239	MISC. FABRICATED TEXTILE PRODS	.1	.2	(Z)	.1	(D)	4.0	.1	-	21	38
24	LUMBER AND WOOD PRODUCTS	.3	.8	.3	.4	.3	13.9	.4	-	40	31
245	WOOD BUILDINGS AND MOBILE HOMES.	.1	.2	.1	.1	.1	3.7	.1	-	18	38
25	FURNITURE AND FIXTURES	.1	.2	(S)	(S)	(D)	8.7	.2	-	(X)	51
27	PRINTING AND PUBLISHING.	.4	1.2	.2	.3	.1	48.8	1.0	-	12	14
275	COMMERCIAL PRINTING.	.1	.3	(Z)	(Z)	(D)	14.1	.3	-	40	44
28	CHEMICALS, ALLIED PRODUCTS	2.9	6.3	2.0	2.2	(D)	260.9	4.1	-	5	1
289	MISCELLANEOUS CHEMICAL PRODUCTS.	.4	.6	.3	.3	.1	10.3	.2	-	3	6
29	PETROLEUM AND COAL PRODUCTS.	5.3	8.1	4.7	5.4	(S)	189.0	2.8	-	14	2
291	PETROLEUM REFINING	5.3	8.1	4.6	5.3	(S)	189.3	2.8	-	14	2
32	STONE, CLAY, GLASS PRODUCTS.	9.7	11.1	9.2	8.3	(S)	155.0	2.8	-	26	28
327	CONCRETE, GYPSUM, PLASTER PRODS.	3.2	4.3	(D)	(D)	.9	(D)	(D)	-	(X)	(X)
33	PRIMARY METAL INDUSTRIES	27.3	36.1	25.8	27.6	(D)	432.8	8.4	(D)	1	2
34	FABRICATED METAL PRODUCTS.	.7	1.8	.5	.7	(D)	50.8	1.1	-	55	15
344	FABRICATED STRUC. METAL PRODS.	.4	1.0	.3	.4	(D)	24.0	.5	-	88	28
35	MACHINERY, EXCEPT ELECTRIC	1.0	2.9	.7	.8	(D)	87.1	2.1	-	32	32
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.2	.2	.3	(D)	46.7	.9	-	1	2
37	TRANSPORTATION EQUIPMENT	1.8	3.4	1.5	2.0	(D)	81.0	1.4	-	1	1
371	MOTOR VEHICLES AND EQUIPMENT	.1	.4	.1	.1	(Z)	11.1	.2	-	1	1
39	MISC. MANUFACTURING INDUS.	.2	.6	.1	.1	(Z)	24.1	.5	-	15	22
	NEVADA	17.7	35.6	14.1	20.5	(D)	1,062.7	15.1	(D)	9	5
20	FOOD AND KINDRED PRODUCTS.	.8	2.5	.6	1.2	.2	50.5	1.3	-	5	8
27	PRINTING AND PUBLISHING.	.1	.6	.1	.1	(Z)	23.4	.6	-	79	23
271	NEWSPAPERS	(Z)	.2	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
275	COMMERCIAL PRINTING.	.1	.2	(Z)	(D)	(D)	(D)	(D)	-	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	7.4	14.0	6.9	9.9	(S)	162.9	4.1	(D)	16	17

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	NEVADA--CON.										
32	STONE, CLAY, GLASS PRODUCTS--CON.										
327	CONCRETE, GYPSUM, PLASTER PRODS.	4.3	7.0	4.0	5.3	(D)	73.1	1.7	(D)	13	8
329	MISC. NONMETALLIC MINERAL PRODS.	.9	2.2	.7	1.2	(D)	39.0	1.0	-	4	5
33	PRIMARY METAL INDUSTRIES	2.8	4.5	(D)	(D)	(Z)	(D)	(D)	(D)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.1	.4	.1	.2	(Z)	7.8	.2	-	49	24
39	MISC. MANUFACTURING INDUS.	.2	.5	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
	WASHINGTON	237.6	388.1	139.8	246.9	(D)	28,652.6	141.3	(S)	2	2
20	FOOD AND KINDRED PRODUCTS	20.7	37.7	18.1	31.2	.7	771.4	6.5	(D)	8	20
202	DAIRY PRODUCTS	1.3	2.7	1.0	1.9	.3	79.3	.8	-	9	12
203	PRESERVED FRUITS AND VEGETABLES	6.5	11.9	5.4	10.1	(D)	314.2	1.8	-	6	11
204	GRAIN MILL PRODUCTS	.9	1.9	.7	1.2	(S)	77.8	.7	-	10	8
205	BAKERY PRODUCTS	.4	1.0	.4	.8	(D)	16.2	.2	-	30	40
208	BEVERAGES	2.0	4.6	1.6	3.6	(S)	(S)	(S)	(D)	59	(X)
209	MISC. FOODS, KINDRED PRODUCTS	.9	1.8	.8	1.4	.7	(S)	(S)	(D)	28	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.6	.1	.3	.1	27.5	.4	-	29	15
232	MEN'S AND BOYS' FURNISHINGS	.1	.2	(Z)	.1	(D)	9.3	.1	-	15	5
239	MISC. FABRICATED TEXTILE PRODS	.1	.2	(S)	(S)	(D)	9.8	.1	-	(X)	15
24	LUMBER AND WOOD PRODUCTS	17.9	41.7	13.6	29.1	2.0	1,239.4	12.6	(S)	10	7
241	LOGGING CAMPS, LOG CONTRACTORS	6.9	16.1	6.6	15.2	.4	85.0	.9	-	19	6
242	SAWMILLS AND PLANING MILLS	6.1	14.5	3.7	7.6	.6	689.8	6.9	(S)	7	4
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	3.7	8.1	2.4	4.4	.3	385.6	3.6	(D)	8	4
249	MISCELLANEOUS WOOD PRODUCTS	.7	1.6	.5	.9	(D)	54.2	.7	-	23	58
25	FURNITURE AND FIXTURES	.2	.6	.2	.3	.2	16.0	.3	-	22	32
253	PUBLIC BLDG., RELATED FURNITURE	.1	.1	(Z)	.1	(D)	6.2	(Z)	-	14	67
26	PAPER AND ALLIED PRODUCTS	69.4	115.4	51.9	86.9	(D)	5,124.8	28.5	(S)	1	1
261	PULPMILLS	14.9	26.4	11.3	20.1	(Z)	1,063.2	6.2	(D)	1	1
262	PAPERMILLS, EXC. BUILDING PAPER	39.2	64.5	30.3	50.0	(D)	2,610.7	14.5	(D)	1	1
263	PAPERBOARD MILLS	13.8	21.3	9.2	14.7	-	1,349.9	6.5	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	.8	1.8	.6	1.1	.4	60.9	.7	(D)	4	23
27	PRINTING AND PUBLISHING	.6	1.8	.3	.5	(D)	101.4	1.3	-	11	8
271	NEWSPAPERS	.3	.8	.1	.2	(D)	54.8	.6	-	17	14
28	CHEMICALS, ALLIED PRODUCTS	14.7	22.8	10.0	15.6	(D)	1,364.3	7.2	(D)	6	3
281	INDUSTRIAL INORGANIC CHEMICALS	9.7	14.4	5.9	8.6	(D)	1,115.0	5.8	(D)	1	1
285	PAINTS AND ALLIED PRODUCTS	.1	.2	.1	.1	(D)	3.9	.1	-	43	90
289	MISCELLANEOUS CHEMICAL PRODUCTS	.3	.7	.3	.5	.1	16.3	.2	-	1	28
29	PETROLEUM AND COAL PRODUCTS	12.6	21.8	10.0	16.6	(S)	758.7	5.2	(D)	3	3
30	RUBBER, MISC. PLASTICS PROD.	.8	1.8	.5	.8	(D)	78.2	1.0	-	38	13
307	MISCELLANEOUS PLASTICS PRODUCTS	.7	(D)	.5	(D)	.2	68.1	1.0	-	(X)	12
32	STONE, CLAY, GLASS PRODUCTS	10.3	22.0	9.1	18.2	(S)	368.0	3.7	(S)	8	7
324	CEMENT, HYDRAULIC	6.1	10.9	5.5	9.8	(D)	172.9	1.0	-	1	1
327	CONCRETE, GYPSUM, PLASTER PRODS.	.9	3.6	.8	2.9	(S)	35.3	.7	(D)	45	37
33	PRIMARY METAL INDUSTRIES	76.4	91.2	17.2	31.0	(D)	17,346.2	60.1	(D)	5	1
331	BLAST FURNACE, BASIC STEEL PROD.	3.6	6.9	2.8	5.5	(S)	233.3	1.5	(Z)	12	14
332	IRON AND STEEL FOUNDRIES	.8	1.5	.5	.9	(D)	90.4	.6	-	21	71
333	PRIMARY NONFERROUS METALS	66.4	72.9	9.8	17.3	(D)	16,585.7	55.6	(D)	1	1
335	NONFERROUS ROLLING AND DRAWING	4.9	8.0	3.5	5.9	.1	410.9	2.1	-	1	1
34	FABRICATED METAL PRODUCTS	1.7	4.9	.8	1.5	.1	253.6	3.4	(D)	18	38
341	METAL CANS, SHIPPING CONTAINERS	.5	1.2	.4	.8	(Z)	34.1	.4	-	1	1
344	FABRICATED STRUC. METAL PRODS.	.6	1.5	.3	.6	(D)	76.5	.9	(D)	19	16
349	MISC. FABRICATED METAL PRODUCTS	(Z)	1.0	(S)	(S)	(D)	85.6	1.4	(D)	(X)	82
35	MACHINERY, EXCEPT ELECTRIC	1.5	4.2	.9	1.8	(D)	179.9	2.4	(S)	9	12
353	CONSTRUCTION, RELATED MACHINERY	.5	1.1	.3	.6	(Z)	55.1	.5	(S)	7	11
355	SPECIAL INDUSTRY MACHINERY	.2	.8	.1	.2	(D)	29.4	.5	(S)	29	50
359	MISC. MACHINERY, EXC. ELEC	.4	1.1	.2	.4	(D)	48.0	.7	-	31	11
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.0	.2	.3	(D)	55.4	.7	(S)	20	26
366	COMMUNICATION EQUIPMENT	.1	.4	(Z)	.1	(Z)	20.7	.3	-	33	48
37	TRANSPORTATION EQUIPMENT	9.2	18.4	6.3	11.8	(D)	853.0	6.7	(D)	3	1
371	MOTOR VEHICLES AND EQUIPMENT	.2	.5	.1	.3	(D)	24.4	.3	-	3	10
373	SHIP, BOAT BUILDING, REPAIRING	.8	1.8	.6	1.0	.3	72.8	.8	-	4	6
38	INSTRUMENTS, RELATED PRODS	.1	.4	(Z)	.1	(Z)	29.9	.3	-	9	5
	OREGON	132.2	269.7	84.1	150.7	(D)	14,102.6	119.0	173.7	2	2
20	FOOD AND KINDRED PRODUCTS	9.4	19.6	7.5	12.7	1.2	574.8	6.9	(D)	3	8
201	MEAT PRODUCTS	.8	1.8	.5	.9	.2	71.7	.8	(D)	19	25
202	DAIRY PRODUCTS	.6	1.4	.3	.6	(D)	80.5	.8	(D)	37	17

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	OREGON--CON.										
20	FOOD AND KINDRED PRODUCTS--CON.										
203	PRESERVED FRUITS AND VEGETABLES. .	2.9	6.5	2.1	4.1	(D)	223.7	2.3	(D)	4	7
204	GRAIN MILL PRODUCTS.	.7	1.8	.5	.9	(D)	67.7	.9	(Z)	9	36
205	BAKERY PRODUCTS.	.6	1.4	.5	1.0	(D)	28.9	.5	-	1	1
207	FATS AND OILS.	.5	1.1	.5	.9	(D)	13.4	.2	-	10	19
209	MISC. FOODS, KINDRED PRODUCTS. . .	.9	2.0	.7	1.2	(D)	52.1	.8	-	18	30
22	TEXTILE MILL PRODUCTS.	.2	.4	.1	.2	(S)	11.8	.2	(S)	19	24
23	APPAREL, OTH. TEXTILE PRODS. . .	.1	.4	.1	.2	.1	14.9	.2	-	6	6
24	LUMBER AND WOOD PRODUCTS	31.9	82.1	22.7	45.1	10.7	2,724.3	37.0	155.7	6	2
241	LOGGING CAMPS, LOG CONTRACTORS . .	6.7	14.5	6.5	13.5	6.3	61.0	1.0	(D)	17	21
242	SAWMILLS AND PLANING MILLS	8.1	24.5	4.4	9.1	1.7	1,094.3	15.4	102.8	6	3
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	12.6	31.4	8.8	16.9	1.5	1,112.4	14.5	48.2	2	3
245	WOOD BUILDINGS AND MOBILE HOMES. .	.1	(D)	(Z)	.1	(Z)	(D)	(D)	-	1	(X)
249	MISCELLANEOUS WOOD PRODUCTS. . . .	4.4	11.1	2.9	5.5	1.0	437.0	5.7	(D)	5	2
25	FURNITURE AND FIXTURES	.3	.9	.2	.4	(D)	30.3	.5	-	17	11
251	HOUSEHOLD FURNITURE.	.2	.7	.2	.3	(D)	21.2	.4	-	9	3
26	PAPER AND ALLIED PRODUCTS. . . .	36.8	74.1	25.2	44.7	.2	3,394.6	29.4	(D)	1	1
262	PAPERMILLS, EXC. BUILDING PAPER. .	22.5	45.8	14.9	25.4	(Z)	2,217.2	20.4	(D)	1	1
263	PAPERBOARD MILLS	11.5	21.9	8.0	15.2	(Z)	1,004.0	6.7	-	1	1
265	PAPERBOARD CONTAINERS AND BOXES. .	.1	.4	.1	.2	(D)	8.8	.2	-	28	43
27	PRINTING AND PUBLISHING.	.5	1.8	.2	.4	(D)	81.0	1.4	(D)	33	18
271	NEWSPAPERS	.1	.6	(S)	(S)	(D)	34.1	.6	-	(X)	15
28	CHEMICALS, ALLIED PRODUCTS . . .	7.7	13.2	4.7	8.2	(S)	884.0	5.1	-	1	24
286	INDUSTRIAL ORGANIC CHEMICALS . . .	.5	1.0	.5	.8	(Z)	18.5	.2	-	1	1
289	MISCELLANEOUS CHEMICAL PRODUCTS. .	.8	1.8	.7	1.3	.1	45.5	.5	-	1	1
29	PETROLEUM AND COAL PRODUCTS. . .	2.9	5.0	2.8	4.4	(D)	(S)	(S)	-	17	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	9.5	13.8	8.7	11.5	2.5	224.4	2.2	(D)	10	6
327	CONCRETE, GYPSUM, PLASTER PRODS. .	2.5	5.2	2.3	4.4	1.6	(S)	(S)	(S)	26	(X)
33	PRIMARY METAL INDUSTRIES	26.7	41.3	8.2	16.0	.2	5,438.4	25.4	-	6	3
332	IRON AND STEEL FOUNDRIES	1.7	4.6	1.2	2.6	(D)	132.2	2.0	-	25	16
34	FABRICATED METAL PRODUCTS. . . .	1.5	4.2	1.1	2.0	(S)	131.7	2.2	(Z)	32	17
341	METAL CANS, SHIPPING CONTAINERS. .	.3	.6	.2	.5	-	9.8	.1	-	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE. .	.2	.5	.1	.3	(D)	17.7	.3	-	30	26
36	ELECTRIC, ELECTRONIC EQUIP . . .	.4	1.3	.2	.4	(D)	61.8	.9	-	21	24
361	ELECTRIC DISTRIBUTING EQUIPMENT. .	(Z)	.1	(S)	(S)	(D)	3.9	.1	-	(X)	41
37	TRANSPORTATION EQUIPMENT	.8	2.3	.5	.9	(D)	93.8	1.4	-	14	12
39	MISC. MANUFACTURING INDUS. . . .	.1	.5	(S)	(S)	(S)	19.4	.3	(D)	(X)	59
	CALIFORNIA	659.5	1,667.3	538.4	816.1	77.0	35,514.7	851.2	1,391.4	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	102.6	230.8	90.2	146.7	(D)	3,649.8	84.1	247.1	2	3
201	MEAT PRODUCTS.	6.2	16.7	4.8	7.9	2.6	427.4	8.8	(Z)	12	7
202	DAIRY PRODUCTS	6.1	17.0	4.7	7.4	.6	424.9	9.6	(D)	5	5
203	PRESERVED FRUITS AND VEGETABLES. .	32.0	69.8	28.5	46.4	7.5	1,047.3	23.4	(D)	3	5
204	GRAIN MILL PRODUCTS.	5.5	15.1	4.3	6.9	3.6	355.3	8.1	-	18	6
205	BAKERY PRODUCTS.	4.4	10.0	3.7	5.1	(D)	203.9	4.8	(D)	8	13
206	SUGAR, CONFECTIONERY PRODUCTS. . .	28.1	50.8	27.6	47.4	.5	138.0	3.4	(S)	1	3
207	FATS AND OILS.	5.9	13.0	5.1	7.8	(D)	226.0	5.2	-	21	7
208	BEVERAGES.	7.3	19.5	5.8	8.6	1.6	446.2	10.9	(S)	5	6
209	MISC. FOODS, KINDRED PRODUCTS. . .	7.1	18.9	5.8	9.2	1.4	380.9	9.8	(S)	2	16
22	TEXTILE MILL PRODUCTS.	5.1	12.6	4.2	5.9	(D)	265.5	6.7	(S)	19	8
225	KNITTING MILLS	.8	2.1	.6	.8	(D)	54.6	1.3	-	22	15
226	TEXTILE FINISHING, EXCEPT WOOL . .	.6	1.6	.5	(D)	(D)	(D)	(D)	(Z)	(X)	(X)
227	FLOOR COVERING MILLS	2.3	4.6	2.1	2.6	(S)	80.6	2.0	(S)	42	12
228	YARN AND THREAD MILLS.	.3	1.2	.1	.3	.2	39.7	1.0	-	8	2
229	MISCELLANEOUS TEXTILE GOODS. . . .	.9	2.5	.7	1.1	(D)	51.3	1.4	(D)	13	11
23	APPAREL, OTH. TEXTILE PRODS. . .	3.2	14.1	1.9	3.2	(D)	405.1	10.9	(D)	10	9
232	MEN'S AND BOYS' FURNISHINGS. . . .	.3	1.7	.2	.3	(D)	48.9	1.4	-	15	9
233	WOMEN'S AND MISSES' OUTERWEAR. . .	1.2	6.0	.6	1.0	(D)	204.2	5.0	(D)	11	11
234	WOMEN'S, CHILDREN'S UNDERGARMS . .	.1	.7	.1	.1	.1	19.1	.6	(Z)	1	4
239	MISC. FABRICATED TEXTILE PRODS . .	1.2	3.7	.9	1.5	(D)	77.7	2.2	(D)	19	18
24	LUMBER AND WOOD PRODUCTS	19.9	63.0	14.8	29.0	(D)	1,510.8	34.0	77.0	7	4
241	LOGGING CAMPS, LOG CONTRACTORS . .	3.1	6.8	3.0	6.3	2.4	18.8	.4	-	20	33
242	SAWMILLS AND PLANING MILLS	8.5	30.1	5.6	11.8	.4	828.9	18.3	(S)	10	5
243	MILLWORK, PLYWOOD, STRUC. MEMBS. .	3.0	10.1	2.1	3.7	(D)	281.7	6.4	(D)	8	5
244	WOOD CONTAINERS.	.4	1.4	.3	.6	(S)	31.2	.9	(D)	13	18
245	WOOD BUILDINGS AND MOBILE HOMES. .	.3	1.0	.2	.4	.3	18.4	.6	(S)	48	23
249	MISCELLANEOUS WOOD PRODUCTS. . . .	4.7	13.5	3.6	6.1	1.0	331.8	7.4	(D)	6	9
25	FURNITURE AND FIXTURES	2.9	12.0	1.6	2.7	1.4	372.3	9.2	(D)	11	7

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised – Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	CALIFORNIA--CON.										
25	FURNITURE AND FIXTURES--CON.										
251	HOUSEHOLD FURNITURE	1.7	7.2	.9	1.5	1.0	234.1	5.7	(D)	17	9
252	OFFICE FURNITURE	.4	1.6	.2	.4	(D)	48.1	1.2	-	15	11
254	PARTITIONS AND FIXTURES	.6	2.1	.4	.6	(D)	56.2	1.5	(S)	16	21
259	MISC. FURNITURE AND FIXTURES	.2	1.0	.1	.2	.2	28.8	.8	-	23	26
26	PAPER AND ALLIED PRODUCTS	36.9	88.8	31.0	49.4	(D)	1,720.2	39.3	562.4	1	2
261	PULPMILLS	3.7	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)
262	PAPERMILLS, EXC. BUILDING PAPER	9.3	23.5	7.5	11.9	.1	515.8	11.5	(D)	1	1
263	PAPERBOARD MILLS	16.0	32.6	14.6	23.3	.2	419.2	9.3	(D)	1	1
264	MISC. CONVERTED PAPER PRODUCTS	3.2	11.9	1.8	2.8	(S)	423.8	9.1	(D)	8	5
265	PAPERBOARD CONTAINERS AND BOXES	4.2	13.0	3.2	4.9	1.0	302.3	8.0	(D)	5	5
266	BUILDING PAPER AND BOARD MILLS	.6	1.2	(D)	(D)	(D)	(D)	(D)	-	(X)	(X)
27	PRINTING AND PUBLISHING	6.7	28.2	3.6	5.5	1.6	894.5	22.7	(S)	5	6
271	NEWSPAPERS	1.4	7.4	.4	.6	(D)	271.8	6.8	(D)	14	8
274	MISCELLANEOUS PUBLISHING	.1	.5	(Z)	(D)	(Z)	19.6	.5	-	(X)	10
275	COMMERCIAL PRINTING	3.8	14.5	2.4	3.6	1.4	409.5	10.9	(D)	6	11
276	MANIFOLD BUSINESS FORMS	.4	1.8	.3	.5	(D)	56.2	1.4	(D)	6	12
277	GREETING CARD PUBLISHING	(Z)	.1	(Z)	(Z)	(Z)	2.0	.1	-	1	1
278	BLANKBOOKS AND BOOKBINDING	.2	.9	.1	.2	.1	27.9	.7	-	15	14
279	PRINTING TRADE SERVICES	.3	1.1	.1	.2	.2	44.2	.9	-	6	32
28	CHEMICALS, ALLIED PRODUCTS	65.9	157.4	54.3	78.7	9.4	3,390.3	78.6	(D)	2	1
281	INDUSTRIAL INORGANIC CHEMICALS	15.6	51.8	10.6	18.1	(D)	1,444.4	33.8	(D)	4	1
282	PLASTICS MATERIALS, SYNTHETICS	5.1	14.8	3.8	5.2	(D)	389.2	9.6	-	2	2
283	DRUGS	2.0	5.9	1.4	1.9	(D)	163.2	4.0	-	2	5
284	SOAPS, CLEANERS, TOILET GOODS	5.6	12.9	4.8	7.4	1.3	217.6	5.6	(D)	5	5
285	PAINTS AND ALLIED PRODUCTS	1.4	3.9	1.1	1.4	(S)	87.0	2.5	(D)	4	7
286	INDUSTRIAL ORGANIC CHEMICALS	17.3	30.5	16.3	23.4	(D)	284.4	7.1	(D)	5	3
287	AGRICULTURAL CHEMICALS	14.0	27.6	11.7	15.4	(S)	652.9	12.2	(D)	2	2
289	MISCELLANEOUS CHEMICAL PRODUCTS	4.9	10.0	4.4	6.1	(D)	151.7	4.0	(Z)	2	4
29	PETROLEUM AND COAL PRODUCTS	147.4	291.0	129.9	183.0	(S)	5,107.9	108.0	(D)	2	1
291	PETROLEUM REFINING	140.4	277.0	123.5	173.3	(S)	4,949.3	103.7	(D)	2	1
295	PAVING AND ROOFING MATERIALS	5.1	10.5	4.7	7.0	(D)	125.2	3.4	-	11	7
299	MISC. PETROLEUM, COAL PRODUCTS	1.9	3.5	1.8	2.7	(D)	33.4	.9	(D)	3	23
30	RUBBER, MISC. PLASTICS PROD.	13.6	52.1	8.1	12.4	4.3	1,598.5	39.7	(D)	5	5
301	TIRES AND INNER TUBES	3.5	10.2	2.7	4.0	(Z)	241.9	6.2	-	1	1
306	FABRICATED RUBBER PRODUCTS, NEC	1.2	4.6	.7	1.0	(Z)	136.1	3.6	(D)	11	11
307	MISCELLANEOUS PLASTICS PRODUCTS	8.6	36.7	4.5	7.1	4.2	1,209.6	29.6	(D)	8	7
31	LEATHER, LEATHER PRODUCTS	.8	2.5	.6	1.1	(D)	61.8	1.4	-	10	18
311	LEATHER TANNING AND FINISHING	.6	1.7	.5	.9	(D)	34.9	.8	-	12	14
316	LUGGAGE	(Z)	.2	(Z)	(Z)	(Z)	5.8	.2	-	1	42
317	WOMEN'S HANDBAGS AND PURSES	(Z)	(Z)	-	(Z)	(Z)	(S)	(S)	-	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	108.7	202.7	99.4	141.3	4.3	2,746.6	61.4	(S)	3	3
322	GLASS, PRESSED OR BLOWN	20.7	41.8	18.2	28.0	(D)	725.4	13.7	(S)	1	1
324	CEMENT, HYDRAULIC	47.5	80.3	44.0	56.3	(D)	1,026.2	24.0	-	1	1
325	STRUCTURAL CLAY PRODUCTS	5.4	8.8	5.2	7.2	(S)	62.8	1.6	-	44	21
326	POTTERY AND RELATED PRODUCTS	3.1	5.3	3.0	3.8	.3	41.1	1.4	(Z)	28	14
327	CONCRETE, GYPSUM, PLASTER PRODS.	12.2	25.8	11.3	19.4	2.3	257.2	6.4	(D)	8	10
329	MISC. NONMETALLIC MINERAL PRODS.	15.7	31.2	13.9	20.0	(D)	512.1	11.2	-	8	4
33	PRIMARY METAL INDUSTRIES	52.6	143.7	43.1	71.6	3.3	2,770.6	71.9	(D)	9	5
331	BLAST FURNACE, BASIC STEEL PROD.	31.5	79.1	26.2	39.1	1.4	1,560.3	40.1	(D)	1	2
332	IRON AND STEEL FOUNDRIES	4.7	20.6	3.2	8.9	(D)	429.4	11.7	-	29	25
334	SECONDARY NONFERROUS METALS	3.6	6.9	3.4	5.4	(D)	67.0	1.5	-	13	17
335	NONFERROUS ROLLING AND DRAWING	5.8	17.4	4.2	5.8	(D)	459.5	11.6	-	2	2
336	NONFERROUS FOUNDRIES	4.7	13.4	4.2	9.4	.9	150.3	4.0	(D)	60	17
339	MISC. PRIMARY METAL PRODUCTS	2.2	5.8	1.9	3.1	.6	91.8	2.7	-	34	15
34	FABRICATED METAL PRODUCTS	26.1	80.9	19.1	28.4	5.8	2,052.5	52.6	(S)	6	5
341	METAL CANS, SHIPPING CONTAINERS	5.8	13.6	4.9	7.2	.3	266.7	6.4	-	1	1
342	CUTLERY, HANDTOOLS AND HARDWARE	1.6	5.8	1.1	1.4	.2	155.9	4.4	(D)	20	17
343	PLUMBING, HEATING, EXCEPT ELEC	1.0	3.4	.6	1.0	(D)	105.2	2.4	-	5	13
344	FABRICATED STRUC. METAL PRODS.	4.2	16.8	2.6	4.1	1.8	481.9	12.7	(Z)	5	15
345	SCREW MACHINE PROD., BOLTS, ETC.	1.1	5.1	.5	.7	.3	175.4	4.4	(Z)	9	9
346	METAL FORGINGS AND STAMPINGS	3.8	8.6	3.4	4.8	.1	124.2	3.8	(D)	13	16
347	METAL SERVICES, NEC	5.0	14.8	3.7	5.7	1.5	383.8	9.1	-	23	16
348	ORDNANCE AND ACCESSORIES, NEC	1.5	4.7	1.1	1.6	(D)	113.4	3.1	(D)	1	1
349	MISC. FABRICATED METAL PRODUCTS	2.0	8.1	1.2	1.9	(D)	246.0	6.2	(Z)	17	7
35	MACHINERY, EXCEPT ELECTRIC	14.2	59.1	7.7	12.6	6.2	1,898.1	46.5	(D)	5	4
351	ENGINES AND TURBINES	.7	2.9	.4	.7	(D)	82.9	2.2	-	34	13
352	FARM AND GARDEN MACHINERY	.4	1.2	.3	.4	(D)	32.2	.8	(D)	28	23
353	CONSTRUCTION, RELATED MACHINERY	2.1	6.8	1.3	2.0	(D)	245.1	4.8	-	10	6
354	METALWORKING MACHINERY	1.1	5.3	.6	1.1	.7	145.3	4.2	(D)	17	17
356	GENERAL INDUSTRIAL MACHINERY	1.5	7.0	.8	1.3	(D)	212.3	5.6	(D)	11	8
357	OFFICE AND COMPUTING MACHINES	3.5	18.9	1.2	1.9	(D)	686.6	17.0	(D)	2	4
359	MISC. MACHINERY, EXC. ELEC	2.5	9.4	1.5	2.6	(D)	307.5	6.8	(D)	13	15
36	ELECTRIC, ELECTRONIC EQUIP	18.4	79.0	9.4	14.7	6.1	2,642.0	64.3	(D)	3	3
361	ELECTRIC DISTRIBUTING EQUIPMENT	.6	2.4	.3	.5	.2	75.6	1.9	-	20	17
362	ELECTRICAL INDUSTRIAL APPARATUS	.9	4.5	.4	.7	.4	127.6	3.8	(S)	13	24
363	HOUSEHOLD APPLIANCES	.7	2.2	.6	.8	(D)	51.0	1.4	-	2	6

See footnotes at end of table.

Table 4. Selected Fuels and Electric Energy Statistics for States by Industry Group: 1976 Revised—Con.

(Data are revised because of adjustments to estimating techniques; see appendix G, Description of Survey Sample. For explanation of terms, see appendix A)

SIC code	State and industry group	Purchased fuels and electric energy		Purchased fuels		Fuels not specified by kind (million dollars)	Electric energy			Standard error of estimate (percent) for columns[1]--	
							Purchased		Generated less sold (million kWh)		
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)		Quantity (million kWh)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	D	G
	CALIFORNIA--CON.										
36	ELECTRIC, ELECTRONIC EQUIP--CON.										
364	ELEC. LIGHTING, WIRING EQUIP	1.1	4.0	.8	1.2	(D)	96.3	2.7	(Z)	4	10
365	RADIO, TV RECEIVING EQUIPMENT	1.4	3.7	1.0	1.5	(D)	101.1	2.2	-	4	9
366	COMMUNICATION EQUIPMENT	4.8	25.2	2.0	2.9	(D)	842.9	22.3	-	6	4
367	ELECTRONIC COMPONENTS, ACCESS.	7.6	32.5	3.5	6.0	(D)	1,205.8	26.5	(D)	3	4
369	MISC. ELEC. EQUIPMENT, SUPPLIES	1.3	4.5	.8	(S)	(S)	141.7	3.4	(Z)	(X)	10
37	TRANSPORTATION EQUIPMENT	27.3	118.7	15.3	22.8	3.0	3,515.8	95.9	(S)	3	2
371	MOTOR VEHICLES AND EQUIPMENT	8.0	26.0	5.6	8.8	(D)	696.1	17.2	(S)	5	5
372	AIRCRAFT AND PARTS	9.1	44.1	4.7	6.4	.4	1,316.4	37.8	(D)	3	2
373	SHIP, BOAT BUILDING, REPAIRING	1.3	6.4	.7	1.2	(S)	154.3	5.3	(D)	11	10
375	MOTORCYCLES, BICYCLES, PARTS	.2	.7	(S)	(S)	.2	15.9	.5	-	(X)	56
376	GUIDED MISSILES, SPACE VEHICLES	7.5	36.3	3.5	5.0	(Z)	1,186.3	31.3	(D)	1	1
379	TRANSPORTATION EQUIPMENT, NEC.	.7	2.9	.5	.8	.3	79.3	2.1	(S)	7	12
38	INSTRUMENTS, RELATED PRODS	4.6	19.7	2.5	3.9	(D)	612.4	15.9	(S)	7	5
381	ENGINEERING, SCIENTIFIC INSTRU	.4	2.2	.2	.3	.2	69.0	1.8	-	9	22
382	MEASURING, CONTROLLING DEVICES	1.7	7.5	.9	1.3	(D)	251.5	6.3	(D)	16	5
383	OPTICAL INSTRUMENTS AND LENSES	.6	2.6	.3	.6	.5	69.3	2.0	-	10	15
384	MEDICAL INSTRUMENTS, SUPPLIES	1.2	5.0	.6	1.0	(D)	158.3	4.1	-	9	8
386	PHOTOGRAPHIC EQUIP., SUPPLIES	.4	1.4	.3	.5	(D)	32.0	.9	(D)	12	19
39	MISC. MANUFACTURING INDUS.	2.7	11.1	1.7	(S)	(D)	299.3	8.0	.2	(X)	7
391	JEWELRY, SILVER AND PLATED WARE	.1	.4	.1	(D)	.1	(D)	(D)	-	(X)	(X)
393	MUSICAL INSTRUMENTS	.1	.5	(Z)	.1	(Z)	13.3	.4	-	1	24
395	PENS, OFFICE AND ART GOODS	.3	1.2	.1	.2	(D)	39.7	1.0	-	1	14
396	COSTUME JEWELRY AND NOTIONS	.1	.5	.1	.1	.1	11.7	.4	(Z)	31	21
	ALASKA	9.0	19.7	8.4	15.8	(S)	165.5	3.9	227.2	5	12
20	FOOD AND KINDRED PRODUCTS	1.6	5.2	1.4	3.3	.4	75.2	1.8	(S)	12	25
209	MISC. FOODS, KINDRED PRODUCTS	1.5	4.6	1.3	(D)	.5	(D)	(D)	(S)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.6	4.3	1.4	3.0	1.3	48.6	1.3	(S)	15	5
241	LOGGING CAMPS, LOG CONTRACTORS	1.1	2.7	1.0	2.4	(D)	(S)	(S)	(S)	18	(X)
	HAWAII	9.9	28.8	8.3	15.9	1.0	453.1	12.9	315.4	4	6
20	FOOD AND KINDRED PRODUCTS	6.5	16.2	5.9	11.0	.8	180.6	5.2	315.4	3	10
201	MEAT PRODUCTS	.1	.4	.1	(D)	(D)	(D)	(D)	-	(X)	(X)
203	PRESERVED FRUITS AND VEGETABLES	1.0	2.8	.9	1.7	(D)	40.0	1.1	-	1	3
204	GRAIN MILL PRODUCTS	.1	.3	.1	.1	(D)	6.4	.2	-	1	1
206	SUGAR, CONFECTIONERY PRODUCTS	4.3	10.2	4.0	8.0	(D)	75.7	2.3	315.4	1	1
208	BEVERAGES	.1	.4	(S)	(S)	(D)	11.9	.3	-	(X)	26
209	MISC. FOODS, KINDRED PRODUCTS	.2	.5	.2	.3	(D)	7.4	.2	-	66	34
26	PAPER AND ALLIED PRODUCTS	(Z)	.1	(Z)	.1	(D)	1.3	.1	-	1	1
32	STONE, CLAY, GLASS PRODUCTS	2.0	5.7	1.7	3.8	(D)	60.3	1.9	-	11	10

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards, either on basis of the associated standard error of estimate or on basis of a consistency review. (X) Not applicable. (Z) Less than half of the unit of measure specified.

[1]For further explanation, see appendix G, Qualifications of the Data.

Fuels and Electric Energy Consumed

Standard Metropolitan Statistical Areas by Major Industry Group

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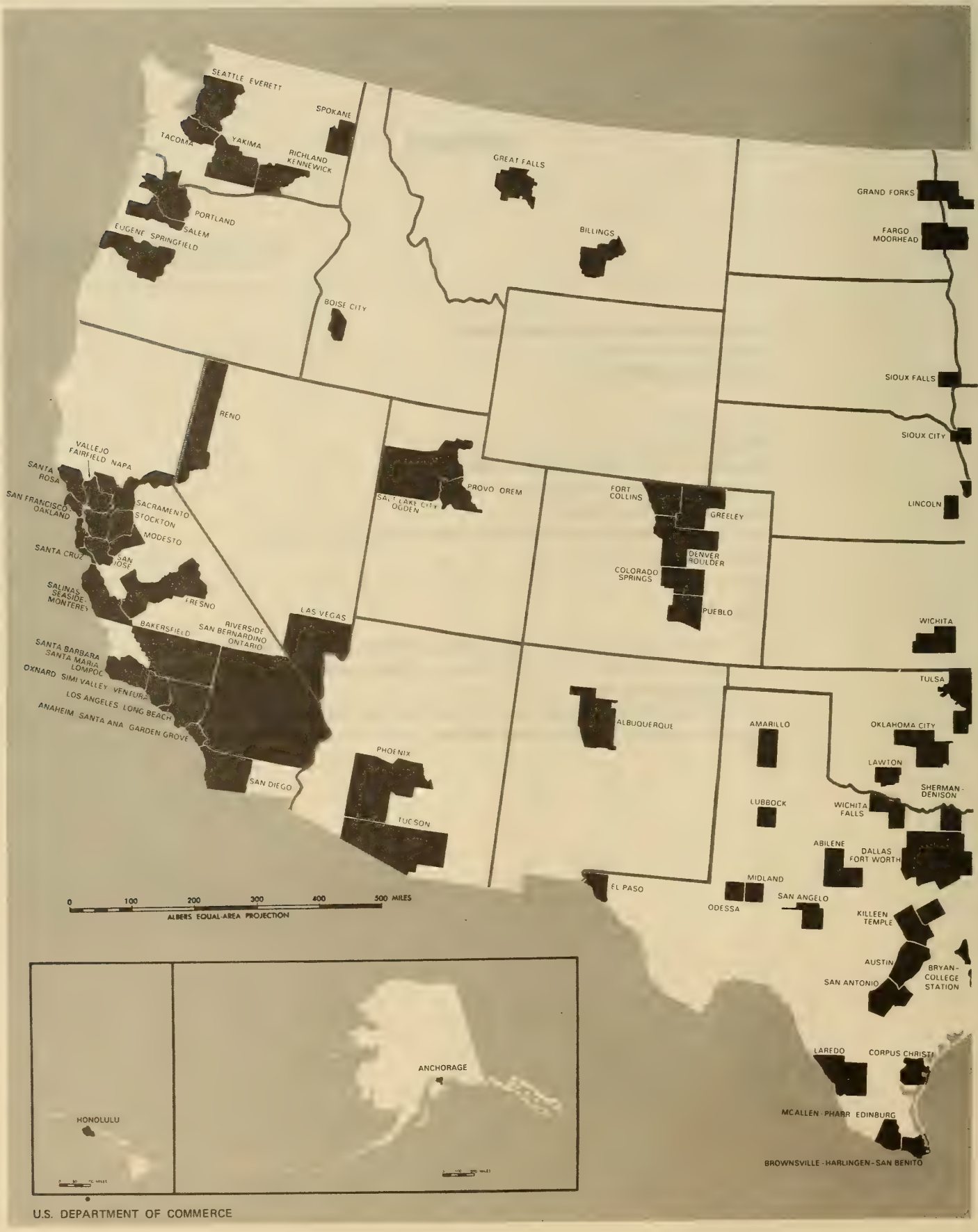
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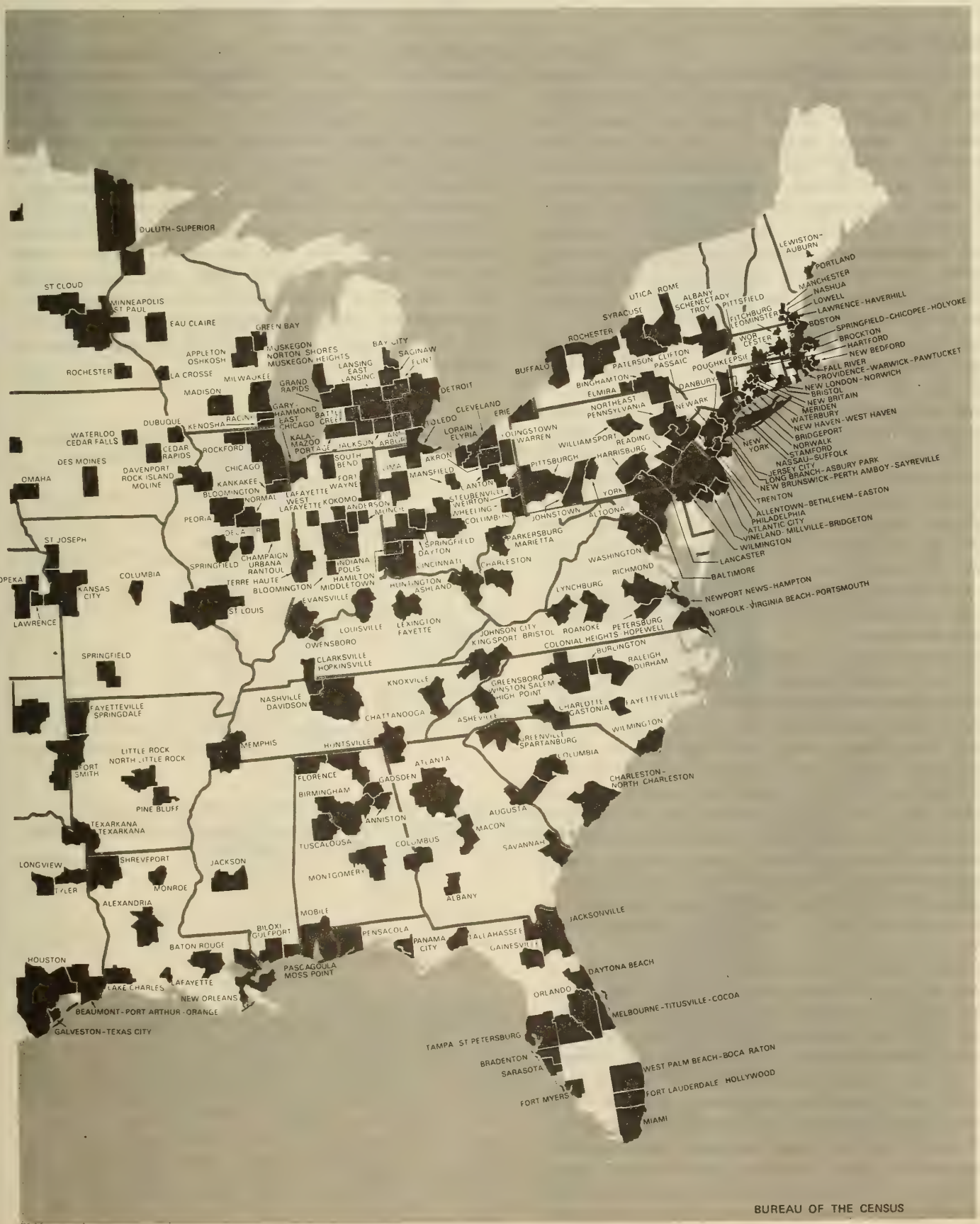
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STANDARD METROPOLITAN STATISTICAL



U.S. DEPARTMENT OF COMMERCE

AREAS OF THE UNITED STATES



EXPLANATORY TEXT

SUMMARY DATA

In 1977 the U.S. consumption of purchased fuels and electric energy for heat and power by manufacturing establishments totaled 12.9 quadrillion British thermal units (Btu's). This represented a 1 percent increase over the 1976 consumption figure of 12.8 quadrillion Btu's, which was considerably lower than the 6.2 percent increase in the Federal Reserve Board's (FRB) index of manufacturing production for that period. From these statistics it appears that proportionately less energy is being consumed in the production of manufactured goods. Apparently, fuel shortages and resulting efforts to save energy have changed the historic correlation between levels of production and energy consumption.

Expenditures during 1977 by manufacturers for fuels and electric energy amounted to $33.4 billion, an increase of 19 percent over the 1976 total of $28.1 billion (chart 1). Manufacturers' expenditures in 1977 for natural gas totaled $8.9 billion, an 18 percent increase over the 1976 level of $7.5 billion. Purchased electric energy costs increased 19 percent from $12.2 billion in 1976 to $14.5 billion in 1977, while those for fuel oil increased 23 percent to a 1977 level of $4.9 billion. Expenditures for coal increased by 11 percent between 1976 and 1977 to $1.5 billion, while for coke and breeze they increased 22 percent from the revised 1976 figure of $1.4 billion to $1.8 billion in 1977 (chart 2). All dollar figures in this report are in current dollars and therefore are not adjusted for changes in price levels.

While overall energy consumption between 1976 and 1977 showed only a modest increase, some variations in the mix of the fuel types and electric energy occured (chart 3). Increases in consumption were recorded for each of the major fuels and purchased electric energy except natural gas. Consumption of gas declined 5 percent from the 1976 level. This decrease caused the proportion of total natural gas consumed to slide to 46 percent of all manufacturing energy usage during 1977. Although natural gas remains the dominant fuel used by manufacturers, its percent of total energy usage has dropped significantly from the 1971 level of 56 percent. This shows the increasing switch from natural gas to the other major fuels and electric energy, particularly to residual fuel oil (table A and chart 4).

The average cost per million Btu's of energy consumed in 1977 was $2.58, a 17 percent increase over the 1976 average cost. This increase, more than the 14 percent increase between 1975 and 1976, was considerably lower than the average annual increase of 25 percent between 1971 and 1975. The increased average cost per million Btu's resulted primarily from an increased unit cost of natural gas, which rose to $1.55 per million Btu's. This was a 24 percent jump over the 1976 average cost of $1.26 per million Btu's. Lesser increases in average unit cost were registered by each of the other major fuels and electric energy. Again in 1977, coal remained the lowest cost fuel (on a Btu-per-dollar basis) of any of the major fuels covered in this report (table B and chart 5). Chart 6 illustrates the sharp increase in unit costs of selected fuels and electric energy consumed by all manufacturing industries during 1967-1977.

Although purchased electric energy accounted for 17 percent of the total energy consumed by manufacturers, it accounted for 43 percent of total energy expenditures. While natural gas accounted for 46 percent of total energy used (chart 4), it accounted for only 27 percent of total expenditures, making it a considerably lower priced source of energy than electricity in terms of Btu's. This Btu computation assumes perfect conversion of various fuels into energy, which in practice does not occur. Thus, a decrease in fuel consumption with a corresponding increase in purchased electric energy will result in a lower Btu figure to the extent that conversion losses are shifted to a public utility.

Table A. **Percent of Total Energy Consumed by All Manufacturing Industries for Selected Fuels and Purchased Electric Energy: 1967, 1971, and 1974-1977**

(Data for fuels not specified by kind were distributed among detailed fuels)

Fuels and electric energy	1977	1976	1975	1974	1971	1967
Total.....	100	100	100	100	100	100
Residual fuel oil.....	12	12	10	9	7	7
Bituminous coal, lignite, and anthracite	11	10	10	10	13	19
Coke and breeze.....	4	4	3	3	3	3
Distillate fuel oil.....	5	4	5	5	5	4
Natural gas.....	46	49	52	54	56	53
Purchased electric energy.....	17	17	17	15	13	12
Other fuels.....	4	4	4	3	2	1

Note: Detail may not add to 100 because of independent rounding.

Table B. **Unit Cost and Index of Change of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974-1977**

Year	Total purchased fuels and electric energy	Natural gas	Bituminous coal, lignite, and Anthracite	Residual fuel oil	Distillate fuel oil	Coke and breeze	Purchased Electric energy
	UNIT COST (DOLLARS PER MILLION BTU)						
1977.....	2.58	1.55	1.13	2.14	2.70	3.37	6.41
1976.....	2.20	1.26	1.07	1.88	2.38	2.98	5.58
1975.....	1.93	.95	1.12	1.93	2.24	2.58	5.06
1974.....	1.44	.64	.86	1.83	2.04	1.87	4.02
1971.....	.80	.38	.41	.61	.74	.89	2.89
1967.....	.65	.32	.28	.42	.62	.71	2.55
	INDEX OF CHANGE (1971=100)						
1977.....	321	405	276	354	363	379	222
1976.....	275	328	262	310	321	335	193
1975.....	240	247	273	318	304	290	175
1974.....	179	167	210	301	275	211	139
1971.....	100	100	100	100	100	100	100
1967.....	81	83	68	69	84	80	88

CHART 1.

Purchased Fuels and Electric Energy Quantity Consumed, Expenditures, and Unit Cost: 1967,1971, and 1974–1977

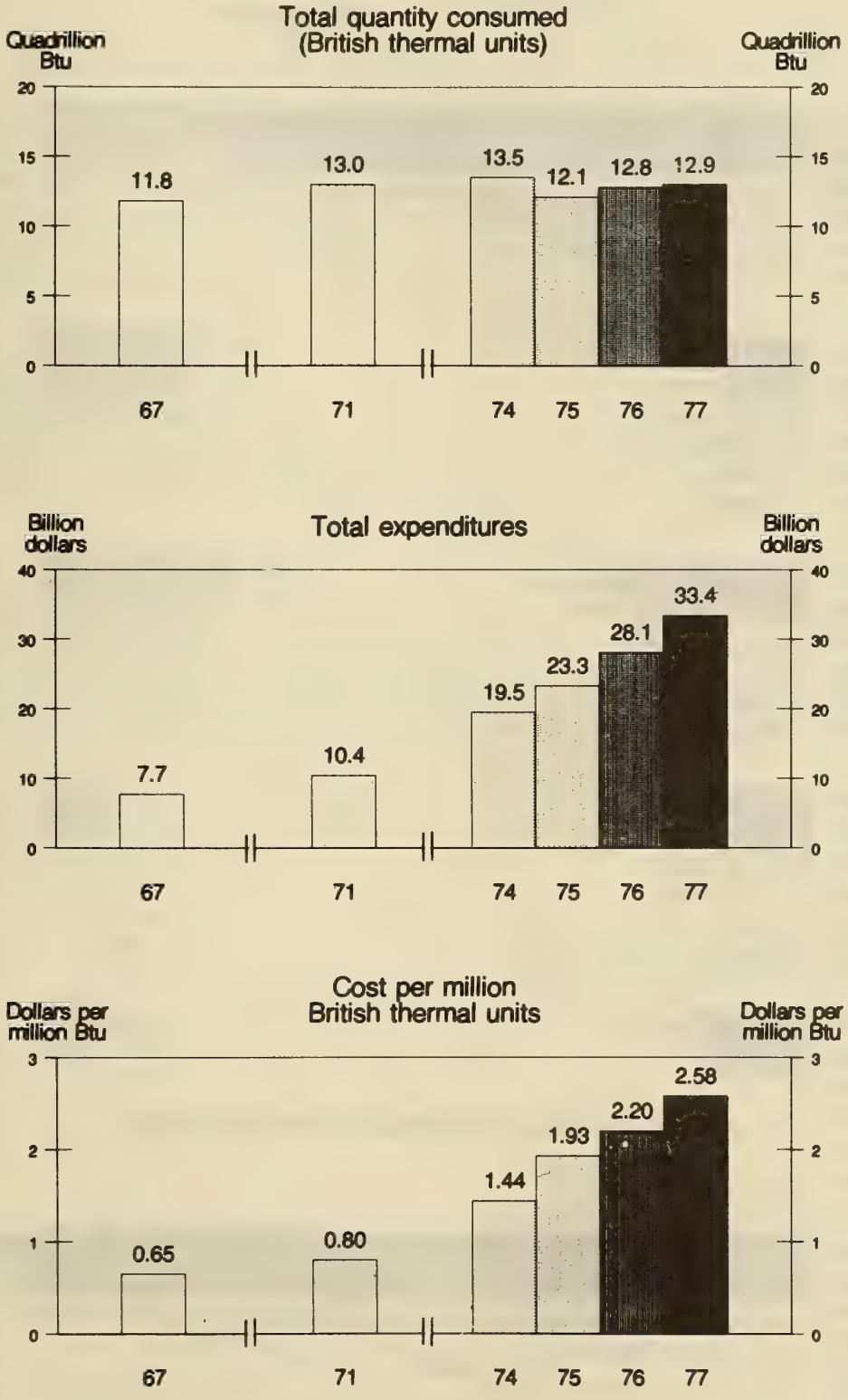


CHART 2.

Expenditures for Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes expenditures for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 3.2 and 2.3 percent of all fuel and electric energy expenditures by all manufacturing industries)

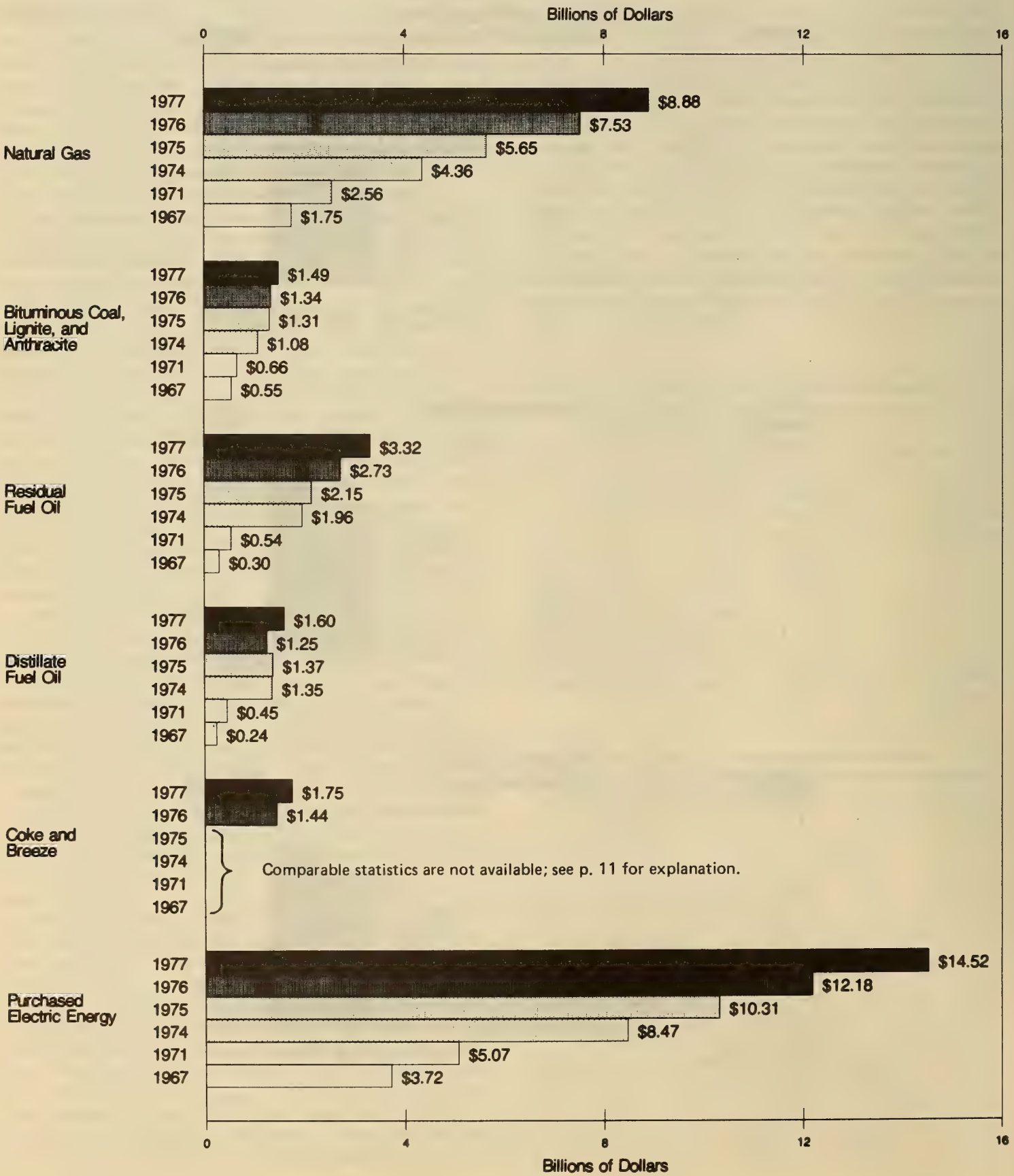


CHART 3.

Quantity of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes consumption for Other Fuels and Fuels Not Specified by Kind, which for 1977 amounted to 4.8 and 4.4 percent of all fuel and electric energy consumption by all manufacturing industries)

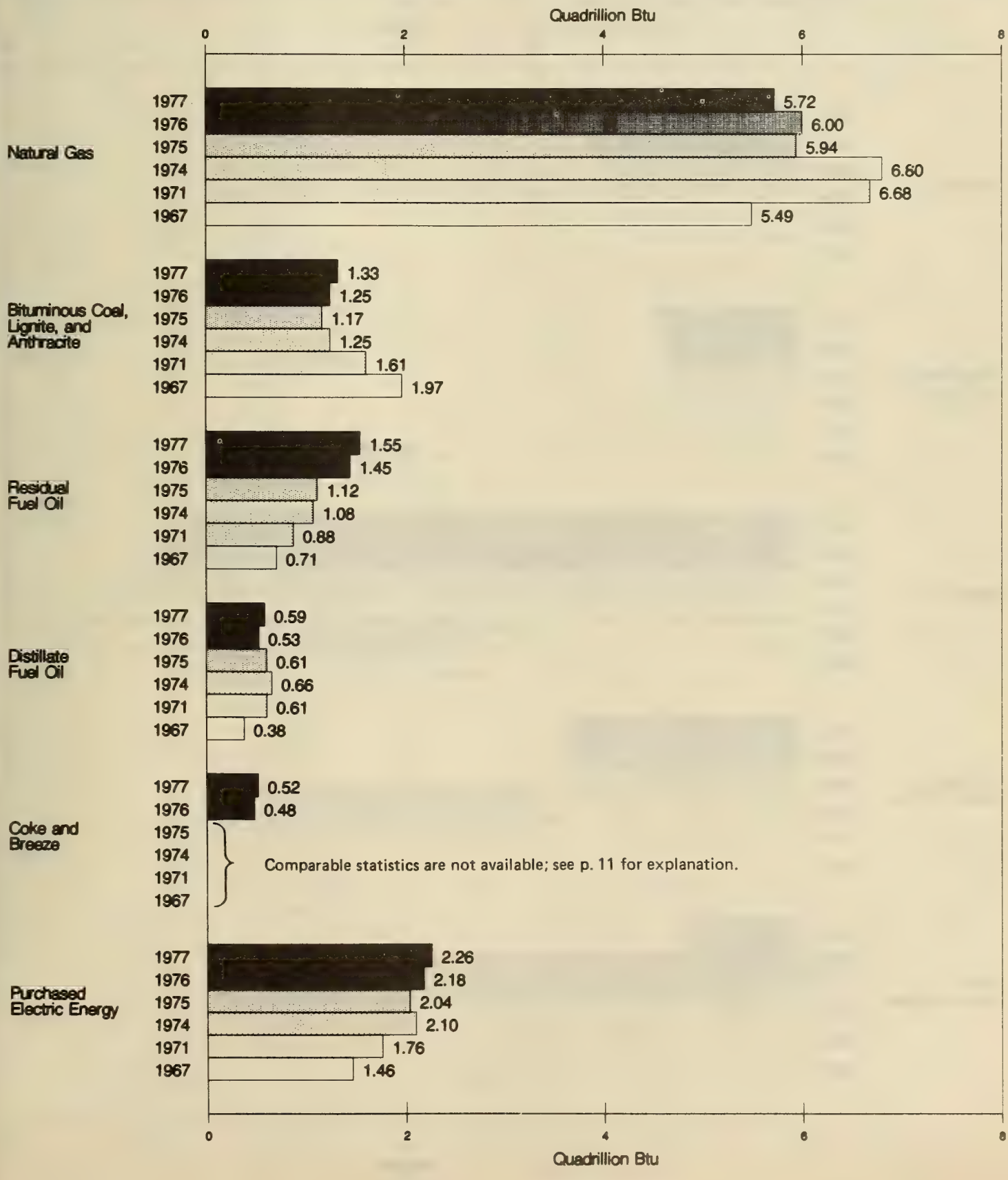


CHART 4.

Percent of Manufacturing Energy (BTU) Consumption Represented by Selected Individual Fuels and Purchased Electric Energy: 1967, 1971, and 1974–1977

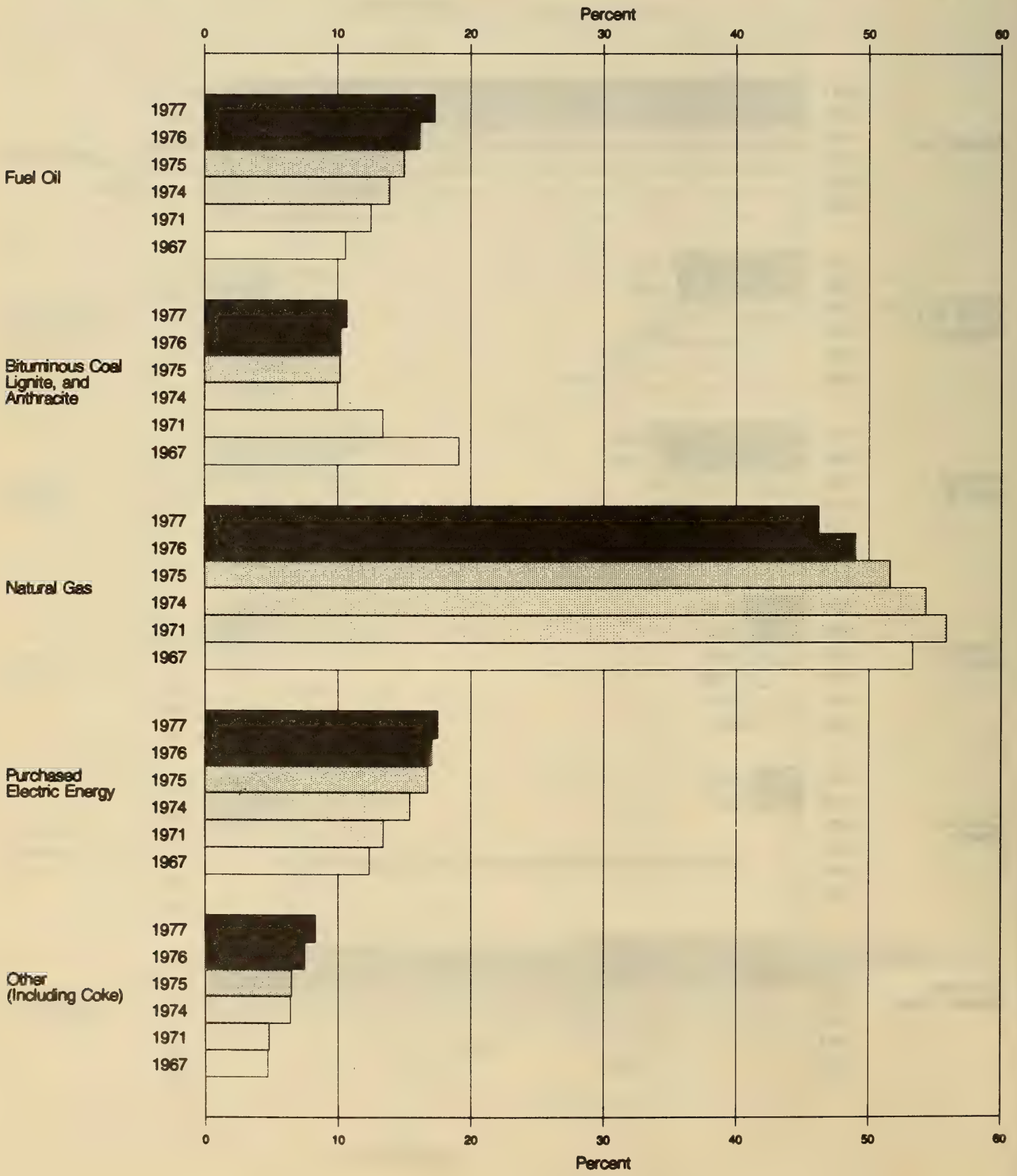


CHART 5.

Cost per Million British Thermal Units of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries: 1967, 1971, and 1974–1977

(Excludes Other Fuels and Fuels Not Specified by Kind, which for 1977 averaged $2.09 and $1.59 per million Btu's)

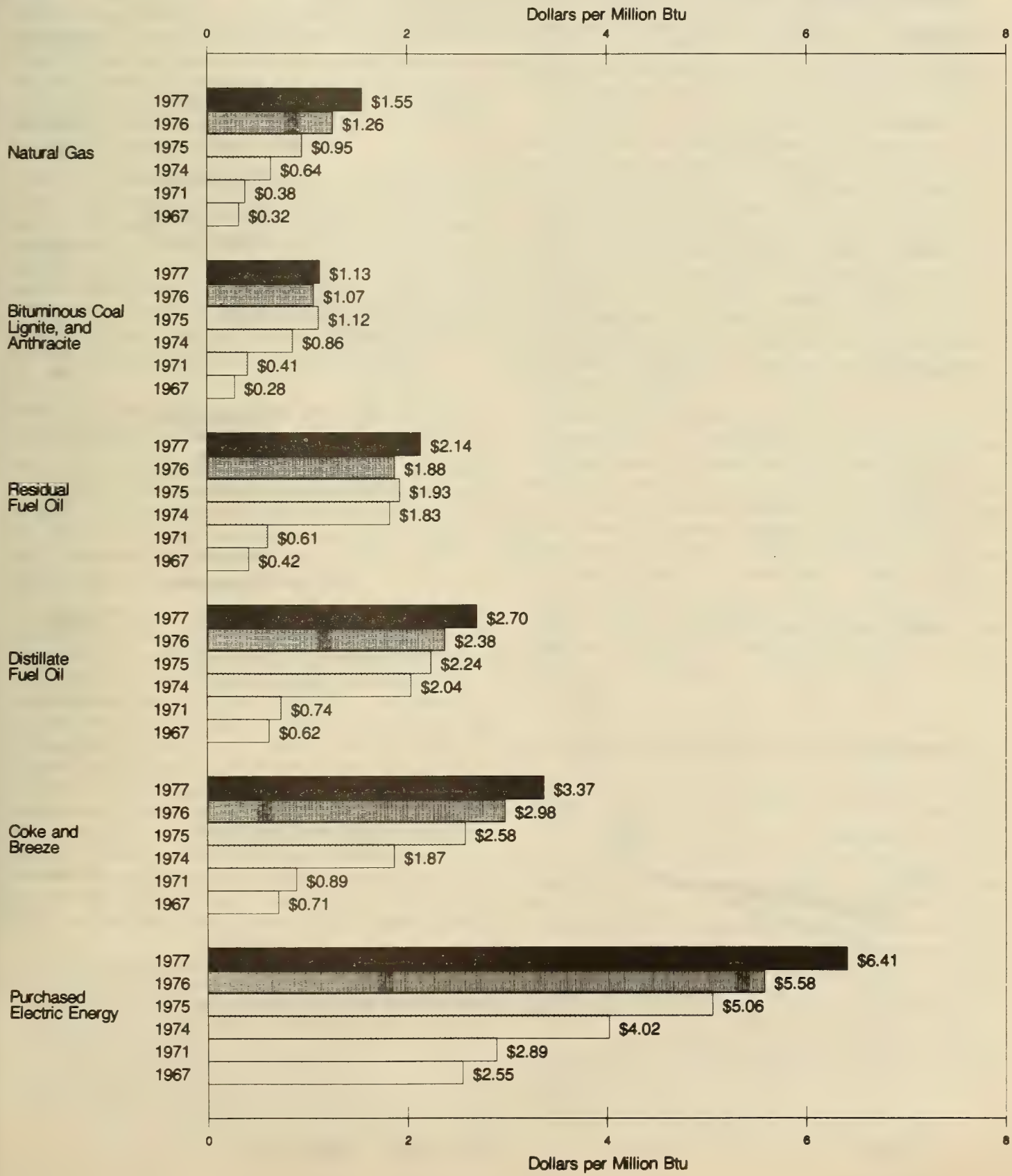
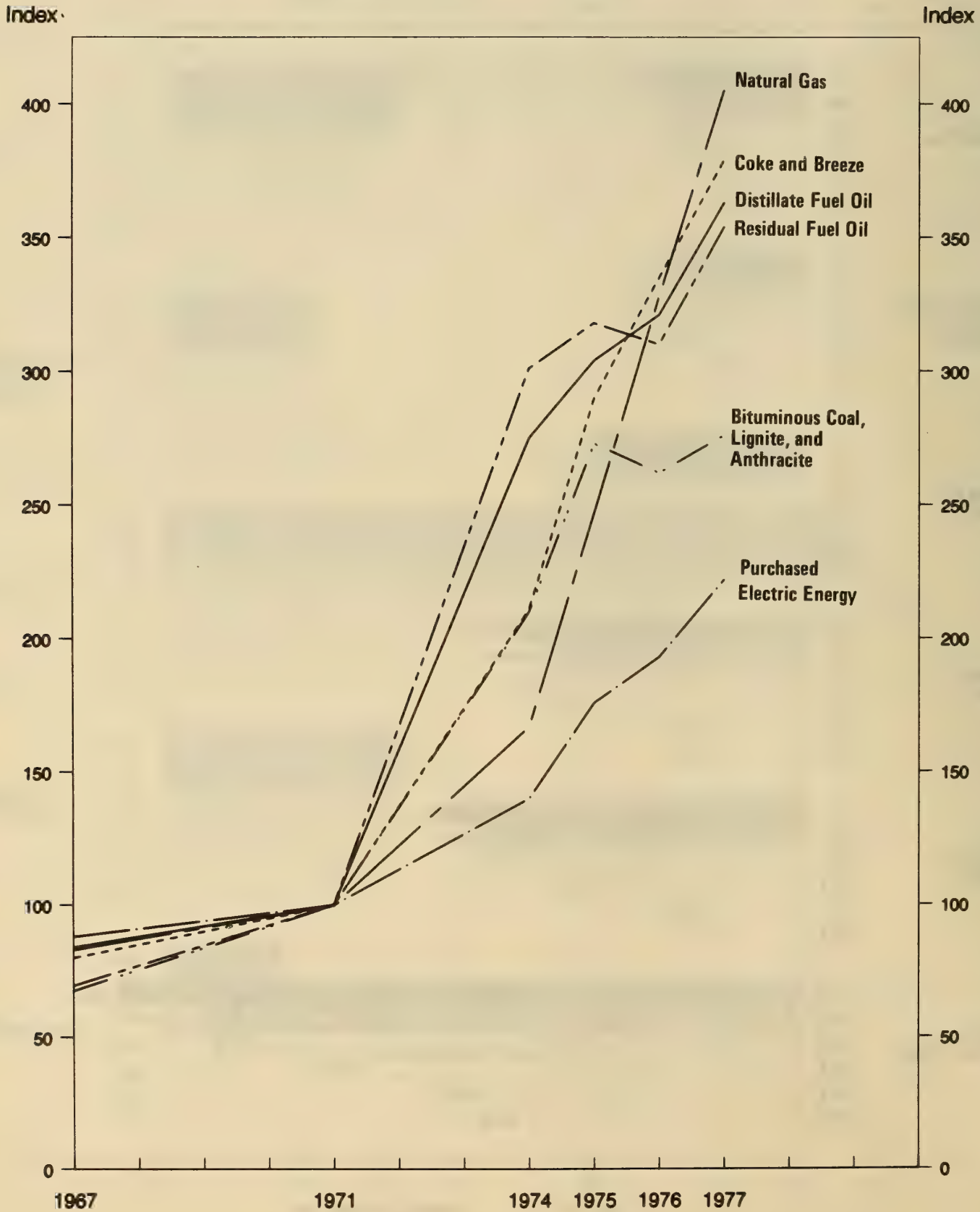


CHART 6.

Cost Per British Thermal Unit of Selected Fuels and Purchased Electric Energy Consumed by All Manufacturing Industries 1967, 1971, and 1974–1977 (1971=100)



STANDARD METROPOLITAN STATISTICAL AREA DATA

During 1977, the trend in energy usage and prices paid by manufacturing establishments in the 277 standard metropolitan statistical areas (SMSA'S)[1] covered by this report was an upward one. As compared to 1976, establishments in these SMSA's consumed 2 percent more energy and paid a unit cost which was approximately 17 percent higher. Consumption and unit prices increased from 1976 for the group of the 20 biggest energy users among the SMSA's, the next 40 largest, and for the group of other SMSA's as well (table C).

For the United States as a whole, energy consumption rose by 152.7 trillion Btu's and SMSA's accounted for 134.9 trillion Btu's of this increase, or just over 88 percent. The 10 largest energy-consuming SMSA's contributed 47.9 trillion Btu's, or nearly 32 percent, of the total U.S. increase. The average unit cost per million Btu's of energy consumed by all SMSA's rose to $2.63 in 1977, nearly 2 percent above the U.S. average. This 17 percent increase in unit cost for all SMSA's was identical to the percentage increase experienced in non-SMSA areas.

Energy Cost and Usage Trends for the Larger Energy Consuming Metropolitan Areas

Manufacturing establishments located in the top 60 energy-using SMSA's in the United States accounted for 50 percent of the total U.S. consumption of fuels and electric energy and 49 percent of the total cost paid for energy by U.S. manufacturing establishments. Their unit cost of $2.52 per million Btu's was 2 percent below the national average.

A substantial range in unit cost paid for energy existed within the top 60 energy-using SMSA's. Establishments in Longview, Texas, paid $.71 per million Btu's, as opposed to $4.36 in New York (table D). In general, southern SMSA's tended to pay less for energy than those in the Northeast. The primary reason for the wide variation in unit cost was differences in proportions of purchased fuels and electric energy used. For instance, Longview establishments purchased 94 percent of their energy as natural gas, as opposed to less than 16 percent for New York establishments. Electric energy, distillate fuel oil, and residual fuel oil, more expensive energy types, combined to meet approximately 51 percent of New York's energy needs. New York manufacturers paid an average price of $11.87 per million Btu's for its electric energy, and more than $2.50 each for distillate ($2.85) and residual ($2.52) fuel oils, while Longview's paid a unit price of $.42 for natural gas. Establishments in New York paid $2.16 per million Btu's for natural gas, substantially higher than Longview but well below the prices it paid for electric energy and fuel oils.

This specific case is a good example of what holds true throughout the top 60 metropolitan areas. Those areas where natural gas accounted for a majority of fuel consumption paid a much lower cost per million Btu's than those in which the use of purchased electric energy and fuel oil predominated.

The 20 largest energy consuming SMSA's accounted for 34 percent of the U.S. total for fuel and electric energy consumption, the same percentage as in 1976. Again in 1977, Houston was the largest energy-consuming SMSA with a consumption of 715.5 trillion Btu's of energy. Houston was followed by Chicago (366.4 trillion Btu's) and Pittsburgh (361.3 trillion Btu's) as the largest energy-consuming SMSA's (table E). The unit cost of $2.52 per million Btu's for the largest 20 SMSA's was slightly below the national average of $2.58. The top 10 SMSA's accounted for 25 percent of total fuel consumption in the United States, and 35 percent of total fuel consumption of all SMSA's, showing the domination of the larger SMSA's within the top 20.

Among the top 20 SMSA's, three were in Texas, and three in Louisiana. Due to the abundance of natural gas fields in the Gulf Coast area, all six were able to use large proportions of natural gas to meet their energy needs, and they all paid a unit cost of at least 18 percent below the national average for their energy needs. Two major industry groups, Chemicals and Allied Products, and Petroleum and Coal Products, accounted for a major portion of the energy usage in these six SMSA's.

Los Angeles stands out among the top energy-using SMSA's, paying the highest unit cost outside of those SMSA's in the Northeast. This high unit cost arises from Los Angeles using purchased electric energy to meet nearly one quarter of its energy needs.

REVISIONS TO 1976 COKE AND BREEZE DATA

Data on the consumption of purchased coke and breeze before 1976 are not fully comparable with the data for 1976 and 1977,

During review of the 1977 Census of Manufactures data on the production and disposition of coke and breeze, it became evident that the amount of purchased coke consumed as a fuel was understated for some establishments. This occurred because some respondents misinterpreted instructions for reporting coke consumption. Correct 1977 data were obtained and the 1976 figures for purchased coke and breeze were adjusted to reflect the true consumption picture. These adjustments increased 1976 quantity and cost figures for coke and breeze (table F). It is not possible to develop comparable consumption figures for earlier years. However, the magnitude of the 1976 revisions gives a good indication of the probable impact on the 1974 and 1975 figures.

[1] **Standard Metropolitan Statistical Areas**—A standard metropolitan statistical area is an integrated economic and social unit with a recognized large population nucleus. Each standard metropolitan statistical area consists of one or more entire counties which meet standards pertaining to population and metropolitan character. In New England, where towns rather than counties are used as the basic geographic unit for statistical compilations, standard metropolitan statistical areas are defined on a town rather than a county basis. Census Divisions are used for defining standard metropolitan statistical areas in the State of Alaska.

Chart 7.

Energy Consumption for the Largest Energy-Consuming Metropolitan Areas as a Percentage of the Total Energy Consumption by Manufactures in the United States: 1977

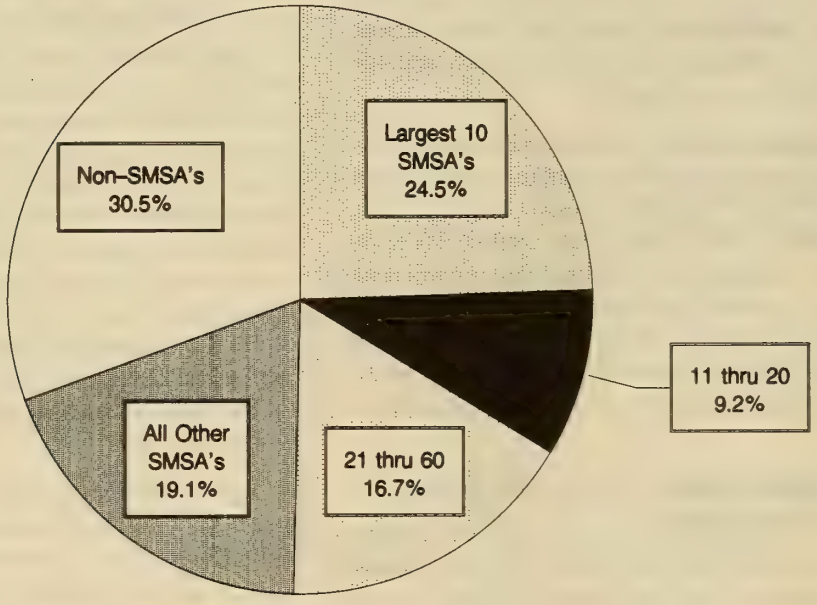


Table C. **Energy Consumption and Cost for Selected Standard Metropolitan Statistical Areas: 1977 and 1976**

Area	Purchased fuels and electric energy				Cost per million Btu's (dollars)	
	Btu consumption (trillions)		Total cost (million dollars)			
	1977	1976	1977	1976	1977	1976
United States	12,929.0	12,776.3	33,379.6	28,138.5	2.58	2.20
All standard metropolitan statistical areas (SMSA's)	8,985.9	8,851.0	23,640.6	19,873.5	2.63	2.25
20 largest SMSA's	4,358.5	4,319.7	10,999.3	9,318.5	2.52	2.16
21st-60th largest SMSA's	2,155.7	2,117.0	5,498.1	4,571.4	2.55	2.16
Other SMSA's (61-277)	2,471.7	2,414.3	7,143.2	5,983.6	2.89	2.48
Non-SMSA areas	3,943.1	3,925.3	9,739.0	8,265.0	2.47	2.11

Table D. **Energy Costs in the Largest 60 Energy-Consuming Metropolitan Areas, Ranked by 1977 Unit Cost: 1977 and 1976**

Rank	Standard metropolitan statistical area	Cost per million Btu's (dollars)			Rank	Standard metropolitan statistical area	Cost per million Btu's (dollars)		
		1977	1976	1977/1976 relative			1977	1976	1977/1976 relative
1	Longview, Tex.	.71	.60	1.19	30	St. Louis, Mo.-Ill.	2.63	2.20	1.20
2	New Orleans, La.	.98	.77	1.27	31	Dallas-Fort Worth, Tex.	2.63	2.31	1.14
3	Pascagoula-Moss Point, Miss.	1.33	1.10	1.20	32	Allentown-Bethlehem- Easton, Pa.-N.J.	2.64	2.37	1.11
4	Baton Rouge, La.	1.37	1.09	1.25	33	Hamilton-Middletown, Ohio.	2.69	2.18	1.23
5	Johnson City-Kingsport-Bristol, Tenn.-Va.	1.39	1.23	1.12	34	Youngstown-Warren, Ohio.	2.70	2.05	1.32
6	Lake Charles, La.	1.41	1.14	1.23	35	Minneapolis-St. Paul, Minn.-Wis.	2.73	2.39	1.15
7	Beaumont-Port Arthur-Orange, Tex.	1.46	1.41	1.03	36	Pittsburgh, Pa.	2.77	2.06	1.35
8	Galveston-Texas City, Tex.	1.78	1.59	1.12	37	Canton, Ohio.	2.80	2.32	1.21
9	Charleston, W. Va.	1.81	1.65	1.09	38	Indianapolis, Ind.	2.80	2.41	1.16
10	Tulsa, Okla.	1.89	1.53	1.24	39	Toledo, Ohio-Mich.	2.82	2.35	1.20
11	Houston, Tex.	2.10	1.83	1.14	40	Buffalo, N.Y.	2.91	2.46	1.18
12	Seattle-Everett, Wash.	2.11	2.05	1.03	41	Cincinnati, Ohio-Ky.-Ind.	2.92	2.46	1.19
13	Portland, Oreg.-Wash.	2.12	1.83	1.16	42	Columbus, Ohio.	2.94	2.58	1.14
14	Corpus Christi, Tex.	2.15	1.54	1.40	43	Evansville, Ind.-Ky.	2.98	2.41	1.24
15	Pensacola, Fla.	2.18	1.87	1.17	44	Baltimore, Md.	3.01	2.80	1.07
16	Louisville, Ky.-Ind.	2.30	1.93	1.19	45	San Francisco-Oakland, Calif.	3.01	2.12	1.42
17	Kansas City, Mo.-Kans.	2.36	1.93	1.22	46	Milwaukee, Wis.	3.03	2.57	1.18
18	Augusta, Ga.-S.C.	2.36	2.16	1.10	47	Dayton, Ohio.	3.09	2.71	1.14
19	Steubenville-Weirton, Ohio-W.Va.	2.39	2.29	1.04	48	Chicago, Ill.	3.10	2.73	1.13
20	Gary-Hammond-East Chicago, Ind.	2.41	1.98	1.22	49	Detroit, Mich.	3.13	2.88	1.09
21	Akron, Ohio.	2.43	1.82	1.34	50	Atlanta, Ga.	3.17	2.93	1.08
22	Memphis, Tenn.-Ark.-Miss.	2.44	1.99	1.23	51	Wilmington, Del.-N.J.-Md.	3.20	2.72	1.18
23	Mobile, Ala.	2.45	1.91	1.28	52	Cleveland, Ohio.	3.20	2.56	1.25
24	Birmingham, Ala.	2.45	1.93	1.27	53	Philadelphia, Pa.-N.J.	3.27	2.81	1.16
25	Riverside-San Bernardino-Ontario, Calif.	2.52	2.23	1.13	54	Greenville-Spartanburg, S.C.	3.41	3.12	1.09
26	Huntington-Ashland, W.Va.-Ky., Ohio.	2.52	2.13	1.18	55	Los Angeles-Long Beach, Calif.	3.43	2.99	1.15
27	Syracuse, N.Y.	2.52	2.11	1.20	56	Newark, N.J.	3.53	3.18	1.11
28	Albany-Schenectady-Troy, N.Y.	2.56	2.29	1.12	57	New Brunswick-Perth Amboy-Sayre-ville, N.J.	3.73	3.25	1.15
X	United States.	2.58	2.20	1.17	58	San Jose, Calif.	3.85	2.89	1.33
29	Rochester, N.Y.	2.60	2.37	1.10	59	Boston, Mass.	4.22	3.85	1.10
					60	New York, N.Y.-N.J.	4.37	3.70	1.18

Table E. **Largest 20 Energy-Consuming Metropolitan Areas Ranked by 1977 British Thermal Unit Consumption: 1977 and 1976**

Rank	Standard metropolitan statistical area	Purchased fuels and electric energy				Cost per million Btu (dollars)		Major industry groups accounting for at least 10 percent of purchased energy consumption within the metropolitan area, with percent accounted for shown parenthetically
		Btu consumption (trillions)		Total cost (million dollars)				
		1977	1976	1977	1976	1977	1976	
1	Houston, Tex.	715.5	742.7	1,499.1	1,361.4	2.10	1.83	Chemicals, Allied Products (54%): Petroleum and Coal Products (33%).
2	Chicago, Ill.	366.4	348.3	1,135.1	951.6	3.10	2.73	Primary Metal Industries (36%): Food and Kindred Products (10%).
3	Pittsburgh, Pa.	361.3	314.8	1,000.5	647.6	2.77	2.06	Primary Metal Industries (84%).
4	Beaumont-Port Arthur-Orange, Tex.	308.1	287.1	449.2	404.9	1.46	1.41	Petroleum and Coal Products (69%): Chemical, Allied Products (27%).
5	Detroit, Mich.	297.4	304.4	930.8	876.2	3.13	2.88	Primary Metal Industries (43%): Transportation Equipment (D).
6	Gary-Hammond-East Chicago, Ind.	286.9	296.0	692.0	585.8	2.41	1.98	Primary Metal Industries (85%).
7	Baton Rouge, La.	254.0	244.4	347.2	266.6	1.37	1.09	Chemicals, Allied Products (81%).
8	Philadelphia, Pa.-N.J.	218.8	226.5	715.0	636.1	3.27	2.81	Primary Metal Industries (27%): Chemicals, Allied Products (14%): Petroleum and Coal Products (13%).
9	Los Angeles-Long Beach, Calif.	215.1	199.6	737.6	597.5	3.43	2.99	Petroleum and Coal Products (26%): Stone, Clay, Glass Products (12%).
10	Cleveland, Ohio.	147.8	159.6	473.5	408.7	3.20	2.56	Primary Metal Industries (60%).
11	St. Louis, Mo.-Ill.	147.5	145.9	387.2	320.4	2.63	2.20	Primary Metal Industries (32%): Chemicals, Allied Products (16%): Stone, Clay, Glass Products (14%).
12	Galveston-Texas City, Tex.	143.5	148.3	255.5	236.4	1.78	1.59	Chemicals, Allied Products (D): Petroleum and Coal Products (D).
13	San Francisco-Oakland, Calif.	142.3	152.3	428.6	323.5	3.01	2.12	Petroleum and Coal Products (42%): Chemicals, Allied Products (14%).
14	Lake Charles, La.	140.0	152.3	196.7	174.0	1.41	1.14	Chemicals, Allied Products (D): Petroleum and Coal Products (D).
15	New Orleans, La.	111.3	101.0	108.7	77.7	.98	.77	Primary Metal Industries (D): Chemicals, Allied Products (19%): Petroleum and Coal Products (D): Stone, Clay, Glass Products (11%).
16	Newark, N.J.	108.0	99.6	381.1	316.8	3.53	3.18	Chemicals, Allied Products (32%): Petroleum and Coal Products (D).
17	New York, N.Y.-N.J.	105.3	114.5	459.6	424.1	4.37	3.70	Chemicals, Allied Products (15%): Food and Kindred Products (14%).
18	Buffalo, N.Y.	104.5	97.0	303.8	238.9	2.91	2.46	Primary Metal Industries (45%): Chemicals, Allied Products (15%).
19	Steubenville-Weirton, Ohio-W. Va.	93.0	96.2	221.9	220.5	2.39	2.29	Primary Metal Industries (D).
20	Baltimore, Md.	91.8	89.2	276.2	249.8	3.01	2.80	Primary Metal Industries (41%): Chemicals, Allied Products (15%): Stone, Clay, Glass Products (14%).

(D) Withheld to avoid disclosing figures for individual companies.

Table F. **Revisions to 1976 Coke and Breeze Statistics**

Fuel	Published 1976		Revised 1976	
	Quantity (1,000 s. tons)	Cost (mil. dol.)	Quantity (1,000 s. tons)	Cost (mil. dol.)
	All industries			
Coke and breeze.....	15,665.7	1,141.2	18,536.0	1,437.2
	Industry 3312, Blast furnaces and steel mills			
Coke and breeze.....	13,031.4	879.9	15,447.1	1,115.7

Table G. **Conversion to British Thermal Units: 1977**

Kind of energy	Unit of measure	Btu's (1,000)
Electric energy.	1,000 kWh	3,412
Coal	Short tons.	26,194
Coke	. . do.	25,993
Fuel oil:		
Distillate	Barrels (42-gal.) .	5,824
Residual	. . do.	6,285
Natural gas.	MCF (1,000 cu. ft.)	1,024
Other fuels.	Dollars	478

Note: For costs of "fuels, not specified by kind," conversion factors for 1977 were developed for each 2-digit SIC group, based on the relationship of total cost of fuels to the total kilowatt-hour equivalents for those groups, as published in M76(AS)-4.1, "Fuels and Electric Energy," 1976 Annual Survey of Manufactures.

CONVERSION TO BRITISH THERMAL UNITS (BTU'S)

Fuels consumed data were converted to British thermal units (BTU's) to provide comparable figures (table G). A Btu is the quantity of heat required to raise the temperature of one pound of water by 1 degree Fahrenheit. Btu factors reflect the energy content of the various fuels with no regard to efficiency of use. Since some fuel applications are considerably more efficient than others (none 100 percent efficient), the Btu figures must be considered as the maximum amount of available energy.

Beginning in 1976, the Btu rather than the kilowatt-hour equivalent was used as the common unit of measure for this statistical series. Several data users recommended the adoption of Btu's as the standard for energy quantification. There are 3,412 Btu's in one kilowatt-hour equivalent.

FUELS EXCLUDED FROM REPORT

Data on fuels produced and consumed in the same establishment, such as coke-oven gas or blast-furnaces gas; data on fuels used as raw materials, such as fuel oil and natural gas used to produce carbon black and crude petroleum used to produce fuels; and fuels converted to other fuel types, such as coal converted to coke, were not collected in the 1974, 1975, 1976, or 1977 surveys. As a result, significant amounts of energy materials used in manufacturing plants are not covered by this report. For example, in 1972 coke produced and consumed in SIC Industry 3312, Blast Furnaces and Steel Mills, amounted to 40.5 million short tons or 1.1 quadrillion Btu's. Inclusion of this coke would have increased the gross Btu's of fuels consumed by manufacturers by about 8 to 10 percent.

1972 AND 1977 REVISIONS TO STANDARD INDUSTRIAL CLASSIFICATION SYSTEM

A revised edition of the Standard Industrial Classification (SIC) manual was issued in 1972, the first major revision since 1957. In the 1972 version, extensive modifications were made in the manufacturing sector which affect comparability with the historic data in many industries. In 1977 a supplement to the 1972 SIC manual was issued presenting several minor additional changes to the classification system. More detailed descriptions of these changes are found in the 1972 and 1977 Census of Manufactures volumes, in the introduction.

CENSUS DISCLOSURE RULES

The Bureau of the Census is prohibited by law from publishing any statistics that would disclose information reported by individual companies. Additionally, quantity or cost data may be withheld if the figures do not meet publication standards on the basis of a consistency review. However, the total figures for a State, industry group, or major group include data for all component industries whether or not separate figures are shown for the individual industries comprising the total.

Table 1. Fuels and Electric Energy Used for Heat and Power: 1977 and Earlier Years

(For explanation of terms, see appendix A)

Year	Cost of purchased fuels and electric energy (million dollars)	Cost of purchased fuels (million dollars)	Electric energy		
			Purchased		Generated less sold (million kWh)
			Quantity (million kWh)	Cost (million dollars)	
1977	33,379.6	18,864.7	663,351.0	14,515.1	63,194.2
1976[1]	28,138.5	15,959.5	640,164.6	12,179.1	63,843.9
1975[1]	23,290.7	12,977.8	596,798.0	10,312.9	63,275.0
1974[1]	19,468.3	11,003.0	616,665.1	8,465.3	80,932.3
1973[1]	13,625.5	7,012.3	612,601.5	6,613.2	84,864.7
1972	11,771.7	6,055.9	557,468.9	5,715.8	87,185.7
1971	10,432.1	5,360.6	514,612.7	5,070.6	82,828.0
1970	9,424.7	4,845.7	500,768.7	4,579.2	83,327.3
1969	8,751.4	4,456.6	497,015.7	4,294.8	83,351.7
1968	8,272.1	4,263.0	458,908.4	4,009.1	82,752.2
1967	7,691.7	3,974.9	427,465.1	3,716.8	78,355.8
1966	7,365.9	3,902.3	399,390.0	3,463.6	80,500.0
1965	6,973.4	3,727.3	373,428.0	3,246.1	80,453.0
1964	6,706.6	3,583.9	357,292.0	3,122.7	79,740.0
1963	6,369.7	3,409.0	333,512.0	2,960.7	72,949.0
1962	6,184.0	3,360.7	313,961.0	2,823.3	74,261.0
1961	5,825.3	3,192.6	298,325.0	2,632.7	68,533.0
1960	5,765.1	3,192.9	291,949.0	2,572.2	70,016.0
1959	5,544.6	3,082.7	281,301.0	2,461.9	69,291.0
1958	5,067.0	2,836.2	252,909.0	2,230.8	66,850.0

[1]Data are revised because of adjustments to estimating technique; see appendix G, Revised Method of Estimation, for explanation of changes to 1976 data. A comparable adjustment with 1972 as the base was used to revise 1973, 1974, and 1975 data.

Table 2. Quantity and Cost of Purchased Fuels and Electric Energy Used for Heat and Power: 1977 and Selected Earlier Years

(For explanation of terms, see appendix A)

Year	Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite	
					Distillate		Residual			
	British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)
1977	12,929.0	33,379.6	10,665.5	18,864.7	101,594.5	1,596.4	246,176.3	3,317.0	50,622.6	1,494.0
1976[1]	12,776.3	28,138.5	10,592.1	15,959.5	90,202.6	1,252.3	231,122.5	2,733.4	47,903.0	1,344.2
1975[1]	12,084.1	23,290.7	10,047.8	12,977.8	104,894.2	1,369.7	177,452.4	2,149.0	44,623.3	1,310.3
1974[1]	13,548.3	19,468.3	11,444.2	11,003.0	113,823.6	1,350.4	171,095.3	1,964.9	47,806.8	1,083.1
1971	13,008.3	10,432.1	11,252.4	5,360.6	104,940.8	453.4	140,726.4	535.9	61,392.6	658.1
1967	11,810.3	7,691.7	10,351.7	3,974.9	65,653.9	236.9	112,958.9	298.7	75,100.0	551.7
1962	9,810.5	6,184.1	8,739.2	3,360.7	44,730.0	190.9	150,885.0	432.4	89,438.0	639.5
1958	8,247.8	5,067.0	7,384.9	2,836.2	[2]166,301.0	[2]522.7	([2])	([2])	81,784.0	638.2

Year	Coke and breeze		Natural gas		Other fuels (million dollars)	Fuels not specified by kind (million dollars)	Electric energy		
							Purchased		Generated less sold (million kWh)
	Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cu. ft.)	Cost (million dollars)			Quantity (million kWh)	Cost (million dollars)	
1977	19,957.7	1,747.6	5,585.7	8,879.4	[4]1,076.1	754.3	663,351.0	14,515.1	63,194.2
1976[1]	18,536.0	1,437.2	5,858.1	7,532.2	[4]911.4	748.8	640,164.6	12,179.1	63,843.9
1975[1]	13,156.8	880.8	5,804.8	5,653.1	[4]849.5	765.4	596,798.0	10,312.9	63,275.0
1974[1]	15,215.2	744.6	6,566.4	4,360.1	[4]702.6	797.2	616,665.1	8,465.3	80,932.3
1971	13,742.8	317.6	6,454.4	2,559.9	[4]377.5	458.2	514,612.7	5,070.6	82,828.0
1967	13,562.5	248.9	[3]5,306.9	[3]1,749.1	220.2	669.4	427,465.1	3,716.8	78,355.8
1962	17,747.0	304.8	[3]4,308.1	[3]1,455.9	337.1	-	313,961.0	2,823.3	74,261.0
1958	13,585.0	271.0	[3]3,112.2	[3]900.9	147.9	355.6	252,909.0	2,230.8	66,850.0

- Represents zero.
[1]Data are revised because of adjustments to estimating technique; see appendix G, Revised Method of Estimation, for explanation of changes to 1976 data. A comparable adjustment with 1972 as the base was used to revise 1974 and 1975 data.
[2]Figures for residual fuel oil are included with distillate fuel oil.
[3]Figure includes manufactured, still, blast-furnace, and coke-oven gas.
[4]Figure includes gas, except natural gas.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ABILENE, TEX.	3.9	8.7	3.5	5.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.6	1.8	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
	AKRON, OHIO	39.4	95.8	33.7	53.6	246.9	3.9	780.8	11.2	594.6	16.3	2	1	1
20	FOOD AND KINDRED PRODUCTS	.6	2.0	.5	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.5	1.7	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	10.3	19.2	9.7	14.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	18.1	40.0	15.6	22.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.8	4.1	1.7	2.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.8	3.1	.6	1.1	(D)	(Z)	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.0	13.6	3.0	6.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.9	6.8	1.3	2.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	.9	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
	ALBANY, GA.	5.8	18.6	4.3	7.9	108.5	1.8	86.0	1.3	-	-	21	1	(X)
20	FOOD AND KINDRED PRODUCTS	.6	1.9	.5	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	ALBANY-SCHENECTADY-TROY, N.Y.	42.0	107.5	36.6	66.0	498.4	8.3	2,464.6	31.7	(D)	(D)	7	2	(X)
20	FOOD AND KINDRED PRODUCTS	1.7	5.8	1.3	2.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.8	2.3	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	8.3	18.9	7.7	14.4	9.6	.2	(D)	(D)	-	-	31	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	8.7	24.4	7.4	15.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.3	1.4	(S)	(S)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	11.4	19.0	10.3	10.6	74.9	1.2	(D)	(D)	(D)	(D)	12	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.9	11.9	3.4	7.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	ALBUQUERQUE, N.MEX.	5.8	15.3	4.7	7.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
20	FOOD AND KINDRED PRODUCTS	.6	1.5	.5	.7	-	-	-	-	-	-	(X)	(X)	(X)
	ALEXANDRIA, LA.	7.8	12.8	7.3	9.9	(D)	(Z)	-	-	-	-	1	(X)	(X)
	ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J.	69.4	183.2	59.7	109.7	1,086.3	16.9	2,824.1	41.0	(D)	(D)	7	1	(X)
20	FOOD AND KINDRED PRODUCTS	3.0	11.4	2.2	5.3	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	2.3	7.7	1.9	4.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.0	4.7	.7	1.7	31.3	.5	24.3	.4	(D)	(Z)	25	18	98
26	PAPER AND ALLIED PRODUCTS	.8	3.6	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	1.4	(S)	(S)	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	11.5	29.2	9.8	16.7	198.6	2.9	(D)	(D)	(D)	(D)	1	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.9	5.3	.5	1.3	20.7	.3	(D)	(D)	-	-	27	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	18.9	31.9	17.2	20.9	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	24.4	63.5	21.9	46.8	282.1	4.6	(D)	(D)	(D)	(D)	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.7	6.2	1.3	3.2	62.4	1.0	(D)	(D)	(D)	(Z)	14	(X)	1
35	MACHINERY, EXCEPT ELECTRIC	.8	3.7	.6	1.4	16.6	.3	(D)	(D)	(D)	(D)	12	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.6	6.9	.9	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	ALTOONA, PA.	5.8	15.3	4.9	8.1	121.2	1.8	(D)	(Z)	(D)	(D)	9	1	(X)
20	FOOD AND KINDRED PRODUCTS	.4	1.2	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
	AMARILLO, TEX.	7.2	15.3	6.0	8.0	(D)	(Z)	(D)	(D)	-	-	79	(X)	(X)
	ANAHEIM-SANTA ANA-GARDEN GROVE, CALI	31.2	113.3	22.0	37.5	83.5	1.3	13.0	.2	-	-	6	1	(X)
20	FOOD AND KINDRED PRODUCTS	5.0	13.0	4.4	7.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.3	1.2	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
25	FURNITURE AND FIXTURES	.5	1.6	.3	(S)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	2.0	7.6	1.4	2.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.5	2.9	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	5.2	12.0	4.6	6.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.8	9.4	.9	1.6	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.3	5.8	2.0	3.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.3	9.1	(S)	(S)	(D)	(Z)	(Z)	(Z)	-	-	1	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.1	9.7	.9	1.6	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	3.3	19.0	1.4	2.4	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
37	TRANSPORTATION EQUIPMENT	1.9	8.1	1.1	1.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.8	3.6	(S)	(S)	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.7	3.1	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
	ANCHORAGE, ALASKA	.7	2.0	.6	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	ANDERSON, IND.	10.9	27.5	8.6	12.8	209.3	3.4	-	-	(D)	(D)	1	(X)	(X)
	ANN ARBOR, MICH.	9.2	36.2	6.1	10.7	24.2	.4	(D)	(D)	(D)	(D)	30	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	1.7	.2	.5	(D)	(Z)	-	-	-	-	96	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ABILENE, TEX.	-	-	(S)	(S)	(D)	(S)	103.3	2.8	-	5.1	9.7	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	-	(S)	40.9	1.0	-	.5	1.4	(X)
	AKRON, OHIO	-	-	8.6	16.3	(D)	(D)	1,671.8	42.2	634.4	44.8	81.5	10
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.3	(Z)	(D)	40.6	1.1	-	.6	1.6	3
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(Z)	32.1	.9	-	.5	1.2	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	180.0	4.2	(D)	14.9	17.3	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.4	2.9	(D)	(D)	744.4	18.0	(D)	19.4	34.7	15
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.1	2.0	(D)	(D)	43.3	1.3	-	1.8	3.4	2
33	PRIMARY METAL INDUSTRIES	-	-	.3	.6	(D)	(D)	67.3	2.0	-	.8	2.5	1
34	FABRICATED METAL PRODUCTS	-	-	2.0	3.9	.7	(Z)	296.2	7.4	(D)	4.0	10.9	6
35	MACHINERY, EXCEPT ELECTRIC	-	-	.9	1.8	(D)	.6	154.2	4.3	-	1.9	5.5	13
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	.1	-	.1	24.0	.7	-	.2	.7	34
	ALBANY, GA.	-	-	3.2	5.1	(D)	(D)	439.4	10.7	(D)	5.4	14.6	2
20	FOOD AND KINDRED PRODUCTS	-	-	.3	.5	(D)	(D)	34.9	1.0	(D)	.6	1.5	17
	ALBANY-SCHENECTADY-TROY, N.Y.	-	-	3.9	8.1	7.4	(D)	1,576.2	41.5	(D)	40.4	92.6	2
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	123.7	2.9	-	1.5	4.3	(X)
22	TEXTILE MILL PRODUCTS	-	-	.1	.1	-	(D)	37.8	1.0	-	.8	2.2	3
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	1.7	172.0	4.5	(D)	8.4	18.3	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	.2	378.4	9.0	-	8.1	18.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	-	(D)	33.9	1.0	-	.2	.9	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(D)	318.3	8.4	(D)	9.9	14.8	(X)
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	(D)	(D)	155.3	4.1	-	3.4	9.3	(X)
	ALBUQUERQUE, N.MEX.	-	-	3.4	5.5	(D)	(D)	305.3	7.7	-	4.7	9.4	4
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.6	-	.1	29.0	.8	-	.4	.7	32
	ALEXANDRIA, LA.	-	-	6.5	8.5	.3	(D)	128.7	2.9	(D)	5.4	6.8	1
	ALLENTOWN-BETHLEHEM-EASTON, PA.-N.J.	42.4	4.0	7.2	17.0	(D)	2.4	2,844.9	73.5	(D)	68.9	163.5	2
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	211.9	6.2	-	3.4	11.1	(X)
22	TEXTILE MILL PRODUCTS	-	-	.4	1.1	(Z)	.5	119.3	3.2	-	1.8	6.0	19
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.2	(Z)	.6	84.9	3.0	(D)	1.1	4.2	18
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	79.6	2.3	-	.9	3.2	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(D)	(D)	39.3	1.1	-	.2	1.3	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	.2	.4	(D)	(D)	516.3	12.4	-	10.8	24.9	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.2	(Z)	(D)	119.3	4.0	-	1.0	5.1	5
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	(S)	(S)	(Z)	(S)	474.2	11.0	(D)	19.9	31.6	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	5.4	12.2	.7	(D)	719.5	16.7	(D)	23.7	55.6	1
34	FABRICATED METAL PRODUCTS	-	-	.3	.8	.3	(D)	98.6	2.9	-	1.2	4.1	12
35	MACHINERY, EXCEPT ELECTRIC	(Z)	(Z)	.1	.2	(D)	(D)	65.7	2.3	-	.8	3.2	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(Z)	.1	199.7	4.9	-	1.7	6.6	1
	ALTOONA, PA.	-	-	(D)	(D)	.5	.7	262.3	7.2	(D)	6.6	13.3	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	16.8	.5	-	.3	.9	(X)
	AMARILLO, TEX.	-	-	4.8	6.3	(D)	1.3	336.6	7.3	-	8.3	11.8	1
	ANAHEIM-SANTA ANA-GARDEN GROVE, CALI	(D)	(D)	14.3	23.9	2.2	(D)	2,710.9	75.9	(D)	31.0	96.3	4
20	FOOD AND KINDRED PRODUCTS	-	-	3.5	6.3	(D)	(D)	181.9	5.1	(D)	5.9	12.3	3
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	(D)	(D)	28.8	.8	-	.3	1.0	55
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(D)	(S)	54.1	1.2	-	.4	1.2	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	1.0	1.9	(D)	.3	198.6	5.2	-	1.8	6.4	2
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(Z)	(D)	76.8	2.4	-	.5	2.3	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.5	5.0	(Z)	1.3	192.8	5.7	-	5.2	9.8	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.6	(Z)	(D)	267.2	7.8	-	1.5	6.4	8
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.3	2.3	1.0	(D)	77.2	1.9	-	2.4	5.2	35
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(D)	1.4	235.2	6.5	(D)	2.1	7.4	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.4	.8	(Z)	.8	343.6	8.0	-	1.8	7.6	20
36	ELECTRIC, ELECTRONIC EQUIP	(D)	(Z)	1.0	1.7	(Z)	.6	568.9	16.6	-	3.6	16.7	1
37	TRANSPORTATION EQUIPMENT	-	-	.9	1.4	(D)	(D)	214.2	6.3	(D)	2.0	8.7	5
38	INSTRUMENTS, RELATED PRODS	-	-	(S)	(S)	-	(D)	93.1	2.8	-	.8	2.6	(X)
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	-	(D)	69.1	2.2	-	.6	2.7	(X)
	ANCHORAGE, ALASKA	-	-	.5	.6	-	(D)	33.0	1.0	-	.8	2.0	38
	ANDERSON, IND.	(D)	(D)	2.3	3.4	.1	(D)	673.6	14.7	-	10.7	22.3	6
	ANN ARBOR, MICH.	-	-	4.1	7.6	.1	(D)	886.3	25.5	(D)	9.3	31.4	6
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.5	-	(D)	35.2	1.2	-	.3	1.2	26

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ANNISTON, ALA.	5.4	17.7	4.1	7.7	31.8	.5	9.5	.2	(D)	(D)	4	1	(X)
22	TEXTILE MILL PRODUCTS.	.8	4.0	.4	.7	10.3	.1	(D)	(D)	(D)	(D)	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.8	3.2	.7	2.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	.9	4.0	.6	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	APPLETON-OSHKOSH, WIS.	32.4	84.8	27.7	50.7	223.8	3.4	172.3	2.4	(S)	(S)	7	6	(X)
20	FOOD AND KINDRED PRODUCTS.	3.0	7.4	2.7	5.1	18.1	.3	(D)	(D)	-	-	7	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.3	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.1	.4	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	23.5	54.4	20.7	35.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.4	1.4	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.2	.8	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.3	9.9	1.7	5.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.1	3.9	.8	1.5	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	.9	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	ASHEVILLE, N.C.	7.6	20.4	6.3	11.2	59.6	1.0	220.0	3.3	(D)	(D)	11	2	(X)
20	FOOD AND KINDRED PRODUCTS.	.5	1.7	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	2.3	6.4	2.0	4.0	15.5	.3	(D)	(D)	(D)	(D)	13	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.1	.4	(Z)	.1	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	1.1	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	ATLANTA, GA.	41.7	132.2	32.0	54.9	731.9	11.5	100.1	1.5	(D)	(D)	3	5	(X)
20	FOOD AND KINDRED PRODUCTS.	4.7	15.3	3.8	6.6	53.0	.9	(D)	(D)	(D)	(Z)	4	(X)	1
22	TEXTILE MILL PRODUCTS.	1.7	7.3	1.0	2.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.5	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS.	3.9	12.2	3.1	5.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.8	4.2	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.5	9.1	1.7	2.8	14.7	.2	(D)	(D)	-	-	7	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	1.5	3.0	1.4	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.2	5.1	.8	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	10.2	23.1	8.9	14.0	232.9	3.7	-	-	(D)	(D)	5	(X)	(X)
34	FABRICATED METAL PRODUCTS.	1.7	5.5	1.3	2.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.5	.4	.7	(D)	(Z)	-	-	(D)	(Z)	1	(X)	89
36	ELECTRIC, ELECTRONIC EQUIP	.9	3.8	.6	1.1	-	-	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	6.1	19.8	4.5	8.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.2	1.0	.2	.4	-	-	(D)	(Z)	-	-	(X)	1	(X)
	ATLANTIC CITY, N.J.	1.4	5.6	1.1	2.5	43.0	.7	(D)	(D)	-	-	11	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	.4	1.2	.3	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	AUGUSTA, GA.-S.C.	54.9	129.8	45.8	73.1	376.5	6.1	1,077.5	15.2	(D)	(D)	1	18	(X)
20	FOOD AND KINDRED PRODUCTS.	.8	2.3	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	7.3	18.4	6.0	9.3	-	-	363.6	5.2	(D)	(D)	(X)	53	(X)
26	PAPER AND ALLIED PRODUCTS.	10.5	30.1	8.1	15.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	28.8	61.1	24.8	37.1	227.7	3.7	(D)	(D)	(D)	(D)	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	6.3	13.1	5.6	8.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	AUSTIN, TEX.	4.4	14.1	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	.3	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	BAKERSFIELD, CALIF.	25.6	69.0	20.4	37.1	(D)	(D)	107.8	1.3	(D)	(D)	(X)	1	(X)
20	FOOD AND KINDRED PRODUCTS.	.9	3.1	.6	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS.	16.8	47.8	12.7	26.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	BALTIMORE, MD.	91.8	276.2	77.3	164.7	2,071.4	33.3	5,168.2	74.0	(D)	(D)	5	1	(X)
20	FOOD AND KINDRED PRODUCTS.	7.8	24.1	6.8	14.7	154.4	2.6	333.7	5.2	(D)	(D)	5	2	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.7	2.7	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.8	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.8	3.7	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	13.8	41.5	11.5	27.5	588.2	9.4	767.9	11.4	-	-	1	1	(X)
29	PETROLEUM AND COAL PRODUCTS.	1.6	4.1	1.5	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.4	6.4	1.0	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	13.1	29.5	11.8	20.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	37.9	107.3	32.5	69.9	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	2.9	10.3	2.3	4.9	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	79
35	MACHINERY, EXCEPT ELECTRIC	1.7	7.4	1.1	2.4	14.9	.2	(D)	(D)	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.4	9.9	1.5	2.9	77.9	1.1	(D)	(D)	-	-	1	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.4	1.5	.3	.7	14.5	.2	(D)	(D)	-	-	61	(X)	(X)
	BATON ROUGE, LA.	254.0	347.2	227.1	233.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	1.1	2.9	1.0	2.0	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	205.2	274.0	183.6	179.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	.3	.8	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ANNISTON, ALA.	(D)	(D)	2.7	3.6	.4	.7	357.4	10.0	(D)	5.0	12.4	3
22	TEXTILE MILL PRODUCTS.	-	-	.3	.3	-	(Z)	124.6	3.4	-	.9	3.2	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.2	.3	-	.1	26.6	.7	-	.6	2.1	1
34	FABRICATED METAL PRODUCTS.	(D)	(D)	.4	.6	(D)	(Z)	103.0	3.1	-	.7	2.4	18
	APPLETON-OSHKOSH, WIS.	(D)	(D)	15.9	28.6	(D)	.5	1,370.0	34.1	(D)	29.7	69.3	2
20	FOOD AND KINDRED PRODUCTS.	-	-	2.2	4.1	.1	(D)	88.1	2.3	-	2.3	5.2	5
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	-	(S)	23.0	.9	-	.4	1.2	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	-	(D)	6.3	.2	-	.2	.7	(X)
26	PAPER AND ALLIED PRODUCTS.	-	-	(S)	(S)	(S)	(S)	838.2	19.0	444.9	21.4	42.6	(X)
27	PRINTING AND PUBLISHING.	-	-	.2	.5	(D)	(D)	27.7	.8	-	.4	1.4	23
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	(D)	21.5	.6	-	.3	1.3	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(D)	(D)	180.7	4.7	(D)	2.3	9.2	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.6	1.2	(Z)	(D)	78.7	2.4	-	1.0	3.5	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	-	(D)	20.0	.6	-	.3	.9	26
	ASHEVILLE, N.C.	-	-	.8	1.9	.3	(D)	368.6	9.3	(D)	7.4	17.6	7
20	FOOD AND KINDRED PRODUCTS.	-	-	(Z)	.1	-	(Z)	25.3	.7	-	.5	1.6	33
22	TEXTILE MILL PRODUCTS.	-	-	.2	.5	(D)	.8	102.7	2.5	(D)	5.3	10.5	21
24	LUMBER AND WOOD PRODUCTS	-	-	-	-	(Z)	(Z)	(S)	(S)	-	.1	.3	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(D)	33.3	.9	-	.2	1.0	(X)
	ATLANTA, GA.	-	-	16.8	24.4	6.9	(D)	2,848.7	77.3	(D)	37.3	109.2	4
20	FOOD AND KINDRED PRODUCTS.	-	-	1.7	2.7	(D)	(D)	282.8	8.7	(D)	4.1	12.0	8
22	TEXTILE MILL PRODUCTS.	-	-	.5	.8	(D)	(D)	191.8	5.4	-	2.3	8.5	7
25	FURNITURE AND FIXTURES	-	-	.1	.2	.2	.2	22.1	.9	-	.3	1.1	41
26	PAPER AND ALLIED PRODUCTS.	-	-	1.4	2.0	(Z)	1.7	236.0	6.7	(D)	3.8	11.2	2
27	PRINTING AND PUBLISHING.	-	-	(S)	(S)	(Z)	.5	115.4	3.4	(D)	.8	3.7	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	.6	1.0	(D)	(D)	239.2	6.3	-	1.6	4.9	12
29	PETROLEUM AND COAL PRODUCTS.	-	-	1.0	1.4	(Z)	(D)	22.8	.8	-	1.4	2.0	51
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.5	(Z)	(D)	126.7	3.6	-	1.2	4.0	6
32	STONE, CLAY, GLASS PRODUCTS.	-	-	5.7	7.7	(D)	1.3	380.5	9.1	-	8.4	17.1	3
34	FABRICATED METAL PRODUCTS.	-	-	.7	1.1	.2	(D)	129.5	3.4	-	1.4	4.5	24
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.4	(D)	(D)	55.3	1.8	-	.7	2.7	24
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.5	.8	(D)	(D)	86.0	2.7	-	.8	3.1	16
37	TRANSPORTATION EQUIPMENT	-	-	1.9	3.0	(D)	.1	467.0	11.2	(D)	5.9	17.6	1
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	-	(D)	18.0	.6	-	.3	1.0	(X)
	ATLANTIC CITY, N.J.	-	-	.7	1.8	(D)	(D)	93.1	3.1	-	1.4	5.2	31
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(D)	(D)	-	(D)	12.6	.4	-	.5	1.0	(X)
	AUGUSTA, GA.-S.C.	-	-	14.3	22.1	(D)	2.5	2,652.5	56.7	(D)	47.6	102.8	8
20	FOOD AND KINDRED PRODUCTS.	-	-	.3	.5	(D)	(D)	38.8	1.1	-	.7	1.9	1
22	TEXTILE MILL PRODUCTS.	-	-	2.1	3.8	(D)	(D)	371.6	9.1	45.7	3.9	11.4	41
26	PAPER AND ALLIED PRODUCTS.	-	-	(D)	(D)	(D)	1.7	718.9	14.6	-	8.8	23.2	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	6.4	10.2	.5	(Z)	1,191.5	23.9	(D)	27.0	52.1	1
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(D)	(D)	(D)	(D)	204.4	4.7	(Z)	6.1	10.5	(X)
	AUSTIN, TEX.	-	-	(S)	(S)	(S)	(S)	252.2	8.0	-	4.6	13.2	(X)
20	FOOD AND KINDRED PRODUCTS.	-	-	.1	.2	(D)	(D)	26.7	.7	-	.2	1.1	27
	BAKERSFIELD, CALIF.	(D)	(D)	14.2	29.3	.4	(D)	1,531.4	31.9	-	31.6	45.6	4
20	FOOD AND KINDRED PRODUCTS.	-	-	(D)	(D)	-	(D)	79.3	2.1	-	.9	2.4	(X)
29	PETROLEUM AND COAL PRODUCTS.	-	-	(S)	(S)	(D)	(S)	1,173.4	21.6	-	21.7	27.0	(X)
	BALTIMORE, MD.	(D)	(D)	20.3	40.1	6.1	(D)	4,248.9	111.5	(D)	89.2	249.8	2
20	FOOD AND KINDRED PRODUCTS.	-	-	2.1	4.1	(D)	1.6	280.0	9.4	(D)	7.7	22.1	5
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.3	.6	(D)	(Z)	45.5	1.7	-	.5	2.3	46
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	-	(S)	31.6	1.1	-	.6	2.0	(X)
27	PRINTING AND PUBLISHING.	-	-	.3	.5	(D)	(D)	88.6	2.7	-	.7	3.5	30
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.7	5.7	(D)	(D)	649.6	14.0	-	17.2	45.9	1
29	PETROLEUM AND COAL PRODUCTS.	-	-	(D)	(D)	(D)	(D)	23.5	.8	-	1.6	3.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.4	(Z)	(D)	125.8	4.0	-	1.5	6.8	12
32	STONE, CLAY, GLASS PRODUCTS.	-	-	2.4	4.8	.4	(D)	371.4	9.5	-	11.4	23.2	4
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(D)	(S)	1,575.7	37.4	(D)	33.9	88.8	(X)
34	FABRICATED METAL PRODUCTS.	-	-	1.1	2.3	.6	.9	182.9	5.5	-	3.2	10.2	3
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	.3	.6	.5	(D)	174.9	5.0	-	1.8	7.2	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.7	1.1	(D)	(D)	239.9	6.9	-	2.4	9.8	2
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	-	(D)	23.1	.8	-	.2	.8	(X)
	BATON ROUGE, LA.	(D)	(D)	214.5	217.6	(D)	.9	7,892.7	113.7	(D)	244.4	266.6	1
20	FOOD AND KINDRED PRODUCTS.	-	-	1.1	2.3	(D)	(D)	40.5	.9	-	1.5	3.4	42
28	CHEMICALS, ALLIED PRODUCTS	-	-	175.4	170.4	(D)	(D)	6,325.0	94.8	(D)	194.2	204.6	1
34	FABRICATED METAL PRODUCTS.	-	-	(S)	(S)	(S)	(S)	22.7	.5	-	.2	.6	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	BATTLE CREEK, MICH.	12.0	37.3	9.8	20.0	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.6	.3	.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.5	5.6	1.2	2.7	12.9	.2	(D)	(D)	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.4	1.5	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
	BAY CITY, MICH.	5.0	16.3	3.8	6.9	(D)	(Z)	(D)	(D)	(D)	(D)	10	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.3	.3	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
	BEAUMONT-PORT ARTHUR-ORANGE, TEX.	308.1	449.2	293.6	370.8	62.9	1.0	(D)	(D)	-	-	1	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	82.9	132.3	73.2	82.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	213.9	287.5	211.0	272.6	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.8	4.2	1.6	3.1	(D)	(Z)	-	-	-	-	36	(X)	(X)
	BILLINGS, MONT.	6.8	10.7	5.5	6.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.1	3.6	2.0	3.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	4.2	6.2	3.2	3.0	-	-	-	-	-	-	(X)	(X)	(X)
	BILOXI-GULFPORT, MISS.	1.6	5.8	1.2	2.4	81.3	1.3	-	-	-	-	69	(X)	(X)
	BINGHAMTON, N.Y.-PA.	8.2	27.8	6.3	13.0	242.2	4.1	(D)	(D)	(D)	(D)	15	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.7	.3	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.1	.2	.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
	BIRMINGHAM, ALA.	74.6	182.7	64.3	111.7	568.7	8.7	(D)	(D)	294.4	8.8	11	(X)	5
20	FOOD AND KINDRED PRODUCTS	1.7	5.8	1.3	2.2	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
22	TEXTILE MILL PRODUCTS	.4	1.8	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.6	1.9	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.6	.3	.4	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.6	7.4	.6	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	22.8	44.2	21.1	31.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	41.9	100.5	36.8	68.5	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.3	8.6	1.6	3.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.0	.5	.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	.9	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.5	2.3	.3	.5	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
	BLOOMINGTON, IND.	1.1	3.7	.8	1.5	17.0	.2	(D)	(D)	-	-	10	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.6	2.2	.5	.9	15.4	.2	(D)	(D)	-	-	1	(X)	(X)
	BLOOMINGTON-NORMAL, ILL.	1.7	5.1	1.4	2.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	BOISE CITY, IDAHO.	1.1	2.5	.9	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.4	.8	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.2	.5	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	BOSTON, MASS.	46.9	198.1	37.9	88.2	654.3	10.4	2,863.7	40.5	(D)	(Z)	6	2	1
20	FOOD AND KINDRED PRODUCTS	5.7	20.9	4.9	11.0	45.0	.8	319.6	4.7	-	-	17	1	(X)
22	TEXTILE MILL PRODUCTS	1.9	6.0	1.7	3.8	(D)	(D)	103.8	1.5	(D)	(Z)	(X)	15	1
23	APPAREL, OTH. TEXTILE PRODS.	.7	3.5	.5	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
24	LUMBER AND WOOD PRODUCTS	.3	1.2	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.1	.7	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	3.9	16.5	3.3	9.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	1.7	8.7	1.2	2.7	38.5	.6	12.7	.2	-	-	17	25	(X)
28	CHEMICALS, ALLIED PRODUCTS	6.0	18.4	5.5	11.7	65.3	1.0	610.0	8.3	-	-	12	4	(X)
29	PETROLEUM AND COAL PRODUCTS	1.9	4.9	1.8	3.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	3.0	15.5	2.1	5.0	17.4	.3	151.6	2.2	-	-	7	4	(X)
31	LEATHER, LEATHER PRODUCTS	1.5	5.3	1.4	3.1	42.8	.7	72.3	1.0	-	-	45	37	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.4	4.1	1.2	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.7	3.3	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	3.0	12.4	2.6	6.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.9	14.0	2.2	5.1	48.2	.8	134.6	1.9	-	-	14	4	(X)
36	ELECTRIC, ELECTRONIC EQUIP	4.0	23.1	2.7	6.3	33.1	.5	138.3	2.0	-	-	6	2	(X)
37	TRANSPORTATION EQUIPMENT	4.5	19.0	3.6	8.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	3.3	18.5	2.1	4.9	25.9	.4	199.3	2.9	-	-	1	1	(X)
39	MISC. MANUFACTURING INDUS.	.4	2.2	.3	.8	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
	BRADENTON, FL.	3.9	10.7	3.1	5.0	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
	BRIDGEPORT, CONN.	12.3	59.4	9.1	23.7	370.3	5.9	489.8	7.2	-	-	11	4	(X)
20	FOOD AND KINDRED PRODUCTS	.3	1.7	.2	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.9	4.3	.6	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.9	13.8	2.2	6.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	BATTLE CREEK, MICH.	(D)	(Z)	(S)	(S)	(D)	(S)	622.7	17.3	64.4	11.5	33.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	.4	.6	-	(D)	22.5	.9	-	.4	1.2	31
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	(D)	(D)	(D)	(D)	93.0	2.9	-	1.8	5.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	.3	.5	-	(Z)	30.0	1.0	-	.4	1.4	5
	BAY CITY, MICH.	(D)	(D)	1.7	3.3	(Z)	1.1	351.7	9.5	(D)	5.0	15.5	2
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(D)	20.0	.7	-	.3	1.2	(X)
	BEAUMONT-PORT ARTHUR-ORANGE, TEX.	-	-	279.0	355.3	7.3	(D)	4,265.3	78.4	2,035.7	287.1	404.9	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	66.2	71.1	(D)	(D)	2,843.9	50.3	(D)	81.5	102.2	1
29	PETROLEUM AND COAL PRODUCTS	-	-	205.4	271.7	-	(D)	845.6	14.9	1,794.6	196.2	282.9	1
34	FABRICATED METAL PRODUCTS	-	-	.9	1.8	(D)	(D)	51.4	1.1	-	2.0	6.2	1
	BILLINGS, MONT.	(D)	(D)	3.9	3.9	(D)	(D)	370.9	4.3	(D)	7.0	8.5	1
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	.8	.8	(Z)	(Z)	45.1	.6	(D)	2.4	3.0	3
29	PETROLEUM AND COAL PRODUCTS	-	-	3.1	3.0	-	-	298.8	3.1	-	4.2	4.5	1
	BILOXI-GULFPORT, MISS.	-	-	1.2	2.2	(D)	(D)	111.1	3.4	-	2.3	6.2	22
	BINGHAMTON, N.Y.-PA.	-	-	.7	1.6	.6	.6	549.7	14.8	(D)	9.0	24.3	12
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(D)	24.3	.8	(D)	.5	1.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	.1	(Z)	.1	34.3	.7	-	.3	1.1	1
	BIRMINGHAM, ALA.	321.7	29.7	34.8	47.5	3.6	(D)	3,013.3	71.0	(D)	74.8	144.0	1
20	FOOD AND KINDRED PRODUCTS	-	-	.8	1.2	(D)	.4	122.4	3.6	-	1.7	4.7	7
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	46.1	1.3	-	.5	1.6	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	.1	28.7	1.1	-	.6	1.6	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	-	(D)	33.8	1.1	-	.4	1.3	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	.2	.3	(D)	.2	293.7	6.3	-	1.1	4.1	4
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	5.3	7.3	.9	8.2	505.8	13.1	-	18.3	32.8	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(S)	(S)	1,521.8	32.0	(D)	46.4	82.3	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	(S)	(S)	(S)	(S)	205.3	5.4	(D)	3.2	7.8	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.4	(Z)	.5	34.7	1.1	-	.4	1.1	38
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.1	(Z)	(Z)	24.1	.7	(D)	.2	.8	7
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	.1	58.5	1.7	-	.5	1.5	(X)
	BLOOMINGTON, IND.	(D)	(D)	(D)	(D)	(D)	.4	83.7	2.1	-	1.1	3.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(D)	(Z)	53.5	1.3	-	.7	2.0	(X)
	BLOOMINGTON-NORMAL, ILL.	-	-	1.0	2.0	(Z)	(D)	98.2	2.6	-	1.7	4.2	3
	BOISE CITY, IDAHO.	-	-	.7	.9	.4	(D)	66.8	1.2	-	.8	2.0	24
20	FOOD AND KINDRED PRODUCTS	-	-	.3	.4	(D)	(D)	17.2	.3	-	.3	.6	24
24	LUMBER AND WOOD PRODUCTS	-	-	.2	.3	(Z)	(D)	8.5	.2	-	.2	.5	52
	BOSTON, MASS.	-	-	7.2	21.0	(D)	(D)	2,631.0	110.0	202.0	46.9	180.4	18
20	FOOD AND KINDRED PRODUCTS	-	-	1.2	3.2	(D)	(D)	242.1	9.8	(D)	6.4	22.3	13
22	TEXTILE MILL PRODUCTS	-	-	.1	.3	(D)	.9	50.1	2.2	-	3.1	8.9	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.2	.6	(D)	.2	59.1	2.3	-	.5	2.2	42
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	(S)	19.8	.7	-	.2	1.0	(X)
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(Z)	(S)	10.4	.4	-	.2	.7	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	169.8	6.9	(D)	3.2	10.2	(X)
27	PRINTING AND PUBLISHING	-	-	.2	.7	.4	.8	142.5	5.9	-	1.6	8.1	18
28	CHEMICALS, ALLIED PRODUCTS	-	-	.5	1.2	(D)	(D)	157.7	6.6	(D)	5.9	16.3	9
29	PETROLEUM AND COAL PRODUCTS	-	-	(Z)	(Z)	(Z)	1.0	33.2	1.4	(D)	2.0	3.9	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.4	1.2	(D)	(D)	262.0	10.4	-	2.9	13.4	21
31	LEATHER, LEATHER PRODUCTS	-	-	(Z)	.2	(D)	(D)	45.3	2.2	-	1.6	5.2	36
32	STONE, CLAY, GLASS PRODUCTS	-	-	(Z)	(Z)	(D)	(D)	38.1	1.7	-	1.3	3.9	4
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	(Z)	(S)	43.6	2.0	-	.6	2.9	(X)
34	FABRICATED METAL PRODUCTS	-	-	.9	2.5	.1	.6	134.3	6.2	(D)	3.2	12.1	17
35	MACHINERY, EXCEPT ELECTRIC	-	-	.4	1.2	(Z)	1.2	201.7	8.9	(D)	3.1	14.3	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.7	2.1	.3	1.3	400.9	16.8	(D)	3.5	19.9	1
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	(S)	249.6	10.4	(D)	3.8	15.7	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.3	.9	(D)	(D)	336.7	13.6	(D)	3.3	17.4	16
39	MISC. MANUFACTURING INDUS.	-	-	.1	.3	(D)	.2	34.1	1.4	-	.6	2.2	25
	BRADENTON, FL.	-	-	2.1	2.3	.4	(D)	212.2	5.7	-	3.5	8.5	1
	BRIDGEPORT, CONN.	(D)	(D)	2.9	8.6	1.1	(D)	919.9	35.8	(D)	11.9	50.9	6
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	23.8	1.0	-	.4	1.7	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.6	(D)	.1	91.7	2.8	-	.5	2.5	6
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.6	4.6	(D)	(D)	192.1	7.6	-	3.1	12.6	6

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	BRIDGEPORT, CONN--CON.													
34	FABRICATED METAL PRODUCTS. . . .	1.5	8.1	1.1	3.1	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.7	4.3	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	1.3	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	BRISTOL, CONN.	2.3	10.8	1.6	4.4	33.6	.6	92.3	1.4	-	-	14	26	(X)
34	FABRICATED METAL PRODUCTS. . . .	.2	1.6	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	BROCKTON, MASS..	1.5	6.8	1.2	2.9	64.1	1.1	37.7	.6	-	-	44	29	(X)
	BROWNSVILLE-HARLINGEN-SAN BENITO,TEX	10.2	24.3	9.8	20.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.4	1.7	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
	BRYAN-COLLEGE STATION, TEX.. . . .	.3	1.3	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
	BUFFALO, N.Y..	104.5	303.8	81.1	192.4	729.3	12.0	3,059.9	43.7	242.6	7.9	4	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	4.0	13.6	3.0	6.5	34.6	.6	90.6	1.4	-	-	16	9	(X)
22	TEXTILE MILL PRODUCTS.	.1	.5	(Z)	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	4.0	8.6	3.2	5.7	(D)	(D)	89.6	1.3	(D)	(D)	(X)	4	(X)
27	PRINTING AND PUBLISHING.	.9	3.6	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	15.6	34.1	10.1	20.2	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	3.6	10.1	3.0	6.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	3.8	9.8	2.7	6.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	47.1	128.1	40.9	100.3	225.4	3.6	(D)	(D)	(D)	(D)	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	3.4	12.7	2.5	5.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	5.2	17.6	3.9	9.0	106.2	1.8	(D)	(D)	(D)	(D)	8	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	5.9	15.0	3.5	7.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.3	1.1	.2	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.3	1.5	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	BURLINGTON, N.C.	7.0	22.8	5.1	11.0	99.8	1.5	437.4	6.2	(D)	(D)	7	3	(X)
22	TEXTILE MILL PRODUCTS.	5.8	19.1	4.1	9.2	80.3	1.2	417.9	5.9	-	-	9	1	(X)
	CANTON, OHIO	44.3	123.8	34.3	63.8	317.1	4.9	297.6	4.2	72.3	2.1	2	8	1
20	FOOD AND KINDRED PRODUCTS. . . .	1.6	4.7	1.4	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.9	2.7	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.3	4.0	1.0	1.9	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	3.7	7.1	3.5	5.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	6.2	17.3	5.2	10.1	(D)	(D)	(D)	(D)	30.5	.7	(X)	(X)	1
35	MACHINERY, EXCEPT ELECTRIC . . .	3.4	8.9	2.9	5.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	CEDAR RAPIDS, IOWA	13.5	41.1	11.2	21.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	11.2	31.4	9.6	18.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.7	3.1	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	CHAMPAIGN-URBANA-RANTOUL, ILL. . . .	4.3	12.8	3.7	8.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	3.3	9.6	2.9	6.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	CHARLESTON, S.C.	24.1	62.7	19.9	36.3	58.9	.9	(D)	(D)	(D)	(D)	11	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.6	2.1	.5	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.4	1.2	.4	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	CHARLESTON, W.VA..	52.8	95.4	47.9	68.0	(D)	(D)	(D)	(D)	1,155.9	36.8	(X)	(X)	1
28	CHEMICALS, ALLIED PRODUCTS . . .	50.1	88.4	45.5	63.6	(D)	(D)	(D)	(D)	1,155.9	36.8	(X)	(X)	1
34	FABRICATED METAL PRODUCTS. . . .	.5	1.3	.4	.7	-	-	-	-	-	-	(X)	(X)	(X)
	CHARLOTTE-GASTONIA, N.C.	24.9	89.8	16.7	38.9	611.8	9.5	1,059.3	15.9	(D)	(D)	18	5	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	2.3	7.3	1.8	4.1	35.5	.6	(D)	(D)	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS.	10.6	39.4	6.3	14.3	223.0	3.5	346.1	5.5	(D)	(D)	3	6	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.6	2.3	.5	1.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.4	1.7	.2	.3	(D)	(Z)	-	-	-	-	42	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	4.2	12.2	3.4	7.6	70.3	1.1	(D)	(D)	-	-	3	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.4	5.4	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.9	2.8	.8	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.5	5.9	1.1	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.5	1.7	.3	.5	2.6	(Z)	(D)	(Z)	-	-	64	85	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.2	5.0	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	CHATTANOOGA, TENN.-GA.	33.2	89.8	25.5	46.7	239.7	3.8	314.3	4.2	221.6	6.5	1	5	1
20	FOOD AND KINDRED PRODUCTS. . . .	2.9	6.7	2.3	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	5.9	16.8	4.5	8.1	75.2	1.1	(D)	(D)	(D)	(D)	2	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	BRIDGEPORT, CONN--CON.												
34	FABRICATED METAL PRODUCTS. . . .	-	-	(S)	(S)	(D)	(S)	117.1	5.0	-	1.6	7.3	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.2	.4	-	(D)	76.2	3.1	-	.7	3.8	18
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	(D)	(D)	26.3	.9	-	.3	1.6	(X)
	BRISTOL, CONN.	-	-	.9	2.6	(D)	(D)	209.8	6.4	(D)	2.5	10.3	16
34	FABRICATED METAL PRODUCTS. . . .	-	-	(S)	(S)	(Z)	(D)	33.2	1.1	(D)	.3	1.7	(X)
	BROCKTON, MASS..	-	-	.3	.7	(D)	(D)	101.3	4.0	(D)	1.4	6.1	21
	BROWNSVILLE-HARLINGEN-SAN BENITO, TEX	-	-	6.8	15.1	(D)	(D)	108.0	3.3	(D)	11.6	25.8	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(D)	(D)	-	(D)	43.1	1.3	-	.4	1.5	(X)
	BRYAN-COLLEGE STATION, TEX.. . . .	-	-	(D)	(D)	(D)	(Z)	41.6	.9	-	.6	1.5	(X)
	BUFFALO, N.Y..	(D)	(D)	25.9	57.2	5.8	(D)	6,868.5	111.4	36.5	97.0	238.9	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.9	4.2	.2	.2	307.8	7.1	-	4.1	12.2	13
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.2	.7	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	.6	1.2	(D)	.1	225.8	2.9	(D)	4.7	8.3	10
27	PRINTING AND PUBLISHING.	-	-	.4	.8	(D)	(D)	94.3	2.3	(D)	.9	3.0	17
28	CHEMICALS, ALLIED PRODUCTS . . .	(D)	(Z)	(S)	(S)	(D)	(S)	1,618.3	13.9	(D)	16.8	32.4	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	1.6	3.5	(D)	(D)	150.9	3.6	-	3.7	8.4	2
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	1.2	2.7	(D)	(D)	314.7	3.8	-	4.4	9.2	11
33	PRIMARY METAL INDUSTRIES	(D)	(D)	11.2	24.8	4.1	(D)	1,825.8	27.8	(D)	38.2	88.4	2
34	FABRICATED METAL PRODUCTS. . . .	-	-	1.1	2.4	.1	.8	263.9	7.3	-	2.9	9.9	27
35	MACHINERY, EXCEPT ELECTRIC . . .	(D)	(D)	1.4	2.9	(Z)	.2	372.4	8.6	-	5.3	14.4	6
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	2.8	6.4	(D)	.1	696.7	7.1	-	5.2	12.5	1
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	-	.1	21.8	.6	-	.3	1.0	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	.2	.4	(D)	(D)	36.4	1.1	-	.3	.7	27
	BURLINGTON, N.C.	-	-	.6	1.3	.6	(D)	568.1	11.8	(D)	6.5	19.8	8
22	TEXTILE MILL PRODUCTS.	-	-	.5	1.2	(D)	(D)	483.6	9.9	(D)	5.3	16.2	9
	CANTON, OHIO	-	-	25.1	47.2	(D)	(D)	2,937.5	60.0	(S)	44.5	103.0	4
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.7	1.4	(D)	.3	76.3	2.0	-	1.5	3.7	7
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	(D)	(D)	-	(D)	43.0	1.2	-	.8	2.1	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	.4	.7	-	(D)	80.3	2.1	-	1.3	3.3	1
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(D)	(D)	(D)	(S)	47.7	1.4	-	4.1	7.7	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	2.7	5.6	(D)	(D)	292.3	7.2	(D)	6.1	13.7	2
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(D)	(D)	(D)	(D)	145.5	3.3	-	3.3	7.4	(X)
	CEDAR RAPIDS, IOWA	-	-	6.0	9.3	(D)	.2	692.2	20.1	(D)	17.6	38.2	3
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	4.6	7.1	(D)	(D)	464.7	12.9	(D)	15.3	29.3	1
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.5	.7	(D)	(D)	59.1	2.2	-	.7	2.7	2
	CHAMPAIGN-URBANA-RANTOUL, ILL. . . .	-	-	2.7	6.4	(D)	(D)	169.9	4.0	-	4.4	10.3	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	2.2	5.5	(D)	(D)	122.6	2.6	-	3.2	7.4	1
	CHARLESTON, S.C.	-	-	(D)	(D)	1.1	1.8	1,210.8	26.4	(D)	24.4	52.0	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(S)	(S)	55.5	1.2	-	.7	2.2	(X)
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(Z)	(D)	22.1	.6	-	.3	1.2	(X)
	CHARLESTON, W.VA..	-	-	10.8	15.9	(D)	(D)	1,434.0	27.5	(D)	54.9	90.7	2
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	9.2	12.9	(D)	(D)	1,326.7	24.8	(D)	52.5	84.9	1
34	FABRICATED METAL PRODUCTS. . . .	-	-	.3	.5	(D)	(D)	22.1	.6	-	.4	1.0	17
	CHARLOTTE-GASTONIA, N.C.	(D)	(D)	5.0	10.5	1.7	(D)	2,401.3	51.0	(S)	22.2	74.2	8
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.5	1.1	(D)	(D)	144.8	3.2	-	2.2	6.5	5
22	TEXTILE MILL PRODUCTS.	-	-	1.7	3.4	.1	(D)	1,264.4	25.1	(D)	10.6	36.5	4
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	(S)	(S)	(D)	(S)	43.6	1.1	-	.6	1.9	(X)
27	PRINTING AND PUBLISHING.	-	-	(D)	(D)	(Z)	(D)	58.8	1.3	-	.3	1.3	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	.7	1.7	(D)	.5	216.7	4.6	(D)	2.9	7.6	1
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	(D)	(D)	.1	(D)	158.7	3.5	-	1.3	4.2	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(S)	(S)	27.9	.9	-	.9	2.3	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(D)	(D)	111.0	2.6	-	1.3	4.6	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	.1	.3	(D)	(D)	47.0	1.2	-	.5	1.9	25
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.3	.5	(D)	.2	150.4	3.5	(D)	1.0	3.8	15
	CHATTANOOGA, TENN.-GA.	(D)	(D)	12.7	19.5	(D)	(Z)	2,257.2	43.2	(D)	40.7	84.2	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.4	2.1	(Z)	(D)	170.7	2.9	-	2.9	5.4	4
22	TEXTILE MILL PRODUCTS.	-	-	2.4	3.9	1.7	.2	401.5	8.7	-	5.8	14.3	5

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	CHATTANOOGA, TENN.-GA--CON.													
28	CHEMICALS, ALLIED PRODUCTS	8.7	22.2	6.4	10.4	108.9	1.8	(D)	(D)	(D)	(D)	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	6.0	10.4	5.2	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	4.4	18.5	3.2	11.9	(D)	(Z)	(D)	(D)	(D)	(D)	40	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.3	6.5	1.6	2.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	1.3	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.8	2.2	.6	1.0	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
	CHICAGO, ILL.	366.4	1,135.1	311.0	697.2	1,929.8	31.3	3,692.5	54.8	764.6	29.5	4	1	1
20	FOOD AND KINDRED PRODUCTS	37.9	102.4	33.1	62.6	150.4	2.5	740.3	11.1	(D)	(D)	4	4	(X)
22	TEXTILE MILL PRODUCTS	.8	2.3	.7	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.9	3.8	.6	1.4	34.8	.6	(D)	(Z)	(D)	(Z)	69	1	1
26	PAPER AND ALLIED PRODUCTS	12.5	39.4	10.2	20.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	8.9	37.1	6.6	13.8	136.8	2.2	14.6	.2	-	-	4	27	(X)
28	CHEMICALS, ALLIED PRODUCTS	35.9	93.2	30.9	55.8	91.5	1.5	273.4	4.1	(D)	(D)	8	6	(X)
29	PETROLEUM AND COAL PRODUCTS	14.9	45.2	10.6	18.9	61.2	.9	(D)	(D)	-	-	10	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	10.1	40.3	7.0	13.8	100.6	1.6	48.8	.8	(D)	(D)	1	27	(X)
32	STONE, CLAY, GLASS PRODUCTS	21.7	46.9	20.0	33.7	68.8	1.2	35.3	.5	(D)	(D)	1	1	(X)
33	PRIMARY METAL INDUSTRIES	133.0	424.9	120.5	335.2	302.4	4.8	1,665.8	24.2	(D)	(D)	15	1	(X)
34	FABRICATED METAL PRODUCTS	30.7	97.4	25.3	50.6	325.3	5.4	190.8	2.9	-	-	10	4	(X)
35	MACHINERY, EXCEPT ELECTRIC	22.0	75.3	16.6	32.5	186.6	3.0	116.5	2.0	(D)	(D)	4	6	(X)
36	ELECTRIC, ELECTRONIC EQUIP	17.8	59.8	13.8	26.1	113.6	1.8	117.0	1.8	(D)	(D)	13	2	(X)
37	TRANSPORTATION EQUIPMENT	7.4	24.2	5.9	12.4	186.1	3.0	(D)	(D)	(D)	(D)	4	(X)	(X)
39	MISC. MANUFACTURING INDUS.	2.7	10.6	2.1	4.3	47.7	.8	28.6	.5	-	-	17	7	(X)
	CINCINNATI, OHIO-KY.-IND.	56.9	166.4	47.1	86.8	911.2	14.8	805.9	11.2	655.9	23.1	8	1	2
20	FOOD AND KINDRED PRODUCTS	8.7	22.3	7.6	13.1	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.2	.7	.2	.3	(D)	(Z)	-	-	-	-	91	(X)	(X)
25	FURNITURE AND FIXTURES	.3	1.2	.3	.5	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	5.6	14.8	4.9	8.8	(S)	(S)	108.2	1.6	(D)	(D)	(X)	5	(X)
27	PRINTING AND PUBLISHING	1.4	5.1	1.0	1.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	15.3	38.5	13.4	22.9	274.5	4.5	201.9	2.7	264.6	8.8	3	1	1
29	PETROLEUM AND COAL PRODUCTS	3.8	10.6	3.5	7.9	107.0	1.7	(D)	(D)	-	-	45	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	2.3	7.1	1.8	3.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.9	4.5	1.7	3.1	91.4	1.4	-	-	(D)	(Z)	5	(X)	98
33	PRIMARY METAL INDUSTRIES	4.0	14.6	2.9	6.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.7	9.8	2.0	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	3.7	13.8	2.7	4.9	(S)	(S)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.0	4.2	.7	1.3	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	5.2	19.2	3.6	7.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.5	2.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	CLARKSVILLE-HOPKINSVILLE, TENN.-KY.	2.6	6.9	2.0	3.1	4.5	.1	(D)	(D)	(D)	(D)	1	(X)	(X)
	CLEVELAND, OHIO	147.8	473.5	126.3	300.0	676.7	10.9	1,447.1	21.3	356.7	11.3	6	1	1
20	FOOD AND KINDRED PRODUCTS	2.7	8.9	2.2	4.2	23.1	.4	(D)	(D)	(D)	(D)	45	(X)	(X)
22	TEXTILE MILL PRODUCTS	.5	1.6	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.6	2.4	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.4	.4	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.7	5.8	1.3	2.6	47.8	.7	(D)	(Z)	(D)	(D)	32	1	(X)
27	PRINTING AND PUBLISHING	1.3	5.7	.8	1.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	8.5	26.4	6.6	12.5	115.6	2.0	(D)	(D)	(D)	(D)	2	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.6	4.1	1.5	3.2	41.4	.7	(D)	(D)	-	-	65	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	2.9	11.1	1.9	3.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.7	11.0	4.3	7.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	88.9	271.7	81.7	218.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	14.0	44.5	11.1	20.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	7.1	29.4	4.9	9.3	71.3	1.2	(D)	(D)	(D)	(D)	3	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	3.3	13.9	2.2	4.1	35.0	.5	(D)	(D)	(D)	(D)	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	8.0	30.5	5.5	8.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.5	2.7	.3	.6	(D)	(D)	(D)	(Z)	-	-	(X)	92	(X)
39	MISC. MANUFACTURING INDUS.	.7	1.8	.6	.8	(D)	(Z)	-	-	(D)	(D)	1	(X)	(X)
	COLORADO SPRINGS, COLO.	1.5	3.8	1.1	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	COLUMBIA, MO.	.8	2.2	.6	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	COLUMBIA, S.C.	15.0	40.6	11.6	17.8	64.4	1.1	315.3	4.2	(D)	(D)	19	3	(X)
22	TEXTILE MILL PRODUCTS	1.0	4.7	.4	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.4	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.5	1.9	.2	.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	COLUMBUS, GA.-ALA.	10.7	29.8	8.5	13.5	77.2	1.2	330.5	4.3	(D)	(D)	23	1	(X)
20	FOOD AND KINDRED PRODUCTS	.8	2.8	.5	.8	4.0	.1	-	-	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	3.3	12.2	2.0	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	COLUMBUS, OHIO	38.4	112.7	31.8	61.1	807.0	12.9	397.3	5.3	299.7	10.2	4	1	15
20	FOOD AND KINDRED PRODUCTS	5.9	18.0	4.9	10.1	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	3.2	7.7	2.7	4.1	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	1	(X)
27	PRINTING AND PUBLISHING	.5	2.4	.3	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		E	L	M	N	O	P	Q	R	S	T	U	N
	CHATTANOOGA, TENN.-GA--CON.												
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.7	5.4	(D)	.3	663.2	11.7	(D)	16.2	29.3	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.0	1.5	(D)	(D)	255.5	4.8	(D)	6.1	9.9	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(Z)	(D)	349.4	6.6	-	3.4	10.4	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	1.1	1.8	(D)	(D)	189.5	3.7	-	2.2	5.3	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.2	(Z)	.2	35.8	.9	-	.4	1.2	7
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(S)	(S)	56.5	1.2	-	.5	1.3	(X)
	CHICAGO, ILL.	(D)	(D)	172.5	335.8	7.9	(D)	16,233.6	437.9	152.6	348.3	951.6	1
20	FOOD AND KINDRED PRODUCTS	-	-	19.1	36.4	2.4	(D)	1,406.5	39.8	(D)	37.5	87.9	3
22	TEXTILE MILL PRODUCTS	-	-	.5	.9	-	.2	30.6	1.1	-	.7	2.1	34
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.4	.8	-	(Z)	82.7	2.4	-	.7	2.6	14
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	673.4	18.9	(D)	12.8	34.9	(X)
27	PRINTING AND PUBLISHING	-	-	3.8	8.0	.1	3.3	687.3	23.3	(S)	9.0	33.4	4
28	CHEMICALS, ALLIED PRODUCTS	-	-	19.7	37.2	.8	(D)	1,482.4	37.3	(S)	35.2	77.0	2
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	1,251.1	26.3	(D)	14.1	38.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	4.8	9.3	.1	(D)	909.2	26.5	(D)	8.0	31.6	13
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	8.7	16.8	.3	(D)	498.3	13.2	(D)	22.7	42.2	3
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	.6	5.8	3,668.7	89.7	(D)	122.2	349.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	20.7	40.5	.4	1.5	1,595.6	46.8	(D)	30.7	84.1	5
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	11.7	22.4	(D)	3.7	1,573.7	42.8	(S)	19.8	62.6	3
36	ELECTRIC, ELECTRONIC EQUIP	-	-	10.8	20.4	.5	(D)	1,190.8	33.6	(D)	17.0	50.2	4
37	TRANSPORTATION EQUIPMENT	-	-	2.6	5.5	(Z)	.7	424.5	11.8	(D)	6.5	18.8	3
39	MISC. MANUFACTURING INDUS.	-	-	1.3	2.5	.2	.3	186.1	6.3	(D)	2.6	9.1	12
	CINCINNATI, OHIO-KY.-IND.	(D)	(D)	18.0	34.9	(D)	(D)	2,872.3	79.6	46.8	56.7	139.6	4
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	321.0	9.2	(D)	9.3	19.8	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	-	(S)	20.3	.4	-	.3	.7	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(Z)	(D)	21.3	.7	(D)	.3	1.0	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	200.1	6.0	(D)	5.5	11.7	(X)
27	PRINTING AND PUBLISHING	-	-	.4	.8	(D)	(D)	110.8	3.2	(D)	1.5	4.8	22
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.0	6.2	.1	.6	573.9	15.6	(D)	14.4	30.2	4
29	PETROLEUM AND COAL PRODUCTS	-	-	2.3	4.3	(D)	(D)	93.8	2.7	(D)	2.2	5.6	16
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	.8	138.0	4.0	(D)	2.2	5.9	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.7	1.0	(D)	(D)	57.5	1.4	-	3.0	5.5	5
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.7	3.3	(D)	(D)	322.6	8.6	-	3.3	10.1	10
34	FABRICATED METAL PRODUCTS	-	-	1.3	2.6	.4	.6	202.9	5.7	-	2.8	8.1	13
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(S)	(S)	292.6	8.9	(D)	5.0	17.4	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.4	.8	(D)	.1	92.3	2.9	-	1.1	3.5	4
37	TRANSPORTATION EQUIPMENT	-	-	.8	1.8	(D)	(D)	484.2	12.1	-	5.2	15.4	2
39	MISC. MANUFACTURING INDUS.	-	-	(S)	(S)	-	(S)	36.1	1.2	-	.5	1.4	(X)
	CLARKSVILLE-HOPKINSVILLE, TENN.-KY.	-	-	1.1	1.5	.6	.8	175.9	3.7	(S)	2.2	5.4	2
	CLEVELAND, OHIO	1,566.9	137.5	53.0	103.1	5.9	9.9	6,303.5	173.6	287.5	159.6	408.7	3
20	FOOD AND KINDRED PRODUCTS	-	-	1.3	2.6	.4	.7	168.6	4.6	(D)	2.6	7.6	10
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	23.0	.7	-	.5	1.4	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.2	.4	-	.2	57.7	1.6	-	.7	2.3	1
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(Z)	(D)	23.2	.7	-	.5	1.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	.2	(Z)	115.0	3.2	(D)	1.2	3.9	(X)
27	PRINTING AND PUBLISHING	-	-	.4	.7	.5	(D)	136.9	4.1	-	1.3	4.9	22
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.5	6.6	(D)	1.2	563.4	13.9	(D)	14.6	30.8	3
29	PETROLEUM AND COAL PRODUCTS	-	-	1.3	2.5	(D)	(D)	32.4	1.0	-	1.6	2.8	19
30	RUBBER, MISC. PLASTICS PROD.	-	-	.8	1.7	(D)	.4	270.4	7.5	-	3.0	9.4	12
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.3	4.4	(D)	2.8	109.1	3.6	-	3.8	7.8	7
33	PRIMARY METAL INDUSTRIES	(S)	(S)	(S)	(S)	(S)	(S)	2,122.1	53.4	(D)	96.6	236.5	(X)
34	FABRICATED METAL PRODUCTS	-	-	6.6	12.1	.3	3.3	852.0	24.5	(D)	13.5	35.6	8
35	MACHINERY, EXCEPT ELECTRIC	-	-	3.0	5.5	.6	(D)	653.5	20.1	(D)	7.3	24.8	5
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.4	2.8	(Z)	(D)	341.9	9.7	(D)	3.2	10.9	5
37	TRANSPORTATION EQUIPMENT	-	-	1.8	3.6	(D)	.3	721.2	21.7	-	8.0	24.9	2
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.4	(Z)	(D)	62.6	2.0	-	.5	1.8	7
39	MISC. MANUFACTURING INDUS.	-	-	(S)	(S)	(D)	(S)	37.4	1.0	-	.7	1.5	(X)
	COLORADO SPRINGS, COLO.	-	-	(S)	(S)	(D)	(S)	111.7	2.4	-	1.2	2.9	(X)
	COLUMBIA, MO.	-	-	.2	.4	(D)	(D)	42.2	1.2	-	.7	1.9	1
	COLUMBIA, S.C.	-	-	3.6	5.0	(D)	3.2	985.3	22.8	(D)	10.4	25.2	5
22	TEXTILE MILL PRODUCTS	-	-	.2	.2	(Z)	(D)	189.0	3.9	-	.5	1.6	2
34	FABRICATED METAL PRODUCTS	-	-	.2	.2	(D)	(D)	30.3	.9	(D)	.4	1.2	5
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.2	.3	(Z)	(Z)	61.6	1.5	-	.5	1.7	1
	COLUMBUS, GA.-ALA.	(D)	(D)	5.3	6.6	.7	(D)	638.5	16.2	(D)	13.3	29.9	2
20	FOOD AND KINDRED PRODUCTS	-	-	.5	.7	(D)	(D)	81.6	1.9	-	.8	2.4	9
22	TEXTILE MILL PRODUCTS	-	-	1.6	2.2	.1	(Z)	377.0	9.2	(D)	3.6	10.9	1
	COLUMBUS, OHIO	19.8	2.5	13.9	26.1	2.8	1.2	1,921.9	51.6	(D)	37.2	96.0	4
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	287.3	7.9	(Z)	5.3	15.0	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	-	(S)	145.1	3.6	-	3.3	7.0	(X)
27	PRINTING AND PUBLISHING	-	-	.1	.2	(D)	(D)	56.2	1.7	-	.5	2.1	35

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite		
						Distillate		Residual				
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	
		A	B	C	D	E	F	G	H	I	J	F H J
	COLUMBUS, OHIO--CON.											
28	CHEMICALS, ALLIED PRODUCTS	2.0	5.7	1.8	3.5	52.6	.9	(D)	(D)	(D)	(D)	9 (X) (X)
30	RUBBER, MISC. PLASTICS PROD.	1.9	8.3	1.2	2.9	(D)	(D)	-	-	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS	11.6	26.2	10.6	19.5	124.8	2.0	(D)	(D)	-	-	1 (X) (X)
33	PRIMARY METAL INDUSTRIES	2.4	9.5	1.8	5.4	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	2.9	8.8	2.3	3.9	15.6	.3	(D)	(Z)	(D)	(D)	6 1 (X)
35	MACHINERY, EXCEPT ELECTRIC	2.4	8.4	1.9	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	1.9	7.0	1.4	2.8	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
37	TRANSPORTATION EQUIPMENT	1.6	4.6	1.2	1.8	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
	CORPUS CHRISTI, TEX.	89.4	192.4	81.7	125.6	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
20	FOOD AND KINDRED PRODUCTS	2.5	6.0	2.4	4.6	-	-	(D)	(D)	-	-	(X) (X) (X)
28	CHEMICALS, ALLIED PRODUCTS	55.5	123.2	51.7	90.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
29	PETROLEUM AND COAL PRODUCTS	26.7	47.9	24.3	27.3	-	-	-	-	-	-	(X) (X) (X)
	DALLAS-FORT WORTH, TEX.	85.0	223.4	67.9	108.3	67.3	1.1	64.4	.9	(D)	(D)	10 8 (X)
20	FOOD AND KINDRED PRODUCTS	8.0	22.6	6.1	11.1	(S)	(S)	(D)	(D)	-	-	(X) (X) (X)
23	APPAREL, OTH. TEXTILE PRODS.	1.0	4.2	.5	1.0	-	-	-	-	-	-	(X) (X) (X)
25	FURNITURE AND FIXTURES	.6	2.3	.5	.9	(D)	(D)	-	-	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS	2.6	9.1	1.7	3.0	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
27	PRINTING AND PUBLISHING	1.4	6.7	.7	1.2	(D)	(Z)	-	-	-	-	1 (X) (X)
28	CHEMICALS, ALLIED PRODUCTS	6.4	16.9	5.2	8.2	(D)	(Z)	(D)	(Z)	-	-	1 23 (X)
29	PETROLEUM AND COAL PRODUCTS	2.2	4.4	2.1	3.5	(D)	(Z)	(D)	(D)	-	-	1 (X) (X)
30	RUBBER, MISC. PLASTICS PROD.	2.1	8.4	1.1	2.1	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS	34.1	59.3	32.0	45.0	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	5.6	18.3	4.0	7.5	(D)	(D)	-	-	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	4.1	13.2	3.1	5.7	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	4.3	15.4	2.8	5.0	(D)	(D)	-	-	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	4.2	17.9	2.1	3.6	(D)	(Z)	-	-	-	-	1 (X) (X)
37	TRANSPORTATION EQUIPMENT	7.1	20.0	5.1	9.0	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
	DANBURY, CONN.	4.2	16.8	3.1	7.3	109.6	1.8	194.9	3.0	(D)	(Z)	6 12 1
30	RUBBER, MISC. PLASTICS PROD.	.2	.9	.1	.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	.2	.9	.1	.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	.2	.9	.1	.2	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	2.1	.3	.7	(D)	(D)	-	-	-	-	(X) (X) (X)
38	INSTRUMENTS, RELATED PRODS	.2	1.2	.1	.3	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
	DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL.	26.1	63.7	22.0	34.2	(S)	(S)	(S)	(S)	(S)	(S)	(X) (X) (X)
20	FOOD AND KINDRED PRODUCTS	2.7	5.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	8.8	26.5	6.8	12.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	.5	1.3	.4	.8	(D)	(Z)	(D)	(D)	-	-	1 (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	7.8	19.4	6.7	11.1	15.6	.3	-	-	(D)	(D)	1 (X) (X)
	DAYTON, OHIO	37.3	115.2	28.9	56.1	764.3	12.2	28.5	.4	255.4	8.1	1 67 1
20	FOOD AND KINDRED PRODUCTS	3.7	10.7	3.2	6.8	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
24	LUMBER AND WOOD PRODUCTS	.2	.7	(S)	(S)	-	-	-	-	-	-	(X) (X) (X)
26	PAPER AND ALLIED PRODUCTS	4.2	10.7	3.6	6.0	73.7	1.2	-	-	(D)	(D)	7 (X) (X)
27	PRINTING AND PUBLISHING	1.2	4.4	.8	1.5	-	-	(D)	(Z)	-	-	(X) 1 (X)
28	CHEMICALS, ALLIED PRODUCTS	1.2	2.9	1.0	1.6	17.8	.3	-	-	-	-	1 (X) (X)
30	RUBBER, MISC. PLASTICS PROD.	4.8	15.8	3.6	6.8	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
33	PRIMARY METAL INDUSTRIES	2.4	9.1	1.9	5.6	(D)	(D)	-	-	-	-	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	1.7	5.8	1.2	2.4	(D)	(D)	(D)	(D)	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	5.1	20.0	3.3	6.9	(D)	(D)	(D)	(D)	(D)	(D)	(X) (X) (X)
36	ELECTRIC, ELECTRONIC EQUIP	5.4	15.1	4.7	9.8	(D)	(D)	-	-	-	-	(X) (X) (X)
	DAYTONA BEACH, FLA.	1.1	4.7	.7	1.2	(D)	(D)	-	-	-	-	(X) (X) (X)
	DECATUR, ILL.	24.3	51.0	21.2	33.8	(S)	(S)	(D)	(D)	(D)	(D)	(X) (X) (X)
	DENVER-BOULDER, COLO.	34.2	69.3	28.4	32.8	60.4	.8	53.3	.6	(D)	(D)	8 21 (X)
20	FOOD AND KINDRED PRODUCTS	10.1	16.3	9.1	10.0	49.2	.7	(D)	(Z)	(D)	(D)	9 1 (X)
27	PRINTING AND PUBLISHING	.7	2.4	.5	.7	(D)	(Z)	-	-	-	-	84 (X) (X)
28	CHEMICALS, ALLIED PRODUCTS	2.2	4.7	1.7	1.8	(D)	(Z)	(D)	(D)	-	-	1 (X) (X)
29	PETROLEUM AND COAL PRODUCTS	2.5	3.8	2.2	2.5	(D)	(D)	-	-	-	-	(X) (X) (X)
30	RUBBER, MISC. PLASTICS PROD.	3.3	4.7	3.0	2.9	(D)	(Z)	(D)	(D)	-	-	1 (X) (X)
32	STONE, CLAY, GLASS PRODUCTS	5.5	9.8	4.9	6.3	(D)	(Z)	(D)	(D)	(D)	(D)	78 (X) (X)
34	FABRICATED METAL PRODUCTS	2.4	7.0	1.8	2.2	2.2	(Z)	(D)	(D)	-	-	21 (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	1.4	3.9	.9	1.3	(D)	(D)	-	-	-	-	(X) (X) (X)
37	TRANSPORTATION EQUIPMENT	1.1	3.2	.7	.8	(D)	(D)	(D)	(Z)	-	-	(X) 1 (X)
	DES MOINES, IOWA	14.5	30.8	12.5	16.8	(S)	(S)	(D)	(D)	(D)	(D)	(X) (X) (X)
20	FOOD AND KINDRED PRODUCTS	2.5	6.1	2.1	3.3	22.0	.3	(D)	(D)	-	-	1 (X) (X)
27	PRINTING AND PUBLISHING	.8	2.5	.6	.9	(D)	(D)	-	-	-	-	(X) (X) (X)
32	STONE, CLAY, GLASS PRODUCTS	6.1	7.8	5.8	5.8	(D)	(D)	-	-	(D)	(D)	(X) (X) (X)
34	FABRICATED METAL PRODUCTS	.2	.8	.1	.2	-	-	-	-	-	-	(X) (X) (X)
35	MACHINERY, EXCEPT ELECTRIC	1.1	3.3	.8	1.4	(D)	(D)	-	-	-	-	(X) (X) (X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	COLUMBUS, OHIO--CON.												
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	.5	.9	.1	(D)	78.7	2.2	-	2.5	6.2	4
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	.4	204.0	5.4	-	1.8	7.0	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	7.2	13.0	1.0	(D)	272.7	6.7	-	11.3	22.8	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(D)	(S)	158.5	4.1	-	2.2	6.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	.7	1.4	(D)	1.0	172.4	4.8	-	2.7	7.9	16
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	1.0	2.1	.2	.2	173.2	4.9	-	2.2	6.8	7
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.5	1.1	(D)	(D)	157.8	4.2	-	2.2	6.1	1
37	TRANSPORTATION EQUIPMENT	-	-	.2	.4	(Z)	(D)	107.2	2.8	-	1.6	4.4	1
	CORPUS CHRISTI, TEX.	-	-	64.6	97.6	6.6	1.6	2,256.7	66.8	607.6	95.0	146.2	1
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	42.2	1.4	(D)	2.7	5.5	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	.1	1,135.6	33.1	(D)	57.1	82.0	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	-	(D)	697.3	20.7	-	30.5	44.0	(X)
	DALLAS-FORT WORTH, TEX.	(D)	(D)	42.6	74.8	2.5	13.9	5,006.3	115.1	(S)	79.6	183.8	3
20	FOOD AND KINDRED PRODUCTS	-	-	5.6	10.3	(D)	.6	565.3	11.5	(D)	7.8	18.2	3
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(S)	(S)	-	(S)	121.5	3.2	(Z)	1.0	4.2	(X)
25	FURNITURE AND FIXTURES	-	-	.2	.3	(D)	(D)	52.4	1.4	(D)	.6	1.6	14
26	PAPER AND ALLIED PRODUCTS	-	-	1.2	2.2	(Z)	.7	257.4	6.1	-	2.9	7.7	2
27	PRINTING AND PUBLISHING	-	-	.4	.7	(D)	(D)	218.0	5.5	(S)	1.4	5.4	22
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.5	4.5	.3	3.3	368.6	8.7	(D)	6.2	13.9	5
29	PETROLEUM AND COAL PRODUCTS	-	-	(S)	(S)	(Z)	(S)	35.1	.9	-	1.2	2.3	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.5	1.0	(D)	.8	283.7	6.2	(D)	1.9	6.1	5
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(S)	(S)	624.1	14.2	(D)	28.9	44.4	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	2.0	3.6	(D)	(D)	(S)	(S)	-	5.2	14.7	1
34	FABRICATED METAL PRODUCTS	-	-	2.4	4.5	.3	.9	286.5	7.4	-	5.9	16.1	21
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.7	2.9	(D)	2.0	418.9	10.4	-	4.5	14.2	5
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.9	3.2	(D)	(D)	595.6	14.3	-	4.2	14.5	7
37	TRANSPORTATION EQUIPMENT	-	-	4.4	7.8	.5	.4	591.0	11.0	(Z)	6.9	16.6	2
	DANBURY, CONN.	(Z)	(Z)	.4	1.0	.5	1.0	301.6	9.5	-	3.9	15.0	9
30	RUBBER, MISC. PLASTICS PROD.	-	-	(Z)	(Z)	-	(D)	19.1	.6	-	.2	1.1	1
34	FABRICATED METAL PRODUCTS	-	-	.1	.2	(D)	(D)	15.1	.5	-	.3	1.2	12
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	(Z)	-	(D)	22.0	.7	-	.1	.7	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	.1	(D)	(D)	45.0	1.5	-	.4	2.1	1
38	INSTRUMENTS, RELATED PRODS	-	-	(Z)	(Z)	-	(Z)	26.9	.9	-	.2	1.1	1
	DAVENPORT-ROCK ISLAND-MOLINE, IOWA-ILL.	(S)	(S)	(S)	(S)	(S)	(S)	1,214.0	29.5	(D)	23.8	49.3	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	1.3	1.9	(D)	(D)	(D)	(D)	(D)	2.1	3.5	8
33	PRIMARY METAL INDUSTRIES	(D)	(D)	6.0	9.4	(D)	(D)	603.9	14.1	-	7.9	19.6	7
34	FABRICATED METAL PRODUCTS	-	-	.2	.4	(D)	(D)	16.4	.6	-	.7	1.9	25
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	4.1	6.9	1.7	(D)	318.1	8.3	(D)	6.8	14.6	3
	DAYTON, OHIO	(D)	(D)	9.5	18.1	10.8	(D)	2,472.4	59.1	2.0	35.9	97.3	5
20	FOOD AND KINDRED PRODUCTS	-	-	1.3	2.0	(D)	.1	157.5	3.8	-	3.5	9.0	13
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	11.3	.3	-	.2	.4	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.6	1.2	(Z)	(Z)	190.7	4.7	(D)	4.4	10.3	10
27	PRINTING AND PUBLISHING	-	-	.6	1.2	(D)	.2	118.5	2.9	-	1.3	4.2	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	.1	.2	(D)	(D)	46.3	1.3	-	.6	1.5	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	1.5	3.0	(D)	(D)	377.4	9.0	-	4.6	12.4	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.1	2.0	(D)	(D)	137.5	3.5	-	2.2	6.9	41
34	FABRICATED METAL PRODUCTS	-	-	.3	.6	(D)	(D)	130.6	3.4	-	1.7	5.5	26
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.1	2.2	1.5	.7	533.6	13.1	(D)	7.9	21.1	2
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(D)	.2	218.6	5.3	(D)	2.5	7.2	(X)
	DAYTONA BEACH, FLA.	-	-	.2	.2	(Z)	(D)	102.2	3.5	-	1.0	4.2	15
	DECATUR, ILL.	-	-	(S)	(S)	(S)	(S)	896.1	17.2	(D)	21.3	38.5	(X)
	DENVER-BOULDER, COLO.	(D)	(D)	20.9	23.5	.9	(D)	1,703.0	56.5	139.7	33.8	60.8	3
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	6.0	7.1	.2	(D)	287.6	6.2	(D)	9.6	17.7	3
27	PRINTING AND PUBLISHING	-	-	.3	.3	(D)	(D)	76.2	1.7	-	.6	1.8	28
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	152.6	2.9	(D)	2.3	4.2	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	2.1	2.3	-	(D)	74.0	1.4	-	4.3	5.4	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	(S)	(S)	-	(S)	81.7	1.8	(D)	3.4	3.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.7	3.4	(D)	1.6	173.8	3.4	-	5.2	7.2	10
34	FABRICATED METAL PRODUCTS	-	-	1.5	1.7	(D)	(Z)	182.5	4.8	-	1.5	3.7	9
35	MACHINERY, EXCEPT ELECTRIC	-	-	.6	.8	.1	(D)	124.2	2.6	-	1.4	3.2	9
37	TRANSPORTATION EQUIPMENT	-	-	.6	.6	(D)	.1	114.1	2.3	-	1.1	2.7	15
	DES MOINES, IOWA	-	-	(S)	(S)	(S)	(S)	577.0	14.0	(D)	14.6	26.4	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	1.5	1.9	(D)	(D)	113.8	2.8	-	2.0	4.8	8
27	PRINTING AND PUBLISHING	-	-	.5	.7	-	(D)	67.0	1.6	(D)	.9	2.4	5
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(D)	(S)	80.8	1.9	-	6.6	6.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(D)	15.3	.6	-	.3	1.1	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.7	1.1	(D)	(D)	71.6	1.9	-	1.1	3.0	1

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976 – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	DETROIT, MICH.	297.4	930.8	246.9	498.0	1,004.1	16.0	1,475.1	20.1	1,649.4	56.1	6	2	1
20	FOOD AND KINDRED PRODUCTS	7.5	23.4	6.3	12.6	47.2	.8	105.7	1.4	-	-	14	5	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.6	6.2	1.2	2.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.4	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.3	1.0	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	7.1	21.7	5.8	11.3	54.6	.8	(D)	(D)	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING	1.6	6.6	1.1	2.3	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	22.7	61.3	18.4	32.7	11.6	.2	(D)	(D)	(D)	(D)	12	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	5.4	12.9	4.9	8.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	4.9	20.1	3.4	6.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	14.9	33.2	13.6	22.0	118.8	2.1	(D)	(D)	(D)	(D)	34	(X)	(X)
33	PRIMARY METAL INDUSTRIES	129.2	381.5	113.5	250.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	20.7	73.4	15.9	30.6	69.5	1.2	84.2	1.2	(D)	(D)	17	9	(X)
35	MACHINERY, EXCEPT ELECTRIC	13.3	53.1	9.8	19.7	219.9	3.5	(D)	(D)	-	-	2	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.1	4.2	.8	1.6	5.3	.1	-	-	-	-	22	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.4	1.6	.3	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.5	2.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	DUBUQUE, IOWA	6.4	15.0	5.6	8.9	42.1	.6	(D)	(Z)	(D)	(D)	1	1	(X)
	DULUTH-SUPERIOR, MINN.-WIS.	5.0	15.6	3.9	6.6	62.3	1.0	(D)	(D)	(D)	(D)	11	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.3	1.7	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.6	.6	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	EAU CLAIRE, WIS.	5.4	15.0	4.4	9.0	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.3	3.7	1.2	2.7	51.4	.8	(D)	(D)	(D)	(D)	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	.3	.9	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	EL PASO, TEX.	13.6	35.0	11.8	21.4	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.0	2.7	.8	1.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.4	1.5	.2	.3	(Z)	(Z)	-	-	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.5	2.6	.4	1.4	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
	ELMIRA, N.Y.	5.2	16.5	4.3	8.7	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
20	FOOD AND KINDRED PRODUCTS	1.2	4.2	1.0	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.3	.8	(D)	(D)	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
	ERIE, PA.	20.7	44.8	18.7	27.0	93.5	1.7	175.0	2.7	335.6	6.1	10	1	1
20	FOOD AND KINDRED PRODUCTS	.8	2.4	.6	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.0	4.0	.7	1.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.8	11.0	3.3	7.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.7	5.9	1.4	2.9	28.9	.5	(D)	(D)	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.8	3.0	.6	1.2	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	34
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.7	.2	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
	EUGENE-SPRINGFIELD, OREG.	11.3	26.6	7.9	17.3	132.3	2.2	(D)	(D)	-	-	37	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.3	.8	.2	.5	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
24	LUMBER AND WOOD PRODUCTS	4.9	13.0	3.3	7.5	112.0	1.9	7.2	.1	-	-	42	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	.8	1.8	.7	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	EVANSVILLE, IND.-KY.	44.0	130.9	21.2	33.5	505.5	7.8	439.5	5.4	248.3	6.8	2	6	1
20	FOOD AND KINDRED PRODUCTS	1.4	4.0	1.1	1.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.7	.2	.3	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	7.6	14.6	6.3	8.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.6	2.4	.3	.5	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
34	FABRICATED METAL PRODUCTS	1.0	2.5	.8	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.3	2.3	1.1	1.3	-	-	-	-	(D)	(D)	(X)	(X)	(X)
	FALL RIVER, MASS.-R.I.	4.2	15.7	3.5	8.2	43.0	.7	220.0	3.2	-	-	22	4	(X)
22	TEXTILE MILL PRODUCTS	2.2	7.2	1.9	4.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.4	1.8	.2	.6	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	FARGO-MOORHEAD, N.DAK.-MINN.	2.1	6.7	1.9	4.8	(S)	(S)	(D)	(Z)	(D)	(D)	(X)	42	(X)
	FAYETTEVILLE, N.C.	5.7	21.1	4.0	9.0	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.0	3.1	.9	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	FAYETTEVILLE-SPRINGDALE, ARK.	3.9	10.5	2.9	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.8	4.2	1.5	2.0	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.5	1.6	.4	.5	-	-	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	DETROIT, MICH.	1,412.2	124.7	116.7	218.5	37.6	25.0	14,805.3	432.8	(D)	304.4	876.2	1
20	FOOD AND KINDRED PRODUCTS	-	-	3.1	6.2	2.6	1.6	358.1	10.8	-	7.9	22.7	7
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.6	1.2	(D)	.1	114.0	3.8	-	1.3	4.8	8
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.1	(D)	(D)	26.0	.7	-	.4	1.3	39
25	FURNITURE AND FIXTURES	-	-	.2	.3	-	.1	15.1	.6	-	.4	1.1	19
26	PAPER AND ALLIED PRODUCTS	-	-	2.3	4.1	(D)	1.2	373.4	10.4	(D)	6.2	17.9	2
27	PRINTING AND PUBLISHING	-	-	.4	.7	.7	.9	138.2	4.4	(S)	1.6	6.5	13
28	CHEMICALS, ALLIED PRODUCTS	(D)	(Z)	5.7	10.7	8.1	.5	1,276.7	28.7	(D)	19.0	50.9	7
29	PETROLEUM AND COAL PRODUCTS	-	-	3.7	6.5	-	(D)	149.6	4.4	-	4.5	9.8	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	2.2	3.9	.2	(D)	435.5	13.8	(D)	4.1	13.7	12
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	5.1	10.3	.8	(D)	374.4	11.2	-	14.4	28.5	4
33	PRIMARY METAL INDUSTRIES	(D)	(D)	48.7	87.5	3.8	6.7	4,618.5	131.1	(D)	140.1	401.1	2
34	FABRICATED METAL PRODUCTS	-	-	10.5	20.3	4.2	(D)	1,403.0	42.9	(D)	21.0	67.3	6
35	MACHINERY, EXCEPT ELECTRIC	-	-	5.5	10.5	1.8	(D)	1,030.2	33.4	(D)	12.7	45.9	7
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.6	1.1	(Z)	.4	76.0	2.7	-	1.2	4.1	19
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.5	-	.1	31.9	1.1	-	.3	1.5	29
39	MISC. MANUFACTURING INDUS.	-	-	.1	.2	(D)	(D)	40.3	1.3	-	.4	1.6	19
	DUBUQUE, IOWA	(D)	(D)	3.5	4.6	.5	(D)	245.1	6.2	(D)	6.4	11.7	2
	DULUTH-SUPERIOR, MINN.-WIS.	-	-	.7	1.2	.4	(D)	318.6	8.9	(Z)	5.1	14.5	12
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.1	(D)	(D)	43.2	1.3	-	.6	2.1	22
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(Z)	(D)	51.7	1.5	-	1.1	3.0	(X)
	EAU CLAIRE, WIS.	-	-	(S)	(S)	(S)	(D)	298.1	6.0	-	5.9	13.5	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	.7	1.5	(D)	(Z)	40.0	1.0	-	1.2	2.6	8
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	.1	18.5	.4	-	.3	1.0	(X)
	EL PASO, TEX.	(D)	(D)	(S)	(S)	(D)	(S)	541.6	13.6	(D)	15.3	32.7	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.6	(D)	(D)	56.7	1.5	-	.9	2.0	10
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.2	-	.2	50.4	1.2	-	.4	1.6	1
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	(D)	(D)	(D)	(S)	44.7	1.2	-	.8	1.8	(X)
	ELMIRA, N.Y.	(D)	(D)	3.0	5.7	.1	(D)	281.7	7.8	-	5.8	15.1	2
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.2	-	(Z)	69.1	1.9	-	1.3	3.3	1
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(Z)	.1	(D)	(D)	-	.5	1.3	(X)
	ERIE, PA.	(D)	(D)	6.8	13.5	1.1	(D)	593.6	17.8	313.8	21.4	39.7	4
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.8	(D)	(D)	45.5	1.1	-	.7	1.9	23
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.7	-	(D)	86.0	2.7	-	1.0	3.4	11
33	PRIMARY METAL INDUSTRIES	(D)	(D)	2.2	4.4	(D)	(D)	137.8	4.0	(D)	4.5	10.3	2
34	FABRICATED METAL PRODUCTS	-	-	.8	1.7	(D)	(D)	103.7	3.0	-	1.9	5.5	5
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	(S)	(S)	(Z)	(S)	55.4	1.8	-	.8	2.5	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(D)	(D)	37.4	1.2	-	.4	1.5	(X)
	EUGENE-SPRINGFIELD, OREG.	-	-	4.5	10.3	(D)	1.6	999.7	9.3	(D)	11.5	25.6	4
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.2	(D)	(D)	23.0	.3	-	.3	.8	41
24	LUMBER AND WOOD PRODUCTS	-	-	1.7	3.8	1.5	.3	460.8	5.5	(D)	6.6	15.4	9
28	CHEMICALS, ALLIED PRODUCTS	-	-	.6	1.3	-	(D)	43.1	.4	-	.9	1.7	1
	EVANSVILLE, IND.-KY.	-	-	7.1	10.1	(D)	(D)	6,678.7	97.4	(D)	41.4	99.7	2
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.2	(Z)	.4	99.6	2.4	-	1.2	2.9	34
25	FURNITURE AND FIXTURES	-	-	.1	.1	(Z)	(D)	16.9	.4	(Z)	.3	.8	34
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	.1	372.8	6.6	-	5.4	8.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.2	(Z)	.2	87.2	1.9	(D)	.7	2.3	8
34	FABRICATED METAL PRODUCTS	-	-	.4	.5	(D)	(D)	60.2	1.4	-	1.0	2.2	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.2	(D)	.1	42.5	1.0	-	1.0	1.7	9
	FALL RIVER, MASS.-R.I.	-	-	.9	2.5	(D)	(D)	205.5	7.5	(D)	4.9	15.8	5
22	TEXTILE MILL PRODUCTS	-	-	.5	1.4	(D)	(D)	69.6	2.6	(D)	2.9	8.1	6
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	.1	-	(D)	31.7	1.2	-	.3	1.3	20
	FARGO-MOORHEAD, N.DAK.-MINN.	-	-	(S)	(S)	(S)	(S)	71.9	1.9	(D)	4.3	5.4	(X)
	FAYETTEVILLE, N.C.	-	-	(S)	(S)	(S)	(S)	486.3	12.1	-	6.0	18.7	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(Z)	27.3	.8	-	1.3	3.0	(X)
	FAYETTEVILLE-SPRINGDALE, ARK.	-	-	2.3	3.0	.2	.6	320.8	6.7	-	3.7	8.1	5
20	FOOD AND KINDRED PRODUCTS	-	-	1.3	1.6	(D)	(D)	95.1	2.2	-	2.0	4.0	9
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(D)	53.4	1.1	-	.4	.9	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	FITCHBURG-LEOMINSTER, MASS.	7.5	32.0	6.1	14.8	160.1	2.8	683.1	9.4	-	-	32	3	(X)
22	TEXTILE MILL PRODUCTS	.1	.8	(Z)	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	4.3	12.7	4.0	8.4	(D)	(Z)	(D)	(D)	-	-	81	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.4	5.2	1.2	2.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.8	5.3	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	2.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	FLINT, MICH.	27.4	93.7	20.7	41.0	41.7	.7	(D)	(D)	292.2	10.1	8	(X)	1
20	FOOD AND KINDRED PRODUCTS	.4	1.3	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.0	7.9	1.4	2.4	-	-	-	-	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.6	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
	FLORENCE, ALA.	30.9	107.5	13.0	20.0	446.6	6.8	120.9	1.6	(D)	(D)	3	1	(X)
	FORT COLLINS, COLO.	4.7	7.7	4.2	4.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	FORT LAUDERDALE-HOLLYWOOD, FLA.	3.5	15.2	2.0	4.0	18.0	.3	(D)	(D)	-	-	13	(X)	(X)
27	PRINTING AND PUBLISHING	.3	1.4	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.2	1.0	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.3	2.2	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.1	.6	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
	FORT MYERS, FLA.	.3	1.5	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	FORT SMITH, ARK.-OKLA.	6.3	15.1	5.0	6.1	12.4	.2	-	-	-	-	3	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.6	3.2	1.4	1.7	(D)	(Z)	-	-	-	-	1	(X)	(X)
25	FURNITURE AND FIXTURES	.8	2.1	.6	.6	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.0	1.4	.9	1.1	-	-	-	-	-	-	(X)	(X)	(X)
	FORT WAYNE, IND.	20.4	56.7	16.6	29.2	120.6	1.9	479.9	6.8	(D)	(D)	22	6	(X)
20	FOOD AND KINDRED PRODUCTS	2.7	6.2	2.3	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	2.0	6.5	1.5	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	4.5	11.7	3.7	6.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.7	2.6	.5	.9	11.8	.2	(D)	(D)	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.1	3.5	.8	1.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.8	6.9	1.2	2.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	FRESNO, CALIF.	11.9	38.7	9.9	19.3	38.9	.6	308.4	3.3	-	-	12	1	(X)
20	FOOD AND KINDRED PRODUCTS	6.6	18.6	5.8	11.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.7	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	GADSDEN, ALA.	18.0	42.4	16.1	27.3	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
	GAINESVILLE, FLA.	.8	3.4	.6	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	GALVESTON-TEXAS CITY, TEX.	143.5	255.5	139.5	232.3	7.2	.1	-	-	-	-	8	(X)	(X)
	GARY-HAMMOND-EAST CHICAGO, IND.	286.9	692.0	261.3	501.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	6.1	11.3	5.7	8.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.4	3.8	1.2	2.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	12.9	47.0	7.7	12.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	3.4	9.5	2.7	4.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	10.7	18.4	10.1	14.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	244.0	577.5	227.0	448.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.7	12.7	3.9	6.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	1.5	.3	.5	(S)	(S)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	2.6	7.8	2.1	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	GRAND FORKS ND-MN.	9.8	7.3	9.5	5.8	20.7	.3	(D)	(D)	(D)	(D)	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	9.6	6.8	9.4	5.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	GRAND RAPIDS, MICH.	20.8	71.3	16.2	30.6	82.9	1.3	94.2	1.4	(D)	(D)	14	1	(X)
20	FOOD AND KINDRED PRODUCTS	1.5	4.9	1.2	2.2	(D)	(Z)	(D)	(D)	-	-	19	(X)	(X)
25	FURNITURE AND FIXTURES	1.8	6.8	1.3	2.6	(D)	(Z)	(D)	(D)	(D)	(Z)	1	(X)	1
26	PAPER AND ALLIED PRODUCTS	.7	1.9	.7	1.0	(S)	(S)	-	-	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.4	1.4	(S)	(S)	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.4	3.8	1.2	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.9	3.3	.7	1.2	-	-	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.2	3.0	1.1	1.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.6	8.7	2.1	4.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
34	FABRICATED METAL PRODUCTS	4.3	16.6	3.1	6.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	FITCHBURG-LEOMINSTER, MASS.	-	-	.8	2.2	(D)	(D)	413.4	17.2	(D)	7.4	27.6	20
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(S)	10.6	.5	-	.1	.7	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	100.1	4.3	(D)	4.5	12.0	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	67.3	2.6	-	1.1	3.6	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	-	.4	115.2	4.5	-	.6	4.2	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(Z)	(D)	52.5	2.2	-	.3	1.2	(X)
	FLINT, MICH.	(D)	(D)	7.3	15.3	(D)	1.6	1,974.3	52.7	(D)	27.2	87.1	4
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	23.5	.8	-	.3	1.0	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	-	(D)	182.8	5.4	-	2.1	7.5	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.3	.6	-	(Z)	32.0	1.0	-	.4	1.4	10
	FLORENCE, ALA.	-	-	9.0	10.9	.2	(D)	5,264.9	87.5	(D)	33.3	95.4	3
	FORT COLLINS, COLO.	(D)	(D)	1.6	1.9	(Z)	.5	157.1	3.4	(D)	4.1	5.8	5
	FORT LAUDERDALE-HOLLYWOOD, FLA.	-	-	(D)	(D)	1.6	1.7	417.4	11.2	-	2.7	11.8	(X)
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(S)	(S)	47.6	1.2	-	.2	1.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	-	-	-	(S)	28.5	.7	-	.2	.8	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	-	-	(Z)	(S)	67.1	2.1	-	.3	1.8	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.1	.5	(X)
	FORT MYERS, FLA.	-	-	-	-	.2	(D)	26.8	.8	-	.3	1.1	(X)
	FORT SMITH, ARK.-OKLA.	-	-	4.0	4.6	.4	1.0	377.9	9.0	-	6.5	13.0	5
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(S)	57.2	1.5	-	1.5	2.4	(X)
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(D)	(D)	53.8	1.5	-	.7	1.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.7	.8	-	.3	14.2	.3	-	1.5	1.9	1
	FORT WAYNE, IND.	-	-	7.7	12.2	2.3	(D)	1,126.2	27.4	(D)	19.5	44.5	3
20	FOOD AND KINDRED PRODUCTS	-	-	1.2	1.8	(D)	(D)	98.2	2.7	(D)	2.4	4.9	7
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	(D)	138.5	3.2	-	1.6	4.4	(X)
33	PRIMARY METAL INDUSTRIES	-	-	2.2	3.5	(D)	(D)	229.8	5.4	-	4.1	9.5	6
34	FABRICATED METAL PRODUCTS	-	-	.2	.4	.2	(D)	73.2	1.7	-	.7	2.1	24
35	MACHINERY, EXCEPT ELECTRIC	-	-	.5	.9	(D)	(D)	85.6	2.1	-	1.1	2.8	3
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(D)	(S)	180.5	4.5	-	1.9	5.6	(X)
	FRESNO, CALIF.	-	-	5.7	12.2	.7	2.5	587.3	19.4	(D)	12.7	29.5	2
20	FOOD AND KINDRED PRODUCTS	-	-	2.9	6.3	.3	1.6	229.2	7.4	(D)	6.4	13.7	2
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	-	(D)	24.3	.9	-	.5	1.3	(X)
	GADSDEN, ALA.	(S)	(S)	(D)	(D)	(D)	(S)	567.3	15.1	(D)	10.9	22.7	(X)
	GAINESVILLE, FLA.	-	-	.3	.4	.2	(D)	73.5	2.4	-	.9	3.0	4
	GALVESTON-TEXAS CITY, TEX.	-	-	135.9	231.5	(D)	(D)	1,172.6	23.2	(D)	148.3	236.4	1
	GARY-HAMMOND-EAST CHICAGO, IND.	(D)	(D)	104.3	156.8	7.2	7.3	7,514.0	190.6	2,762.6	296.0	585.8	1
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	106.4	2.7	(D)	5.9	8.0	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(Z)	64.1	1.8	-	1.3	2.7	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	6.1	8.8	(D)	(D)	1,526.5	34.9	(D)	13.0	36.8	1
29	PETROLEUM AND COAL PRODUCTS	-	-	2.4	3.7	(D)	(D)	197.5	5.3	(D)	3.7	7.6	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(Z)	(D)	181.1	4.3	-	10.5	14.8	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	81.7	123.1	6.6	6.7	5,000.8	128.9	(D)	253.7	497.5	1
34	FABRICATED METAL PRODUCTS	(D)	(Z)	(S)	(S)	(S)	(S)	224.3	6.3	-	4.2	8.8	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(S)	(S)	34.0	1.0	-	.3	1.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	1.5	2.2	(Z)	(D)	131.8	4.0	-	2.8	6.3	1
	GRAND FORKS ND-MN.	-	-	.3	.6	(D)	(D)	78.0	1.4	(D)	8.5	6.4	11
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	71.0	1.2	(D)	8.3	6.0	(X)
	GRAND RAPIDS, MICH.	(D)	(D)	12.0	22.4	.5	(D)	1,347.9	40.7	(D)	20.5	61.7	4
20	FOOD AND KINDRED PRODUCTS	(D)	(Z)	.9	1.7	-	(D)	91.9	2.7	(D)	1.5	4.1	4
25	FURNITURE AND FIXTURES	-	-	1.2	2.4	(Z)	(D)	131.2	4.2	-	2.0	5.8	15
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	22.5	.9	-	.8	1.6	(X)
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	-	(D)	30.8	1.0	-	.1	1.6	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	.7	1.1	-	(D)	56.0	1.6	(D)	1.3	3.3	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.4	.7	-	(D)	62.8	2.1	-	.7	2.5	20
32	STONE, CLAY, GLASS PRODUCTS	-	-	.6	1.1	(D)	(D)	38.5	1.1	-	1.1	2.4	22
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.2	2.3	-	(D)	150.9	4.3	-	2.3	7.1	9
34	FABRICATED METAL PRODUCTS	-	-	2.6	5.0	.1	(D)	350.2	10.5	(D)	4.8	14.7	7

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** –Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F	H	J
		A	B	C	D	E	F	G	H	I	J			
	GRAND RAPIDS, MICH--CON.													
35	MACHINERY, EXCEPT ELECTRIC	1.3	4.7	1.0	1.8	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.1	3.1	1.0	1.8	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.5	6.3	1.0	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.3	1.2	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.2	1.0	.2	.4	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
	GREAT FALLS, MONT.	2.4	4.5	2.0	3.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	GREELY, COLO.	4.7	8.0	4.1	4.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.3	4.1	2.1	2.6	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	GREEN BAY, WIS.	23.6	56.0	20.5	32.7	89.7	1.3	54.6	.7	387.4	15.0	16	1	1
20	FOOD AND KINDRED PRODUCTS	1.8	5.5	1.5	2.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	19.8	44.8	17.3	26.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.2	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	GREENSBORO-WINSTON-SALEM-HIGH POINT, N.C.	33.9	109.5	24.8	50.3	863.0	13.7	997.9	14.9	253.4	9.1	8	8	1
20	FOOD AND KINDRED PRODUCTS	2.3	7.5	1.7	3.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	11.2	39.8	7.5	17.0	252.8	4.0	665.4	10.1	(D)	(D)	24	11	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.9	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	2.1	9.0	1.3	3.0	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.6	1.9	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	1.2	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	.9	2.8	.8	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.4	11.4	3.8	7.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.9	2.8	.7	1.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.6	5.4	1.1	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	4.2	.4	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	GREENVILLE-SPARTANBURG, S.C.	37.8	128.9	24.6	51.7	344.4	5.3	1,713.4	24.4	59.5	2.3	4	1	1
20	FOOD AND KINDRED PRODUCTS	.6	2.1	.5	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	16.5	59.8	9.5	20.0	102.1	1.6	620.5	8.9	59.5	2.3	1	1	1
23	APPAREL, OTH. TEXTILE PRODS	2.7	7.3	2.3	4.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.3	.9	.2	.6	(D)	(D)	(D)	(Z)	-	-	(X)	96	(X)
26	PAPER AND ALLIED PRODUCTS	1.3	4.1	.9	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	9.1	29.4	6.3	13.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD	2.3	7.9	1.5	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.1	2.6	1.0	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.0	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.8	7.0	1.0	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.6	2.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	HAMILTON-MIDDLETOWN, OHIO.	36.5	98.1	30.6	58.3	(D)	(D)	(D)	(D)	353.4	12.6	(X)	(X)	1
26	PAPER AND ALLIED PRODUCTS	10.5	21.2	9.8	15.5	188.0	3.0	(D)	(D)	285.6	10.2	1	(X)	1
34	FABRICATED METAL PRODUCTS	1.2	4.8	.7	1.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.2	.8	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	HARRISBURG, PA.	19.3	71.0	14.4	34.2	597.5	9.0	666.9	9.7	.8	(Z)	3	1	1
20	FOOD AND KINDRED PRODUCTS	3.5	12.5	2.8	6.4	68.7	1.1	232.0	3.2	-	-	1	2	(X)
34	FABRICATED METAL PRODUCTS	1.0	2.9	.9	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.4	2.2	.2	.6	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	1.4	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.5	2.0	.3	.8	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	HARTFORD, CONN.	14.4	63.9	10.6	28.5	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.7	3.1	.5	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.8	2.4	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.8	6.3	1.5	3.9	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.3	2.0	.2	.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	.9	3.8	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.2	1.1	.1	.6	36.3	.6	-	-	-	-	54	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.3	2.1	.2	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.0	5.0	.8	2.1	45.2	.7	(D)	(D)	-	-	46	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.8	9.0	1.2	3.4	78.5	1.3	44.6	.7	-	-	20	1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	2.3	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.2	1.0	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	HONOLULU, HAWAII	5.8	22.2	4.5	9.2	80.9	1.2	434.0	5.7	-	-	15	2	(X)
20	FOOD AND KINDRED PRODUCTS	2.4	8.6	2.0	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	HOUSTON, TEX.	715.5	1,499.1	646.1	1,126.9	422.2	7.0	2,528.9	30.7	(D)	(D)	4	1	(X)
20	FOOD AND KINDRED PRODUCTS	9.0	25.5	7.5	16.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.0	.5	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	.6	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	16.1	31.6	14.0	20.7	-	-	(D)	(Z)	-	-	(X)	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	GRAND RAPIDS, MICH--CON.												
35	MACHINERY, EXCEPT ELECTRIC	-	-	.7	1.2	(D)	.4	90.4	2.9	-	1.4	4.8	16
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.9	1.7	(D)	(D)	44.0	1.3	-	1.3	3.1	4
37	TRANSPORTATION EQUIPMENT	-	-	.9	1.7	-	.1	155.7	4.3	-	1.3	5.6	1
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.3	-	(Z)	29.9	.9	-	.3	1.1	26
39	MISC. MANUFACTURING INDUS.	-	-	(S)	(S)	(D)	(S)	20.9	.6	-	.2	.6	(X)
	GREAT FALLS, MONT.	(D)	(D)	1.8	3.2	(Z)	(D)	112.7	1.1	(D)	2.4	4.1	4
	GREELY, COLO.	(D)	(D)	3.0	3.4	(Z)	.2	187.0	3.3	(D)	5.2	7.4	1
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	1.2	1.6	(Z)	.1	66.9	1.5	(D)	3.3	4.5	1
	GREEN BAY, WIS.	-	-	7.5	12.7	.6	2.4	904.5	23.3	(D)	25.4	51.3	3
20	FOOD AND KINDRED PRODUCTS	-	-	1.1	2.2	(D)	(D)	82.7	2.6	-	1.6	4.4	11
26	PAPER AND ALLIED PRODUCTS	-	-	5.8	9.3	(D)	(D)	738.9	17.9	(D)	22.3	42.6	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.3	-	(D)	24.7	.8	-	.3	1.1	1
	GREENSBORO-WINSTON-SALEM-HIGH POINT, N.C.	-	-	4.7	9.2	2.1	1.4	2,663.3	59.2	90.0	31.3	95.1	4
20	FOOD AND KINDRED PRODUCTS	-	-	.3	.7	.3	.2	157.8	3.6	-	2.4	7.2	13
22	TEXTILE MILL PRODUCTS	-	-	1.3	2.8	.4	(D)	1,107.4	22.7	(D)	10.2	34.2	10
24	LUMBER AND WOOD PRODUCTS	-	-	(Z)	(Z)	(Z)	.3	64.8	1.7	-	.9	3.3	60
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(D)	(S)	227.7	6.0	(D)	1.8	7.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(Z)	(Z)	(Z)	(D)	37.0	1.0	-	.5	1.4	1
27	PRINTING AND PUBLISHING	-	-	.1	.1	(D)	(D)	34.8	1.0	-	.2	1.0	72
28	CHEMICALS, ALLIED PRODUCTS	-	-	.1	.2	.1	(D)	44.1	1.2	(D)	.8	2.5	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.4	2.3	(D)	(D)	180.9	3.6	-	4.1	9.0	1
33	PRIMARY METAL INDUSTRIES	-	-	.3	.5	(D)	(D)	59.3	1.3	-	.9	2.7	6
34	FABRICATED METAL PRODUCTS	-	-	.6	1.2	.3	.2	128.2	3.1	-	1.3	4.3	3
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(D)	(D)	138.1	3.3	-	.8	3.7	23
	GREENVILLE-SPARTANBURG, S.C.	(D)	(D)	7.2	14.3	(D)	(D)	3,862.0	77.2	(D)	35.0	109.2	12
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.3	(Z)	(D)	47.2	1.2	-	.6	1.8	6
22	TEXTILE MILL PRODUCTS	-	-	2.3	4.9	1.4	.8	2,029.6	39.8	(D)	15.2	52.2	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	1.1	1.9	(D)	(D)	124.1	2.6	(D)	3.1	7.2	2
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(Z)	(S)	19.7	.3	-	.4	.9	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.1	.2	.1	(D)	106.0	2.4	-	1.2	3.6	13
28	CHEMICALS, ALLIED PRODUCTS	-	-	.6	1.1	-	(D)	832.3	16.1	-	7.8	22.0	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.4	.7	(D)	.1	234.5	4.7	(D)	1.8	5.7	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	.4	.8	(D)	(D)	30.6	.7	-	1.3	2.7	8
34	FABRICATED METAL PRODUCTS	-	-	.1	.3	(Z)	(D)	40.8	1.0	-	.6	1.8	5
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.3	.7	.2	.3	229.4	4.6	-	1.5	5.6	7
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.3	(Z)	(D)	96.5	2.0	-	.6	2.4	1
	HAMILTON-MIDDLETOWN, OHIO.	(D)	(D)	11.2	21.4	.7	1.1	1,720.9	39.8	184.9	46.2	100.8	1
26	PAPER AND ALLIED PRODUCTS	-	-	.5	.8	-	(D)	191.9	5.7	(D)	10.4	18.6	1
34	FABRICATED METAL PRODUCTS	(Z)	(Z)	.3	.5	-	(Z)	141.8	3.7	-	1.2	3.9	16
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	.1	(Z)	(D)	15.9	.5	-	.2	.9	1
	HARRISBURG, PA.	(D)	(D)	4.3	11.2	2.6	(D)	1,451.4	36.8	(D)	18.9	61.7	1
20	FOOD AND KINDRED PRODUCTS	-	-	.4	1.1	(S)	(S)	185.3	6.2	-	3.5	12.1	1
34	FABRICATED METAL PRODUCTS	-	-	.1	.3	.8	(D)	31.6	1.0	-	.4	1.3	14
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(D)	(S)	51.8	1.6	-	.4	1.6	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(Z)	(Z)	36.5	1.2	-	.2	1.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	(D)	40.9	1.2	-	.5	1.6	(X)
	HARTFORD, CONN.	(D)	(D)	(S)	(S)	(D)	(S)	1,122.4	35.4	(D)	14.2	61.0	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.6	(D)	(D)	60.1	1.7	-	.8	3.3	28
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	.1	19.6	.7	-	1.3	3.7	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	-	(S)	82.4	2.4	(D)	1.8	5.7	(X)
27	PRINTING AND PUBLISHING	-	-	.1	.2	-	(D)	41.9	1.4	-	.3	1.5	13
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	117.7	2.9	-	.7	3.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(D)	10.1	.4	(Z)	.4	2.1	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.1	.2	(D)	(D)	38.3	1.2	-	.1	1.3	50
34	FABRICATED METAL PRODUCTS	-	-	.3	.8	(Z)	(D)	78.5	2.9	-	1.0	4.8	16
35	MACHINERY, EXCEPT ELECTRIC	-	-	.5	1.5	(D)	(D)	161.1	5.6	(D)	1.9	8.3	14
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	-	.1	40.0	1.6	-	.4	2.0	17
38	INSTRUMENTS, RELATED PRODS	-	-	(S)	(S)	(S)	(S)	19.0	.7	-	.2	1.0	(X)
	HONOLULU, HAWAII	-	-	.5	.8	.7	.8	396.4	12.9	(D)	6.2	19.6	23
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	.3	(D)	140.2	4.8	(D)	2.8	7.5	(X)
	HOUSTON, TEX.	(D)	(D)	566.9	996.9	50.5	(D)	20,346.3	372.2	3,283.4	742.7	1,361.4	1
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	437.0	8.8	(D)	9.4	23.4	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.2	.3	(D)	(S)	(S)	(S)	-	.8	1.9	16
25	FURNITURE AND FIXTURES	-	-	(Z)	(Z)	(Z)	(S)	17.1	.4	-	.1	.4	50
26	PAPER AND ALLIED PRODUCTS	-	-	12.3	17.8	(D)	(D)	622.2	10.9	(D)	15.8	25.4	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	HOUSTON, TEX--CON.													
27	PRINTING AND PUBLISHING. . . .	.8	3.2	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	372.9	765.0	338.6	590.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS. . .	239.2	448.4	227.0	386.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.3	5.1	.7	1.3	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	13.7	29.8	12.5	22.6	99.8	1.8	(D)	(D)	(D)	(D)	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	40.9	120.8	29.8	57.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	9.4	29.8	7.2	15.5	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
35	MACHINERY, EXCEPT ELECTRIC . . .	7.8	26.4	5.3	10.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.6	7.0	.8	1.5	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.6	1.9	1.4	.9	3.5	.1	-	-	-	-	25	(X)	(X)
	HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO .	67.2	169.0	60.6	131.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.3	.8	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	12.5	22.2	10.9	13.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	2.7	6.6	2.3	4.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	46.2	122.9	43.4	106.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	HUNTSVILLE, ALA.	7.3	27.6	4.2	8.1	132.9	2.1	8.2	.2	(Z)	(Z)	1	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	1.2	3.3	1.0	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.4	2.2	.1	.4	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.5	1.6	.4	.7	(D)	(D)	-	-	(Z)	(Z)	(X)	(X)	1
34	FABRICATED METAL PRODUCTS. . . .	.4	1.2	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.8	3.2	.4	.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	.7	2.6	.4	1.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	INDIANAPOLIS, IND.	43.5	121.6	34.0	61.1	509.4	7.9	398.3	5.3	339.5	10.4	2	11	1
20	FOOD AND KINDRED PRODUCTS. . . .	5.6	13.0	4.7	7.4	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.6	1.4	.5	.8	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	87	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.9	2.9	.8	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.5	2.3	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	6.4	15.6	5.4	9.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.7	4.8	1.4	2.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	2.6	5.9	2.3	4.1	(S)	(S)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
33	PRIMARY METAL INDUSTRIES	4.4	14.9	3.6	9.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	3.2	8.7	2.7	5.1	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	2.6	8.5	1.9	3.3	37.5	.6	6.1	.1	(D)	(D)	9	8	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.9	8.1	2.1	3.2	68.1	1.1	-	-	(D)	(D)	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	9.9	28.7	7.0	11.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	JACKSON, MICH.	6.4	22.9	5.1	10.4	24.3	.4	77.7	1.1	-	-	4	1	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.3	4.3	1.2	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.2	4.3	1.0	2.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.8	3.1	.6	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	JACKSON, MISS.	9.5	25.3	8.0	12.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.1	3.5	.8	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	5.9	10.5	5.6	7.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	JACKSONVILLE, FLA.	34.5	95.3	31.2	61.7	276.4	4.3	3,478.8	45.2	-	-	9	1	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	3.3	12.6	2.6	5.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.7	.3	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	21.6	51.6	20.7	42.2	7.1	.1	3,146.0	40.5	-	-	1	1	(X)
27	PRINTING AND PUBLISHING.	.2	1.2	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	2.4	5.6	2.2	3.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	3.0	7.8	2.8	4.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.6	2.9	.4	.8	-	-	(D)	(Z)	-	-	(X)	1	(X)
	JERSEY CITY, N.J..	23.8	80.1	20.2	46.2	651.8	10.2	1,217.2	18.5	-	-	7	10	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	5.3	16.4	4.7	11.2	160.0	2.5	402.7	6.1	-	-	5	11	(X)
22	TEXTILE MILL PRODUCTS.	1.2	3.6	1.0	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.7	3.6	(S)	(S)	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.2	1.0	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	6.5	19.6	5.7	11.9	135.3	2.1	271.0	4.3	-	-	17	5	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.4	2.4	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.1	.6	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.8	1.9	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.7	2.8	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.7	2.8	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.3	4.8	1.0	2.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.3	1.4	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	JOHNSON CITY-KINGSPORT-BRISTOL,TN-VA	69.7	96.5	66.0	74.1	(D)	(D)	(D)	(D)	2,092.5	54.0	(X)	(X)	1
20	FOOD AND KINDRED PRODUCTS. . . .	.6	1.9	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	1.3	5.1	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.1	.6	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	52.0	56.9	51.5	53.4	(D)	(D)	-	-	1,799.6	46.5	(X)	(X)	1
30	RUBBER, MISC. PLASTICS PROD. . .	.5	1.4	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	6.5	11.4	6.0	7.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	HOUSTON, TEX--CON.												
27	PRINTING AND PUBLISHING. . . .	-	-	(S)	(S)	(S)	(S)	115.5	2.6	-	.7	2.9	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	292.6	514.5	(S)	(S)	10,069.9	174.3	(D)	400.1	684.4	1
29	PETROLEUM AND COAL PRODUCTS. .	-	-	218.9	380.1	-	(D)	3,576.5	62.3	(D)	242.3	449.7	1
30	RUBBER, MISC. PLASTICS PROD. .	-	-	.4	.8	(Z)	.5	156.7	3.8	(D)	1.0	3.7	19
32	STONE, CLAY, GLASS PRODUCTS. .	4.8	.2	10.5	18.7	.4	1.3	340.2	7.2	-	16.8	25.6	2
33	PRIMARY METAL INDUSTRIES . . .	(D)	(D)	12.6	24.0	(D)	(D)	3,274.8	63.3	-	36.1	90.4	1
34	FABRICATED METAL PRODUCTS. . .	(D)	(D)	6.4	14.0	(D)	(D)	631.1	14.3	(D)	6.5	18.3	15
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	(S)	(S)	(D)	1.5	736.2	15.5	(D)	11.5	30.2	(X)
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.5	1.1	(D)	(D)	240.0	5.5	-	.5	1.9	1
37	TRANSPORTATION EQUIPMENT . . .	-	-	(D)	(D)	-	(D)	36.6	1.1	-	.4	1.3	(X)
	HUNTINGTON-ASHLAND, W.VA.-KY.-OHIO .	(D)	(D)	16.5	27.4	6.8	(S)	1,943.3	37.4	(D)	73.2	155.8	1
20	FOOD AND KINDRED PRODUCTS. . .	-	-	(S)	(S)	(D)	(S)	13.6	.3	-	.2	.4	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	2.6	4.3	(D)	.2	473.6	8.5	-	11.5	18.2	1
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	1.3	2.3	(Z)	(D)	105.7	2.2	-	5.9	7.5	7
33	PRIMARY METAL INDUSTRIES . . .	(D)	(D)	(D)	(D)	(D)	(S)	812.6	16.4	(D)	49.9	116.9	(X)
	HUNTSVILLE, ALA.	(D)	(Z)	2.6	4.3	.8	.6	902.4	19.6	(D)	7.2	23.1	16
20	FOOD AND KINDRED PRODUCTS. . .	-	-	.8	1.1	(D)	.1	72.4	1.6	-	1.3	2.7	6
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	(Z)	90.7	1.9	-	.5	2.0	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	.1	.2	(Z)	(D)	50.8	1.0	-	.5	1.5	1
34	FABRICATED METAL PRODUCTS. . .	-	-	.1	.2	(D)	(D)	34.0	.6	-	.4	1.1	1
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.1	.3	(D)	(Z)	116.3	2.4	-	.7	2.7	1
37	TRANSPORTATION EQUIPMENT . . .	-	-	(S)	(S)	-	(S)	84.8	1.6	-	.6	2.0	(X)
	INDIANAPOLIS, IND.	(D)	(D)	12.1	19.3	(D)	(S)	2,767.6	60.4	8.9	42.1	101.4	8
20	FOOD AND KINDRED PRODUCTS. . .	-	-	.9	1.6	(D)	(S)	249.6	5.6	(D)	6.3	12.2	5
24	LUMBER AND WOOD PRODUCTS . . .	-	-	.2	.4	(D)	(D)	26.7	.6	-	.6	1.2	26
26	PAPER AND ALLIED PRODUCTS. . .	-	-	.2	.3	.9	(Z)	55.9	1.3	(D)	.9	2.4	26
27	PRINTING AND PUBLISHING. . . .	-	-	.1	.1	-	.3	69.6	1.7	-	.6	2.3	13
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	(S)	(S)	(S)	(S)	265.8	5.9	(D)	6.0	13.5	(X)
30	RUBBER, MISC. PLASTICS PROD. .	-	-	(S)	(S)	(D)	(S)	103.3	2.4	-	1.5	3.4	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(S)	(S)	(S)	(S)	90.8	1.9	-	2.6	4.9	(X)
33	PRIMARY METAL INDUSTRIES . . .	(D)	(D)	1.3	2.2	.7	(D)	244.5	5.4	-	4.5	12.2	2
34	FABRICATED METAL PRODUCTS. . .	-	-	(S)	(S)	(S)	(S)	147.6	3.6	-	2.9	7.3	(X)
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	.9	1.4	.7	(D)	221.0	5.2	-	2.3	6.5	9
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.2	.5	.3	(D)	236.9	4.9	(D)	3.7	8.9	7
37	TRANSPORTATION EQUIPMENT . . .	-	-	1.9	3.1	(D)	(D)	847.3	17.6	(D)	9.4	23.5	10
	JACKSON, MICH.	-	-	3.3	6.9	(D)	(D)	382.2	12.5	(D)	6.4	21.4	6
34	FABRICATED METAL PRODUCTS. . .	-	-	.6	1.2	-	.7	48.6	1.9	-	1.8	5.2	26
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	(S)	(S)	-	(S)	68.1	2.3	-	1.1	4.2	(X)
37	TRANSPORTATION EQUIPMENT . . .	-	-	.5	1.1	(D)	(D)	52.0	1.8	(D)	.7	2.7	20
	JACKSON, MISS.	(D)	(D)	(S)	(S)	(S)	(S)	446.7	13.3	-	9.0	19.4	(X)
20	FOOD AND KINDRED PRODUCTS. . .	-	-	1.2	2.1	(D)	(D)	64.1	2.1	-	1.2	2.9	45
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(S)	(S)	(D)	(S)	88.4	2.7	-	5.6	7.7	(X)
	JACKSONVILLE, FLA.	(D)	(Z)	5.7	8.5	2.7	1.1	943.0	33.6	(D)	34.3	80.0	3
20	FOOD AND KINDRED PRODUCTS. . .	(D)	(Z)	.6	.9	(D)	(D)	201.8	7.3	(D)	3.2	11.0	2
24	LUMBER AND WOOD PRODUCTS . . .	-	-	-	-	(D)	(D)	21.9	.8	-	.1	.6	(X)
26	PAPER AND ALLIED PRODUCTS. . .	-	-	(D)	(D)	(D)	.1	252.5	9.4	(D)	23.9	48.8	(X)
27	PRINTING AND PUBLISHING. . . .	-	-	(D)	(D)	(Z)	(Z)	43.7	1.0	-	.1	.8	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	(D)	(D)	(D)	(D)	62.0	2.1	-	2.1	3.7	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(S)	(S)	(S)	(S)	81.2	2.9	-	2.3	5.0	(X)
34	FABRICATED METAL PRODUCTS. . .	-	-	.4	.7	.1	.1	53.8	2.1	-	.5	2.4	1
	JERSEY CITY, N.J..	-	-	5.5	12.0	2.2	3.3	1,050.2	33.9	(D)	24.6	74.9	5
20	FOOD AND KINDRED PRODUCTS. . .	-	-	1.0	2.0	(D)	(D)	155.0	5.3	-	5.7	16.4	23
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	(Z)	1.1	53.9	1.5	-	1.2	3.3	(X)
26	PAPER AND ALLIED PRODUCTS. . .	-	-	(D)	(D)	(D)	(S)	(S)	(S)	(D)	.7	3.1	(X)
27	PRINTING AND PUBLISHING. . . .	-	-	(D)	(D)	-	(D)	22.9	.7	-	.1	.7	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	1.3	2.6	(D)	(D)	230.5	7.7	(D)	5.7	15.1	2
30	RUBBER, MISC. PLASTICS PROD. .	-	-	(S)	(S)	-	(S)	67.0	1.7	-	(S)	(S)	(X)
31	LEATHER, LEATHER PRODUCTS. . .	-	-	(D)	(D)	-	(Z)	15.4	.4	-	.1	.5	(X)
33	PRIMARY METAL INDUSTRIES . . .	-	-	(S)	(S)	(D)	(S)	(S)	(S)	(D)	.9	2.9	(X)
34	FABRICATED METAL PRODUCTS. . .	-	-	.3	.7	(D)	.3	42.4	1.5	-	.7	2.6	11
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	.1	.2	-	.1	42.8	1.6	(D)	.8	2.8	46
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.5	1.0	(D)	(D)	78.8	2.7	-	1.2	4.2	5
39	MISC. MANUFACTURING INDUS. . .	-	-	(D)	(D)	-	(D)	25.7	.8	(Z)	.3	1.3	(X)
	JOHNSON CITY-KINGSPORT-BRISTOL,TN-VA	-	-	(D)	(D)	1.2	(D)	1,064.9	22.5	1,036.3	66.4	81.9	(X)
20	FOOD AND KINDRED PRODUCTS. . .	-	-	(D)	(D)	(D)	(D)	49.0	.9	-	.5	1.5	(X)
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	(Z)	(D)	163.8	3.4	-	1.5	4.9	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	-	(D)	16.9	.4	-	.1	.5	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	(D)	(D)	(D)	(D)	167.3	3.4	912.1	49.0	47.3	(X)
30	RUBBER, MISC. PLASTICS PROD. .	-	-	(D)	(D)	(D)	(D)	28.7	.5	-	.3	.9	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(D)	(D)	.5	(D)	156.3	3.6	-	6.7	10.8	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	JOHNSON CITY-KINGSPORT-BRISTOL, TN.-VA.--CON.													
33	PRIMARY METAL INDUSTRIES	.7	2.3	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.5	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.5	2.1	.2	.4	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.6	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	JOHNSTOWN, PA.	10.9	29.9	9.3	17.4	(D)	(D)	(D)	(D)	7.7	.2	(X)	(X)	20
	KALAMAZOO-PORTAGE, MICH.	22.4	66.0	19.4	40.2	44.7	.7	1,065.5	15.4	(D)	(D)	18	1	(X)
20	FOOD AND KINDRED PRODUCTS	.9	2.7	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	12.9	33.0	12.1	25.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	.7	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.3	1.9	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.6	5.3	1.4	3.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.9	4.6	.4	.9	(D)	(Z)	(D)	(D)	-	-	94	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.5	1.8	.3	.7	(D)	(Z)	-	-	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.8	2.8	.6	1.4	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	KANKAKEE, ILL.	6.4	17.5	5.4	10.2	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.8	4.8	1.5	2.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.0	4.7	1.8	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.1	.7	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.2	.6	(D)	(D)	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.3	3.4	1.2	2.2	-	-	-	-	(D)	(D)	(X)	(X)	(X)
	KANSAS CITY, MO.-KANS.	65.4	154.0	53.6	72.8	435.7	6.6	949.9	12.4	(D)	(D)	2	1	(X)
20	FOOD AND KINDRED PRODUCTS	8.2	19.1	7.1	10.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	.9	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	2.0	5.1	1.7	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	1.0	4.5	.5	.8	(D)	(D)	(D)	(Z)	-	-	(X)	23	(X)
28	CHEMICALS, ALLIED PRODUCTS	5.0	12.0	4.1	5.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	12.2	17.3	11.5	12.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	12.3	23.0	10.9	13.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.5	11.9	3.4	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.3	4.7	1.0	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.8	6.6	1.1	1.6	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	KENOSHA, WIS.	4.6	14.8	3.6	7.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	KILLEEN-TEMPLE, TEX.	2.7	8.3	2.2	5.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	KNOXVILLE, TENN.	33.6	87.5	18.5	28.0	298.8	4.5	(D)	(D)	235.2	5.7	2	(X)	1
20	FOOD AND KINDRED PRODUCTS	1.3	3.6	1.1	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.4	1.2	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.6	2.0	.4	.7	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	3.6	5.7	3.3	4.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.7	1.7	.6	1.1	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	KOKOMO, IN	10.2	30.1	7.3	12.7	22.8	.4	(D)	(D)	(D)	(D)	6	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.2	.6	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.4	1.0	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.3	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	LA CROSSE, WIS.	2.4	6.0	2.0	3.1	14.5	.2	31.2	.4	(D)	(D)	6	1	(X)
	LAFAYETTE, LA.	.5	1.7	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.4	1.2	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	LAFAYETTE-WEST LAFAYETTE, IND.	10.6	24.6	8.6	13.9	200.6	3.0	195.0	2.5	(D)	(D)	1	1	(X)
20	FOOD AND KINDRED PRODUCTS	3.2	8.3	2.6	5.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	LAKE CHARLES, LA.	140.0	196.7	132.5	161.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	LAKELAND-WINTER HAVEN, FLA.	19.0	66.1	13.1	23.1	270.5	3.9	720.5	8.8	-	-	5	1	(X)
20	FOOD AND KINDRED PRODUCTS	5.9	14.0	5.0	7.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	11.1	46.3	6.5	12.7	139.5	2.2	478.5	5.9	-	-	2	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.2	2.6	1.1	1.7	(S)	(S)	-	-	-	-	(X)	(X)	(X)
	LANCASTER, PA.	17.4	62.3	13.6	32.3	582.4	9.6	392.7	5.6	83.8	3.0	9	6	1
20	FOOD AND KINDRED PRODUCTS	2.0	8.3	1.6	4.3	145.5	2.5	48.7	.7	(D)	(D)	15	1	(X)
22	TEXTILE MILL PRODUCTS	.9	3.1	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	JOHNSON CITY-KINGSPORT-BRISTOL, TN.-VA.--CON.												
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	(D)	(D)	57.7	1.3	-	.6	1.7	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	.2	(D)	96.0	2.0	-	.6	2.4	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	-	(D)	90.3	1.7	-	.5	2.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(D)	46.7	1.0	-	.1	.7	(X)
	JOHNSTOWN, PA.	(D)	(Z)	6.3	11.2	1.0	1.3	474.4	12.4	(D)	10.6	24.1	1
	KALAMAZOO-PORTAGE, MICH.	(D)	(D)	9.5	19.1	.3	.8	887.6	25.7	(D)	22.5	55.5	3
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	35.7	1.2	-	1.0	2.4	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	5.5	10.9	-	(D)	246.3	7.4	(D)	13.4	27.7	1
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	-	(S)	15.5	.5	-	.2	.6	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.3	-	(D)	46.4	1.5	-	.3	1.6	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.2	2.4	(D)	(D)	42.6	1.5	-	1.3	3.2	17
34	FABRICATED METAL PRODUCTS	-	-	.4	.8	(Z)	(D)	151.5	3.8	-	1.0	4.5	12
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.4	(D)	(D)	37.1	1.1	-	.5	1.7	17
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	(Z)	46.0	1.4	-	.7	2.3	(X)
	KANKAKEE, ILL.	-	-	(S)	(S)	(S)	(S)	278.8	7.3	-	6.1	14.2	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	1.5	2.7	(D)	(D)	86.6	2.1	-	1.9	4.1	2
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.6	3.0	-	-	63.6	1.5	-	2.0	3.8	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	(Z)	(D)	(D)	-	.1	.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(Z)	(D)	(D)	-	.2	.6	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.1	2.1	-	(D)	45.0	1.2	-	1.4	3.0	1
	KANSAS CITY, MO.-KANS.	(D)	(D)	37.1	42.1	3.6	5.5	3,436.6	81.2	155.3	62.9	121.7	1
20	FOOD AND KINDRED PRODUCTS	-	-	4.6	5.6	.2	.7	317.0	8.5	(D)	7.9	15.6	3
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	-	(D)	(S)	(S)	-	.3	.6	29
26	PAPER AND ALLIED PRODUCTS	-	-	1.2	1.5	.2	(D)	96.8	2.7	(D)	2.0	4.0	2
27	PRINTING AND PUBLISHING	-	-	.4	.5	(Z)	(D)	149.6	3.7	-	1.0	3.9	19
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.2	2.3	(D)	(D)	252.7	6.2	(D)	4.9	10.2	1
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	205.7	4.7	(D)	10.9	11.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	7.0	7.5	.8	(D)	430.0	9.9	-	12.3	17.5	1
34	FABRICATED METAL PRODUCTS	-	-	2.3	2.8	(D)	(D)	312.0	6.9	(D)	4.4	9.3	9
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.5	.6	(Z)	.6	91.0	2.9	-	1.4	4.1	24
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(D)	(S)	208.5	5.0	-	1.9	5.3	(X)
	KENOSHA, WIS.	-	-	1.9	4.0	(D)	(D)	296.1	7.1	(D)	5.3	13.2	2
	KILLEEN-TEMPLE, TEX.	(D)	(D)	1.4	2.4	(D)	.2	152.1	3.1	-	2.2	6.1	5
	KNOXVILLE, TENN.	-	-	7.5	12.4	1.7	(D)	4,434.5	59.5	(D)	32.7	84.9	10
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.7	.2	.7	69.1	1.6	-	1.2	2.9	8
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	34.2	.7	-	.4	1.2	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.2	.3	(D)	(D)	57.5	1.3	-	.5	1.7	5
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(D)	83.7	1.7	-	3.3	5.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	.3	.6	.5	(D)	22.9	.6	(D)	.6	1.6	8
	KOKOMO, IN	(D)	(D)	5.6	9.0	.4	(D)	842.9	17.4	-	10.2	24.3	9
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	(S)	(S)	-	.1	.3	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.8	1.5	(Z)	(D)	5.1	.2	-	.6	.9	54
34	FABRICATED METAL PRODUCTS	-	-	.2	.3	(Z)	(D)	23.7	.6	-	.3	.9	1
	LA CROSSE, WIS.	(D)	(D)	.9	1.2	.3	(D)	119.7	2.9	(S)	2.4	6.2	9
	LAFAYETTE, LA.	-	-	.3	.5	(D)	(D)	38.7	1.0	-	1.2	2.3	11
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.3	(D)	(D)	25.8	.7	-	1.1	1.9	8
	LAFAYETTE-WEST LAFAYETTE, IND.	-	-	3.3	5.0	.9	(D)	560.7	10.7	-	9.4	19.1	3
20	FOOD AND KINDRED PRODUCTS	-	-	.9	1.3	(Z)	(Z)	177.4	3.2	-	2.7	5.9	1
	LAKE CHARLES, LA.	-	-	95.2	87.2	48.4	(D)	2,186.5	35.6	(D)	152.3	174.0	1
	LAKELAND-WINTER HAVEN, FLA.	(D)	(D)	5.2	6.5	.5	(D)	1,734.2	43.0	(D)	14.9	52.7	25
20	FOOD AND KINDRED PRODUCTS	-	-	2.9	3.5	(D)	(D)	272.1	6.3	(D)	4.1	10.4	44
28	CHEMICALS, ALLIED PRODUCTS	(D)	(D)	1.1	1.2	(Z)	(D)	1,364.8	33.6	(Z)	8.9	37.0	2
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(S)	(S)	29.5	.9	-	1.1	2.3	(X)
	LANCASTER, PA.	(D)	(D)	4.4	11.6	1.7	(D)	1,102.6	30.0	(S)	16.9	54.1	4
20	FOOD AND KINDRED PRODUCTS	-	-	.5	1.2	.2	(D)	138.5	4.0	-	1.8	7.1	20
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	(D)	51.4	1.3	-	.9	2.6	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	LANCASTER, PA--CON.													
23	APPAREL, OTH. TEXTILE PRODS.	.3	1.3	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.3	1.8	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.8	12.6	3.2	7.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	1.7	7.6	1.2	3.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.8	3.9	.5	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	3.5	.5	1.0	3.1	.1	(D)	(D)	(D)	(D)	1	(X)	(X)
	LANSING-EAST LANSING, MICH.	18.7	57.7	15.2	31.1	227.0	3.4	58.2	.8	(D)	(D)	11	3	(X)
20	FOOD AND KINDRED PRODUCTS.	.8	2.7	.7	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.1	.5	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.1	3.4	.9	1.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.9	3.4	.7	1.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	LAREDO, TEX.	.2	.9	.2	.5	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	LAS VEGAS, NEV.	10.2	19.0	7.7	11.6	100.5	1.6	(D)	(D)	(D)	(D)	13	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	3.9	6.4	3.8	4.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	LAWRENCE, KS	11.3	18.7	10.6	13.0	21.0	.3	(D)	(D)	-	-	1	(X)	(X)
	LAWRENCE-HAVERHILL, MASS.-N.H.	9.1	34.8	7.5	16.6	65.6	1.1	627.0	8.5	-	-	43	16	(X)
20	FOOD AND KINDRED PRODUCTS.	.4	1.5	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.4	2.1	.3	.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS.	.4	1.4	.3	.6	-	-	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	.5	2.2	.4	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.4	.3	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.3	8.7	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	LAWTON, OKLA.	.2	.7	.1	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	LEWISTON-AUBURN, MAINE	2.5	8.8	2.0	5.0	25.2	.5	253.0	3.5	-	-	53	1	(X)
	LEXINGTON-FAYETTE, KY.	6.4	21.1	4.7	10.0	(D)	(D)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	.3	1.4	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
21	TOBACCO PRODUCTS	.5	1.6	.5	1.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	.4	1.4	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
	LIMA, OHIO	28.8	73.3	24.2	46.3	384.0	6.2	213.1	3.1	64.9	2.6	1	1	1
20	FOOD AND KINDRED PRODUCTS.	2.5	5.8	2.2	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	.7	2.5	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.2	3.4	.9	1.6	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	2.0	7.0	1.1	2.1	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	LINCOLN, NEBR.	4.9	11.8	4.1	6.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	2.4	5.1	2.1	3.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	LITTLE ROCK-NORTH LITTLE ROCK, ARK.	35.2	58.4	33.7	45.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS.	1.0	3.3	.7	1.0	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING.	.2	1.0	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.7	2.4	.5	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
	LONG BRANCH-ASBURY PARK, N.J.	9.3	33.0	7.7	18.1	443.1	6.9	343.1	5.2	-	-	4	37	(X)
28	CHEMICALS, ALLIED PRODUCTS	.7	2.8	.6	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.5	2.5	.4	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.7	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	LONGVIEW, TEX.	45.8	32.6	43.5	19.5	44.9	.7	(D)	(D)	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS.	1.0	1.9	.9	1.5	-	-	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.5	2.6	.2	.6	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	1.5	3.8	1.3	2.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.2	.6	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
	LORAIN-ELYRIA, OHIO.	31.5	90.7	25.7	53.0	414.7	6.8	428.4	7.1	112.6	3.9	1	1	1
28	CHEMICALS, ALLIED PRODUCTS	3.9	10.3	2.8	4.9	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS.	2.2	7.6	1.6	3.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.5	2.0	.3	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	LANCASTER, PA--CON.												
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	(Z)	-	(S)	21.0	.7	-	.4	1.2	1
27	PRINTING AND PUBLISHING.	-	-	(Z)	.1	(Z)	(Z)	42.1	1.4	(D)	.3	1.6	1
33	PRIMARY METAL INDUSTRIES	-	-	1.6	4.3	(D)	(D)	185.6	4.7	-	3.8	10.9	7
34	FABRICATED METAL PRODUCTS.	(D)	(D)	.6	1.6	(D)	(D)	141.6	3.8	(D)	1.5	5.8	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.4	.4	(D)	76.5	2.4	-	.7	3.0	12
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(Z)	(D)	99.1	2.5	-	.8	2.9	(X)
	LANSING-EAST LANSING, MICH.	(D)	(D)	8.9	18.1	(D)	(D)	1,008.6	26.5	-	18.6	51.4	7
20	FOOD AND KINDRED PRODUCTS.	-	-	(S)	(S)	(Z)	(S)	(S)	(S)	-	.6	1.4	(X)
27	PRINTING AND PUBLISHING.	-	-	(D)	(D)	-	(D)	14.4	.3	-	.4	1.0	(X)
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	-	(D)	54.5	1.6	-	1.0	2.9	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.6	1.1	(Z)	(D)	66.8	2.2	-	.7	2.7	14
	LAREDO, TEX.	(D)	(D)	(D)	(D)	-	.1	15.0	.4	-	.3	1.1	(X)
	LAS VEGAS, NEV.	-	-	4.4	6.4	(D)	(D)	721.8	7.4	(D)	10.7	18.9	1
32	STONE, CLAY, GLASS PRODUCTS.	-	-	1.9	2.8	(D)	(D)	55.5	1.5	(Z)	4.1	5.8	1
	LAWRENCE, KS	-	-	9.4	11.1	-	(D)	227.7	5.8	2.4	11.7	15.3	1
	LAWRENCE-HAVERHILL, MASS.-N.H.	-	-	.8	2.2	3.2	1.5	472.6	18.3	(D)	7.3	26.9	4
20	FOOD AND KINDRED PRODUCTS.	-	-	(D)	(D)	-	(D)	19.9	.8	-	.3	1.0	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.1	(Z)	(D)	36.6	1.5	-	.5	2.2	M
31	LEATHER, LEATHER PRODUCTS.	-	-	(Z)	(Z)	-	(D)	23.4	.8	-	.3	1.3	1
34	FABRICATED METAL PRODUCTS.	-	-	(S)	(S)	-	(S)	32.8	1.2	-	.4	1.8	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	-	(D)	16.0	.8	-	.3	1.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(D)	.2	177.8	7.1	-	1.3	7.5	1
	LAWTON, OKLA.	-	-	(Z)	(Z)	(Z)	(D)	15.6	.4	-	.3	1.0	20
	LEWISTON-AUBURN, MAINE	-	-	.5	1.4	(D)	(D)	151.8	3.7	(D)	1.7	5.3	72
	LEXINGTON-FAYETTE, KY.	-	-	(S)	(S)	(S)	(S)	474.5	11.2	-	5.9	16.0	(X)
20	FOOD AND KINDRED PRODUCTS.	-	-	.1	.2	(Z)	(Z)	33.4	.9	-	.3	.6	1
21	TOBACCO PRODUCTS	-	-	(D)	(D)	-	(D)	22.7	.6	-	.4	1.1	(X)
34	FABRICATED METAL PRODUCTS.	-	-	(D)	(D)	(D)	(Z)	34.3	.9	-	.2	.7	(X)
	LIMA, OHIO	(D)	(D)	16.5	30.8	(D)	3.1	1,337.4	27.0	(D)	23.2	54.0	1
20	FOOD AND KINDRED PRODUCTS.	(D)	(D)	.4	.9	(Z)	(D)	66.6	1.7	-	2.7	5.4	5
34	FABRICATED METAL PRODUCTS.	-	-	(D)	(D)	(Z)	(Z)	51.5	1.5	-	.7	2.1	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.4	(D)	(D)	63.0	1.8	-	.9	2.7	8
37	TRANSPORTATION EQUIPMENT	-	-	.5	1.1	(D)	(D)	244.1	4.9	-	1.8	5.9	1
	LINCOLN, NEBR.	-	-	(S)	(S)	(S)	(S)	233.9	5.6	(D)	4.8	10.5	(X)
20	FOOD AND KINDRED PRODUCTS.	-	-	1.4	1.8	(D)	(D)	83.1	1.8	(D)	2.7	5.4	1
	LITTLE ROCK-NORTH LITTLE ROCK, ARK.	-	-	(S)	(S)	(S)	(S)	452.1	12.8	(D)	37.1	45.5	(X)
20	FOOD AND KINDRED PRODUCTS.	-	-	.5	.5	(D)	(D)	91.2	2.4	-	.9	2.6	9
27	PRINTING AND PUBLISHING.	-	-	.1	.1	-	.1	28.5	.8	-	.2	.8	47
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(Z)	(S)	60.8	1.8	-	.4	1.5	(X)
	LONG BRANCH-ASBURY PARK, N.J.	-	-	2.5	5.2	.5	.2	461.6	14.9	(D)	8.2	24.3	2
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	43.9	1.4	-	.8	3.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.2	(D)	.2	52.3	1.7	-	.3	1.7	14
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	.1	(D)	(D)	31.3	1.1	-	.4	1.4	1
	LONGVIEW, TEX.	(D)	(D)	42.0	18.1	.2	.1	676.8	13.1	(D)	44.0	26.4	3
32	STONE, CLAY, GLASS PRODUCTS.	-	-	(S)	(S)	-	(S)	18.7	.4	-	1.0	1.3	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(Z)	(D)	88.4	2.1	-	.5	1.9	(X)
34	FABRICATED METAL PRODUCTS.	-	-	1.1	1.7	(Z)	(D)	81.1	1.6	-	1.6	3.1	4
37	TRANSPORTATION EQUIPMENT	-	-	.1	.2	(Z)	(Z)	22.5	.4	-	.2	.4	1
	LORAIN-ELYRIA, OHIO.	(D)	(D)	11.4	23.4	2.5	(D)	1,695.8	37.7	(D)	25.5	64.5	3
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	.1	326.0	5.4	-	4.0	8.9	(X)
34	FABRICATED METAL PRODUCTS.	-	-	.5	1.1	.2	(D)	175.5	4.4	-	2.2	6.1	6
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.4	-	(D)	42.9	1.2	-	.6	1.8	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	LOS ANGELES-LONG BEACH, CALIF.	215.1	737.6	164.8	287.2	613.6	9.0	419.5	5.8	(D)	(D)	15	7	(X)
20	FOOD AND KINDRED PRODUCTS	15.6	51.8	12.4	22.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	3.8	10.6	3.3	5.9	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
23	APPAREL, OTH. TEXTILE PRODS.	2.4	11.8	1.4	2.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.4	5.7	1.0	1.8	-	-	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	2.3	10.0	1.5	2.7	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	9.9	31.1	8.1	14.7	87.5	1.3	(D)	(D)	-	-	1	(X)	(X)
27	PRINTING AND PUBLISHING	3.6	16.8	2.2	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	20.0	66.4	15.4	26.9	114.6	1.5	(D)	(D)	-	-	1	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	55.0	156.0	45.3	76.7	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	9.1	37.2	8.3	11.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	24.8	56.7	22.4	35.9	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	17.6	59.4	14.2	28.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	16.8	59.4	12.6	21.0	12.9	.2	(D)	(Z)	-	-	1	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	6.4	29.7	4.0	7.0	(D)	(D)	(D)	(Z)	-	-	(X)	81	(X)
36	ELECTRIC, ELECTRONIC EQUIP	7.2	33.8	4.5	7.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	15.6	82.2	8.3	15.0	40.3	.6	(D)	(D)	-	-	1	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	1.6	9.1	.9	1.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
39	MISC. MANUFACTURING INDUS.	1.6	7.6	.9	1.7	-	-	-	-	-	-	(X)	(X)	(X)
	LOUISVILLE, KY.-IND.	56.4	129.5	45.9	73.3	1,052.4	16.7	333.7	5.1	796.4	22.7	7	1	1
20	FOOD AND KINDRED PRODUCTS	6.7	15.5	5.9	10.4	153.2	2.5	172.8	2.6	43.9	1.5	15	1	1
24	LUMBER AND WOOD PRODUCTS	.9	2.8	.6	1.2	17.3	.3	-	-	(D)	(D)	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.6	1.8	.5	.9	33.3	.5	-	-	-	-	21	(X)	(X)
27	PRINTING AND PUBLISHING	.9	3.0	.6	1.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	18.2	38.2	15.2	24.6	(S)	(S)	(D)	(D)	(S)	(S)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	8.1	12.2	7.2	7.2	81.8	1.3	-	-	(D)	(D)	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.4	4.6	.9	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.1	9.6	3.5	6.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	4.4	12.7	3.4	6.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	LOWELL, MASS.-N.H.	4.2	19.0	3.1	7.1	(D)	(D)	52.7	.7	-	-	(X)	8	(X)
22	TEXTILE MILL PRODUCTS	1.4	4.8	1.3	3.0	-	-	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	1.2	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	LUBBOCK, TEX.	2.8	9.3	2.0	2.8	(D)	(Z)	-	-	-	-	19	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.5	4.0	1.2	1.6	(D)	(Z)	-	-	-	-	19	(X)	(X)
	LYNCHBURG, VA.	11.7	40.8	9.2	24.2	140.1	2.3	412.9	5.6	(D)	(D)	37	1	(X)
20	FOOD AND KINDRED PRODUCTS	.3	1.5	.2	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.9	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MACON, GA.	16.2	37.1	14.0	20.7	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.3	6.5	1.8	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.6	2.2	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.2	.6	.1	.3	(D)	(D)	(D)	(Z)	-	-	(X)	47	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.5	8.6	4.0	5.7	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	MADISON, WIS.	5.1	15.5	4.4	8.8	33.3	.6	(D)	(D)	(D)	(D)	9	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.6	7.2	2.4	5.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	.9	.1	.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	MANCHESTER, N.H.	2.7	10.4	2.1	4.5	85.5	1.3	67.5	1.0	-	-	11	1	(X)
20	FOOD AND KINDRED PRODUCTS	.3	.7	.2	.4	(S)	(S)	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.9	2.8	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	.3	1.2	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.3	1.5	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	MANSFIELD, OHIO	11.4	34.7	8.9	17.4	(D)	(D)	(D)	(D)	67.4	2.2	(X)	(X)	1
34	FABRICATED METAL PRODUCTS	1.1	3.8	.7	1.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.8	5.2	1.5	2.8	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	MCALLEN-PHARR-EDINBURG, TEX.	1.3	4.3	1.0	2.0	(D)	(Z)	(D)	(Z)	(D)	(Z)	59	1	85
20	FOOD AND KINDRED PRODUCTS	.8	2.4	.7	1.5	(D)	(Z)	-	-	(D)	(Z)	86	(X)	85
	MELBOURNE-TITUSVILLE-COCOA, FLA.	1.5	10.2	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MEMPHIS, TENN.-ARK.-MISS.	45.7	111.7	36.6	60.5	764.3	11.9	1,252.7	15.5	(D)	(D)	5	1	(X)
20	FOOD AND KINDRED PRODUCTS	11.4	26.5	9.8	17.1	256.4	4.1	383.2	4.8	(D)	(D)	1	2	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.9	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.3	1.3	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	4.9	12.4	3.9	6.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	LOS ANGELES-LONG BEACH, CALIF.	(D)	(D)	122.7	213.3	14.9	34.9	14,740.9	450.4	(S)	199.6	597.5	3
20	FOOD AND KINDRED PRODUCTS	-	-	7.9	14.0	2.6	4.5	932.3	29.6	(D)	15.2	42.2	5
22	TEXTILE MILL PRODUCTS	-	-	(S)	(S)	-	(S)	146.6	4.7	(D)	3.2	7.2	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.4	.7	(D)	(D)	280.0	9.1	(D)	2.3	10.8	21
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	119.9	3.8	-	1.2	4.8	(X)
25	FURNITURE AND FIXTURES	-	-	.6	1.0	.6	1.2	226.1	7.2	(D)	1.7	7.7	19
26	PAPER AND ALLIED PRODUCTS	-	-	6.2	11.0	.3	(D)	542.8	16.4	(D)	10.1	25.7	1
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	(D)	(S)	419.8	12.9	(D)	3.6	14.3	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	9.0	16.1	(D)	(D)	1,376.5	39.5	(D)	18.2	52.4	8
29	PETROLEUM AND COAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	2,839.2	79.3	(S)	46.0	113.9	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	3.5	6.1	(Z)	3.9	830.8	26.2	-	7.3	29.4	10
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	(S)	(S)	(S)	(S)	698.4	20.8	(S)	24.3	43.4	(X)
33	PRIMARY METAL INDUSTRIES	44.2	5.3	11.4	20.2	(D)	1.4	991.7	31.1	(D)	19.4	55.7	6
34	FABRICATED METAL PRODUCTS	-	-	8.7	14.3	.7	5.8	1,230.7	38.4	(D)	14.9	47.3	5
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.3	2.0	(D)	4.4	700.3	22.6	-	6.1	25.9	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	2.0	3.2	(D)	4.0	799.5	26.2	(D)	6.7	29.2	4
37	TRANSPORTATION EQUIPMENT	-	-	6.0	10.7	.6	(D)	2,144.6	67.1	(S)	15.9	72.7	3
38	INSTRUMENTS, RELATED PRODS	-	-	.5	.8	(Z)	.7	214.9	7.5	-	1.9	8.5	3
39	MISC. MANUFACTURING INDUS.	-	-	.3	.5	(D)	(D)	184.7	5.9	(D)	1.1	5.2	30
	LOUISVILLE, KY.-IND.	(D)	(D)	11.7	16.5	(D)	(D)	3,085.8	96.3	18.8	54.8	106.0	3
20	FOOD AND KINDRED PRODUCTS	-	-	2.4	3.3	.6	(Z)	246.7	5.1	(D)	6.5	12.0	5
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.4	(D)	.3	67.7	1.6	-	.7	2.2	15
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	37.5	.8	-	.5	1.4	(X)
27	PRINTING AND PUBLISHING	-	-	.2	.3	(Z)	(D)	86.7	1.9	-	1.1	3.3	19
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	877.2	13.6	(D)	17.6	31.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.4	.5	(D)	(D)	271.4	5.0	(S)	7.6	10.7	8
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(D)	(S)	149.7	2.8	-	1.2	3.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	1.6	2.2	(D)	.1	161.4	3.4	(Z)	4.2	7.4	7
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.9	1.4	(D)	(D)	305.6	5.9	-	4.5	10.8	6
	LOWELL, MASS.-N.H.	-	-	1.0	3.0	(D)	1.8	304.3	11.9	(D)	3.9	14.5	9
22	TEXTILE MILL PRODUCTS	-	-	.4	1.2	(D)	(D)	43.9	1.8	-	1.3	4.1	6
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	-	(Z)	(D)	(D)	-	.2	1.0	(X)
	LUBBOCK, TEX.	-	-	1.8	2.6	(Z)	.1	236.8	6.5	-	2.4	6.2	18
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	91.1	2.5	-	1.6	3.8	(X)
	LYNCHBURG, VA.	(D)	(D)	2.0	4.1	.8	.1	723.9	16.7	(D)	10.5	32.6	7
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(Z)	29.3	.9	(D)	.3	1.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(Z)	56.4	1.4	-	.4	1.7	(X)
	MACON, GA.	-	-	(S)	(S)	(D)	(S)	656.2	16.5	(D)	16.1	29.9	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	1.2	1.5	(D)	.2	136.4	3.5	-	2.3	5.9	1
22	TEXTILE MILL PRODUCTS	-	-	.1	.2	(Z)	(D)	(S)	(S)	-	.6	2.1	1
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	(D)	19.2	.4	-	.3	.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(D)	(D)	125.4	2.9	-	4.6	6.7	(X)
	MADISON, WIS.	-	-	2.2	4.7	(D)	1.3	212.4	6.7	(D)	4.8	12.5	4
20	FOOD AND KINDRED PRODUCTS	-	-	1.1	2.6	(D)	(D)	67.5	2.1	(D)	2.4	5.5	5
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	-	(S)	19.3	.7	-	.1	.6	(X)
	MANCHESTER, N.H.	-	-	.2	.6	.4	1.3	179.1	5.9	-	2.5	9.1	9
20	FOOD AND KINDRED PRODUCTS	-	-	(Z)	(Z)	-	(S)	12.6	.3	-	.2	.5	25
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	36.5	1.1	-	.9	2.6	(X)
31	LEATHER, LEATHER PRODUCTS	-	-	(Z)	(Z)	-	(D)	19.2	.7	-	.2	.8	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	(Z)	(D)	(D)	38.6	1.2	-	.3	1.5	1
	MANSFIELD, OHIO	-	-	6.0	11.6	1.8	(D)	732.4	17.2	(D)	11.6	28.7	14
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	-	(S)	108.4	2.6	(D)	1.0	2.9	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.7	1.4	(D)	(Z)	88.4	2.4	-	1.6	3.9	1
	MCALLEN-PHARR-EDINBURG, TEX.	-	-	.8	1.7	.3	(Z)	71.9	2.3	-	1.2	3.8	21
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	25.8	.9	-	.6	2.2	(X)
	MELBOURNE-TITUSVILLE-COCOA, FLA.	-	-	(D)	(D)	(Z)	.4	352.7	9.7	(S)	1.4	8.2	(X)
	MEMPHIS, TENN.-ARK.-MISS.	(D)	(D)	19.8	26.8	(D)	1.8	2,654.5	51.2	(D)	44.8	89.2	4
20	FOOD AND KINDRED PRODUCTS	-	-	3.5	4.9	1.4	(D)	482.0	9.4	-	9.8	18.5	2
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(S)	(S)	47.0	1.3	(D)	.4	1.2	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	-	(D)	36.6	.9	-	.3	1.1	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	310.5	5.8	-	4.8	9.8	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** –Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MEMPHIS, TENN.-ARK.-MISS--CON.													
28	CHEMICALS, ALLIED PRODUCTS	16.2	36.9	13.3	21.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.2	4.0	2.0	2.8	(D)	(Z)	(D)	(D)	(D)	(D)	1	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.0	7.0	1.0	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.2	3.4	1.0	1.5	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.2	3.8	.8	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.3	1.0	.2	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
	MERIDEN, CONN.	1.2	5.7	.9	2.5	(D)	(D)	76.4	1.2	-	-	(X)	17	(X)
35	MACHINERY, EXCEPT ELECTRIC	.2	.6	.1	.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	MIAMI, FLA.	12.7	45.9	9.7	16.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.7	6.5	1.2	2.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.5	2.0	.4	.7	-	-	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.7	3.6	.3	.7	(D)	(Z)	-	-	-	-	98	(X)	(X)
25	FURNITURE AND FIXTURES	.2	1.3	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.6	1.3	(D)	(D)	(D)	(D)	(D)	(Z)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.4	2.9	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	.6	1.9	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.4	2.5	.1	.2	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.4	9.4	4.1	6.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.8	2.3	.6	1.1	5.7	.1	-	-	-	-	20	(X)	(X)
34	FABRICATED METAL PRODUCTS	.9	3.9	.7	1.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.3	2.6	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
	MIDLAND, TEX.	.3	.9	.2	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
	MILWAUKEE, WIS.	64.4	195.3	52.6	105.7	482.7	7.7	521.6	7.4	8.8	.3	4	12	18
20	FOOD AND KINDRED PRODUCTS	11.4	30.0	10.0	20.0	(D)	(D)	191.1	2.7	(D)	(D)	(X)	1	(X)
26	PAPER AND ALLIED PRODUCTS	2.0	5.0	1.8	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	1.3	5.6	.9	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.8	7.8	2.5	5.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.9	4.3	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.8	2.2	.7	1.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	9.4	31.1	7.4	15.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	11.2	30.2	9.6	18.1	56.9	1.0	60.8	.9	-	-	13	19	(X)
35	MACHINERY, EXCEPT ELECTRIC	12.0	38.6	9.5	19.3	142.9	2.3	36.7	.6	(D)	(Z)	4	1	1
36	ELECTRIC, ELECTRONIC EQUIP	5.9	20.0	4.2	8.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.3	1.1	.2	.4	(D)	(Z)	-	-	-	-	85	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.4	1.4	.3	.6	(D)	(Z)	-	-	(D)	(D)	55	(X)	(X)
	MINNEAPOLIS-ST PAUL, MINN.-WIS.	71.0	194.0	58.1	101.1	419.1	6.7	3,171.3	40.0	28.4	1.1	5	1	3
20	FOOD AND KINDRED PRODUCTS	10.0	24.8	8.6	13.8	88.9	1.4	(D)	(D)	(D)	(D)	8	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	2.6	.5	1.1	22.4	.4	-	-	-	-	10	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	6.2	13.2	5.6	9.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	1.9	7.1	1.3	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	4.6	9.5	4.1	5.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.6	6.6	1.0	1.7	7.6	.1	(D)	(D)	(D)	(D)	16	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	6.5	15.3	5.7	9.4	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	5.0	16.8	3.3	6.0	(S)	(S)	-	-	(D)	(Z)	(X)	(X)	1
34	FABRICATED METAL PRODUCTS	6.1	16.8	4.5	7.8	61.2	.9	136.3	2.0	-	-	23	11	(X)
35	MACHINERY, EXCEPT ELECTRIC	5.6	20.4	3.8	6.3	49.4	.8	24.2	.3	(D)	(D)	5	7	(X)
36	ELECTRIC, ELECTRONIC EQUIP	3.0	11.7	2.0	3.7	30.5	.5	(D)	(D)	-	-	4	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.9	2.4	.8	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.8	3.5	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.6	2.3	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MOBILE, ALA.	49.9	122.2	43.6	78.8	88.7	1.3	(D)	(D)	(D)	(D)	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.4	1.5	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.8	.3	.6	-	-	(D)	(Z)	-	-	(X)	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	18.5	45.7	16.1	30.7	61.0	.9	(D)	(D)	-	-	1	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.9	4.3	(D)	(D)	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.9	3.2	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	MODESTO, CALIF.	10.7	31.1	9.0	19.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	6.5	19.4	5.6	12.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.4	1.5	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.2	.3	.5	-	-	-	-	-	-	(X)	(X)	(X)
	MONROE, LA.	28.5	43.5	27.4	37.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MONTGOMERY, ALA.	9.8	28.5	7.6	12.3	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
20	FOOD AND KINDRED PRODUCTS	.4	1.8	.3	.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	.4	2.0	(D)	(D)	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.6	1.4	(S)	(S)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.4	4.8	2.2	3.4	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MEMPHIS, TENN.-ARK.-MISS--CON.												
28	CHEMICALS, ALLIED PRODUCTS	-	-	8.1	10.5	.1	.5	860.3	15.1	(D)	18.7	53.3	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.0	1.3	(D)	(D)	57.4	1.2	-	1.5	2.7	11
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.2	1.6	(Z)	(D)	277.9	5.3	-	1.8	5.9	54
34	FABRICATED METAL PRODUCTS	-	-	.6	.8	.1	.4	77.3	1.9	-	1.3	3.3	28
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	(S)	(S)	(S)	(S)	110.3	2.4	-	1.3	3.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	-	(Z)	33.8	.8	-	.3	.9	1
	MERIDEN, CONN.	-	-	.2	.8	(D)	.2	95.2	3.3	-	1.3	5.4	7
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	-	(Z)	(S)	(S)	-	.1	.6	(X)
	MIAMI, FLA.	-	-	1.7	2.9	.6	(D)	891.5	29.2	(S)	11.3	37.6	12
20	FOOD AND KINDRED PRODUCTS	-	-	.3	.6	(D)	1.2	135.8	4.2	(D)	1.7	5.6	12
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	35.8	1.3	-	.4	1.9	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.2	(Z)	.4	101.0	2.9	(D)	.6	2.7	15
25	FURNITURE AND FIXTURES	-	-	(Z)	(Z)	(Z)	.2	28.6	1.0	-	.2	1.1	15
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(Z)	(D)	(D)	-	.7	1.3	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(Z)	.3	73.2	2.6	-	.5	2.3	75
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	(D)	(D)	-	.5	1.7	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	.1	69.3	2.3	-	.4	2.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	.1	.2	(D)	(D)	95.9	3.0	-	2.8	5.8	52
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	-	(D)	41.1	1.2	-	.7	1.7	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	76.1	2.7	-	.8	3.2	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	-	-	(D)	(D)	70.6	2.4	-	.5	2.0	(X)
	MIDLAND, TEX.	-	-	.1	.1	(D)	(D)	(S)	(S)	-	.6	1.4	1
	MILWAUKEE, WIS.	27.4	3.6	36.6	70.7	8.6	7.3	3,474.8	89.6	(S)	63.2	162.2	4
20	FOOD AND KINDRED PRODUCTS	-	-	7.5	15.1	.2	(D)	413.5	10.0	51.0	10.7	23.8	3
26	PAPER AND ALLIED PRODUCTS	-	-	.5	1.0	-	(D)	62.2	1.8	-	1.8	4.2	4
27	PRINTING AND PUBLISHING	-	-	.5	1.1	(D)	.4	141.7	3.9	(Z)	1.4	4.9	12
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	83.2	2.4	(D)	2.6	6.4	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.6	(D)	(D)	110.2	3.3	-	.7	3.2	28
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(D)	(S)	29.0	.9	-	.6	1.4	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	5.7	11.1	1.3	.1	598.3	15.2	(D)	8.7	24.4	10
34	FABRICATED METAL PRODUCTS	-	-	7.4	13.8	(D)	(D)	478.3	12.2	-	11.8	25.8	3
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	6.1	11.3	2.5	(D)	731.6	19.3	(D)	11.3	31.4	2
36	ELECTRIC, ELECTRONIC EQUIP	-	-	2.4	4.7	1.0	(D)	488.2	11.6	(D)	6.1	17.4	1
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.2	-	.2	29.2	.7	-	.6	1.8	13
39	MISC. MANUFACTURING INDUS.	-	-	.1	.1	(D)	(D)	28.7	.9	-	.4	1.3	1
	MINNEAPOLIS-ST PAUL, MINN.-WIS.	(D)	(D)	28.7	40.9	8.1	(D)	3,780.3	92.9	165.9	66.2	157.9	5
20	FOOD AND KINDRED PRODUCTS	-	-	5.2	7.1	1.4	1.4	404.1	11.1	(D)	10.5	22.7	4
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	-	(D)	52.7	1.5	-	.7	2.2	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	3.3	4.7	.1	.2	148.1	4.1	(D)	6.1	11.0	1
27	PRINTING AND PUBLISHING	-	-	.6	1.0	(D)	(D)	165.8	4.7	-	1.8	6.1	11
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.7	3.6	(D)	(D)	163.8	3.6	-	4.2	7.4	36
30	RUBBER, MISC. PLASTICS PROD.	-	-	.4	.7	(Z)	.9	174.6	4.9	-	1.2	4.8	18
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(S)	(S)	238.1	5.9	-	4.0	7.2	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(S)	(S)	(S)	(S)	489.4	10.9	-	5.4	15.9	(X)
34	FABRICATED METAL PRODUCTS	-	-	3.5	5.2	(S)	(S)	477.4	9.0	(D)	5.4	14.8	16
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	2.2	3.1	1.0	(D)	535.6	14.1	-	5.2	17.5	8
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	.5	(D)	289.9	8.0	(D)	2.5	8.0	(X)
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(D)	(D)	34.1	1.2	(D)	.9	2.4	(X)
38	INSTRUMENTS, RELATED PRODS	-	-	.2	.4	(D)	.2	93.6	2.5	-	.8	3.1	3
39	MISC. MANUFACTURING INDUS.	-	-	.3	.4	(D)	.1	58.8	1.5	(D)	.7	2.1	16
	MOBILE, ALA.	(D)	(Z)	21.9	41.1	1.0	1.9	1,827.8	43.4	745.7	47.3	90.4	1
20	FOOD AND KINDRED PRODUCTS	-	-	.3	.4	-	.1	33.9	1.0	-	.4	1.0	37
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	-	(D)	36.8	1.1	-	.4	1.2	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	.8	679.2	15.1	(D)	15.8	30.1	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	1.2	1.8	(X)
37	TRANSPORTATION EQUIPMENT	(D)	(Z)	(D)	(D)	(D)	(D)	62.0	1.8	(D)	.9	2.5	(X)
	MODESTO, CALIF.	-	-	7.1	15.8	.3	.8	480.2	11.9	(D)	9.8	20.9	2
20	FOOD AND KINDRED PRODUCTS	-	-	4.2	9.3	.2	.3	279.6	7.4	-	6.0	12.7	2
26	PAPER AND ALLIED PRODUCTS	-	-	.2	.4	(Z)	(Z)	40.2	1.0	-	.3	1.0	1
34	FABRICATED METAL PRODUCTS	-	-	.2	.4	(D)	(D)	23.7	.7	(D)	.3	.7	5
	MONROE, LA.	-	-	26.0	36.0	(D)	(D)	325.2	6.0	(D)	23.5	24.6	1
	MONTGOMERY, ALA.	(D)	(Z)	4.1	5.4	1.6	.2	653.3	16.2	(D)	8.1	16.1	3
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.2	(D)	(D)	43.2	1.3	-	.4	1.2	11
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(Z)	(Z)	(D)	(D)	-	.5	1.5	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	(D)	15.6	.3	-	(Z)	.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.1	1.6	(D)	(D)	53.7	1.4	-	2.3	3.9	6

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	MUNCIE, IND.	6.6	19.8	5.1	9.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.2	3.0	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	MUSKEGON-NORTON SHORES-MUSKEGON HEIGHTS, MICH	14.4	42.1	12.2	23.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.7	15.5	3.0	9.2	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.9	7.3	1.4	2.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	NASHUA, N.H.	4.3	15.8	3.3	7.0	51.8	.8	330.7	4.5	-	-	11	17	(X)
24	LUMBER AND WOOD PRODUCTS	.2	.6	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NASHVILLE-DAVIDSON, TENN.	33.1	82.2	26.6	44.6	361.1	5.8	329.4	5.0	(D)	(D)	1	7	(X)
20	FOOD AND KINDRED PRODUCTS	2.1	5.9	1.6	3.0	20.6	.3	(D)	(D)	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	.8	2.2	.7	1.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.9	.1	.2	2.4	(Z)	-	-	-	-	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	.5	1.8	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.8	2.9	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.7	5.5	1.2	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	10.3	20.2	9.4	14.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.9	3.5	.6	1.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.2	.2	.4	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.5	4.6	1.1	2.0	(D)	(Z)	(D)	(Z)	-	-	1	75	(X)
37	TRANSPORTATION EQUIPMENT	1.1	3.7	.7	1.3	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	NASSAU-SUFFOLK, N.Y.	23.2	93.4	16.3	34.1	466.0	7.9	334.9	5.2	-	-	8	5	(X)
20	FOOD AND KINDRED PRODUCTS	1.5	5.2	1.2	2.6	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	1.2	3.7	.9	2.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.7	2.7	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	.2	1.0	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.0	3.5	.7	1.3	22.1	.4	(D)	(D)	-	-	22	(X)	(X)
27	PRINTING AND PUBLISHING	1.1	5.6	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.5	4.9	1.2	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.5	5.9	(S)	(S)	(D)	(D)	(D)	(Z)	-	-	(X)	86	(X)
33	PRIMARY METAL INDUSTRIES	1.2	4.5	1.0	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.8	6.5	1.2	2.5	23.0	.4	8.0	.1	-	-	17	27	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.3	5.4	.8	1.5	10.6	.2	(D)	(Z)	-	-	22	63	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.7	13.5	1.7	3.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.9	4.3	.6	1.3	9.8	.2	(D)	(D)	-	-	45	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.6	2.6	.4	.8	4.3	.1	(D)	(D)	-	-	40	(X)	(X)
	NEW BEDFORD, MASS.	4.4	19.3	3.4	8.2	111.8	1.7	172.3	2.4	-	-	12	1	(X)
20	FOOD AND KINDRED PRODUCTS	.4	1.4	(D)	(D)	-	-	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.8	3.4	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.4	2.0	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.5	.3	.8	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	NEW BRITAIN, CONN.	4.6	19.9	3.5	9.2	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.8	7.0	1.5	3.7	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.0	4.7	.7	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEW BRUNSWICK-PERTH AMBOY-SAYREVILLE N.J.	38.3	143.0	31.1	71.9	577.5	9.2	1,922.2	28.9	-	-	8	1	(X)
20	FOOD AND KINDRED PRODUCTS	1.5	6.0	1.2	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	3.4	13.2	2.6	5.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	13.6	47.3	11.5	27.3	203.3	3.3	1,358.7	20.2	-	-	3	1	(X)
29	PETROLEUM AND COAL PRODUCTS	2.8	9.9	2.3	5.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.7	8.9	1.0	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.3	7.8	2.1	5.2	53.7	.9	40.6	.6	-	-	16	18	(X)
33	PRIMARY METAL INDUSTRIES	5.7	19.6	4.8	10.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.1	8.5	1.6	3.6	16.5	.3	(D)	(D)	-	-	6	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.8	4.2	.6	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	4.2	.6	1.6	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
39	MISC. MANUFACTURING INDUS.	.3	1.5	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEW HAVEN-WEST HAVEN, CONN.	12.2	52.1	9.7	24.7	276.9	4.3	732.1	10.6	-	-	20	13	(X)
27	PRINTING AND PUBLISHING	.2	1.1	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.0	6.8	1.7	3.9	35.5	.6	(D)	(D)	-	-	7	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.7	3.5	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.1	16.2	2.3	7.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.1	6.3	.8	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.3	.2	.5	(D)	(Z)	(D)	(D)	-	-	86	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.6	2.2	.5	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEW LONDON-NORWICH, CONN.-R.I.	14.3	43.9	12.5	28.1	176.3	2.8	1,637.0	22.6	-	-	13	1	(X)
22	TEXTILE MILL PRODUCTS	1.1	3.2	1.0	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased		Generated less sold (million kWh)			
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)		British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	MUNCIE, IND.	(D)	(D)	2.9	4.4	1.6	.5	432.0	10.2	-	7.6	17.0	3
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	(Z)	(D)	(D)	-	1.5	2.4	(X)
	MUSKEGON-NORTON SHORES-MUSKEGON HEIGHTS, MICH	(D)	(D)	5.1	9.6	.7	2.0	642.5	19.0	(D)	14.8	39.6	4
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(D)	(D)	200.3	6.3	-	3.8	13.8	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.2	2.2	(D)	(D)	153.5	4.7	-	2.0	6.8	3
	NASHUA, N.H.	-	-	.3	.7	.6	.5	292.0	8.8	-	4.1	13.8	2
24	LUMBER AND WOOD PRODUCTS	-	-	(Z)	(Z)	(D)	(D)	5.8	.2	-	.2	.7	1
	NASHVILLE-DAVIDSON, TENN.	-	-	12.9	21.2	2.1	(D)	1,893.5	57.6	(D)	29.5	65.0	3
20	FOOD AND KINDRED PRODUCTS	-	-	.8	1.4	(D)	.8	138.0	2.9	(D)	1.9	4.8	9
22	TEXTILE MILL PRODUCTS	-	-	.4	.8	-	(D)	27.7	.6	-	.8	1.7	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	.1	(Z)	.1	27.1	.7	-	.5	2.5	18
26	PAPER AND ALLIED PRODUCTS	-	-	.2	.4	(Z)	(Z)	58.9	1.2	-	.5	1.5	1
27	PRINTING AND PUBLISHING	-	-	.2	.4	-	(D)	105.6	2.1	-	.6	1.6	35
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	(D)	169.9	3.1	-	1.3	3.7	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	6.5	10.0	(D)	(D)	284.2	5.3	-	8.3	13.6	5
34	FABRICATED METAL PRODUCTS	-	-	.4	.7	(D)	.1	97.2	2.3	(Z)	.7	2.2	19
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.2	(D)	(D)	32.2	.8	-	.2	.9	30
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.9	1.7	.3	.1	125.9	2.6	-	1.5	3.8	12
37	TRANSPORTATION EQUIPMENT	-	-	.5	1.0	(D)	(D)	118.9	2.4	-	1.1	3.0	2
	NASSAU-SUFFOLK, N.Y.	-	-	2.1	5.0	(D)	(D)	2,020.2	59.3	(S)	22.1	81.7	8
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	101.7	2.6	-	1.6	4.7	(X)
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(Z)	.6	84.8	1.6	-	.6	1.7	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	(Z)	(D)	76.1	1.9	(D)	.5	2.1	(X)
25	FURNITURE AND FIXTURES	-	-	(Z)	.1	(D)	(D)	22.7	.6	-	.2	.8	40
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	85.2	2.2	-	.8	3.1	(X)
27	PRINTING AND PUBLISHING	-	-	.1	.3	(D)	(D)	167.6	4.3	-	.8	4.3	51
28	CHEMICALS, ALLIED PRODUCTS	-	-	.1	.2	(Z)	1.1	84.0	2.7	-	1.6	4.4	6
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.2	(D)	1.4	148.2	4.1	-	1.4	4.6	56
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	(D)	1.0	76.5	2.5	-	1.0	3.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(D)	1.4	171.1	4.0	(D)	1.6	5.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.3	(D)	(D)	160.0	3.8	-	1.5	5.6	36
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.2	.5	.1	1.7	282.0	9.8	(D)	2.7	12.9	13
38	INSTRUMENTS, RELATED PRODS	-	-	.1	.2	-	(D)	80.6	2.9	-	.9	4.2	39
39	MISC. MANUFACTURING INDUS.	-	-	(Z)	(Z)	(D)	.4	55.7	1.7	-	.4	2.2	21
	NEW BEDFORD, MASS.	-	-	1.1	3.1	(D)	(D)	293.4	11.1	-	4.2	18.2	12
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	.2	(D)	(D)	-	.5	1.8	(X)
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	.1	56.2	2.1	-	.8	3.6	(X)
33	PRIMARY METAL INDUSTRIES	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.4	2.0	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(Z)	.1	18.2	.8	-	.3	1.3	(X)
	NEW BRITAIN, CONN.	(D)	(D)	(S)	(S)	(D)	(S)	329.1	10.6	(Z)	4.1	16.4	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	102.7	3.3	(Z)	1.7	6.1	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.6	(D)	(D)	86.4	2.8	-	1.0	3.8	1
	NEW BRUNSWICK-PERTH AMBOY-SAYREVILLE N.J.	27.7	2.9	6.9	16.0	(D)	(D)	2,132.2	71.1	134.2	43.4	141.0	3
20	FOOD AND KINDRED PRODUCTS	-	-	.4	1.0	(D)	(D)	110.2	3.5	-	1.4	5.0	18
26	PAPER AND ALLIED PRODUCTS	-	-	.5	1.2	1.4	(D)	223.3	7.3	(D)	3.6	12.3	2
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.2	2.9	(D)	(D)	602.8	20.0	(D)	13.6	42.7	9
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	(D)	(D)	159.5	4.8	(D)	6.3	15.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.5	(Z)	(D)	187.6	6.5	-	1.5	7.0	26
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	1.0	2.5	(D)	(D)	73.8	2.6	-	3.0	8.8	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.3	.5	.9	5.5	277.7	9.1	(D)	6.4	21.5	1
34	FABRICATED METAL PRODUCTS	(D)	(D)	1.0	2.4	.2	.7	137.2	4.9	-	2.3	7.7	2
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.6	(D)	.2	77.4	2.8	-	.8	4.0	10
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(Z)	(Z)	(D)	.1	78.6	2.6	-	.8	3.4	1
39	MISC. MANUFACTURING INDUS.	-	-	.1	.3	(D)	(Z)	21.7	.8	-	.3	1.1	22
	NEW HAVEN-WEST HAVEN, CONN.	(D)	(D)	1.5	4.4	(D)	1.5	743.3	27.4	(D)	12.0	47.1	5
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(D)	(Z)	19.7	.8	-	.5	2.0	43
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	.4	99.6	3.0	-	1.9	5.9	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	(D)	56.5	2.3	-	.6	2.3	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.6	2.0	.4	.8	232.8	8.9	-	3.0	14.8	6
34	FABRICATED METAL PRODUCTS	-	-	.2	.6	(Z)	(D)	101.3	4.1	(D)	1.2	5.8	11
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	(Z)	(D)	.3	23.9	.9	-	.4	1.4	1
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	-	(D)	26.7	.8	-	.8	2.4	(X)
	NEW LONDON-NORWICH, CONN.-R.I.	-	-	.5	1.4	(S)	(S)	528.8	15.7	(D)	13.3	37.7	22
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	(D)	.1	25.2	.9	(D)	1.0	3.7	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** –Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)	F	H	J
		A	B	C	D	E	F	G	H	I	J			
	NEW LONDON-NORWICH, CONN.-R.I--CON.													
27	PRINTING AND PUBLISHING.	.2	.8	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.4	1.6	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.1	.7	.1	.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEW ORLEANS, LA.	111.3	108.7	104.6	70.9	1,108.3	16.3	(D)	(D)	(D)	(D)	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	5.2	11.8	4.7	8.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.2	.7	.1	.1	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	2.3	4.9	2.0	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	20.6	19.9	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	12.2	24.9	11.3	18.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.8	2.1	.6	1.1	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.2	4.3	.6	1.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	NEW YORK, N.Y.-N.J..	105.3	459.6	81.5	177.5	1,854.0	30.8	3,010.2	47.7	(D)	(D)	6	2	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	14.9	57.1	12.0	27.9	337.0	5.6	620.7	9.7	-	-	23	3	(X)
22	TEXTILE MILL PRODUCTS.	7.2	28.1	6.0	12.5	81.5	1.3	81.5	1.3	-	-	21	37	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	7.8	45.2	4.9	9.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	1.0	4.1	.7	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.3	6.1	.9	2.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	10.3	34.7	8.8	20.1	85.1	1.4	684.6	11.7	-	-	11	1	(X)
27	PRINTING AND PUBLISHING.	7.4	43.8	4.3	9.9	130.8	2.2	71.8	1.1	-	-	39	11	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	15.9	50.6	14.1	28.0	194.0	3.2	829.6	12.5	-	-	7	2	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	3.7	20.5	2.0	4.6	98.2	1.7	(D)	(D)	-	-	38	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	6.1	17.9	5.4	10.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	5.3	25.0	4.3	11.3	133.7	2.3	235.7	3.7	(D)	(D)	14	2	(X)
34	FABRICATED METAL PRODUCTS. . . .	6.1	28.8	4.6	10.0	92.8	1.7	93.5	1.4	(D)	(Z)	20	38	1
35	MACHINERY, EXCEPT ELECTRIC . . .	2.9	14.2	2.2	4.5	21.3	.4	20.7	.4	-	-	21	16	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	3.5	19.5	2.5	5.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	4.5	23.4	3.5	8.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.6	9.0	1.1	2.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	3.7	22.2	2.4	5.5	42.4	.7	63.8	1.0	(D)	(Z)	16	49	79
	NEWARK, N.J.	108.0	381.1	90.9	209.4	1,645.3	26.1	8,202.2	121.6	(D)	(D)	5	2	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	6.2	21.5	5.3	12.2	189.4	2.9	319.7	4.9	-	-	24	4	(X)
22	TEXTILE MILL PRODUCTS.	.6	1.8	.5	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.6	2.5	.4	.9	(D)	(Z)	(D)	(D)	-	-	45	(X)	(X)
25	FURNITURE AND FIXTURES	.4	1.9	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	7.8	25.3	7.0	16.3	51.9	.8	931.3	14.1	-	-	14	1	(X)
27	PRINTING AND PUBLISHING.	1.2	6.1	.7	1.8	34.4	.6	12.4	.2	-	-	21	6	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	34.6	120.3	29.3	66.5	615.6	9.6	2,283.5	33.3	(D)	(D)	8	6	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	4.0	18.0	2.9	6.1	55.1	.9	(D)	(D)	-	-	14	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.5	1.7	.4	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	5.9	16.1	5.4	11.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	4.5	18.6	3.4	8.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
34	FABRICATED METAL PRODUCTS. . . .	4.3	18.4	3.4	8.2	126.2	2.2	115.2	1.8	-	-	18	31	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	3.1	15.0	2.3	5.5	43.6	.7	64.6	1.0	-	-	15	9	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	3.6	18.7	2.3	5.6	122.2	1.9	68.0	1.1	-	-	4	8	(X)
38	INSTRUMENTS, RELATED PRODS . . .	1.0	5.1	.6	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.9	3.9	.6	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NEWPORT NEWS-HAMPTON, VA..	8.1	32.0	5.6	11.4	45.2	.7	(D)	(D)	-	-	5	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.1	3.8	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NORFOLK-VA. BEACH-PORTMOUTH, VA.-N.C.	8.5	32.4	6.7	15.2	305.3	5.0	425.5	5.6	(D)	(D)	16	7	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	2.4	8.3	2.0	4.2	104.5	1.7	45.0	.6	-	-	7	1	(X)
24	LUMBER AND WOOD PRODUCTS	.8	3.0	.7	1.5	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	1.5	5.5	1.2	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	1.1	4.0	.9	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NORTHEAST PENNSYLVANIA	14.3	54.3	10.8	25.9	539.1	9.3	318.8	4.6	4.8	.2	26	2	76
20	FOOD AND KINDRED PRODUCTS. . . .	.6	3.3	.4	1.7	103.4	1.7	(D)	(D)	-	-	80	(X)	(X)
21	TOBACCO PRODUCTS	.1	.6	.1	.2	9.8	.2	-	-	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS.	1.1	4.2	.7	1.7	29.7	.5	(D)	(D)	(D)	(Z)	40	(X)	89
23	APPAREL, OTH. TEXTILE PRODS. . .	1.0	3.8	.7	1.5	18.5	.3	(D)	(D)	(D)	(D)	28	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.1	.9	(S)	(S)	34.0	.7	-	-	-	-	78	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	1.8	6.0	1.4	3.1	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
27	PRINTING AND PUBLISHING.	.3	1.3	.2	.4	-	-	3.9	.1	(D)	(D)	(X)	1	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	.3	1.0	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.8	3.3	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.4	1.4	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	2.8	7.6	2.4	4.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.6	2.1	.5	1.1	-	-	(D)	(D)	(D)	(Z)	(X)	(X)	1
34	FABRICATED METAL PRODUCTS. . . .	1.6	5.6	1.3	3.0	53.2	.9	32.3	.5	(Z)	(Z)	29	1	1
35	MACHINERY, EXCEPT ELECTRIC . . .	.5	2.1	.3	.7	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.6	6.5	1.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.2	1.0	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.3	1.4	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	NORWALK, CONN.	1.5	7.3	1.0	2.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.3	1.4	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	NEW LONDON-NORWICH, CONN.-R.I--CON.												
27	PRINTING AND PUBLISHING. . . .	-	-	(S)	(S)	(D)	(S)	12.1	.5	-	.1	.7	(X)
33	PRIMARY METAL INDUSTRIES . . .	-	-	(Z)	(Z)	(D)	(D)	32.6	1.1	-	.3	1.4	1
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	(Z)	(Z)	-	(D)	13.5	.5	-	.2	.8	1
	NEW ORLEANS, LA.	-	-	88.1	41.1	(D)	(D)	1,975.6	37.9	4,253.8	101.0	77.7	1
20	FOOD AND KINDRED PRODUCTS. . .	-	-	2.7	4.8	(D)	(D)	148.2	3.4	(D)	3.5	7.5	5
23	APPAREL, OTH. TEXTILE PRODS. .	-	-	(Z)	(Z)	-	.1	24.4	.5	-	.3	.8	1
26	PAPER AND ALLIED PRODUCTS. . .	-	-	(D)	(D)	(D)	.1	91.1	1.6	-	1.7	2.9	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	(D)	(D)	(D)	.5	(D)	(D)	(D)	20.0	15.7	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(S)	(S)	(S)	(S)	265.0	6.9	-	11.8	18.4	(X)
34	FABRICATED METAL PRODUCTS. . .	-	-	.5	.9	(D)	(D)	55.2	1.0	-	.8	1.9	14
37	TRANSPORTATION EQUIPMENT . . .	-	-	(D)	(D)	(D)	(S)	177.5	3.1	-	1.1	3.4	(X)
	NEW YORK, N.Y.-N.J..	(D)	(D)	16.3	36.1	7.6	(D)	6,963.3	282.0	188.6	114.5	424.1	4
20	FOOD AND KINDRED PRODUCTS. . .	-	-	3.1	7.3	.9	4.4	836.0	29.2	(D)	17.2	59.8	4
22	TEXTILE MILL PRODUCTS.	-	-	.6	1.5	.8	7.6	364.5	15.6	(D)	7.9	27.6	28
23	APPAREL, OTH. TEXTILE PRODS. .	-	-	.5	1.2	.4	6.5	828.7	35.7	(S)	8.5	39.5	69
24	LUMBER AND WOOD PRODUCTS . . .	-	-	(D)	(D)	(D)	.7	92.0	2.7	(D)	1.1	3.4	(X)
25	FURNITURE AND FIXTURES	-	-	.2	.4	-	1.0	103.7	4.0	-	1.3	5.6	19
26	PAPER AND ALLIED PRODUCTS. . .	-	-	.6	1.2	.3	5.5	434.9	14.6	(D)	12.0	31.9	6
27	PRINTING AND PUBLISHING. . . .	-	-	.9	2.2	2.5	1.9	909.1	33.9	(D)	7.6	37.1	21
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	3.5	6.6	(D)	(D)	533.9	22.6	(D)	13.3	41.0	2
30	RUBBER, MISC. PLASTICS PROD. .	-	-	.3	.9	(D)	(D)	484.2	15.8	-	4.3	19.6	33
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	2.1	4.0	.5	2.4	209.9	7.4	(D)	7.6	19.6	9
33	PRIMARY METAL INDUSTRIES . . .	(D)	(D)	.7	1.7	(D)	1.3	293.0	13.8	(S)	5.7	24.6	11
34	FABRICATED METAL PRODUCTS. . .	-	-	1.3	3.0	.2	3.7	430.1	18.7	(D)	6.3	22.6	13
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	.5	1.3	.2	2.2	228.6	9.7	-	4.8	18.2	13
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	(S)	(S)	(S)	(S)	300.4	13.9	(D)	4.0	19.2	(X)
37	TRANSPORTATION EQUIPMENT . . .	-	-	(D)	(D)	(D)	.8	285.0	15.0	-	4.4	17.8	(X)
38	INSTRUMENTS, RELATED PRODS . .	-	-	.4	.9	(Z)	.6	144.1	6.3	(D)	1.7	8.3	47
39	MISC. MANUFACTURING INDUS. . .	-	-	.2	.6	(D)	(D)	370.8	16.7	(D)	4.3	20.2	17
	NEWARK, N.J.	(D)	(D)	13.7	31.7	(D)	12.8	5,029.3	171.7	83.3	99.6	316.8	4
20	FOOD AND KINDRED PRODUCTS. . .	-	-	.9	2.1	1.0	1.2	261.0	9.3	-	6.3	19.8	1
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	-	.7	(S)	(S)	-	.7	1.6	(X)
23	APPAREL, OTH. TEXTILE PRODS. .	-	-	(D)	(D)	(D)	(S)	51.2	1.6	-	.4	2.0	(X)
25	FURNITURE AND FIXTURES	-	-	(D)	(D)	(D)	(D)	30.4	1.1	-	.5	1.7	(X)
26	PAPER AND ALLIED PRODUCTS. . .	-	-	.1	.3	(Z)	1.1	255.5	9.0	(D)	6.8	16.0	7
27	PRINTING AND PUBLISHING. . . .	-	-	.2	.5	(Z)	.5	126.6	4.3	-	1.0	5.6	35
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	4.9	10.6	(D)	(D)	1,557.7	53.7	(D)	31.6	103.1	6
30	RUBBER, MISC. PLASTICS PROD. .	-	-	.3	.6	.1	(D)	334.5	11.8	(D)	3.6	14.6	19
31	LEATHER, LEATHER PRODUCTS. . .	-	-	-	-	(Z)	(D)	14.4	.6	-	.4	1.4	(X)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	1.4	2.9	.7	1.6	141.9	4.5	(D)	7.0	15.9	3
33	PRIMARY METAL INDUSTRIES . . .	(D)	(Z)	1.3	3.3	1.0	.8	318.5	10.6	(D)	4.9	17.4	20
34	FABRICATED METAL PRODUCTS. . .	-	-	.9	2.3	(D)	(D)	263.1	10.2	(D)	4.0	15.4	10
35	MACHINERY, EXCEPT ELECTRIC . .	-	-	1.2	3.1	(D)	(D)	256.7	9.5	(D)	3.5	13.9	8
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.7	1.8	.5	.3	372.5	13.1	-	3.5	15.6	18
38	INSTRUMENTS, RELATED PRODS . .	-	-	(S)	(S)	(Z)	(S)	118.7	3.7	(Z)	.8	4.1	(X)
39	MISC. MANUFACTURING INDUS. . .	-	-	.1	.2	(Z)	.6	85.9	2.4	-	1.1	4.2	18
	NEWPORT NEWS-HAMPTON, VA.. . . .	(D)	(Z)	.5	.8	1.0	(D)	729.8	20.6	(D)	6.9	23.2	6
20	FOOD AND KINDRED PRODUCTS. . .	-	-	(Z)	.1	-	(Z)	81.3	2.1	-	1.1	3.0	15
	NORFOLK-VA. BEACH-PORTSMOUTH,VA.-N.C.	-	-	1.9	3.7	1.2	(D)	532.1	17.2	(D)	7.4	24.9	16
20	FOOD AND KINDRED PRODUCTS. . .	-	-	.8	1.5	(D)	(D)	135.6	4.2	-	2.1	6.6	6
24	LUMBER AND WOOD PRODUCTS . . .	-	-	(D)	(D)	(S)	(S)	38.9	1.5	-	.6	2.2	(X)
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	.1	.3	(D)	(D)	87.8	2.5	(D)	1.6	4.9	21
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	(D)	(D)	(Z)	(Z)	46.9	1.7	-	1.0	2.9	(X)
	NORTHEAST PENNSYLVANIA	(Z)	(Z)	4.7	10.0	1.6	.2	1,049.3	28.4	(D)	13.7	47.9	8
20	FOOD AND KINDRED PRODUCTS. . .	-	-	.3	.7	(D)	(D)	47.5	1.6	-	.1	1.7	31
21	TOBACCO PRODUCTS	-	-	(D)	(D)	-	(D)	13.6	.4	-	.2	.7	(X)
22	TEXTILE MILL PRODUCTS.	-	-	.3	.7	(D)	(D)	121.9	2.5	-	1.8	7.2	12
23	APPAREL, OTH. TEXTILE PRODS. .	-	-	(Z)	.1	.1	(D)	(S)	(S)	(D)	1.0	3.6	57
24	LUMBER AND WOOD PRODUCTS . . .	-	-	(Z)	(Z)	(D)	(D)	15.3	.4	(Z)	.1	.6	1
26	PAPER AND ALLIED PRODUCTS. . .	-	-	(D)	(D)	(D)	.1	113.6	2.9	-	1.6	4.7	(X)
27	PRINTING AND PUBLISHING. . . .	-	-	(Z)	.1	(D)	.1	26.0	.9	-	.3	1.2	6
28	CHEMICALS, ALLIED PRODUCTS . .	-	-	(D)	(D)	-	(D)	(S)	(S)	-	.3	.7	(X)
30	RUBBER, MISC. PLASTICS PROD. .	-	-	.1	.3	(D)	(D)	75.7	2.1	-	.8	2.8	39
31	LEATHER, LEATHER PRODUCTS. . .	-	-	(Z)	(Z)	-	(D)	38.2	.9	-	.3	1.2	36
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	1.8	3.3	(D)	(D)	131.7	3.0	-	2.7	6.2	1
33	PRIMARY METAL INDUSTRIES . . .	-	-	(D)	(D)	(D)	(Z)	39.3	1.0	-	.6	1.8	(X)
34	FABRICATED METAL PRODUCTS. . .	-	-	.5	1.1	(D)	(D)	78.8	2.6	(D)	1.4	4.8	2
35	MACHINERY, EXCEPT ELECTRIC . .	(Z)	(Z)	(Z)	.1	(Z)	(D)	45.0	1.4	-	.4	1.7	8
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	.5	1.3	(D)	(D)	152.2	4.0	-	1.4	5.0	3
37	TRANSPORTATION EQUIPMENT . . .	-	-	(D)	(D)	(D)	(S)	17.0	.6	-	.3	1.1	(X)
39	MISC. MANUFACTURING INDUS. . .	-	-	(D)	(D)	(Z)	(D)	18.0	.6	-	.2	1.0	(X)
	NORWALK, CONN.	-	-	(S)	(S)	(D)	(S)	140.5	4.5	-	2.0	8.1	(X)
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	(Z)	(Z)	-	(D)	32.0	1.1	-	.3	1.5	87

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** –Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ODESSA, TEX.	28.2	52.0	25.3	39.5	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	11.9	23.8	10.4	17.9	-	-	-	-	-	-	(X)	(X)	(X)
	OKLAHOMA CITY, OKLA.	11.1	29.6	8.4	12.3	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
20	FOOD AND KINDRED PRODUCTS	2.4	6.0	1.9	2.8	-	-	(D)	(Z)	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING	.4	1.3	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.8	3.2	1.7	2.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.0	.4	.7	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.9	2.8	.5	.8	-	-	-	-	-	-	(X)	(X)	(X)
	OMAHA, NEBR.-IOWA	14.2	37.0	11.1	19.4	161.5	2.5	80.9	1.2	(D)	(Z)	4	1	1
20	FOOD AND KINDRED PRODUCTS	4.3	10.9	3.3	5.4	49.6	.8	35.2	.5	-	-	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	.3	.9	.3	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.6	7.6	2.2	5.4	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	1
35	MACHINERY, EXCEPT ELECTRIC	.8	2.9	.5	.9	-	-	-	-	-	-	(X)	(X)	(X)
	ORLANDO, FLA.	5.1	19.6	3.7	6.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.9	8.6	2.4	4.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.2	1.2	(Z)	.1	(D)	(Z)	-	-	-	-	93	(X)	(X)
34	FABRICATED METAL PRODUCTS	.2	.8	.2	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.3	2.1	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
	OWENSBORO, KY.	4.8	10.6	3.8	5.1	93.4	1.5	(D)	(D)	(D)	(D)	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.0	2.7	1.8	1.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	OXNARD-SIMI VALLEY-VENTURA, CALIF.	5.5	19.1	4.1	7.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.8	5.1	1.4	2.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.3	1.7	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
	PARKERSBURG-MARIETTA, W.VA.-OHIO	30.2	57.3	26.6	37.3	134.3	2.3	(D)	(D)	708.9	22.2	1	(X)	1
28	CHEMICALS, ALLIED PRODUCTS	9.6	20.9	7.9	11.6	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	3.2	6.6	2.8	4.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.5	1.4	.4	.8	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	PASCAGOULA-MOSS POINT, MISS.	38.5	51.0	34.8	31.7	(D)	(D)	771.6	8.5	-	-	(X)	1	(X)
	PATERSON-CLIFTON-PASSAIC, N.J.	17.1	58.2	13.5	30.9	309.2	5.1	850.4	12.9	(D)	(Z)	12	4	97
20	FOOD AND KINDRED PRODUCTS	1.0	4.1	.8	1.9	31.7	.5	(D)	(D)	-	-	1	(X)	(X)
22	TEXTILE MILL PRODUCTS	3.9	9.1	3.7	7.9	74.9	1.2	152.0	2.3	-	-	36	20	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.3	1.6	.2	.4	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.8	5.4	1.6	3.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.3	1.5	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.8	8.4	2.6	6.2	73.1	1.2	271.4	4.2	-	-	12	1	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.7	8.4	1.2	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.9	3.7	.7	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.3	5.9	.9	2.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.5	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	4.6	.6	1.3	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	97
	PENSACOLA, FLA.	38.4	83.8	35.5	63.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	31.3	69.6	29.1	54.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	PEORIA, ILL.	29.1	84.1	23.5	36.1	270.0	4.3	(D)	(D)	444.0	15.1	2	(X)	1
20	FOOD AND KINDRED PRODUCTS	9.4	18.5	9.0	14.4	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	2.0	2.8	2.0	2.4	-	-	(D)	(Z)	(D)	(D)	(X)	1	(X)
	PETERSBURG-COLONIAL HEIGHTS-HOPEWELL VA.	24.6	70.2	21.6	46.8	1,313.3	18.7	1,808.0	23.5	5.6	.2	1	1	1
	PHILADELPHIA, PA.-N.J.	218.8	715.0	184.0	397.5	3,541.7	57.0	11,061.7	159.4	112.7	3.3	4	2	12
20	FOOD AND KINDRED PRODUCTS	20.7	67.0	17.9	39.9	254.1	4.2	1,632.9	23.9	(D)	(D)	7	1	(X)
22	TEXTILE MILL PRODUCTS	4.4	16.4	3.7	8.4	146.9	2.2	199.0	2.9	-	-	25	29	(X)
23	APPAREL, OTH. TEXTILE PRODS.	1.8	8.1	1.3	2.8	28.7	.5	23.3	.4	-	-	43	24	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.9	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
25	FURNITURE AND FIXTURES	1.1	4.5	.8	1.8	21.4	.3	(D)	(D)	-	-	14	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	18.1	57.1	15.8	36.9	226.2	3.5	2,138.8	31.0	-	-	4	5	(X)
27	PRINTING AND PUBLISHING	3.5	17.0	2.3	5.2	46.7	.8	(D)	(D)	-	-	8	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	31.6	102.6	26.8	59.2	439.5	6.9	2,748.9	38.6	(D)	(D)	13	1	(X)
29	PETROLEUM AND COAL PRODUCTS	27.5	63.9	23.6	31.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	7.6	29.6	5.9	12.7	226.4	3.6	375.3	5.4	(D)	(D)	8	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	16.2	49.7	14.2	32.2	446.8	7.0	619.9	8.5	(D)	(D)	5	19	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ODESSA, TEX.	-	-	19.8	29.3	(D)	(D)	860.4	12.5	(D)	30.3	47.4	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	6.0	8.9	(D)	(D)	417.0	5.9	-	12.6	21.2	1
	OKLAHOMA CITY, OKLA.	-	-	5.9	8.5	.8	3.0	805.3	17.3	-	10.3	22.9	8
20	FOOD AND KINDRED PRODUCTS	-	-	1.7	2.5	(D)	(D)	146.2	3.2	-	2.2	4.2	8
27	PRINTING AND PUBLISHING	-	-	.1	.2	(D)	(D)	59.4	1.0	-	.3	1.0	49
32	STONE, CLAY, GLASS PRODUCTS	-	-	.4	.4	(D)	(D)	23.4	.6	-	1.2	2.2	33
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(D)	53.7	1.3	-	.6	1.5	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	-	(D)	96.5	2.1	-	.8	2.6	(X)
	OMAHA, NEBR.-IOWA	(D)	(D)	6.5	8.3	2.2	(D)	909.6	17.6	-	15.2	34.3	4
20	FOOD AND KINDRED PRODUCTS	-	-	2.0	2.6	(D)	(D)	285.8	5.5	-	4.6	10.6	9
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(S)	6.5	.2	-	.4	.8	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.0	1.2	(D)	(D)	118.9	2.3	-	2.3	6.0	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.3	(D)	(D)	89.6	2.0	-	.9	2.6	9
	ORLANDO, FLA.	-	-	1.7	2.6	.3	2.1	419.1	13.4	-	4.7	16.8	5
20	FOOD AND KINDRED PRODUCTS	-	-	1.4	2.1	(D)	(D)	134.7	4.5	-	2.6	7.0	5
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	-	(Z)	39.2	1.0	-	.2	1.0	1
34	FABRICATED METAL PRODUCTS	-	-	(Z)	.1	(D)	(D)	21.7	.6	-	.2	.8	7
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(D)	53.1	1.9	-	.2	1.7	(X)
	OWENSBORO, KY.	-	-	2.2	3.1	.1	(D)	283.4	5.5	-	5.4	9.5	37
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	-	(S)	48.9	1.0	-	2.5	2.8	(X)
	OXNARD-SIMI VALLEY-VENTURA, CALIF.	-	-	(S)	(S)	(S)	(S)	410.7	11.7	(D)	4.2	12.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(Z)	(S)	102.0	2.5	-	1.4	3.8	(X)
37	TRANSPORTATION EQUIPMENT	-	-	.1	.1	-	.1	47.7	1.5	-	.3	1.7	1
	PARKERSBURG-MARIETTA, W.VA.-OHIO	(D)	(D)	5.2	8.5	2.2	.7	1,083.6	20.0	(D)	30.5	54.1	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.9	3.1	(D)	(D)	504.0	9.3	-	5.6	12.3	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.3	3.7	(D)	-	102.8	2.0	-	1.4	2.6	1
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(Z)	(D)	18.6	.6	-	.7	1.6	(X)
	PASCAGOULA-MOSS POINT, MISS.	-	-	26.8	17.6	(D)	(D)	1,091.1	19.3	(D)	39.7	43.8	2
	PATERSON-CLIFTON-PASSAIC, N.J.	-	-	2.5	6.0	(D)	(D)	1,058.7	27.3	(D)	16.8	54.4	21
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.6	-	(D)	56.0	2.3	-	1.1	4.2	1
22	TEXTILE MILL PRODUCTS	-	-	.3	.7	(D)	(D)	58.5	1.2	-	4.6	10.5	31
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	(D)	.2	31.3	1.2	(D)	.3	1.3	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	37.9	1.6	-	1.9	5.2	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(D)	.2	35.5	1.2	-	.3	1.5	40
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	70.0	2.2	-	3.0	8.3	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(S)	(S)	(D)	(S)	152.5	5.6	-	1.4	5.5	(X)
33	PRIMARY METAL INDUSTRIES	-	-	(S)	(S)	(D)	(S)	51.1	1.7	-	.9	3.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	.5	1.3	(D)	(D)	395.3	3.8	-	1.2	5.6	16
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.3	(D)	(D)	40.1	1.6	-	.6	2.3	50
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.3	(D)	.3	78.8	3.3	(D)	.8	4.1	1
	PENSACOLA, FLA.	-	-	(S)	(S)	(S)	(S)	829.4	20.2	(D)	36.7	68.5	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	8.9	13.9	(D)	(Z)	641.5	15.4	(D)	29.4	55.9	1
	PEORIA, ILL.	-	-	7.7	13.4	(D)	(S)	1,642.3	48.0	135.9	28.8	70.8	3
20	FOOD AND KINDRED PRODUCTS	-	-	2.2	3.9	(Z)	.1	113.2	4.1	(D)	9.4	17.1	5
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	14.5	.4	(D)	2.0	2.4	(X)
	PETERSBURG-COLONIAL HEIGHTS-HOPEWELL VA.	-	-	2.0	3.3	1.0	(Z)	861.1	23.5	(D)	26.0	57.4	1
	PHILADELPHIA, PA.-N.J.	421.9	27.4	60.6	116.9	15.0	18.5	10,187.8	317.6	777.2	226.5	636.1	1
20	FOOD AND KINDRED PRODUCTS	-	-	2.2	5.3	(D)	5.9	835.8	27.1	(D)	20.7	60.9	7
22	TEXTILE MILL PRODUCTS	-	-	.5	1.1	.3	1.8	211.3	8.0	-	4.0	13.2	8
23	APPAREL, OTH. TEXTILE PRODS.	-	-	.1	.2	(D)	(D)	152.4	5.3	(D)	1.9	7.7	13
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.2	(D)	(Z)	37.3	1.0	-	.5	1.7	86
25	FURNITURE AND FIXTURES	-	-	.2	.5	(D)	.8	81.5	2.6	-	1.1	3.8	15
26	PAPER AND ALLIED PRODUCTS	-	-	.8	1.9	(D)	(D)	681.7	20.1	(D)	18.2	50.6	17
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	1.8	1.1	363.0	11.8	(D)	3.7	14.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	3.3	7.5	3.9	(D)	1,424.0	43.4	(D)	30.0	84.7	4
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	(S)	(S)	(S)	(S)	1,147.4	32.3	(D)	32.0	59.1	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.6	(D)	2.1	511.6	16.8	(D)	9.4	27.3	13
32	STONE, CLAY, GLASS PRODUCTS	-	-	5.0	12.6	(D)	(D)	589.9	17.6	(D)	17.1	45.4	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	PHILADELPHIA, PA.-N.J--CON.													
33	PRIMARY METAL INDUSTRIES	59.5	178.0	52.9	119.9	560.5	9.1	2,339.5	34.1	(D)	(D)	1	1	(X)
34	FABRICATED METAL PRODUCTS	9.1	38.8	7.2	18.5	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	5.9	28.2	4.1	9.5	143.5	2.4	216.3	3.1	(S)	(S)	12	7	(X)
36	ELECTRIC, ELECTRONIC EQUIP	4.8	21.4	3.0	7.5	206.4	3.4	129.3	2.0	-	-	21	1	(X)
37	TRANSPORTATION EQUIPMENT	3.5	17.1	2.4	6.0	47.6	.8	238.2	3.6	-	-	25	1	(X)
38	INSTRUMENTS, RELATED PRODS	1.4	7.3	.8	1.9	29.3	.5	(D)	(D)	-	-	7	(X)	(X)
39	MISC. MANUFACTURING INDUS.	1.4	5.8	1.0	2.2	59.1	.9	(D)	(D)	-	-	7	(X)	(X)
	PHOENIX, ARIZ.	16.0	62.8	10.2	18.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.9	8.3	2.4	3.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.0	4.0	.4	.7	(D)	(Z)	(D)	(Z)	-	-	I	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.2	6.2	2.1	4.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.6	2.5	.4	.8	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.9	5.3	.4	.7	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.0	10.6	.6	1.1	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
	PINE BLUFF, ARK.	13.9	25.3	13.4	21.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	PITTSBURGH, PA.	361.3	1,000.5	327.4	744.1	1,568.3	25.4	5,323.0	73.8	1,590.1	44.2	4	1	I
20	FOOD AND KINDRED PRODUCTS	3.3	9.9	2.8	5.8	43.7	.8	60.7	.9	(D)	(D)	40	1	(X)
26	PAPER AND ALLIED PRODUCTS	.6	2.3	.5	1.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.8	3.5	.5	1.2	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	15.1	31.1	12.8	18.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.1	2.8	1.0	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.0	4.0	.7	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	19.4	42.4	16.7	28.3	153.5	2.7	(D)	(D)	(D)	(D)	20	(X)	(X)
33	PRIMARY METAL INDUSTRIES	302.6	844.0	278.9	658.5	785.9	12.4	4,942.6	68.2	1,144.8	33.7	1	1	1
34	FABRICATED METAL PRODUCTS	7.2	22.4	5.9	11.8	101.8	1.6	(D)	(D)	(D)	(D)	10	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	4.9	18.2	3.6	7.5	83.9	1.4	(D)	(D)	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	2.7	9.1	2.1	4.0	83.8	1.4	-	-	(D)	(D)	1	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	.6	2.4	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	PITTSFIELD, MASS.	8.0	25.7	6.6	14.4	38.8	.6	815.8	11.0	-	-	8	9	(X)
26	PAPER AND ALLIED PRODUCTS	3.3	10.2	2.7	5.7	(D)	(Z)	341.0	4.7	-	-	1	1	(X)
	PORTLAND, MAINE.	7.0	19.9	6.2	14.3	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.8	3.3	.7	2.2	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS	.4	1.1	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.3	.3	.7	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.4	.2	.5	12.6	.2	-	-	-	-	37	(X)	(X)
	PORTLAND, OREG.-WASH.	65.8	139.6	40.0	76.2	260.3	4.0	780.4	9.0	(D)	(D)	18	4	(X)
20	FOOD AND KINDRED PRODUCTS	4.4	10.3	3.7	7.1	(D)	(D)	29.8	.4	-	-	(X)	27	(X)
22	TEXTILE MILL PRODUCTS	.5	1.0	.4	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	3.6	10.4	2.7	6.3	174.2	2.8	38.4	.5	-	-	25	46	(X)
26	PAPER AND ALLIED PRODUCTS	20.7	46.9	15.8	29.3	(D)	(D)	455.3	5.0	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING	.4	1.3	.1	.3	(S)	(S)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	6.2	11.7	3.0	5.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.9	4.0	1.8	3.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.9	8.5	4.3	6.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	17.1	25.6	4.3	8.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.5	4.8	1.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.2	4.0	.7	1.3	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.2	.2	.5	-	-	(S)	(S)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.8	2.8	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	POUGHKEEPSIE, N.Y.	5.9	26.9	4.1	8.4	194.6	2.9	176.1	2.4	-	-	21	9	(X)
	PROVIDENCE-WARWICK-PAWTUCKET, R.I.-MASS.	25.5	107.3	19.9	47.1	521.5	8.6	1,264.8	18.0	-	-	17	10	(X)
22	TEXTILE MILL PRODUCTS	3.5	13.3	2.9	6.9	105.7	1.6	300.1	4.4	-	-	70	38	(X)
27	PRINTING AND PUBLISHING	.5	2.5	.3	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.3	6.2	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.4	8.5	2.1	5.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.6	16.3	2.7	6.0	8.8	.1	141.9	2.1	-	-	1	2	(X)
34	FABRICATED METAL PRODUCTS	3.1	13.1	2.4	5.3	33.6	.5	54.4	.8	-	-	21	6	(X)
35	MACHINERY, EXCEPT ELECTRIC	.7	4.7	.4	1.5	51.5	1.0	20.3	.3	-	-	59	20	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.8	4.3	.5	1.1	(D)	(D)	43.1	.6	-	-	(X)	11	(X)
38	INSTRUMENTS, RELATED PRODS	1.6	8.3	1.1	2.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	2.4	11.6	1.8	4.6	87.9	1.5	66.2	1.0	-	-	18	9	(X)
	PUEBLO, COLO.	14.6	25.2	12.1	12.9	(S)	(S)	(D)	(Z)	-	-	(X)	49	(X)
32	STONE, CLAY, GLASS PRODUCTS	1.9	3.0	1.8	2.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	RACINE, WIS.	8.0	23.5	6.2	11.6	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.2	1.0	.2	.3	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
34	FABRICATED METAL PRODUCTS	.7	2.6	.6	1.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	PHILADELPHIA, PA.-N.J--CON.												
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	1.8	1.4	1,931.9	58.1	(D)	60.9	159.4	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	(S)	(S)	(S)	(S)	563.1	20.4	-	9.8	34.8	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.0	2.4	1.0	(D)	530.3	18.6	(D)	5.4	22.9	9
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.5	1.3	(D)	(D)	516.1	13.8	(D)	5.1	21.2	7
37	TRANSPORTATION EQUIPMENT	-	-	.4	.9	.6	(Z)	321.5	11.1	(D)	3.6	15.1	7
38	INSTRUMENTS, RELATED PRODS	-	-	.4	.9	(D)	.3	163.4	5.4	(D)	1.5	6.9	19
39	MISC. MANUFACTURING INDUS.	-	-	.1	.3	(D)	.8	115.3	3.6	(D)	1.6	5.7	18
	PHOENIX, ARIZ.	-	-	5.3	8.0	3.6	2.6	1,712.2	44.5	(D)	15.4	49.7	3
20	FOOD AND KINDRED PRODUCTS	-	-	1.5	2.2	(D)	(D)	142.5	4.3	(D)	3.9	8.6	3
28	CHEMICALS, ALLIED PRODUCTS	-	-	.2	.4	(D)	(D)	160.7	3.3	-	.8	2.3	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(S)	(S)	47.0	1.8	-	1.8	5.0	(X)
34	FABRICATED METAL PRODUCTS	-	-	.1	.1	(D)	(D)	45.9	1.7	-	.4	1.7	52
35	MACHINERY, EXCEPT ELECTRIC	-	-	.1	.2	(D)	(D)	153.5	4.6	-	.8	4.0	29
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.5	.8	(D)	.1	409.5	9.5	-	2.0	8.4	7
	PINE BLUFF, ARK.	-	-	3.4	4.0	.3	.3	143.8	3.9	(D)	14.1	21.1	1
	PITTSBURGH, PA.	4,333.1	361.4	93.5	169.4	60.2	9.7	9,937.6	256.4	779.6	314.8	647.6	1
20	FOOD AND KINDRED PRODUCTS	-	-	1.1	2.4	(D)	.6	146.7	4.1	(D)	3.5	8.8	15
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(D)	.1	39.5	1.2	-	.6	1.9	(X)
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	(S)	(S)	87.3	2.3	(D)	.5	1.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.4	5.0	(S)	(S)	670.9	12.5	(D)	17.3	29.8	7
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	-	.8	35.2	1.1	-	1.1	2.1	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.5	(D)	.2	92.7	2.4	-	.7	2.5	28
32	STONE, CLAY, GLASS PRODUCTS	-	-	9.6	18.3	1.1	(D)	779.7	14.0	(S)	19.8	34.6	1
33	PRIMARY METAL INDUSTRIES	(D)	(D)	71.6	125.9	55.8	(D)	6,944.9	185.5	(D)	254.2	513.6	1
34	FABRICATED METAL PRODUCTS	(D)	(D)	3.6	7.1	.5	2.0	360.3	10.6	-	6.7	19.1	5
35	MACHINERY, EXCEPT ELECTRIC	-	-	2.2	4.5	(D)	(D)	376.4	10.7	(D)	5.1	15.2	4
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.7	1.3	(D)	(D)	175.5	5.1	-	2.4	8.0	1
38	INSTRUMENTS, RELATED PRODS	-	-	.3	.6	-	(D)	63.8	1.6	-	.5	2.1	1
	PITTSFIELD, MASS.	-	-	1.1	2.5	.2	.1	425.2	11.3	(D)	8.8	24.8	7
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	183.0	4.5	(D)	4.0	11.0	(X)
	PORTLAND, MAINE.	-	-	(S)	(S)	(S)	(S)	228.1	5.6	(D)	6.7	16.2	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	42.2	1.1	-	.7	2.6	(X)
31	LEATHER, LEATHER PRODUCTS	-	-	-	-	(Z)	(D)	13.0	.4	(D)	.4	1.0	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	(D)	(Z)	32.7	.6	-	.4	1.4	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(Z)	(D)	35.5	.9	-	.2	.9	(X)
	PORTLAND, OREG.-WASH.	-	-	25.9	51.7	(D)	4.5	7,537.6	63.4	(D)	68.0	124.6	2
20	FOOD AND KINDRED PRODUCTS	-	-	2.2	4.6	(D)	1.8	216.3	3.2	(D)	4.2	9.0	3
22	TEXTILE MILL PRODUCTS	-	-	(D)	(D)	-	(D)	24.7	.3	-	.4	.9	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.6	1.2	(D)	(D)	270.4	4.1	-	2.8	7.6	17
26	PAPER AND ALLIED PRODUCTS	-	-	11.7	22.3	1.8	(D)	1,441.6	17.6	(D)	19.9	39.2	1
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	(S)	(S)	67.3	1.0	-	.3	1.3	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	938.5	6.1	-	5.7	8.9	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	28.1	.4	-	1.9	3.5	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.4	3.0	(Z)	(D)	153.2	2.2	-	6.4	10.0	1
33	PRIMARY METAL INDUSTRIES	-	-	3.7	7.9	(D)	(D)	3,757.3	16.8	-	20.9	29.6	2
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	116.8	2.3	-	1.2	3.3	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(S)	(S)	133.1	2.7	-	1.2	3.3	(X)
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(Z)	(S)	42.5	.8	-	.4	1.1	(X)
37	TRANSPORTATION EQUIPMENT	-	-	.3	.7	(D)	(D)	92.3	1.8	-	.7	1.9	12
	POUGHKEEPSIE, N.Y.	-	-	1.1	1.9	(D)	(D)	517.4	18.5	(D)	5.1	20.2	7
	PROVIDENCE-WARWICK-PAWTUCKET, R.I.-MASS.	-	-	4.8	12.9	(D)	(D)	1,643.4	60.2	(D)	24.0	93.6	8
22	TEXTILE MILL PRODUCTS	-	-	.3	.9	(D)	(D)	182.5	6.4	(Z)	3.6	12.5	5
27	PRINTING AND PUBLISHING	-	-	.1	.2	-	.1	49.2	1.7	(D)	.4	1.9	45
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.3	(D)	(D)	129.6	4.4	-	1.2	5.7	22
32	STONE, CLAY, GLASS PRODUCTS	-	-	1.6	4.0	(D)	(D)	88.5	3.0	-	2.5	7.1	15
33	PRIMARY METAL INDUSTRIES	-	-	.5	1.4	.7	1.7	275.2	10.3	(S)	3.9	17.5	12
34	FABRICATED METAL PRODUCTS	-	-	.4	1.1	(D)	(D)	210.0	7.8	(D)	1.8	8.7	57
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.7	(D)	(D)	86.9	3.2	-	.7	4.3	28
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(D)	(D)	89.0	3.2	-	1.5	6.9	38
38	INSTRUMENTS, RELATED PRODS	-	-	.3	.9	(D)	(D)	156.8	5.7	-	.6	2.5	5
39	MISC. MANUFACTURING INDUS.	-	-	.5	1.4	.3	.4	178.6	7.0	(D)	2.2	10.2	14
	PUEBLO, COLO.	(D)	(D)	(S)	(S)	(D)	(S)	736.5	12.3	(D)	12.7	18.6	(X)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	2.0	1.8	(D)	(D)	14.2	.7	-	1.4	2.3	63
	RACINE, WIS.	(D)	(D)	(S)	(S)	(S)	(S)	522.4	12.0	(D)	6.8	17.8	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	(D)	18.2	.7	-	(Z)	.3	(X)
34	FABRICATED METAL PRODUCTS	-	-	(D)	(D)	-	(D)	48.1	1.2	(Z)	.4	1.3	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	RACINE, WIS--CON.													
35	MACHINERY, EXCEPT ELECTRIC . . .	2.4	6.4	1.9	3.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	RALEIGH-DURHAM, N.C.	6.9	26.8	4.6	11.2	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.9	3.1	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	1.6	5.7	1.0	2.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	.5	1.8	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.2	1.2	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.5	2.6	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.3	1.9	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	READING, PA.	18.9	69.3	15.0	35.4	(S)	(S)	(S)	(S)	(S)	(S)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.3	5.0	1.1	2.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS.	.7	2.7	.6	1.3	(D)	(Z)	54.5	.8	-	-	38	34	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.2	1.0	.2	.4	8.1	.1	(D)	(D)	(D)	(Z)	16	(X)	1
26	PAPER AND ALLIED PRODUCTS. . . .	1.0	3.4	.9	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	.9	2.4	.8	1.5	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)	(X)	1
33	PRIMARY METAL INDUSTRIES	5.4	21.8	4.2	11.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.6	2.4	.5	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.5	1.9	.3	1.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	2.2	10.0	1.5	4.0	20.5	.3	66.6	.9	-	-	5	3	(X)
37	TRANSPORTATION EQUIPMENT	.9	3.3	.7	1.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	RENO, NEV.	1.8	6.0	1.4	2.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.4	1.2	.4	.5	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.5	1.9	.4	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	RICHLAND-KENNEWICK, WASH..	8.2	14.4	6.3	11.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.8	4.1	1.5	3.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	6.1	9.4	4.7	7.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	RICHMOND, VA..	22.9	78.1	18.1	38.6	443.0	7.0	1,325.7	17.5	62.3	2.6	2	2	1
20	FOOD AND KINDRED PRODUCTS. . . .	1.3	5.0	.9	2.1	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
24	LUMBER AND WOOD PRODUCTS	1.0	3.1	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	2.1	6.6	1.8	3.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.3	1.5	.2	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.9	3.7	.6	1.4	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.7	1.9	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.6	2.5	.5	.9	(D)	(Z)	(D)	(D)	-	-	63	(X)	(X)
	RIVERSIDE-SAN BERNARDINO-ONTARIO, CA	61.2	153.9	52.9	84.2	222.1	2.8	1,760.3	18.5	(D)	(D)	16	1	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	2.9	7.3	2.5	3.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.3	1.4	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.5	1.5	.4	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.6	2.6	.4	.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	33.4	65.1	31.2	47.6	46.4	.7	1,446.1	15.2	(D)	(D)	58	1	(X)
33	PRIMARY METAL INDUSTRIES	15.8	47.6	12.8	22.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.5	4.9	1.2	2.0	(D)	(Z)	-	-	-	-	77	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.4	1.5	.3	.4	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.4	2.3	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.0	3.2	.7	.9	(D)	(Z)	-	-	-	-	1	(X)	(X)
	ROANOKE, VA.	8.3	24.6	6.4	11.5	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.6	1.9	.5	1.0	(D)	(D)	(D)	(Z)	-	-	(X)	66	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.2	.8	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
	ROCHESTER, MINN.	2.6	6.4	2.3	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	ROCHESTER, N.Y..	45.5	118.5	39.5	70.7	341.0	5.5	793.2	11.7	715.7	26.4	9	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	4.3	13.0	3.8	8.4	150.5	2.3	107.0	1.5	-	-	7	1	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.2	.7	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	1.2	4.7	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.8	3.2	.6	1.2	-	-	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	1.1	3.6	1.0	2.2	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	.5	2.3	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	3.1	7.8	2.8	5.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.9	6.0	1.6	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	3.3	12.0	2.2	3.7	10.9	.2	(D)	(D)	(D)	(D)	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.9	6.9	1.5	3.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.5	1.9	.3	.9	33.1	.6	-	-	-	-	15	(X)	(X)
	ROCKFORD, ILL.	13.5	47.6	10.4	23.2	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.3	3.7	1.1	1.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	.3	.9	.2	.5	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.4	1.2	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.2	4.7	1.0	3.1	(D)	(Z)	-	-	-	-	1	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	RACINE, WIS--CON.												
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	1.4	2.4	(D)	(D)	145.4	2.8	(S)	1.8	4.9	3
	RALEIGH-DURHAM, N.C.	-	-	(S)	(S)	(S)	(S)	680.2	15.6	(D)	6.0	21.7	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	56.2	1.3	-	1.0	2.8	(X)
22	TEXTILE MILL PRODUCTS	-	-	.2	.4	(D)	(Z)	167.9	3.5	-	1.6	5.1	11
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	(D)	(D)	-	.5	1.4	(X)
34	FABRICATED METAL PRODUCTS	-	-	(Z)	(Z)	(Z)	(D)	28.1	.8	-	.2	.9	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	.1	(D)	(D)	87.2	2.0	(D)	.6	2.4	17
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	(D)	(D)	64.1	1.7	-	.3	1.6	(X)
	READING, PA.	(S)	(S)	(S)	(S)	(S)	(S)	1,125.4	33.9	(D)	17.7	59.2	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	72.9	2.2	-	1.3	4.3	(X)
22	TEXTILE MILL PRODUCTS	-	-	(Z)	.1	(D)	(D)	38.2	1.3	-	.8	2.7	40
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	-	(D)	16.1	.6	-	.3	1.0	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(Z)	.1	(Z)	(D)	49.8	1.6	-	1.0	2.7	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(D)	(D)	28.4	.9	-	.8	2.2	(X)
33	PRIMARY METAL INDUSTRIES	13.5	1.8	2.4	6.4	.3	(D)	352.5	10.8	(D)	5.0	17.5	1
34	FABRICATED METAL PRODUCTS	(D)	(D)	(D)	(D)	(D)	.3	35.5	1.0	-	.5	2.4	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	(Z)	.1	(D)	(D)	30.3	.9	-	.8	3.0	11
36	ELECTRIC, ELECTRONIC EQUIP	(D)	(D)	.6	1.7	(D)	(D)	205.4	6.0	-	2.1	7.9	3
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(Z)	(Z)	48.8	1.7	-	.7	2.5	(X)
	RENO, NEV.	-	-	(S)	(S)	(D)	(S)	108.5	3.2	(D)	2.0	6.1	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(Z)	(D)	22.2	.7	-	.4	1.3	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(D)	14.9	.5	-	.6	2.1	(X)
	RICHLAND-KENNEWICK, WASH.	-	-	3.2	6.7	(D)	(D)	543.3	3.0	(D)	8.1	14.0	1
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	108.8	.9	-	2.1	3.7	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	.4	393.6	1.6	(D)	5.5	8.3	(X)
	RICHMOND, VA.	(D)	(D)	3.5	7.8	(D)	2.4	1,405.0	39.5	(D)	23.7	64.7	4
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.8	(D)	(D)	111.2	2.9	-	1.2	4.1	2
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	.6	39.7	1.3	-	1.2	3.1	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.3	.7	(D)	(D)	91.6	3.1	(D)	2.1	5.4	21
27	PRINTING AND PUBLISHING	-	-	.1	.1	(D)	(D)	34.2	1.2	-	.6	2.2	32
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(D)	(D)	84.8	2.3	(D)	.2	.8	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(D)	(D)	21.0	.5	-	.9	1.9	(X)
34	FABRICATED METAL PRODUCTS	-	-	.1	.2	(D)	.4	51.4	1.6	-	.6	2.1	1
	RIVERSIDE-SAN BERNARDINO-ONTARIO, CA	(D)	(D)	23.2	41.7	.8	6.1	2,441.7	69.6	(D)	63.2	141.2	3
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(D)	(S)	125.7	3.6	-	2.2	5.2	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	.1	.1	(D)	.3	29.8	.9	-	.4	1.3	25
26	PAPER AND ALLIED PRODUCTS	-	-	(D)	(D)	-	(D)	30.8	.9	-	.4	1.2	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.3	(D)	(D)	64.4	1.9	-	.5	1.9	1
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	7.4	14.8	.2	(D)	628.7	17.6	-	28.6	48.2	3
33	PRIMARY METAL INDUSTRIES	-	-	8.7	15.7	.1	(D)	875.9	25.1	(D)	20.3	50.8	1
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	92.1	2.9	-	1.3	3.9	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.2	(Z)	.2	37.4	1.0	-	.2	1.0	16
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.2	.4	-	(D)	61.3	1.9	-	.5	2.1	11
37	TRANSPORTATION EQUIPMENT	-	-	(S)	(S)	(Z)	(S)	70.6	2.3	-	.8	2.6	(X)
	ROANOKE, VA.	-	-	(S)	(S)	(S)	(S)	541.3	13.1	-	8.5	20.8	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.5	(D)	(Z)	29.8	.9	-	.5	1.6	6
35	MACHINERY, EXCEPT ELECTRIC	-	-	(S)	(S)	(Z)	(S)	18.8	.6	-	.2	.7	(X)
	ROCHESTER, MINN.	-	-	(S)	(S)	(D)	(S)	106.4	3.1	-	2.2	5.5	(X)
	ROCHESTER, N.Y.	-	-	6.3	12.7	10.0	4.4	1,754.9	47.8	(D)	46.9	111.3	6
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	2.9	(D)	166.8	4.6	-	4.4	12.1	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	.2	.6	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.3	.6	(D)	(D)	123.4	3.3	-	1.0	3.2	1
27	PRINTING AND PUBLISHING	-	-	.2	.4	.6	(D)	57.1	2.1	(D)	.9	3.4	11
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	47.9	1.4	-	1.1	3.5	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	-	(D)	73.8	1.9	-	.5	2.1	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(D)	(S)	90.1	2.4	-	3.8	7.9	(X)
34	FABRICATED METAL PRODUCTS	-	-	.9	1.8	.4	(D)	95.5	2.7	-	1.8	4.8	26
35	MACHINERY, EXCEPT ELECTRIC	-	-	.5	1.0	(D)	.7	326.1	8.3	-	3.1	11.0	3
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.5	1.0	(D)	(D)	137.4	3.8	-	1.9	5.8	1
39	MISC. MANUFACTURING INDUS.	-	-	(D)	(D)	(D)	(D)	37.6	1.0	-	.4	1.6	(X)
	ROCKFORD, ILL.	(D)	(D)	(S)	(S)	(S)	(S)	930.2	24.5	(D)	13.1	39.5	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	1.0	1.7	(D)	(D)	67.5	1.8	-	1.4	3.3	8
26	PAPER AND ALLIED PRODUCTS	-	-	.2	.4	-	(Z)	14.6	.4	-	.3	.7	1
32	STONE, CLAY, GLASS PRODUCTS	-	-	.2	.4	(D)	(D)	12.4	.4	-	.4	1.0	10
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.2	2.2	-	(D)	70.4	1.5	-	1.2	3.3	22

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** –Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]—		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	ROCKFORD, ILL--CON.													
34	FABRICATED METAL PRODUCTS. . . .	4.0	12.4	3.2	6.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	2.2	8.7	1.5	2.8	14.2	.2	(D)	(D)	-	-	23	(X)	(X)
	SACRAMENTO, CALIF.	14.1	40.0	11.8	24.5	133.7	2.0	68.9	.8	-	-	33	1	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	7.2	16.9	6.6	13.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.7	3.6	.3	.6	(D)	(Z)	-	-	-	-	72	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	1.7	3.6	1.6	3.0	(D)	(Z)	-	-	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.7	2.0	.6	1.2	-	-	(D)	(Z)	-	-	(X)	1	(X)
	SAGINAW, MICH.	26.3	115.6	20.8	68.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.4	1.6	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
	ST CLOUD, MINN..	3.9	11.2	3.1	5.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.5	3.4	1.3	2.2	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
	ST JOSEPH, MO.	3.1	11.5	2.2	3.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.5	5.8	1.0	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	.5	1.3	.4	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	ST LOUIS, MO.-ILL.	147.5	387.2	124.1	235.3	479.9	7.6	1,128.8	14.4	965.1	26.0	5	2	1
20	FOOD AND KINDRED PRODUCTS. . . .	11.9	29.3	10.4	18.0	77.0	1.2	47.4	.7	(D)	(D)	1	4	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.4	1.5	.3	.5	(D)	(Z)	(D)	(Z)	(D)	(Z)	63	53	25
25	FURNITURE AND FIXTURES	.9	2.4	.8	1.3	(D)	(Z)	(D)	(D)	-	-	86	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	6.2	12.0	5.6	7.9	24.8	.4	32.6	.5	(D)	(D)	11	1	(X)
27	PRINTING AND PUBLISHING.	1.3	5.4	.8	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	24.3	54.9	21.3	35.6	95.3	1.5	173.5	2.6	313.0	9.2	1	4	1
29	PETROLEUM AND COAL PRODUCTS. . .	10.2	28.8	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.7	5.8	1.1	1.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
31	LEATHER, LEATHER PRODUCTS. . . .	.3	1.0	.2	.3	(D)	(Z)	-	-	(D)	(Z)	1	(X)	1
32	STONE, CLAY, GLASS PRODUCTS. . .	20.9	35.3	19.6	27.1	84.3	1.3	(D)	(D)	(D)	(D)	26	(X)	(X)
33	PRIMARY METAL INDUSTRIES	47.1	140.0	(D)	(D)	87.6	1.4	784.4	9.4	-	-	1	1	(X)
34	FABRICATED METAL PRODUCTS. . . .	6.5	18.6	5.3	9.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	3.1	11.4	2.1	3.8	6.8	.1	(D)	(D)	-	-	23	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	1.4	5.2	1.0	1.8	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	10.1	31.5	7.3	13.2	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.4	1.3	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	SALEM, OREG.	6.6	16.8	5.1	9.9	14.5	.3	126.1	1.7	-	-	43	43	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.6	4.1	1.2	2.6	(D)	(D)	74.1	1.0	-	-	(X)	64	(X)
24	LUMBER AND WOOD PRODUCTS	1.9	5.3	1.5	3.2	10.8	.2	(D)	(D)	-	-	57	(X)	(X)
	SALINAS-SEASIDE-MONTEREY, CALIF. . .	10.7	29.4	9.9	21.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	5.2	13.6	4.9	10.5	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	SALT LAKE CITY-OGDEN, UTAH	33.5	59.9	28.9	32.7	150.9	2.3	218.8	2.4	56.2	1.3	40	1	17
20	FOOD AND KINDRED PRODUCTS. . . .	1.5	4.2	1.1	1.3	(D)	(Z)	-	-	-	-	9	(X)	(X)
27	PRINTING AND PUBLISHING.	.3	1.1	.2	.3	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	6.3	7.5	6.0	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.6	1.7	.5	.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.8	2.8	.5	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.4	1.3	.2	.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	SAN ANGELO, TEX.	.5	2.8	(S)	(S)	(D)	(Z)	-	-	-	-	1	(X)	(X)
	SAN ANTONIO, TEX..	20.2	55.1	17.4	32.5	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	2.4	8.7	1.8	3.4	-	-	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	12.2	26.5	11.6	21.6	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.4	6.0	.8	1.5	-	-	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.3	1.3	.2	.3	(D)	(Z)	-	-	-	-	77	(X)	(X)
	SAN DIEGO, CALIF..	9.1	44.2	5.8	11.4	97.0	1.4	(D)	(D)	-	-	50	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.6	5.7	1.3	2.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.3	1.9	.1	.2	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	.7	2.2	.6	1.4	72.4	1.1	-	-	-	-	68	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.8	5.2	.3	.6	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	1.6	10.4	.8	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	1.4	.1	.2	(D)	(Z)	-	-	-	-	1	(X)	(X)
	SAN FRANCISCO-OAKLAND, CALIF.. . . .	142.3	428.6	123.7	252.1	193.1	3.1	375.8	6.2	(D)	(Z)	18	1	1
20	FOOD AND KINDRED PRODUCTS. . . .	12.9	38.4	11.2	23.5	33.8	.5	(D)	(Z)	-	-	4	88	(X)
23	APPAREL, OTH. TEXTILE PRODS. . .	.3	1.5	.2	.4	-	-	-	-	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	ROCKFORD, ILL--CON.												
34	FABRICATED METAL PRODUCTS. . . .	-	-	2.7	5.3	(Z)	(D)	219.5	6.1	-	3.9	10.2	3
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	1.2	2.2	(Z)	(D)	212.8	5.8	(D)	2.3	8.1	5
	SACRAMENTO, CALIF.	-	-	9.5	20.0	.2	1.5	665.9	15.5	(D)	12.7	29.3	5
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	6.0	12.8	(Z)	(D)	179.8	3.4	(D)	7.8	15.0	7
24	LUMBER AND WOOD PRODUCTS	-	-	(Z)	.1	(D)	(D)	109.7	3.0	-	.4	1.8	16
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(D)	(D)	-	(D)	22.0	.6	-	1.4	2.6	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	(D)	(D)	(Z)	(D)	33.3	.7	-	.3	.9	(X)
	SAGINAW, MICH.	(D)	(D)	7.6	15.4	.5	.1	1,604.8	47.5	-	26.8	105.3	3
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(D)	(D)	(Z)	(D)	32.8	1.0	-	.3	1.0	(X)
	ST CLOUD, MINN..	-	-	1.4	2.1	.3	(D)	231.1	6.1	(D)	3.8	10.0	8
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.7	1.0	(D)	(D)	46.6	1.3	-	1.4	3.0	5
	ST JOSEPH, MO.	-	-	(S)	(S)	(S)	(S)	272.5	7.9	-	3.3	9.8	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(S)	(S)	(D)	(S)	145.5	4.0	-	2.2	6.1	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	.2	.2	(D)	(Z)	17.8	.6	-	.3	.8	35
	ST LOUIS, MO.-ILL.	422.3	41.4	66.2	127.5	8.1	10.3	6,866.8	151.9	343.6	145.9	320.4	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	6.8	12.4	.5	(D)	454.3	11.2	(S)	11.2	24.9	5
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	.2	.4	.1	(Z)	31.1	1.0	-	.5	1.7	28
25	FURNITURE AND FIXTURES	-	-	.6	.9	(D)	.3	29.7	1.1	-	.7	1.6	18
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	(D)	(D)	(Z)	.2	173.1	4.1	(D)	6.3	11.3	(X)
27	PRINTING AND PUBLISHING.	-	-	.4	.8	.1	.5	153.4	3.9	(S)	1.2	4.7	11
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	9.9	20.5	.3	1.5	893.9	19.3	(D)	23.5	44.7	1
29	PETROLEUM AND COAL PRODUCTS. . .	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	7.2	19.9	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	.6	1.0	(D)	.2	165.2	4.0	-	1.5	5.1	14
31	LEATHER, LEATHER PRODUCTS. . . .	-	-	(S)	(S)	(S)	(S)	20.3	.6	-	.3	.8	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	7.9	15.6	.5	(S)	386.8	8.3	(S)	23.6	29.9	8
33	PRIMARY METAL INDUSTRIES	409.2	41.1	22.5	44.8	(D)	(D)	(D)	(D)	(D)	48.5	118.4	2
34	FABRICATED METAL PRODUCTS. . . .	(D)	(D)	3.8	6.6	1.5	1.0	343.0	9.2	-	6.4	14.9	8
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	1.5	2.6	.3	(D)	280.5	7.6	-	2.9	9.4	4
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.7	1.3	(D)	(D)	130.1	3.4	(D)	1.3	4.0	3
37	TRANSPORTATION EQUIPMENT	(D)	(D)	4.9	9.8	.9	(D)	826.7	18.3	(D)	9.4	24.7	1
38	INSTRUMENTS, RELATED PRODS . . .	-	-	.2	.4	-	(D)	29.0	.8	-	.4	1.4	15
	SALEM, OREG.	-	-	2.7	5.3	.8	1.8	439.1	6.9	(D)	4.9	11.2	2
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.8	1.7	(D)	(D)	111.9	1.5	-	1.2	2.8	1
24	LUMBER AND WOOD PRODUCTS	-	-	.8	1.6	(D)	(D)	99.5	2.1	(D)	1.0	2.7	3
	SALINAS-SEASIDE-MONTEREY, CALIF. . .	-	-	7.7	17.6	.1	(D)	236.1	8.3	(D)	11.3	23.8	1
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	4.4	9.8	(Z)	(D)	93.6	3.1	(D)	6.1	12.5	1
	SALT LAKE CITY-OGDEN, UTAH	-	-	24.1	25.6	(D)	(D)	1,360.2	27.2	(D)	27.7	47.1	9
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.0	1.2	(D)	(D)	122.9	2.9	(D)	1.6	4.0	22
27	PRINTING AND PUBLISHING.	-	-	.1	.1	(Z)	.1	32.0	.8	-	.3	.9	10
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(D)	(S)	93.8	1.9	-	5.9	6.5	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	.3	.4	-	(D)	41.2	1.0	-	.6	1.5	21
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.3	.5	-	(D)	84.6	2.1	-	.9	2.7	14
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.1	.1	(D)	(D)	43.4	1.0	-	.3	1.0	1
	SAN ANGELO, TEX.	(D)	(D)	(S)	(S)	(D)	(S)	53.9	1.6	-	.5	2.3	(X)
	SAN ANTONIO, TEX..	(D)	(D)	(S)	(S)	(S)	(S)	830.1	22.6	(D)	20.9	54.5	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.2	2.6	(D)	(D)	199.8	5.3	-	2.8	8.7	3
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	(S)	(S)	(S)	(S)	171.0	4.9	(D)	11.9	25.2	(X)
34	FABRICATED METAL PRODUCTS. . . .	-	-	.7	1.3	(D)	(D)	172.0	4.5	(Z)	1.6	6.1	2
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(S)	(S)	-	(S)	30.6	.9	-	.3	1.8	(X)
	SAN DIEGO, CALIF..	-	-	3.4	6.9	(D)	2.3	955.0	32.7	(D)	8.0	35.0	5
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.8	1.3	(D)	(D)	101.4	3.6	(Z)	1.0	3.4	4
27	PRINTING AND PUBLISHING.	-	-	(Z)	.1	(Z)	.1	43.9	1.7	-	.2	1.6	26
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(Z)	(Z)	(D)	(D)	21.9	.8	-	.6	1.5	1
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.1	.2	(D)	(D)	130.2	4.7	-	.6	3.7	9
37	TRANSPORTATION EQUIPMENT	-	-	.6	1.4	(D)	.2	243.0	8.7	(D)	1.9	10.1	1
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(Z)	.1	-	.1	36.3	1.2	-	.1	1.0	1
	SAN FRANCISCO-OAKLAND, CALIF.. . . .	(D)	(D)	102.6	213.6	10.3	(D)	5,435.1	176.5	784.0	152.3	323.5	1
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	9.1	20.0	.6	2.4	477.5	14.9	(D)	14.3	31.5	2
23	APPAREL, OTH. TEXTILE PRODS. . .	-	-	(Z)	.1	(Z)	.3	39.1	1.1	(D)	.2	1.0	7

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	SAN FRANCISCO-OAKLAND, CALIF--CON.													
25	FURNITURE AND FIXTURES	.3	1.2	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	13.1	35.0	12.0	24.7	(D)	(D)	235.6	3.4	-	-	(X)	1	(X)
27	PRINTING AND PUBLISHING	1.6	6.1	1.0	1.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	19.8	46.8	17.7	28.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	59.7	171.8	53.3	112.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.3	6.5	.8	1.5	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	10.8	29.9	9.8	20.4	92.1	1.5	(D)	(Z)	(D)	(Z)	26	1	1
33	PRIMARY METAL INDUSTRIES	10.5	41.4	8.6	21.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	4.6	15.8	3.9	7.7	2.5	.1	-	-	-	-	74	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.8	7.0	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.7	8.3	1.0	1.9	(Z)	(Z)	-	-	-	-	1	(X)	(X)
37	TRANSPORTATION EQUIPMENT	2.8	14.2	2.0	4.2	(D)	(Z)	(D)	(D)	-	-	62	(X)	(X)
	SAN JOSE, CALIF.	36.3	139.6	26.4	52.1	53.0	.8	994.4	11.1	(D)	(Z)	3	1	1
20	FOOD AND KINDRED PRODUCTS	6.8	18.7	5.9	11.8	7.4	.1	-	-	-	-	19	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.7	5.5	1.4	3.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.5	2.2	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	2.9	9.9	2.2	4.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.7	16.5	1.2	2.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	4.6	25.5	2.1	4.0	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	2.5	14.9	1.3	2.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS	2.1	9.7	1.3	2.5	(D)	(Z)	(D)	(Z)	-	-	1	1	(X)
	SANTA BARBARA-SANTA MARIA-LOMPOC, CA	3.5	8.0	3.3	6.1	13.5	.2	(D)	(D)	-	-	1	(X)	(X)
	SANTA CRUZ, CALIF.	3.3	10.9	2.8	5.5	5.4	.1	250.6	3.0	-	-	1	1	(X)
20	FOOD AND KINDRED PRODUCTS	.9	3.3	.6	1.2	-	-	-	-	-	-	(X)	(X)	(X)
	SANTA ROSA, CALIF.	2.3	8.9	1.7	3.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.8	2.7	.7	1.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.5	.2	.5	-	-	-	-	-	-	(X)	(X)	(X)
	SARASOTA, FLA.	.5	2.2	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.1	.4	(Z)	(Z)	-	-	-	-	-	-	(X)	(X)	(X)
	SAVANNAH, GA.	30.3	81.6	27.4	53.6	527.0	8.0	2,555.5	31.4	(D)	(D)	3	1	(X)
20	FOOD AND KINDRED PRODUCTS	2.7	5.9	2.6	4.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.6	2.7	.4	.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	17.0	39.5	16.1	31.0	(D)	(D)	2,223.1	27.1	-	-	(X)	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	6.6	23.8	5.4	11.1	405.8	6.0	(D)	(D)	-	-	1	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	1.1	2.6	1.0	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.2	1.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	SEATTLE-EVERETT, WASH.	42.3	89.3	31.7	59.1	196.1	3.0	254.7	3.1	(D)	(D)	15	6	(X)
20	FOOD AND KINDRED PRODUCTS	3.2	7.4	2.4	4.7	6.1	.1	15.0	.2	-	-	6	28	(X)
24	LUMBER AND WOOD PRODUCTS	3.0	7.3	2.2	4.6	93.2	1.4	(D)	(D)	-	-	26	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	1.4	3.2	1.2	2.2	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
30	RUBBER, MISC. PLASTICS PROD.	.5	1.5	.3	.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	9.6	14.6	8.5	12.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	4.6	10.8	3.4	7.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.3	3.4	.8	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.9	2.6	.6	1.1	4.7	.1	(D)	(D)	-	-	61	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.4	1.1	.3	.5	(D)	(Z)	-	-	-	-	1	(X)	(X)
	SHERMAN-DENISON, TEX.	4.0	12.1	3.0	5.7	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.1	5.6	1.7	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	SHREVEPORT, LA.	25.0	47.9	22.9	37.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.3	1.0	.2	.3	-	-	(D)	(Z)	-	-	(X)	95	(X)
	SIOUX CITY, IOWA-NEBR.	8.9	19.3	8.0	11.7	159.6	2.4	(D)	(D)	(D)	(D)	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	3.4	9.1	2.9	4.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	SIOUX FALLS, S.DAK.	2.0	4.8	1.6	2.5	7.8	.1	(D)	(D)	-	-	1	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	1.5	3.6	1.3	2.0	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
	SOUTH BEND, IND.	8.9	26.6	6.4	11.1	114.8	1.8	110.8	1.5	(D)	(D)	26	1	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.8	4.7	1.4	2.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.7	2.1	.5	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.3	.3	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.9	5.6	1.3	2.0	(D)	(D)	(D)	(Z)	(D)	(D)	(X)	45	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	SAN FRANCISCO-OAKLAND, CALIF--CON.												
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	-	(S)	30.1	.9	(D)	.3	1.0	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	7.3	14.9	6.1	(D)	329.8	10.3	(D)	11.2	24.6	1
27	PRINTING AND PUBLISHING	-	-	.7	1.2	.2	(D)	162.4	4.4	(S)	1.1	4.3	5
28	CHEMICALS, ALLIED PRODUCTS	-	-	13.4	21.8	2.2	3.7	607.8	18.5	(D)	18.2	35.1	3
29	PETROLEUM AND COAL PRODUCTS	-	-	51.5	111.6	(D)	(D)	1,866.9	59.2	(D)	73.2	133.4	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.6	(D)	(D)	161.3	5.0	(Z)	1.2	4.4	19
32	STONE, CLAY, GLASS PRODUCTS	-	-	7.6	16.6	(D)	(D)	272.2	9.5	(S)	10.6	22.4	5
33	PRIMARY METAL INDUSTRIES	(D)	(D)	6.9	14.8	.1	(D)	575.8	20.3	-	10.1	28.5	4
34	FABRICATED METAL PRODUCTS	-	-	3.1	6.4	(D)	(D)	213.3	8.1	(D)	4.5	13.1	12
35	MACHINERY, EXCEPT ELECTRIC	-	-	.4	.7	(Z)	(D)	152.6	4.9	-	1.9	6.0	10
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.4	.7	.3	.9	198.2	6.4	(D)	1.7	5.7	4
37	TRANSPORTATION EQUIPMENT	-	-	(S)	(S)	(S)	(S)	255.3	10.0	(D)	2.5	8.2	(X)
	SAN JOSE, CALIF.	-	-	16.6	35.0	(D)	(D)	2,887.3	87.4	(S)	31.6	91.4	6
20	FOOD AND KINDRED PRODUCTS	-	-	4.8	10.1	(D)	(D)	252.3	6.8	-	5.3	12.3	5
26	PAPER AND ALLIED PRODUCTS	-	-	1.4	3.1	(Z)	(D)	93.0	2.4	-	1.7	4.3	1
27	PRINTING AND PUBLISHING	-	-	(D)	(D)	(Z)	(D)	47.3	1.6	-	.5	1.8	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	1.7	3.9	(Z)	(D)	188.1	5.1	-	2.8	6.9	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	.7	1.5	(Z)	(D)	453.1	14.3	-	2.4	10.1	2
36	ELECTRIC, ELECTRONIC EQUIP	-	-	1.3	2.6	(D)	(D)	719.2	21.5	(Z)	4.2	16.7	7
37	TRANSPORTATION EQUIPMENT	-	-	1.2	2.6	(D)	(D)	331.7	12.0	(D)	2.4	9.4	1
38	INSTRUMENTS, RELATED PRODS	-	-	(S)	(S)	(S)	(S)	224.2	7.2	(D)	1.0	4.5	(X)
	SANTA BARBARA-SANTA MARIA-LOMPOC, CA	(D)	(D)	2.1	3.4	(D)	(D)	57.1	1.9	(D)	.6	.9	1
	SANTA CRUZ, CALIF.	-	-	1.0	2.0	.4	.1	153.0	5.4	-	2.1	4.3	15
20	FOOD AND KINDRED PRODUCTS	-	-	.4	.8	(D)	(D)	65.6	2.1	-	.4	1.4	36
	SANTA ROSA, CALIF.	-	-	.7	1.3	(D)	1.4	185.2	5.9	(D)	2.3	7.0	9
20	FOOD AND KINDRED PRODUCTS	-	-	.2	.5	(D)	(D)	40.1	1.5	-	.9	2.2	7
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	(D)	(D)	39.3	1.0	-	.4	1.4	(X)
	SARASOTA, FLA.	-	-	(Z)	.1	.2	.3	53.8	1.7	-	.4	1.7	38
36	ELECTRIC, ELECTRONIC EQUIP	-	-	-	-	-	(Z)	15.5	.4	-	(Z)	.3	(X)
	SAVANNAH, GA.	-	-	6.1	10.2	3.5	(D)	830.8	28.0	(D)	32.1	71.8	1
20	FOOD AND KINDRED PRODUCTS	-	-	.8	1.3	(D)	(Z)	32.9	1.0	(D)	2.6	4.6	1
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	.3	(D)	55.8	1.8	-	.7	2.6	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	1.0	1.5	(D)	(Z)	267.3	8.6	(D)	18.1	35.6	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	2.4	3.8	(D)	(Z)	365.0	12.6	-	7.6	21.3	1
29	PETROLEUM AND COAL PRODUCTS	-	-	.6	1.1	(Z)	(Z)	18.4	.7	-	1.2	2.4	1
37	TRANSPORTATION EQUIPMENT	-	-	(D)	(D)	(Z)	(Z)	(D)	(D)	-	.2	1.1	(X)
	SEATTLE-EVERETT, WASH.	(D)	(D)	17.4	35.8	6.7	(D)	3,109.3	30.1	(S)	37.9	77.5	5
20	FOOD AND KINDRED PRODUCTS	-	-	1.6	3.2	.2	1.0	223.6	2.7	-	2.9	6.0	7
24	LUMBER AND WOOD PRODUCTS	-	-	.3	.5	1.3	(D)	230.6	2.7	(D)	3.0	7.0	20
28	CHEMICALS, ALLIED PRODUCTS	-	-	.7	1.4	-	(D)	77.6	1.0	-	1.1	2.1	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	.3	.6	-	(D)	56.4	.8	-	.5	1.0	50
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.9	5.4	.1	1.1	303.5	2.4	-	5.2	12.6	16
33	PRIMARY METAL INDUSTRIES	(D)	(D)	3.6	7.9	(D)	(D)	361.3	3.2	-	4.6	8.9	16
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(S)	(S)	142.7	1.7	(Z)	.8	2.2	(X)
35	MACHINERY, EXCEPT ELECTRIC	-	-	.3	.6	(D)	.3	97.0	1.4	-	.8	2.3	16
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(D)	(D)	-	(D)	40.9	.6	-	.2	.7	(X)
	SHERMAN-DENISON, TEX.	(S)	(S)	(S)	(S)	(S)	(S)	278.6	6.4	-	3.7	8.5	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	-	(S)	103.5	2.3	-	2.1	4.2	(X)
	SHREVEPORT, LA.	-	-	10.6	14.2	2.0	2.8	618.5	10.5	(D)	26.3	43.4	2
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.3	(D)	(D)	34.2	.7	-	.3	.7	39
	SIOUX CITY, IOWA-NEBR.	-	-	5.5	6.7	1.0	1.4	269.3	7.6	-	10.0	17.2	2
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	151.2	4.2	-	3.3	8.2	(X)
	SIOUX FALLS, S.DAK.	-	-	.9	1.2	(D)	.5	102.5	2.2	-	2.0	4.4	9
20	FOOD AND KINDRED PRODUCTS	-	-	.7	1.0	(Z)	(D)	78.7	1.6	-	1.6	3.2	4
	SOUTH BEND, IND.	-	-	3.1	4.7	(D)	1.3	709.3	15.5	-	8.7	21.1	4
30	RUBBER, MISC. PLASTICS PROD.	-	-	.2	.4	(Z)	.2	114.2	2.7	-	1.7	3.6	9
33	PRIMARY METAL INDUSTRIES	-	-	(S)	(S)	(S)	(S)	71.9	1.4	-	.4	1.1	(X)
34	FABRICATED METAL PRODUCTS	-	-	.2	.3	(D)	.2	27.5	.8	-	.5	1.4	20
35	MACHINERY, EXCEPT ELECTRIC	-	-	1.0	1.5	(D)	.3	156.9	3.6	-	1.9	4.7	3

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]--		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	SOUTH BEND, IND--CON.													
37	TRANSPORTATION EQUIPMENT	2.5	7.0	1.8	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	SPOKANE, WASH.	17.6	26.7	5.5	12.1	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	.9	1.9	.7	1.4	(D)	(Z)	(D)	(D)	-	-	26	(X)	(X)
	SPRINGFIELD, ILL.	3.3	11.4	2.5	5.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	SPRINGFIELD, MO.	4.9	14.2	3.9	5.9	73.3	1.0	31.9	.5	-	-	16	1	(X)
20	FOOD AND KINDRED PRODUCTS	1.3	4.2	1.0	1.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	SPRINGFIELD, OHIO.	3.7	12.9	2.7	5.3	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.6	2.5	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN.	20.2	68.1	16.9	37.7	306.2	4.8	854.8	12.2	(D)	(D)	5	2	(X)
20	FOOD AND KINDRED PRODUCTS	.7	2.5	.6	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
22	TEXTILE MILL PRODUCTS	.9	2.7	.8	1.8	-	-	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.9	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	3.9	11.6	3.4	7.0	60.1	1.0	205.1	2.8	-	-	5	5	(X)
27	PRINTING AND PUBLISHING	.5	2.4	.4	.8	8.0	.1	-	-	-	-	27	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	2.1	8.3	1.6	3.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	.2	.9	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	.5	3.9	.3	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	2.7	8.8	2.3	5.1	132.2	2.0	(D)	(D)	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.2	5.2	.8	2.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	.8	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS.	.8	3.9	.6	1.5	(D)	(D)	52.2	.9	-	-	(X)	1	(X)
	STAMFORD, CONN.	3.0	12.4	2.2	5.1	93.1	1.5	30.1	.5	-	-	4	2	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.7	3.6	.5	1.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	STEUBENVILLE-WEIRTON, OHIO-W.VA.	93.0	221.9	83.3	166.8	719.4	10.6	2,939.1	37.0	(D)	(D)	1	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	3.1	7.6	3.0	6.2	53.9	.9	(D)	(D)	(D)	(D)	2	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.5	.3	.7	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	STOCKTON, CALIF.	18.7	56.5	16.4	34.3	111.1	1.7	376.6	4.8	-	-	3	1	(X)
20	FOOD AND KINDRED PRODUCTS	10.3	27.6	9.5	20.3	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	4.1	11.7	3.7	7.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	SYRACUSE, N.Y.	42.7	107.7	36.9	64.5	377.6	6.0	1,027.8	14.4	598.8	19.7	1	2	1
20	FOOD AND KINDRED PRODUCTS	4.3	14.2	3.4	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	2.6	8.3	2.1	4.5	(D)	(D)	240.5	3.3	-	-	(X)	2	(X)
27	PRINTING AND PUBLISHING	.2	1.0	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	6.7	19.5	5.6	10.8	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.1	4.4	.8	1.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	2.1	7.5	1.5	3.3	6.7	.1	(D)	(D)	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	1.9	7.6	1.4	3.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	TACOMA, WASH.	24.9	47.4	15.0	31.0	103.3	1.6	570.4	6.9	-	-	44	1	(X)
24	LUMBER AND WOOD PRODUCTS	1.3	3.9	(S)	(S)	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
	TAMPA-ST PETERSBURG, FLA.	28.9	93.4	22.3	37.1	378.3	5.9	817.8	9.7	(D)	(D)	11	1	(X)
20	FOOD AND KINDRED PRODUCTS	4.4	15.8	3.5	6.9	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.3	1.9	.1	.1	(D)	(D)	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	6.0	13.2	5.5	8.3	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.1	7.8	1.5	2.9	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.4	5.8	1.0	1.8	(D)	(Z)	-	-	-	-	1	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.2	1.0	.1	.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.9	5.0	.4	.9	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.2	1.2	(S)	(S)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	TERRE HAUTE, IND.	19.6	48.6	15.9	26.6	(D)	(D)	(D)	(D)	137.5	3.1	(X)	(X)	1
20	FOOD AND KINDRED PRODUCTS	.5	1.7	.4	.9	39.8	.6	(D)	(Z)	-	-	1	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	7.3	17.8	5.6	8.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	TEXARKANA, TEX.-TEXARKANA, ARK.	13.2	22.0	12.0	15.1	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	TOLEDO, OHIO-MICH.	65.9	185.8	55.6	104.1	449.2	7.5	810.4	11.3	550.6	16.1	12	4	1
20	FOOD AND KINDRED PRODUCTS	2.3	7.6	1.8	3.6	6.8	.1	89.9	1.3	-	-	28	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	SOUTH BEND, IND--CON.												
37	TRANSPORTATION EQUIPMENT	-	-	.9	1.3	(Z)	(D)	216.0	3.7	-	2.3	5.3	2
	SPOKANE, WASH.	-	-	(S)	(S)	(S)	(S)	3,529.2	14.6	-	20.0	27.6	(X)
20	FOOD AND KINDRED PRODUCTS	-	-	.5	1.0	-	(D)	44.0	.6	-	.8	1.6	3
	SPRINGFIELD, ILL.	-	-	1.0	2.1	(D)	.6	233.5	6.1	-	3.1	9.2	1
	SPRINGFIELD, MO.	(D)	(D)	2.8	3.3	(D)	(D)	303.9	8.3	-	4.8	11.2	11
20	FOOD AND KINDRED PRODUCTS	-	-	.7	.8	(D)	(D)	102.5	2.7	-	1.4	3.5	3
	SPRINGFIELD, OHIO.	-	-	1.1	2.3	(D)	.4	273.1	7.6	-	3.4	10.8	5
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.4	(D)	(D)	57.1	1.6	-	.6	2.2	1
	SPRINGFIELD-CHICOPEE-HOLYOKE, MASS.-CONN.	(D)	(D)	3.3	7.4	9.2	(D)	970.0	30.5	(D)	16.3	54.2	5
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.5	-	(D)	41.0	1.2	-	.7	2.3	4
22	TEXTILE MILL PRODUCTS	-	-	-	-	(D)	(D)	30.8	.9	(D)	.8	2.3	(X)
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(D)	(D)	(Z)	(Z)	12.8	.6	-	.2	.7	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.2	.6	1.7	1.2	140.8	4.6	(D)	3.8	11.2	12
27	PRINTING AND PUBLISHING	-	-	.1	.2	(D)	(D)	48.6	1.5	(D)	.5	2.1	34
30	RUBBER, MISC. PLASTICS PROD.	-	-	.1	.5	(D)	(Z)	161.8	4.6	-	1.5	5.6	19
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	-	(D)	7.5	.3	-	.4	1.1	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(Z)	(D)	63.0	2.1	-	.1	1.9	(X)
34	FABRICATED METAL PRODUCTS	(D)	(D)	1.0	1.9	(D)	(D)	96.7	3.7	(D)	2.0	7.4	8
35	MACHINERY, EXCEPT ELECTRIC	-	-	.2	.5	(D)	(D)	99.9	3.2	-	1.3	5.0	13
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	-	(D)	14.5	.5	-	.2	.8	1
39	MISC. MANUFACTURING INDUS.	-	-	.2	.5	-	(D)	66.5	2.3	-	.8	3.4	5
	STAMFORD, CONN.	-	-	.7	1.7	(D)	(D)	218.2	7.2	-	2.5	9.4	4
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	-	.1	66.1	2.2	-	.6	2.8	1
	STEUBENVILLE-WEIRTON, OHIO-W.VA.	(D)	(D)	15.1	27.9	.5	.4	2,838.2	95.1	(D)	96.2	220.5	4
32	STONE, CLAY, GLASS PRODUCTS	-	-	2.3	4.8	(D)	(D)	51.1	1.3	(Z)	2.9	5.3	23
34	FABRICATED METAL PRODUCTS	-	-	.2	.5	(D)	(D)	35.1	.8	-	.4	1.2	1
	STOCKTON, CALIF.	-	-	11.2	24.6	.7	2.6	692.9	22.2	49.1	19.9	43.8	1
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	224.4	7.4	(D)	11.7	23.6	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(Z)	(D)	118.1	4.1	-	3.4	7.5	(X)
	SYRACUSE, N.Y.	(D)	(D)	9.8	19.5	(D)	3.0	1,689.7	43.2	(D)	40.6	85.7	2
20	FOOD AND KINDRED PRODUCTS	-	-	.5	1.1	(D)	(D)	283.9	7.6	-	2.6	7.4	1
26	PAPER AND ALLIED PRODUCTS	-	-	.4	.8	-	(D)	134.4	3.7	-	3.1	8.6	1
27	PRINTING AND PUBLISHING	-	-	(S)	(S)	(Z)	(S)	25.7	.7	-	.1	.8	(X)
33	PRIMARY METAL INDUSTRIES	-	-	4.2	8.2	(D)	(D)	320.2	8.7	-	6.4	14.4	2
34	FABRICATED METAL PRODUCTS	-	-	.1	.2	(Z)	(D)	104.2	2.9	-	1.1	3.5	63
35	MACHINERY, EXCEPT ELECTRIC	(D)	(D)	.6	1.4	(D)	.1	163.9	4.3	-	2.1	6.1	10
36	ELECTRIC, ELECTRONIC EQUIP	(D)	(D)	.3	.6	(D)	.2	142.7	4.3	(D)	1.7	6.3	2
	TACOMA, WASH.	(D)	(D)	9.0	18.4	3.0	(D)	2,890.3	16.4	(D)	24.2	38.4	3
24	LUMBER AND WOOD PRODUCTS	-	-	(S)	(S)	(D)	(S)	101.5	1.6	(D)	1.0	2.4	(X)
	TAMPA-ST PETERSBURG, FLA.	(D)	(D)	9.7	14.1	1.9	1.5	1,952.5	56.3	(D)	28.3	84.8	7
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	276.0	8.8	(D)	4.8	14.8	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	(Z)	(Z)	(D)	55.6	1.8	-	.2	1.7	55
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(S)	(S)	156.1	4.9	-	5.1	10.9	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	(D)	(D)	(D)	(D)	169.0	4.9	-	2.2	7.4	(X)
34	FABRICATED METAL PRODUCTS	-	-	.4	.8	(D)	(D)	139.9	4.0	(D)	1.3	4.8	1
35	MACHINERY, EXCEPT ELECTRIC	(D)	(Z)	(Z)	(Z)	(D)	(D)	22.3	.7	-	.3	1.5	6
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(D)	.1	127.9	4.2	-	.9	4.7	1
37	TRANSPORTATION EQUIPMENT	-	-	-	-	-	(D)	26.6	.9	-	.1	.7	(X)
	TERRE HAUTE, IND.	(D)	(Z)	5.1	6.7	3.2	.4	1,094.5	22.0	(D)	19.6	40.0	9
20	FOOD AND KINDRED PRODUCTS	-	-	.1	.2	(D)	(D)	34.4	.8	-	.5	1.4	1
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	(Z)	.1	484.0	8.9	-	7.0	13.6	(X)
	TEXARKANA, TEX.-TEXARKANA, ARK.	-	-	3.2	3.4	(D)	(D)	346.1	6.9	(D)	13.8	17.8	1
	TOLEDO, OHIO-MICH.	(D)	(D)	25.1	49.7	(D)	5.7	3,007.3	81.7	35.5	62.4	146.3	2
20	FOOD AND KINDRED PRODUCTS	-	-	.7	1.3	(D)	(D)	136.7	3.9	-	2.3	6.5	10

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1] --		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	TOLEDO, OHIO-MICH--CON.													
22	TEXTILE MILL PRODUCTS.	.6	2.0	(D)	(D)	(D)	(D)	-	-	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	5.1	8.7	4.8	6.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	.2	.8	.1	.3	(D)	(Z)	-	-	-	-	90	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	2.3	8.8	1.3	3.3	(S)	(S)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.0	3.9	.7	1.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	26.5	58.2	24.6	42.4	(D)	(D)	(D)	(D)	269.2	7.3	(X)	(X)	1
33	PRIMARY METAL INDUSTRIES	7.2	23.8	6.3	16.7	79.8	1.3	(D)	(D)	(D)	(D)	1	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	2.6	10.4	2.0	4.1	31.2	.5	(D)	(D)	(D)	(D)	7	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.9	4.7	.6	1.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.8	3.3	.6	1.2	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	7.6	25.0	5.8	10.3	23.8	.4	145.2	2.0	(D)	(D)	1	1	(X)
	TOPEKA, KANS..	5.9	16.5	4.7	7.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.0	2.9	.8	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	TRENTON, N.J..	8.9	35.9	7.1	16.8	169.1	2.7	604.4	9.5	-	-	7	3	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.4	1.5	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	1.1	4.0	.9	2.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	1.8	6.8	1.4	3.2	(D)	(D)	124.3	1.9	-	-	(X)	11	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	1.2	4.2	1.1	2.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.3	6.2	1.0	2.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.4	2.6	.2	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	TUCSON, ARIZ..	6.1	16.9	5.3	7.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
	TULSA, OKLA.	66.8	126.4	60.3	85.9	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	1.1	2.9	.9	1.4	-	-	-	-	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	16.5	29.7	15.2	22.5	-	-	-	-	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	12.8	21.6	11.6	14.3	(S)	(S)	-	-	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.0	8.7	2.0	3.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	2.1	6.2	1.6	2.6	(D)	(D)	(D)	(Z)	-	-	(X)	83	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	1.4	4.9	.9	1.5	-	-	(D)	(Z)	-	-	(X)	1	(X)
37	TRANSPORTATION EQUIPMENT	1.1	3.2	.7	1.0	-	-	-	-	-	-	(X)	(X)	(X)
	TUSCALOOSA, ALA.	11.6	25.0	10.3	15.9	14.1	.2	218.6	2.7	(D)	(D)	30	1	(X)
24	LUMBER AND WOOD PRODUCTS	.4	1.1	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
	TYLER, TEX..	7.3	21.7	6.1	13.3	(D)	(Z)	-	-	-	-	1	(X)	(X)
	UTICA-ROME, N.Y.	7.4	28.7	5.3	12.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.6	2.2	.4	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	2.1	8.9	1.5	3.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.0	3.8	.8	1.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.7	3.0	.5	1.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	VALLEJO-FAIRFIELD-NAPA, CALIF. . . .	9.5	34.3	7.7	16.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	3.3	10.7	2.7	5.9	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
	VINELAND-MILLVILLE-BRIDGETON, N.J. .	14.3	46.3	12.7	30.9	425.8	7.8	817.7	11.4	-	-	3	1	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.8	3.2	.6	1.5	11.7	.2	(D)	(D)	-	-	1	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	12.0	37.2	10.8	26.5	409.3	7.6	(D)	(D)	-	-	3	(X)	(X)
	WACO, TEX.	8.8	24.2	7.2	14.0	(D)	(D)	(D)	(Z)	-	-	(X)	37	(X)
	WASHINGTON, D.C.-MD.-VA.	9.2	38.3	6.7	14.4	129.7	2.3	138.7	2.2	-	-	9	8	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	2.0	7.5	1.6	3.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
27	PRINTING AND PUBLISHING.	1.7	9.3	.9	1.9	9.0	.1	28.4	.4	-	-	38	10	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	1.2	4.7	1.1	2.7	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	.3	1.3	.2	.4	(D)	(D)	-	-	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.2	.9	.1	.3	-	-	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	.9	5.8	.4	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.2	1.0	.1	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	WATERBURY, CONN.	6.6	33.0	5.0	12.6	140.0	2.3	303.5	4.4	-	-	18	1	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	.2	.8	.1	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.3	10.7	.9	2.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS. . . .	1.3	5.8	.9	2.6	57.6	.9	(D)	(D)	-	-	38	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC . . .	.3	1.7	.2	.6	(D)	(Z)	(D)	(D)	-	-	1	(X)	(X)
38	INSTRUMENTS, RELATED PRODS . . .	.3	1.6	.2	.5	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
39	MISC. MANUFACTURING INDUS. . . .	.4	1.8	.3	.9	-	-	33.6	.5	-	-	(X)	1	(X)

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976**–Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.									1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy					
								Purchased					
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	TOLEDO, OHIO-MICH--CON.												
22	TEXTILE MILL PRODUCTS.	-	-	(D)	(D)	(D)	(Z)	(D)	(D)	-	.6	1.7	(X)
26	PAPER AND ALLIED PRODUCTS. . . .	-	-	.1	.3	(Z)	(D)	79.6	2.6	(D)	4.5	7.0	11
27	PRINTING AND PUBLISHING.	-	-	.1	.2	(D)	(D)	16.6	.6	-	.2	.7	65
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	(S)	(S)	(S)	(S)	283.2	5.5	(D)	1.9	6.9	(X)
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	.3	.5	(D)	(D)	86.7	2.5	-	.9	3.0	6
32	STONE, CLAY, GLASS PRODUCTS. . .	(D)	(D)	11.9	23.7	(D)	2.0	579.3	15.8	(D)	26.3	49.1	3
33	PRIMARY METAL INDUSTRIES	(D)	(D)	1.8	3.9	(D)	(D)	245.2	7.1	(D)	4.8	12.9	11
34	FABRICATED METAL PRODUCTS. . . .	-	-	1.0	2.0	.9	(D)	185.4	6.3	(D)	2.4	7.9	12
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(S)	(S)	-	(S)	89.6	3.0	-	.8	3.5	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.4	.7	(Z)	(D)	65.7	2.1	-	.8	2.5	1
37	TRANSPORTATION EQUIPMENT	-	-	1.9	3.6	(D)	(D)	506.3	14.6	-	7.2	20.5	1
	TOPEKA, KANS..	-	-	2.0	2.2	(D)	(D)	345.5	8.9	-	5.5	13.1	7
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(D)	(D)	(D)	(D)	64.9	1.8	-	1.0	2.6	(X)
	TRENTON, N.J..	-	-	1.0	2.3	.1	2.2	536.2	19.0	(D)	8.6	31.9	11
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	.1	.2	-	(D)	22.0	.8	-	.4	1.3	5
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	.1	.3	(Z)	(D)	44.0	1.6	-	.9	3.2	9
30	RUBBER, MISC. PLASTICS PROD. . .	-	-	(D)	(D)	(Z)	(D)	106.9	3.6	-	1.8	6.4	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	.3	.8	(D)	(D)	43.1	1.7	-	1.1	3.5	33
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(D)	(D)	(Z)	(Z)	90.6	3.4	(D)	1.3	5.5	(X)
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.1	.4	-	(Z)	53.9	2.0	-	.4	2.2	1
	TUCSON, ARIZ..	(D)	(D)	2.0	2.8	(D)	(D)	243.2	9.4	-	6.1	14.5	2
	TULSA, OKLA.	-	-	52.2	75.2	4.3	2.7	1,893.6	40.5	(S)	57.9	88.5	3
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(D)	(D)	(D)	(D)	62.9	1.5	-	.7	1.8	(X)
28	CHEMICALS, ALLIED PRODUCTS . . .	-	-	15.7	23.3	(D)	(D)	380.6	7.2	-	11.7	15.8	8
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	-	(S)	343.5	7.4	-	11.5	15.9	(X)
33	PRIMARY METAL INDUSTRIES	-	-	1.3	1.9	-	(D)	285.1	5.5	-	2.6	6.9	5
34	FABRICATED METAL PRODUCTS. . . .	-	-	1.0	1.4	(D)	.8	146.0	3.6	-	1.8	4.7	12
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.7	1.0	(D)	(D)	142.8	3.5	-	1.5	4.6	10
37	TRANSPORTATION EQUIPMENT	-	-	(S)	(S)	-	(S)	102.1	2.1	-	1.1	2.2	(X)
	TUSCALOOSA, ALA.	(D)	(D)	6.0	7.9	.3	.8	369.2	9.0	(D)	11.6	20.6	2
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	-	(D)	22.2	.7	-	.3	.8	(X)
	TYLER, TEX..	(D)	(D)	(D)	(D)	(D)	1.2	358.7	8.4	-	8.7	19.2	(X)
	UTICA-ROME, N.Y.	(D)	(D)	(S)	(S)	(D)	(S)	594.7	15.9	(D)	8.4	26.0	(X)
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(S)	(S)	-	(S)	66.1	1.1	-	.7	2.0	(X)
33	PRIMARY METAL INDUSTRIES	-	-	.7	1.3	-	(D)	195.3	5.7	-	2.1	7.1	1
34	FABRICATED METAL PRODUCTS. . . .	(D)	(D)	.4	.7	-	(D)	64.9	1.9	-	1.3	3.5	25
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	.2	.4	(Z)	(D)	65.5	1.8	-	1.0	3.4	1
	VALLEJO-FAIRFIELD-NAPA, CALIF. . . .	-	-	6.3	14.2	(D)	1.6	535.7	17.7	-	7.3	19.6	1
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	2.0	4.8	(D)	.8	168.2	4.8	-	1.9	4.5	1
	VINELAND-MILLVILLE-BRIDGETON, N.J. .	-	-	3.8	9.4	(D)	(D)	478.7	15.4	(D)	16.8	45.6	3
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(D)	(D)	(D)	(D)	47.5	1.7	-	1.1	3.7	(X)
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	3.4	8.1	(D)	(D)	341.2	10.7	-	12.3	32.1	1
	WACO, TEX.	-	-	5.8	11.0	.1	(D)	443.3	10.2	(Z)	9.3	20.1	2
	WASHINGTON, D.C.-MD.-VA.	(Z)	(Z)	3.3	6.8	.7	2.5	730.4	23.9	(D)	6.4	25.4	21
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	1.0	2.1	(D)	(D)	114.1	3.8	-	1.8	5.8	14
27	PRINTING AND PUBLISHING.	-	-	.1	.3	(Z)	1.0	249.3	7.5	(D)	1.5	7.7	21
32	STONE, CLAY, GLASS PRODUCTS. . .	-	-	(S)	(S)	(S)	(S)	45.0	1.9	-	.6	3.0	(X)
34	FABRICATED METAL PRODUCTS. . . .	(Z)	(Z)	(Z)	(Z)	(Z)	(D)	25.6	.9	(D)	.2	(S)	17
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(Z)	(Z)	(D)	(D)	17.0	.6	-	.2	.8	61
36	ELECTRIC, ELECTRONIC EQUIP . . .	-	-	.1	.1	-	(D)	142.6	4.7	-	.4	2.7	8
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	-	.1	20.4	.8	-	.1	.6	(X)
	WATERBURY, CONN.	-	-	1.6	4.8	.4	.6	489.5	20.4	(D)	5.9	26.1	11
20	FOOD AND KINDRED PRODUCTS. . . .	-	-	(Z)	(Z)	-	(Z)	14.7	.5	(D)	.2	.8	1
33	PRIMARY METAL INDUSTRIES	-	-	.6	1.6	(Z)	(D)	142.1	8.4	-	1.1	7.8	4
34	FABRICATED METAL PRODUCTS. . . .	-	-	.6	1.6	(Z)	(D)	89.8	3.2	-	1.2	4.6	33
35	MACHINERY, EXCEPT ELECTRIC . . .	-	-	(D)	(D)	(D)	(D)	29.5	1.0	-	.2	1.1	(X)
38	INSTRUMENTS, RELATED PRODS . . .	-	-	(D)	(D)	(Z)	(Z)	34.2	1.1	-	.4	2.0	(X)
39	MISC. MANUFACTURING INDUS. . . .	-	-	.1	.2	(Z)	.1	28.5	.9	-	.5	1.8	1

See footnotes at end of table.

Table 3. **Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976** – Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977										Standard error of estimate (percent) for columns[1]		
		Purchased fuels and electric energy		Purchased fuels		Fuel oil				Bituminous coal, lignite, and anthracite				
						Distillate		Residual						
		British thermal units (trillions)	Cost (million dollars)	British thermal units (trillions)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 barrels)	Cost (million dollars)	Quantity (1,000 short tons)	Cost (million dollars)			
		A	B	C	D	E	F	G	H	I	J	F	H	J
	WATERLOO-CEDAR FALLS, IOWA	9.3	25.5	7.9	13.3	51.5	.8	23.1	.3	(D)	(D)	17	66	(X)
	WEST PALM BEACH-BOCA RATON, FLA.	5.1	19.2	3.9	8.9	95.3	1.8	314.6	4.7	-	-	12	1	(X)
20	FOOD AND KINDRED PRODUCTS	2.5	6.7	2.4	5.4	(D)	(D)	201.2	3.0	-	-	(X)	1	(X)
	WHEELING, W.VA.-OHIO	18.3	49.8	14.3	25.7	(D)	(D)	(D)	(D)	136.1	5.6	(X)	(X)	6
28	CHEMICALS, ALLIED PRODUCTS	12.0	31.3	9.5	16.6	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	1.4	4.0	1.1	2.0	(D)	(D)	-	-	(D)	(D)	(X)	(X)	(X)
	WICHITA, KANS.	25.7	62.2	20.5	27.6	16.7	.3	83.4	.9	-	-	15	1	(X)
20	FOOD AND KINDRED PRODUCTS	1.8	5.1	1.4	1.8	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
29	PETROLEUM AND COAL PRODUCTS	13.6	23.5	12.4	15.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.3	.7	(S)	(S)	-	-	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	3.3	9.6	2.5	3.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
	WICHITA FALLS, TEX.	5.5	14.5	4.7	10.3	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	WILLIAMSPORT, PA.	3.3	13.5	2.4	6.2	148.1	2.5	54.6	.8	(D)	(D)	16	17	(X)
24	LUMBER AND WOOD PRODUCTS	.2	.8	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.3	1.1	.2	.5	(D)	(D)	-	-	-	-	(X)	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.2	1.1	.1	.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	WILMINGTON, DEL.-N.J.-MD.	57.4	183.4	47.8	103.4	1,087.2	16.8	2,673.0	37.0	-	-	11	1	(X)
20	FOOD AND KINDRED PRODUCTS	.4	1.5	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	1.1	3.4	.9	1.9	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	37.9	114.5	32.4	69.3	(S)	(S)	(S)	(S)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	1.7	7.1	1.3	2.9	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.7	8.8	2.3	5.7	(S)	(S)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	3.0	11.8	2.2	5.0	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.4	1.5	.3	.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	.1	.7	(Z)	.2	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	WILMINGTON, N.C.	24.0	67.6	20.0	40.0	120.4	1.9	2,365.6	31.7	(D)	(D)	16	1	(X)
28	CHEMICALS, ALLIED PRODUCTS	18.7	55.3	15.5	33.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	WORCESTER, MASS.	11.4	46.2	9.3	21.8	211.0	3.4	551.7	7.8	(D)	(Z)	7	2	1
20	FOOD AND KINDRED PRODUCTS	.3	1.4	.2	.7	21.7	.4	(D)	(D)	-	-	29	(X)	(X)
22	TEXTILE MILL PRODUCTS	1.6	4.6	1.5	3.1	-	-	(D)	(D)	-	-	(X)	(X)	(X)
28	CHEMICALS, ALLIED PRODUCTS	.5	1.8	.4	.7	-	-	(D)	(D)	-	-	(X)	(X)	(X)
30	RUBBER, MISC. PLASTICS PROD.	.5	2.9	.3	.7	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.3	8.2	1.9	4.3	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.4	6.3	1.1	2.8	(D)	(D)	(D)	(D)	(D)	(Z)	(X)	(X)	1
34	FABRICATED METAL PRODUCTS	2.8	10.6	2.4	5.8	(D)	(D)	113.3	1.6	-	-	(X)	1	(X)
35	MACHINERY, EXCEPT ELECTRIC	.8	4.7	.6	1.6	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	YAKIMA, WASH.	3.8	8.5	3.2	5.7	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
20	FOOD AND KINDRED PRODUCTS	2.6	5.1	2.3	4.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.5	1.6	.3	.8	(D)	(D)	-	-	-	-	(X)	(X)	(X)
	YORK, PA.	25.8	72.6	21.9	38.4	265.1	4.3	922.7	12.5	337.0	10.9	9	6	13
20	FOOD AND KINDRED PRODUCTS	2.2	6.9	1.9	4.2	81.7	1.3	81.0	1.2	-	-	16	7	(X)
22	TEXTILE MILL PRODUCTS	.4	1.6	.2	.4	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
23	APPAREL, OTH. TEXTILE PRODS.	.2	.9	.2	.3	-	-	(D)	(D)	-	-	(X)	(X)	(X)
24	LUMBER AND WOOD PRODUCTS	.3	.9	.2	.4	5.0	.1	(D)	(Z)	(D)	(D)	16	87	(X)
25	FURNITURE AND FIXTURES	.4	1.8	.4	.9	(D)	(D)	(S)	(S)	-	-	(X)	(X)	(X)
26	PAPER AND ALLIED PRODUCTS	7.4	17.1	6.7	11.4	(S)	(S)	(S)	(S)	(D)	(D)	(X)	(X)	(X)
27	PRINTING AND PUBLISHING	.3	1.7	.2	.4	(D)	(D)	(D)	(Z)	-	-	(X)	5	(X)
32	STONE, CLAY, GLASS PRODUCTS	7.1	12.3	6.7	9.0	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	1.5	5.5	1.2	2.5	(D)	(D)	(D)	(D)	(D)	(D)	(X)	(X)	(X)
34	FABRICATED METAL PRODUCTS	.8	2.9	.6	1.3	(D)	(D)	-	-	(D)	(Z)	(X)	(X)	70
35	MACHINERY, EXCEPT ELECTRIC	2.6	10.7	1.7	3.5	20.6	.4	(D)	(D)	(D)	(D)	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.7	3.4	.5	1.0	(D)	(D)	-	-	-	-	(X)	(X)	(X)
37	TRANSPORTATION EQUIPMENT	.7	2.7	.5	1.2	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
	YOUNGSTOWN-WARREN, OHIO	86.3	233.2	77.0	168.5	(D)	(D)	(D)	(D)	227.6	6.8	(X)	(X)	1
20	FOOD AND KINDRED PRODUCTS	.6	1.6	.6	.9	(D)	(D)	(D)	(Z)	-	-	(X)	1	(X)
32	STONE, CLAY, GLASS PRODUCTS	2.5	6.3	2.3	4.6	(D)	(D)	-	-	-	-	(X)	(X)	(X)
33	PRIMARY METAL INDUSTRIES	69.5	178.3	64.4	143.8	(D)	(D)	(D)	(D)	207.0	6.1	(X)	(X)	1
34	FABRICATED METAL PRODUCTS	3.3	10.3	2.6	5.1	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)
35	MACHINERY, EXCEPT ELECTRIC	1.1	4.0	.8	1.6	(D)	(Z)	-	-	-	-	1	(X)	(X)
36	ELECTRIC, ELECTRONIC EQUIP	.6	2.2	.4	.8	(D)	(D)	(D)	(D)	-	-	(X)	(X)	(X)

See footnotes at end of table.

Table 3. Fuels and Electric Energy Used for Heat and Power for Standard Metropolitan Statistical Areas by Major Industry Group and Fuel Type: 1977 and Revised 1976—Con.

(For explanation of terms, see appendix A)

SIC code	Standard metropolitan statistical area and industry group	1977--Con.								1976, purchased fuels and electric energy		Standard error of estimate (percent) for column[1]--
		Coke and breeze		Natural gas				Electric energy				
								Purchased				
		Quantity (1,000 short tons)	Cost (million dollars)	Quantity (billion cubic ft.)	Cost (million dollars)	Other fuels (mil. dol.)	Fuels not specified by kind (mil. dol.)	Quantity (million kWh)	Cost (million dollars)	Generated less sold (million kWh)	British thermal units (trillions)	Cost (million dollars)	
		K	L	M	N	O	P	Q	R	S	T	U	N
	WATERLOO-CEDAR FALLS, IOWA	(D)	(D)	3.5	4.8	.9	.3	408.8	12.2	(D)	8.9	19.0	3
	WEST PALM BEACH-BOCA RATON, FLA.	-	-	.2	.3	.7	1.4	357.1	10.4	(D)	7.3	21.8	30
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	42.2	1.3	(D)	2.4	6.0	(X)
	WHEELING, W.VA.-OHIO	-	-	5.3	10.2	.3	3.9	1,156.4	24.0	-	12.8	34.5	3
28	CHEMICALS, ALLIED PRODUCTS	-	-	(D)	(D)	-	3.3	707.0	14.7	-	6.3	16.4	(X)
34	FABRICATED METAL PRODUCTS	-	-	.6	1.2	(D)	(D)	87.0	2.0	-	1.5	4.1	22
	WICHITA, KANS.	(D)	(D)	18.2	24.0	(D)	1.8	1,516.4	34.6	(D)	24.2	45.9	2
20	FOOD AND KINDRED PRODUCTS	-	-	(S)	(S)	(S)	(S)	116.5	3.2	-	2.0	4.2	(X)
29	PETROLEUM AND COAL PRODUCTS	-	-	(D)	(D)	-	(D)	361.1	7.8	-	11.6	14.9	(X)
34	FABRICATED METAL PRODUCTS	-	-	(S)	(S)	(Z)	(S)	11.3	.4	-	.3	.5	(X)
37	TRANSPORTATION EQUIPMENT	-	-	2.3	2.9	(D)	(D)	247.3	6.5	-	3.5	8.0	1
	WICHITA FALLS, TEX.	(D)	(D)	(S)	(S)	(S)	(S)	217.1	4.2	-	3.9	8.0	(X)
	WILLIAMSPORT, PA.	(D)	(D)	.8	2.2	.5	.1	253.7	7.2	-	3.0	10.9	11
24	LUMBER AND WOOD PRODUCTS	-	-	-	-	(Z)	(S)	(D)	(D)	-	.2	.6	(X)
34	FABRICATED METAL PRODUCTS	-	-	(Z)	.1	(D)	(D)	17.5	.6	-	.3	1.2	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	(S)	(S)	(S)	(S)	26.6	.8	-	.2	1.0	(X)
	WILMINGTON, DEL.-N.J.-MD.	(D)	(D)	6.9	12.4	36.8	(D)	2,787.3	80.0	(D)	57.0	155.0	1
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	-	(D)	20.3	.7	-	.6	1.8	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	.1	.2	.5	.3	41.0	1.4	-	1.0	3.0	19
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	1,605.0	45.3	(D)	36.4	91.0	(X)
30	RUBBER, MISC. PLASTICS PROD.	-	-	(S)	(S)	(S)	(S)	125.4	4.2	(D)	1.9	6.8	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(S)	(S)	(D)	(S)	104.4	3.1	-	3.8	10.9	(X)
33	PRIMARY METAL INDUSTRIES	(Z)	(Z)	(D)	(D)	(D)	(D)	214.6	6.7	-	2.7	9.8	(X)
34	FABRICATED METAL PRODUCTS	-	-	(Z)	.1	(D)	(D)	28.9	.8	-	.3	.9	1
35	MACHINERY, EXCEPT ELECTRIC	-	-	(D)	(D)	(D)	(S)	12.6	.5	-	.2	.7	(X)
	WILMINGTON, N.C.	-	-	.5	1.0	(D)	.6	1,162.6	27.6	-	26.3	63.0	5
28	CHEMICALS, ALLIED PRODUCTS	-	-	(S)	(S)	(D)	(S)	942.4	22.1	-	22.1	54.4	(X)
	WORCESTER, MASS.	(D)	(D)	2.8	7.4	(D)	2.9	619.0	24.4	(D)	10.6	37.6	7
20	FOOD AND KINDRED PRODUCTS	-	-	(D)	(D)	(D)	(D)	17.6	.7	-	.3	1.5	(X)
22	TEXTILE MILL PRODUCTS	-	-	(S)	(S)	-	(S)	(S)	(S)	(D)	1.6	4.2	(X)
28	CHEMICALS, ALLIED PRODUCTS	-	-	(Z)	(Z)	(D)	.2	28.1	1.1	-	.4	1.6	1
30	RUBBER, MISC. PLASTICS PROD.	-	-	(D)	(D)	(Z)	(D)	57.5	2.2	-	.5	2.5	(X)
32	STONE, CLAY, GLASS PRODUCTS	-	-	(D)	(D)	(Z)	(D)	92.7	3.8	(D)	2.2	7.1	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(Z)	.3	.9	(Z)	.2	87.3	3.5	-	1.4	5.3	14
34	FABRICATED METAL PRODUCTS	-	-	1.2	3.1	(Z)	(D)	115.8	4.7	-	2.5	8.2	2
35	MACHINERY, EXCEPT ELECTRIC	-	-	.3	.8	(Z)	(D)	80.5	3.1	-	.5	2.4	58
	YAKIMA, WASH.	(D)	(D)	(S)	(S)	(S)	(S)	189.7	2.8	(D)	4.7	10.0	(X)
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	(S)	(S)	(D)	(D)	(S)	(S)	(Z)	3.6	7.0	(X)
24	LUMBER AND WOOD PRODUCTS	-	-	(Z)	(Z)	(D)	(D)	55.5	.8	-	.6	1.6	36
	YORK, PA.	(D)	(D)	2.7	5.7	2.4	(D)	1,142.1	34.1	(D)	25.1	61.8	6
20	FOOD AND KINDRED PRODUCTS	-	-	.5	1.1	(D)	(D)	78.1	2.7	-	2.1	5.8	12
22	TEXTILE MILL PRODUCTS	-	-	(Z)	(Z)	(Z)	(D)	61.6	1.1	-	.4	1.7	1
23	APPAREL, OTH. TEXTILE PRODS.	-	-	(Z)	.1	(Z)	(D)	16.3	.6	-	.4	1.2	11
24	LUMBER AND WOOD PRODUCTS	-	-	(D)	(D)	.1	(D)	16.4	.5	-	.3	1.1	(X)
25	FURNITURE AND FIXTURES	-	-	(S)	(S)	(S)	(S)	20.7	.9	-	.4	1.5	(X)
26	PAPER AND ALLIED PRODUCTS	-	-	(S)	(S)	(S)	(S)	214.1	5.7	(D)	7.7	15.4	(X)
27	PRINTING AND PUBLISHING	-	-	(Z)	.1	(D)	.1	40.2	1.3	-	.3	1.4	16
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	(S)	(S)	(S)	(S)	119.6	3.3	-	6.9	10.7	(X)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	.2	.5	.3	(D)	90.7	3.0	-	1.4	4.8	3
34	FABRICATED METAL PRODUCTS	-	-	.3	.5	(D)	(D)	46.3	1.6	-	.7	2.0	11
35	MACHINERY, EXCEPT ELECTRIC	-	-	.5	1.0	.4	(D)	256.4	7.2	-	2.4	8.5	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.1	.2	(D)	.3	64.2	2.4	-	.6	2.3	22
37	TRANSPORTATION EQUIPMENT	-	-	(S)	(S)	(D)	(S)	49.2	1.6	-	.6	2.1	(X)
	YOUNGSTOWN-WARREN, OHIO	(D)	(D)	34.6	65.3	(D)	(S)	2,715.8	64.8	(S)	79.7	163.4	2
20	FOOD AND KINDRED PRODUCTS	-	-	.7	1.1	-	(D)	18.5	.7	-	.1	.3	57
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	1.8	3.2	(Z)	(D)	67.5	1.7	(D)	1.8	3.6	3
33	PRIMARY METAL INDUSTRIES	(D)	(D)	25.5	47.6	(D)	(S)	1,497.4	34.5	293.8	64.3	122.3	1
34	FABRICATED METAL PRODUCTS	-	-	1.6	2.9	2.3	(D)	182.3	5.2	-	2.5	7.2	17
35	MACHINERY, EXCEPT ELECTRIC	-	-	.4	.8	.2	.5	84.2	2.4	-	1.0	2.8	1
36	ELECTRIC, ELECTRONIC EQUIP	-	-	.4	.7	-	.1	51.3	1.4	-	.6	1.8	1

Note: Data presented in this table supersede 1976 published data. Data were revised as a result of adjustments to estimating technique. For a complete discussion of these adjustments, see appendix G, Method of Estimation.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (S) Withheld because the estimate did not meet publication standards, either on the basis of the associated standard error of the estimate or on the basis of a consistency review. (X) Not applicable. (Z) Less than half of the unit of measure specified.

[1]Standard error of estimate is described in appendix B. Cost of fuels (col. D) and purchased electric energy (col. Q and R) were collected from all establishments in the 1977 Census of Manufactures. The figures shown for these items are census totals; therefore, sampling errors do not apply. Standard errors of estimates for the cost of coke for the standard metropolitan statistical areas that reported this fuel and standard errors of estimates for "other fuels" are not shown in this table. Standard errors for "other fuels" are generally higher, and may sometimes be considerably higher than those for specified kinds of fuels for which standard errors of estimates are shown. Standard error for cost of coke consumed is less than 1 percent at "all industries" level.

Gross Book Value of Depreciable Assets
Capital Expenditures
Retirements
Depreciation
Rental Payments

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EXPLANATORY TEXT

SUMMARY DATA

At the beginning of 1977, gross book value of depreciable assets held by all operating manufacturing establishments was estimated to be $402.1 billion. By the end of the year 1977, the total rose to $439.0 billion as a result of $51.9 billion in capital expenditures for new and used buildings and equipment during the year, which were offset by $15.0 billion retirements during 1977.

Capital expenditures (new and used) totaled $51.9 billion for 1977, with $48.6 billion for new and $3.3 billion for used buildings and equipment. Of the total figure for expenditures for new buildings and equipment, establishments classified in the chemicals and allied products (SIC 28) industry group accounted for $8.2 billion, establishments classified in the transportation equipment (SIC 37) industry group accounted for $4.7 billion, and establishments classified in the primary metal (SIC 33) industry group accounted for $4.5 billion.

The States with the largest expenditures for new buildings and equipment were Texas, Michigan, and California. These States accounted for nearly 26 percent of the total.

Retirements of depreciable assets during 1977 amounted to $15.0 billion and were 4 percent of the beginning-of-year assets. Retirements of machinery and equipment accounted for 84 percent of this total retirement figure.

The gross book value of depreciable assets at end-of-year 1977 was $439.0 billion, with approximately 28 percent held by establishments classified in the chemical and allied products (SIC 28) and primary metal (SIC 33) industry groups. Establishments located in the States of California and Pennsylvania held approximately 14 percent of all manufacturers' assets.

In addition to the data on gross book value of depreciable assets, capital expenditures, and retirements, this report presents data on depreciation charges during 1977 and rental payments. For all manufacturing establishments, depreciation charges totalled $26.7 billion during 1977 and accounted for approximately 7 percent of the beginning-of-year gross book value of depreciable assets. Rental payments for buildings and equipment made by manufacturers amounted to $7.1 billion during 1977. Approximately 55 percent of these payments were for the use of machinery and equipment.

SOURCE

These data were collected from establishments included in the annual survey of manufactures (ASM) sample for 1977. (Please see the Introduction—Manufacturing Universe and Census Report Forms for a detailed discussion of the ASM and its relationship to the census. Appendix B discusses the estimating procedures used and sampling qualifications of the data.) In the 1977 Census of Manufactures, only establishments included in the ASM sample panel were requested to provide detailed information on gross book value of fixed depreciable assets, capital expenditures, retirements, depreciation charges, and rental payments for buildings and equipment. (A definition of each of these items may be found in appendix A.)

The ASM has been providing data on gross book value of assets in place and rental payments since 1967 and for capital expenditures for many more years. This report provides, for the first time, data on depreciation and retirements. This expansion took place to provide information needed to improve the Gross National Products (GNP) accounts and productivity measures. The expansion was strongly recommended in reports of the Advisory Committee to the Office of Federal Statistical Policy on GNP Data Improvement, and the National Resource Council of the National Academy of Science on Measurement and Interpretation of Productivity.

In the 1977 Census of Manufactures, expenditures for new and used buildings and equipment were also requested of establishments not included in the ASM, except for very small single establishment companies that were not sent any report form (see the Introduction—Manufacturing Universe and Census Report Forms). Universe estimates based on figures reported by establishments filing census reports (MA-100 or other forms) or estimated for the administrative record cases were previously published in the 1977 Census of Manufactures Industry and Area Series. These figures may differ from the results shown in this report, which are based on the ASM sample alone, because of sampling error. The data obtained from the complete census are considered more reliable estimates of the actual levels of capital expenditures. However, the ASM figures shown in this report are considered the best estimate of year-to-year change in capital expenditures (e.g., 1976 to 1977).

RELATIONSHIP TO BEA-SEC CAPITAL EXPENDITURES SERIES

The establishment-based census estimates of capital expenditures (both those derived from the ASM and from the census of manufactures universe) differ from those published by the Bureau of Economic Analysis (BEA) in its quarterly survey of plant and equipment expenditures. In addition to sampling variation (BEA survey is also a sample), there are differences due to use of two different reporting units. The Bureau of the Census data relate to manufacturing establishments only, whereas the BEA series is based on reports filed for company level operations which include nonmanufacturing as well as manufacturing. Also, the capital expenditures of manufacturing establishments owned by companies engaged primarily in nonmanufacturing activities are not classified as manufacturing in the BEA series. They are included in the Bureau of the Census figures for manufacturing. Both series, it should be noted, exclude expenditures for buildings and equipment at establishments owned by the Federal Government but operated under lease or contract by private companies.

Table 1. Manufacturers' Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery: 1977 and Earlier Years

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Year[1]	Assets, beginning of year	Capital expenditures, new[2]	Capital expenditures, used	Retirements	Assets, end of year	Depreciation charges	Rental payments	Standard error of estimate[3] (percent) for columns--						
	A	B	C	D	E	F	G	A	B	C	D	E	F	G
1977 Census.....	402,067.0	48,641.4	3,265.9	14,954.0	439,020.3	26,734.9	7,064.2	1	1	1	1	1	1	1
1976 ASM.....	(NA)	40,544.9	(NA)	(NA)	[4]394,760.8	(NA)	7,068.8	(X)	1	(X)	(X)	1	(X)	1
1975 ASM.....	(NA)	37,262.1	(NA)	(NA)	368,972.3	(NA)	6,542.8	(X)	1	(X)	(X)	1	(X)	1
1974 ASM.....	(NA)	35,698.7	(NA)	(NA)	339,957.8	(NA)	6,154.8	(X)	1	(X)	(X)	1	(X)	1
1973 ASM.....	(NA)	26,972.9	(NA)	(NA)	316,158.1	(NA)	5,297.2	(X)	1	(X)	(X)	(NA)	(X)	(NA)
1972 Census.....	(NA)	24,073.1	1,296.7	(NA)	300,633.3	(NA)	4,402.0	(X)	(X)	(X)	(X)	(NA)	(X)	(NA)
1971 ASM.....	(NA)	20,940.7	(NA)	(NA)	277,419.3	(NA)	4,470.8	(X)	1	(X)	(X)	1	(X)	1
1970 ASM.....	(NA)	22,164.3	(NA)	(NA)	267,305.8	(NA)	4,161.9	(X)	1	(X)	(X)	1	(X)	(NA)
1969 ASM.....	(NA)	22,291.4	(NA)	(NA)	249,243.8	(NA)	4,092.4	(X)	1	(X)	(X)	1	(X)	(NA)
1968 ASM.....	(NA)	20,613.1	(NA)	(NA)	231,779.1	(NA)	4,093.6	(X)	1	(X)	(X)	1	(X)	1
1967 Census.....	(NA)	21,503.0	967.6	(NA)	218,078.4	(NA)	3,656.1	(X)	(X)	(X)	(X)	(NA)	(X)	(NA)
1966 ASM.....	(NA)	20,235.8	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	1	(X)	(X)	(X)	(X)	(X)
1965 ASM.....	(NA)	16,615.0	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	1	(X)	(X)	(X)	(X)	(X)
1964 ASM.....	(NA)	13,294.3	(NA)	(NA)	167,954.9	(NA)	2,656.2	(X)	1	(X)	(X)	1	(X)	4
1963 Census.....	(NA)	11,370.0	706.5	(NA)	157,630.1	(NA)	2,476.6	(X)	(X)	(X)	(X)	(NA)	(X)	(NA)

(NA) Not available. (X) Not applicable.

[1]For all items shown, except new and used capital expenditures in the 1972, 1967, and 1963 census years, data are estimates based on a representative sample of establishments included in the annual survey of manufactures (ASM) and may differ from results of a complete canvass of all establishments. The ASM figures in this table represent the best estimates of the year-to-year change as measured by the continuing ASM sample. However, they are subject to sampling error and hence, as estimates of level, are not as reliable as universe figures.

Comparable ASM figures for new and used expenditures for 1972, 1967, and 1963 are not available. The data shown are the census universe figures based on information collected from manufacturers completing one of the census of manufactures forms, including the ASM form, or estimated for small single establishment companies that were not sent a report form. For 1977, census universe totals for total new capital expenditures, new building expenditures, new machinery expenditures, and total used expenditures have been published in table 3a of the 1977 Census of Manufactures, Industry Series, and also table 3a of the area series. For comparison purposes, the 1977 census universe figures are $47,459.0 million for total new expenditures and $2,870.4 for total used expenditures.

[2]Includes data for plants under construction and not yet in operation.

[3]Description of the standard error of estimate is given in appendix B under "Qualifications of the Data." The percentage standard errors shown are the approximate relative standard errors of the estimate level.

[4]The published end-of-year assets figure for 1976, as shown above, is not as reliable as the 1977 beginning-of-year assets figure also shown above. The 1977 figure has been adjusted upward to approximate a census universe figure (see appendix B) and includes revisions to establishment data originally reported by respondents in the 1976 ASM. Processing errors and sampling problems during the 5-year life of the ASM sample, are the main reasons for the upward adjustment of the beginning-of-year assets in a census year.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	ALL INDUSTRIES				202-DAIRY PRODUCTS				2032-CANNED SPECIALTIES			
ASSETS, BEGINNING OF YEAR.	402 067.0	104 196.3	297 870.6	1	3 348.0	1 028.6	2 319.5	1	657.5	223.9	433.5	1
CAPITAL EXPEND., NEW . .	48 641.4	8 603.7	40 035.9	1	429.6	102.2	327.5	5	45.7	10.8	34.9	7
CAPITAL EXPEND., USED. .	3 265.9	867.6	2 398.3	1	34.7	11.9	22.8	7	.5	-	.5	2
RETIREMENTS.	14 954.0	2 415.8	12 538.4	1	141.6	28.5	113.2	7	19.5	2.0	17.5	2
ASSETS, END OF YEAR. . . .	439 020.3	111 257.7	327 762.6	1	3 670.7	1 114.2	2 556.5	1	684.2	232.8	451.4	1
DEPRECIATION CHARGES . . .	26 734.9	4 587.4	22 147.3	1	285.9	70.4	215.5	2	33.0	7.4	25.6	2
RENTAL PAYMENTS.	7 064.2	3 207.9	3 856.3	1	112.1	35.7	76.5	5	9.2	(2.1)	7.1	8
	20-FOOD AND KINDRED PRODUCTS				2021-CREAMERY BUTTER				2033-CANNED FRUITS AND VEGETABLES			
ASSETS, BEGINNING OF YEAR.	35 088.4	10 853.8	24 234.7	1	60.0	20.0	40.0	3	1 615.0	487.4	1 127.5	2
CAPITAL EXPEND., NEW . .	4 319.3	947.6	3 371.6	1	7.0	1.7	5.3	5	151.4	32.6	118.8	5
CAPITAL EXPEND., USED. .	274.8	81.5	193.3	4	.2	.1	.1	1	21.6	4.9	16.7	3
RETIREMENTS.	1 256.2	263.7	992.9	1	3.5	.5	3.0	2	55.9	9.0	46.9	8
ASSETS, END OF YEAR. . . .	38 426.1	11 619.3	26 806.8	1	63.8	21.3	42.4	3	1 732.0	515.9	1 216.1	2
DEPRECIATION CHARGES . . .	2 432.9	504.1	1 928.8	1	4.2	1.1	3.1	3	108.6	21.6	87.0	2
RENTAL PAYMENTS.	787.5	285.0	502.3	2	1.0	(.1)	.9	6	48.6	12.7	35.9	3
	201-MEAT PRODUCTS				2022-CHEESE, NATURAL AND PROCESSED				2034-DEHYD FRUITS, VEGETABLES, SOUPS			
ASSETS, BEGINNING OF YEAR.	3 922.6	1 625.7	2 296.8	1	578.8	197.0	381.8	2	299.3	95.9	203.4	4
CAPITAL EXPEND., NEW . .	535.1	143.4	391.8	2	60.1	15.0	45.1	8	51.9	(17.0)	34.8	10
CAPITAL EXPEND., USED. .	25.7	9.4	16.3	6	(8.1)	(1.9)	(6.2)	18	(2.0)	.4	(1.6)	59
RETIREMENTS.	189.7	68.1	121.7	6	9.9	2.1	7.8	9	13.0	2.3	10.8	8
ASSETS, END OF YEAR. . . .	4 293.8	1 710.6	2 583.3	1	637.1	211.7	425.3	2	340.2	111.1	229.0	4
DEPRECIATION CHARGES . . .	316.1	88.1	228.0	1	42.6	10.0	32.5	3	19.9	4.0	15.9	6
RENTAL PAYMENTS.	130.1	41.7	88.2	2	10.0	2.8	7.1	5	(5.3)	(2.3)	(3.1)	17
	2011-MEATPACKING PLANTS				2023-CONDENSED AND EVAPORATED MILK				2035-PICKLES, SAUCES, SALAD DRESSINGS			
ASSETS, BEGINNING OF YEAR.	2 149.6	947.4	1 202.2	2	392.1	124.3	267.9	3	506.0	191.0	314.9	2
CAPITAL EXPEND., NEW . .	242.9	67.5	175.4	3	(64.6)	(14.0)	(50.6)	17	51.7	10.8	40.8	6
CAPITAL EXPEND., USED. .	15.0	4.0	11.0	5	2.7	1.5	1.2	4	3.5	2.6	(.9)	9
RETIREMENTS.	111.7	44.4	67.5	8	11.9	1.3	10.6	5	18.0	4.5	13.5	4
ASSETS, END OF YEAR. . . .	2 295.9	974.6	1 321.1	1	447.5	138.4	309.1	2	543.1	199.9	343.1	2
DEPRECIATION CHARGES . . .	164.2	50.8	113.4	2	24.4	4.8	19.7	3	27.0	7.5	19.5	3
RENTAL PAYMENTS.	73.5	18.9	54.4	3	6.6	2.1	(4.5)	10	11.0	3.4	7.5	10
	2013-SAUSAGES AND OTHER PREPARED MEATS				2024-ICE CREAM AND FROZEN DESSERTS				2037-FROZEN FRUITS AND VEGETABLES			
ASSETS, BEGINNING OF YEAR.	1 004.0	401.2	602.6	2	441.8	137.0	304.9	4	844.6	253.2	591.4	2
CAPITAL EXPEND., NEW . .	150.0	35.6	114.4	5	58.1	19.4	38.7	6	103.2	(23.5)	79.7	13
CAPITAL EXPEND., USED. .	(6.7)	(3.3)	3.4	17	5.4	2.6	(2.8)	13	9.4	2.2	(7.2)	12
RETIREMENTS.	44.7	(14.2)	30.5	9	12.2	(2.7)	9.6	9	21.0	2.3	18.7	6
ASSETS, END OF YEAR. . . .	1 116.0	425.9	690.0	2	493.1	156.4	336.8	3	936.2	276.6	659.6	2
DEPRECIATION CHARGES . . .	79.4	19.8	59.6	2	36.2	(9.3)	26.8	8	59.6	10.5	49.2	4
RENTAL PAYMENTS.	42.5	18.4	24.0	4	15.4	7.0	8.3	5	30.7	9.4	21.4	9
	2016-POULTRY DRESSING PLANTS				2026-FLUID MILK				2038-FROZEN SPECIALTIES			
ASSETS, BEGINNING OF YEAR.	676.4	248.4	428.0	1	1 875.2	550.3	1 324.9	1	740.8	240.3	500.6	2
CAPITAL EXPEND., NEW . .	126.4	36.6	89.8	2	239.8	52.1	187.8	6	78.5	18.5	60.0	6
CAPITAL EXPEND., USED. .	3.3	1.7	(1.6)	13	18.2	(5.8)	12.4	9	5.7	1.2	4.5	2
RETIREMENTS.	31.2	(9.2)	22.0	11	104.0	21.8	82.3	10	20.2	3.2	16.9	5
ASSETS, END OF YEAR. . . .	774.9	277.5	497.4	1	2 029.2	586.4	1 442.8	1	804.8	256.7	548.1	2
DEPRECIATION CHARGES . . .	64.2	15.8	48.4	2	178.5	45.2	133.3	2	52.0	10.7	41.4	4
RENTAL PAYMENTS.	8.5	2.5	6.1	3	79.2	(23.6)	55.6	7	21.4	7.7	(13.7)	13
	2017-POULTRY AND EGG PROCESSING				203-PRESERVED FRUITS AND VEGETABLES				204-GRAIN MILL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	92.6	28.6	64.0	6	4 663.2	1 491.9	3 171.4	1	4 614.9	1 413.5	3 201.5	1
CAPITAL EXPEND., NEW . .	16.1	3.9	12.2	7	482.3	113.2	369.1	4	637.5	135.3	502.2	3
CAPITAL EXPEND., USED. .	(.8)	(.4)	(.4)	37	42.6	11.3	31.3	5	(19.9)	(7.0)	(12.9)	18
RETIREMENTS.	(2.1)	(.4)	(1.7)	33	147.6	23.3	124.3	4	143.6	40.2	103.4	3
ASSETS, END OF YEAR. . . .	107.4	32.5	74.9	6	5 040.4	1 593.1	3 447.3	1	5 128.7	1 515.6	3 613.3	1
DEPRECIATION CHARGES . . .	(8.3)	1.7	(6.6)	16	300.1	61.5	238.5	2	285.7	59.4	226.4	2
RENTAL PAYMENTS.	5.7	1.9	3.8	10	126.1	37.5	88.6	4	74.3	12.7	61.6	5

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	2041-FLOUR, OTHER GRAIN MILL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	589.1	223.4	365.7	2
CAPITAL EXPEND., NEW . .	(52.6)	(16.2)	36.4	17
CAPITAL EXPEND., USED. .	2.0	(.1)	1.9	5
RETIREMENTS.	10.1	1.9	8.2	4
ASSETS, END OF YEAR. . . .	633.7	237.8	395.9	2
DEPRECIATION CHARGES . . .	31.9	8.3	23.5	10
RENTAL PAYMENTS.	9.6	.9	8.7	2
	2043-CEREAL BREAKFAST FOODS			
ASSETS, BEGINNING OF YEAR.	636.8	184.8	452.0	1
CAPITAL EXPEND., NEW . .	82.3	11.6	70.7	3
CAPITAL EXPEND., USED. .	1.0	.5	.5	1
RETIREMENTS.	24.9	11.2	13.7	2
ASSETS, END OF YEAR. . . .	695.2	185.7	509.5	1
DEPRECIATION CHARGES . . .	33.8	5.4	28.4	1
RENTAL PAYMENTS.	(2.4)	(1.6)	.7	29
	2044-RICE MILLING			
ASSETS, BEGINNING OF YEAR.	176.5	75.5	101.0	5
CAPITAL EXPEND., NEW . .	40.8	11.7	29.1	3
CAPITAL EXPEND., USED. .	(4.3)	(3.7)	.6	80
RETIREMENTS.	4.7	1.8	2.9	4
ASSETS, END OF YEAR. . . .	216.8	88.9	127.9	6
DEPRECIATION CHARGES . . .	10.0	3.0	7.0	6
RENTAL PAYMENTS.	2.8	(.4)	2.3	3
	2045-BLENDED AND PREPARED FLOUR			
ASSETS, BEGINNING OF YEAR.	176.6	63.2	113.4	6
CAPITAL EXPEND., NEW . .	16.9	5.8	11.1	6
CAPITAL EXPEND., USED. .	.3	-	.3	1
RETIREMENTS.	(8.9)	1.8	(7.1)	19
ASSETS, END OF YEAR. . . .	184.9	67.2	117.7	6
DEPRECIATION CHARGES . . .	11.5	3.4	8.1	7
RENTAL PAYMENTS.	5.1	(2.0)	3.1	7
	2046-WET CORN MILLING			
ASSETS, BEGINNING OF YEAR.	1 218.8	255.1	963.8	1
CAPITAL EXPEND., NEW . .	234.1	34.4	199.7	4
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	28.2	5.5	22.7	1
ASSETS, END OF YEAR. . . .	1 424.9	284.0	1 140.9	1
DEPRECIATION CHARGES . . .	59.2	7.5	51.7	1
RENTAL PAYMENTS.	26.5	.4	26.1	1
	2047-DOG, CAT, AND OTHER PET FOOD			
ASSETS, BEGINNING OF YEAR.	755.2	252.3	502.9	3
CAPITAL EXPEND., NEW . .	70.1	14.4	55.7	5
CAPITAL EXPEND., USED. .	(1.1)	.1	(.9)	30
RETIREMENTS.	29.4	(7.8)	21.6	10
ASSETS, END OF YEAR. . . .	796.9	259.1	537.9	3
DEPRECIATION CHARGES . . .	53.9	10.4	43.4	3
RENTAL PAYMENTS.	(9.3)	2.7	(6.6)	20
	2048-PREPARED FEEDS, NEC			
ASSETS, BEGINNING OF YEAR.	1 061.9	359.2	702.7	1
CAPITAL EXPEND., NEW . .	140.8	41.3	99.5	9
CAPITAL EXPEND., USED. .	11.1	2.6	8.5	7
RETIREMENTS.	37.4	10.2	27.2	4
ASSETS, END OF YEAR. . . .	1 176.4	392.9	783.5	2
DEPRECIATION CHARGES . . .	85.6	21.3	64.3	5
RENTAL PAYMENTS.	18.7	4.7	(14.0)	13
	205-BAKERY PRODUCTS			
ASSETS, BEGINNING OF YEAR.	2 924.5	796.0	2 128.6	1
CAPITAL EXPEND., NEW . .	374.6	75.5	299.1	4
CAPITAL EXPEND., USED. .	(32.0)	(12.2)	19.8	15
RETIREMENTS.	111.4	14.8	96.8	7
ASSETS, END OF YEAR. . . .	3 219.7	868.9	2 350.7	1
DEPRECIATION CHARGES . . .	224.7	36.2	188.4	3
RENTAL PAYMENTS.	105.5	54.9	50.5	11
	2051-BREAD, CAKE, AND RELATED PRODUCTS			
ASSETS, BEGINNING OF YEAR.	2 215.3	567.6	1 647.8	1
CAPITAL EXPEND., NEW . .	291.6	51.8	239.9	5
CAPITAL EXPEND., USED. .	24.9	(6.7)	18.2	7
RETIREMENTS.	93.1	(13.0)	80.1	9
ASSETS, END OF YEAR. . . .	2 438.8	613.0	1 825.8	1
DEPRECIATION CHARGES . . .	178.3	26.0	152.3	3
RENTAL PAYMENTS.	81.8	43.8	(38.1)	8
	2052-COOKIES AND CRACKERS			
ASSETS, BEGINNING OF YEAR.	709.2	228.4	480.8	2
CAPITAL EXPEND., NEW . .	82.9	23.7	59.2	3
CAPITAL EXPEND., USED. .	(7.1)	(5.5)	1.5	64
RETIREMENTS.	18.4	1.7	16.6	3
ASSETS, END OF YEAR. . . .	780.8	255.9	524.9	2
DEPRECIATION CHARGES . . .	46.4	10.3	36.1	3
RENTAL PAYMENTS.	(23.6)	(11.2)	(12.5)	38
	206-SUGAR, CONFECTIONERY PRODUCTS			
ASSETS, BEGINNING OF YEAR.	3 325.0	840.9	2 484.1	1
CAPITAL EXPEND., NEW . .	292.4	53.0	239.4	2
CAPITAL EXPEND., USED. .	20.8	1.7	19.1	2
RETIREMENTS.	113.1	13.1	100.0	7
ASSETS, END OF YEAR. . . .	3 525.2	882.5	2 642.6	1
DEPRECIATION CHARGES . . .	188.2	34.9	153.3	1
RENTAL PAYMENTS.	41.7	18.5	23.2	4
	2061-RAW CANE SUGAR			
ASSETS, BEGINNING OF YEAR.	607.9	116.2	491.7	3
CAPITAL EXPEND., NEW . .	41.3	(4.1)	37.2	4
CAPITAL EXPEND., USED. .	.8	-	.8	1
RETIREMENTS.	(28.8)	(3.2)	(25.6)	24
ASSETS, END OF YEAR. . . .	621.2	117.1	504.1	2
DEPRECIATION CHARGES . . .	36.2	6.6	29.5	2
RENTAL PAYMENTS.	5.8	(.2)	5.6	4
	2062-CANE SUGAR REFINING			
ASSETS, BEGINNING OF YEAR.	550.7	147.0	403.7	1
CAPITAL EXPEND., NEW . .	53.1	10.7	42.4	1
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	41.9	4.6	37.3	1
ASSETS, END OF YEAR. . . .	561.9	153.1	408.8	1
DEPRECIATION CHARGES . . .	26.5	4.5	22.0	1
RENTAL PAYMENTS.	4.0	.5	3.5	1
	2063-BEET SUGAR			
ASSETS, BEGINNING OF YEAR.	747.6	128.9	618.7	1
CAPITAL EXPEND., NEW . .	35.7	2.8	32.8	1
CAPITAL EXPEND., USED. .	4.9	-	4.9	1
RETIREMENTS.	5.5	.2	5.3	1
ASSETS, END OF YEAR. . . .	782.8	131.5	651.2	1
DEPRECIATION CHARGES . . .	39.2	3.3	35.8	1
RENTAL PAYMENTS.	3.6	2.1	1.4	1
	2065-CONFECTIONERY PRODUCTS			
ASSETS, BEGINNING OF YEAR.	942.1	314.4	627.7	2
CAPITAL EXPEND., NEW . .	105.7	20.6	85.1	3
CAPITAL EXPEND., USED. .	3.8	.9	2.9	10
RETIREMENTS.	29.6	4.8	24.8	4
ASSETS, END OF YEAR. . . .	1 022.1	331.2	690.9	2
DEPRECIATION CHARGES . . .	65.6	16.4	49.2	2
RENTAL PAYMENTS.	24.4	14.0	10.3	7
	2066-CHOCOLATE AND COCOA PRODUCTS			
ASSETS, BEGINNING OF YEAR.	299.2	86.2	213.0	1
CAPITAL EXPEND., NEW . .	34.7	11.1	23.6	1
CAPITAL EXPEND., USED. .	11.0	.8	10.1	1
RETIREMENTS.	3.7	.3	3.4	3
ASSETS, END OF YEAR. . . .	341.2	97.9	243.3	1
DEPRECIATION CHARGES . . .	11.8	2.3	9.5	1
RENTAL PAYMENTS.	2.8	1.1	1.7	2
	2067-CHEWING GUM			
ASSETS, BEGINNING OF YEAR.	177.6	48.2	129.4	1
CAPITAL EXPEND., NEW . .	21.9	3.7	18.3	1
CAPITAL EXPEND., USED. .	.3	-	.3	1
RETIREMENTS.	3.7	.1	3.6	1
ASSETS, END OF YEAR. . . .	196.1	51.8	144.3	1
DEPRECIATION CHARGES . . .	8.9	1.7	7.2	1
RENTAL PAYMENTS.	1.1	.5	.6	1
	207-FATS AND OILS			
ASSETS, BEGINNING OF YEAR.	2 049.2	507.3	1 541.9	1
CAPITAL EXPEND., NEW . .	210.7	37.4	173.3	5
CAPITAL EXPEND., USED. .	19.9	6.1	13.9	5
RETIREMENTS.	59.5	11.6	47.9	11
ASSETS, END OF YEAR. . . .	2 220.3	539.1	1 681.1	1
DEPRECIATION CHARGES . . .	125.8	22.9	102.9	3
RENTAL PAYMENTS.	22.1	6.5	15.6	7
	2074-COTTONSEED OIL MILLS			
ASSETS, BEGINNING OF YEAR.	199.7	59.0	140.8	6
CAPITAL EXPEND., NEW . .	14.3	(4.4)	9.9	13
CAPITAL EXPEND., USED. .	.4	-	.3	1
RETIREMENTS.	(8.2)	(3.5)	(4.7)	30
ASSETS, END OF YEAR. . . .	206.2	60.0	146.2	6
DEPRECIATION CHARGES . . .	11.1	(3.0)	8.0	11
RENTAL PAYMENTS.	.3	.1	.2	4
	2075-SOYBEAN OIL MILLS			
ASSETS, BEGINNING OF YEAR.	827.6	202.0	625.5	1
CAPITAL EXPEND., NEW . .	72.6	14.2	58.5	2
CAPITAL EXPEND., USED. .	2.3	1.8	.5	2
RETIREMENTS.	9.1	.9	8.2	2
ASSETS, END OF YEAR. . . .	893.4	217.1	676.3	1
DEPRECIATION CHARGES . . .	50.6	9.9	40.7	1
RENTAL PAYMENTS.	6.7	2.5	4.2	2
	2076-VEGETABLE OIL MILLS, NEC			
ASSETS, BEGINNING OF YEAR.	47.0	15.8	31.2	1
CAPITAL EXPEND., NEW . .	6.1	1.8	4.3	1
CAPITAL EXPEND., USED. .	.1	-	.1	1
RETIREMENTS.	2.5	.9	1.7	1
ASSETS, END OF YEAR. . . .	50.7	16.8	34.0	1
DEPRECIATION CHARGES . . .	2.8	.7	2.1	1
RENTAL PAYMENTS.	.4	.2	.2	1

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	2077-ANIMAL AND MARINE FATS AND OILS			
ASSETS, BEGINNING OF YEAR.	405.7	90.8	314.9	6
CAPITAL EXPEND., NEW . .	(55.9)	(7.7)	(48.2)	17
CAPITAL EXPEND., USED. .	(4.5)	(1.6)	(3.0)	21
RETIREMENTS.	(28.7)	(5.9)	(22.9)	20
ASSETS, END OF YEAR. . . .	437.4	94.2	343.3	6
DEPRECIATION CHARGES . . .	33.1	4.7	28.3	10
RENTAL PAYMENTS.	(6.4)	(1.6)	(4.8)	22
	2079-SHORTENING AND COOKING OILS			
ASSETS, BEGINNING OF YEAR.	569.1	139.7	429.5	1
CAPITAL EXPEND., NEW . .	61.7	9.3	52.4	1
CAPITAL EXPEND., USED. .	12.6	2.6	10.0	2
RETIREMENTS.	10.9	(.5)	10.5	4
ASSETS, END OF YEAR. . . .	632.5	151.1	481.4	1
DEPRECIATION CHARGES . . .	28.2	4.5	23.7	2
RENTAL PAYMENTS.	8.2	2.1	6.1	4
	208-BEVERAGES			
ASSETS, BEGINNING OF YEAR.	7 639.5	2 388.5	5 250.9	1
CAPITAL EXPEND., NEW . .	1 031.5	213.1	818.4	1
CAPITAL EXPEND., USED. .	49.0	14.3	34.7	11
RETIREMENTS.	229.8	40.1	189.7	6
ASSETS, END OF YEAR. . . .	8 490.2	2 575.8	5 914.3	1
DEPRECIATION CHARGES . . .	512.0	91.2	420.8	2
RENTAL PAYMENTS.	123.3	52.2	71.0	4
	2082-MALT BEVERAGES			
ASSETS, BEGINNING OF YEAR.	3 510.4	1 078.9	2 431.6	1
CAPITAL EXPEND., NEW . .	425.9	81.1	344.8	3
CAPITAL EXPEND., USED. .	(11.0)	(.3)	(10.6)	20
RETIREMENTS.	40.7	(2.2)	38.5	4
ASSETS, END OF YEAR. . . .	3 906.6	1 158.2	2 748.5	1
DEPRECIATION CHARGES . . .	193.1	41.1	151.9	3
RENTAL PAYMENTS.	17.8	4.4	13.4	2
	2083-MALT			
ASSETS, BEGINNING OF YEAR.	149.7	70.5	79.2	7
CAPITAL EXPEND., NEW . .	38.4	19.1	19.2	3
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	(9.3)	(4.5)	(4.7)	74
ASSETS, END OF YEAR. . . .	178.8	85.2	93.7	5
DEPRECIATION CHARGES . . .	8.7	3.2	5.5	5
RENTAL PAYMENTS.	.7	(.3)	.5	11
	2084-WINES, BRANDY, AND BRANDY SPIRITS			
ASSETS, BEGINNING OF YEAR.	465.8	160.9	304.8	4
CAPITAL EXPEND., NEW . .	55.2	(14.3)	40.9	11
CAPITAL EXPEND., USED. .	(2.5)	(1.6)	(.9)	39
RETIREMENTS.	5.9	(.9)	5.1	12
ASSETS, END OF YEAR. . . .	517.6	176.0	341.6	3
DEPRECIATION CHARGES . . .	30.0	(6.5)	23.5	6
RENTAL PAYMENTS.	7.7	3.1	(4.6)	11
	2085-DISTILLED LIQUOR, EXCEPT BRANDY			
ASSETS, BEGINNING OF YEAR.	594.7	269.6	325.1	2
CAPITAL EXPEND., NEW . .	35.9	9.5	26.4	3
CAPITAL EXPEND., USED. .	1.7	-	1.7	1
RETIREMENTS.	6.0	1.3	4.7	4
ASSETS, END OF YEAR. . . .	626.4	277.9	348.5	2
DEPRECIATION CHARGES . . .	25.2	7.4	17.8	3
RENTAL PAYMENTS.	7.4	1.3	6.1	4
	2086-BOTTLED AND CANNED SOFT DRINKS			
ASSETS, BEGINNING OF YEAR.	2 572.3	661.9	1 910.4	1
CAPITAL EXPEND., NEW . .	438.0	78.2	359.8	4
CAPITAL EXPEND., USED. .	(30.4)	(11.3)	(19.0)	15
RETIREMENTS.	154.6	27.3	127.3	7
ASSETS, END OF YEAR. . . .	2 886.1	724.2	2 161.9	1
DEPRECIATION CHARGES . . .	235.4	27.6	207.8	4
RENTAL PAYMENTS.	83.8	40.1	43.7	5
	2087-FLAVORING EXTRACTS, SIRUPS, NEC			
ASSETS, BEGINNING OF YEAR.	346.5	146.7	199.9	4
CAPITAL EXPEND., NEW . .	38.1	(10.9)	27.2	10
CAPITAL EXPEND., USED. .	(3.4)	(.9)	(2.5)	54
RETIREMENTS.	13.3	(4.0)	9.3	13
ASSETS, END OF YEAR. . . .	374.7	154.4	220.2	4
DEPRECIATION CHARGES . . .	19.7	5.4	14.3	5
RENTAL PAYMENTS.	5.9	(3.2)	(2.7)	14
	209-MISC FOODS, KINDRED PRODUCTS			
ASSETS, BEGINNING OF YEAR.	2 601.5	761.6	1 840.1	1
CAPITAL EXPEND., NEW . .	325.3	74.5	250.8	5
CAPITAL EXPEND., USED. .	30.2	7.6	22.6	10
RETIREMENTS.	119.9	24.1	95.9	6
ASSETS, END OF YEAR. . . .	2 837.1	819.5	2 017.6	1
DEPRECIATION CHARGES . . .	194.4	39.5	154.8	3
RENTAL PAYMENTS.	52.5	25.3	27.2	5
	2091-CANNED AND CURED SEAFOODS			
ASSETS, BEGINNING OF YEAR.	189.2	64.7	124.5	5
CAPITAL EXPEND., NEW . .	26.8	9.1	17.7	4
CAPITAL EXPEND., USED. .	4.5	.5	4.0	2
RETIREMENTS.	15.8	4.2	11.6	5
ASSETS, END OF YEAR. . . .	204.7	70.1	134.6	5
DEPRECIATION CHARGES . . .	(18.0)	(8.4)	9.6	18
RENTAL PAYMENTS.	4.5	2.0	2.5	9
	2092-FRESH OR FROZEN PACKAGED FISH			
ASSETS, BEGINNING OF YEAR.	226.1	92.0	134.2	5
CAPITAL EXPEND., NEW . .	51.7	(17.0)	34.7	11
CAPITAL EXPEND., USED. .	(3.1)	(2.0)	(1.0)	19
RETIREMENTS.	(8.5)	(1.4)	7.1	15
ASSETS, END OF YEAR. . . .	272.5	109.7	162.8	5
DEPRECIATION CHARGES . . .	18.5	4.9	13.7	5
RENTAL PAYMENTS.	7.3	(2.8)	4.5	8
	2095-ROASTED COFFEE			
ASSETS, BEGINNING OF YEAR.	580.3	120.1	460.2	2
CAPITAL EXPEND., NEW . .	48.0	(2.4)	45.6	14
CAPITAL EXPEND., USED. .	7.0	.2	6.8	5
RETIREMENTS.	(15.7)	1.3	(14.4)	20
ASSETS, END OF YEAR. . . .	619.7	121.4	498.3	2
DEPRECIATION CHARGES . . .	46.5	6.0	40.5	2
RENTAL PAYMENTS.	6.1	3.9	2.2	8
	2097-MANUFACTURED ICE			
ASSETS, BEGINNING OF YEAR.	(120.0)	(45.4)	74.6	15
CAPITAL EXPEND., NEW . .	(21.0)	(8.4)	(12.6)	28
CAPITAL EXPEND., USED. .	.2	-	.2	14
RETIREMENTS.	(11.5)	(4.6)	(6.9)	49
ASSETS, END OF YEAR. . . .	129.8	49.2	80.5	13
DEPRECIATION CHARGES . . .	8.2	(2.3)	5.9	12
RENTAL PAYMENTS.	(3.2)	(1.5)	(1.7)	27
	2098-MACARONI AND SPAGHETTI			
ASSETS, BEGINNING OF YEAR.	176.1	45.7	130.4	5
CAPITAL EXPEND., NEW . .	10.3	3.0	7.3	10
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	8.6	2.5	(6.1)	12
ASSETS, END OF YEAR. . . .	177.9	46.2	131.7	5
DEPRECIATION CHARGES . . .	12.7	2.0	10.7	5
RENTAL PAYMENTS.	(2.7)	(1.9)	(.8)	15
	2099-FOOD PREPARATIONS, NEC			
ASSETS, BEGINNING OF YEAR.	1 309.7	393.7	916.1	2
CAPITAL EXPEND., NEW . .	167.4	34.5	132.9	6
CAPITAL EXPEND., USED. .	(15.4)	4.8	(10.6)	18
RETIREMENTS.	59.9	10.1	49.8	5
ASSETS, END OF YEAR. . . .	1 432.6	422.9	1 009.7	2
DEPRECIATION CHARGES . . .	90.4	15.9	74.5	3
RENTAL PAYMENTS.	28.7	13.2	15.5	6
	21-TOBACCO PRODUCTS			
ASSETS, BEGINNING OF YEAR.	1 663.8	559.7	1 104.1	1
CAPITAL EXPEND., NEW . .	181.5	56.9	124.6	1
CAPITAL EXPEND., USED. .	8.5	1.7	6.8	4
RETIREMENTS.	64.2	4.0	60.2	1
ASSETS, END OF YEAR. . . .	1 789.7	614.3	1 175.4	1
DEPRECIATION CHARGES . . .	111.0	29.5	81.5	1
RENTAL PAYMENTS.	14.4	9.0	5.4	2
	2111-CIGARETTES			
ASSETS, BEGINNING OF YEAR.	1 211.8	384.6	827.2	1
CAPITAL EXPEND., NEW . .	118.0	41.2	76.8	1
CAPITAL EXPEND., USED. .	2.6	-	2.6	1
RETIREMENTS.	50.7	.6	50.0	1
ASSETS, END OF YEAR. . . .	1 281.7	425.2	856.5	1
DEPRECIATION CHARGES . . .	80.4	19.8	60.6	1
RENTAL PAYMENTS.	10.3	7.0	3.3	1
	2121-CIGARS			
ASSETS, BEGINNING OF YEAR.	69.8	24.4	45.5	5
CAPITAL EXPEND., NEW . .	3.3	(.4)	2.9	9
CAPITAL EXPEND., USED. .	.8	-	.8	1
RETIREMENTS.	3.4	1.2	2.2	4
ASSETS, END OF YEAR. . . .	70.6	23.6	47.0	5
DEPRECIATION CHARGES . . .	2.9	.8	2.2	5
RENTAL PAYMENTS.	1.0	.3	.7	7
	2131-CHEWING AND SMOKING TOBACCO			
ASSETS, BEGINNING OF YEAR.	78.3	29.4	48.9	2
CAPITAL EXPEND., NEW . .	7.2	1.8	5.4	2
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	(.6)	(.1)	.6	19
ASSETS, END OF YEAR. . . .	84.9	31.2	53.7	2
DEPRECIATION CHARGES . . .	3.2	.7	2.5	3
RENTAL PAYMENTS.	.6	.3	.2	5
	2141-TOBACCO STEMMING AND REDRYING			
ASSETS, BEGINNING OF YEAR.	303.9	121.3	182.6	3
CAPITAL EXPEND., NEW . .	53.0	13.5	39.5	1
CAPITAL EXPEND., USED. .	5.1	1.6	3.4	6
RETIREMENTS.	9.4	2.1	7.3	1
ASSETS, END OF YEAR. . . .	352.5	134.3	218.2	3
DEPRECIATION CHARGES . . .	24.5	8.3	16.2	3
RENTAL PAYMENTS.	2.5	1.3	1.2	9

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	22-TEXTILE MILL PRODUCTS				2252-HOSIERY, NEC				2261-FINISHING PLANTS, COTTON			
ASSETS, BEGINNING OF YEAR.	13 992.5	3 592.4	10 400.2	1	208.1	51.5	156.6	5	360.8	101.9	259.0	3
CAPITAL EXPEND., NEW . .	1 285.6	216.7	1 068.9	1	13.7	3.2	10.5	10	32.3	5.6	27.1	8
CAPITAL EXPEND., USED. .	163.1	32.8	130.3	4	(4.2)	(.7)	(3.5)	41	22.5	6.3	16.2	2
RETIREMENTS.	600.8	98.4	502.3	2	(5.6)	(.7)	(4.9)	16	22.1	5.0	17.2	2
ASSETS, END OF YEAR. . . .	14 840.2	3 742.9	11 097.1	1	220.4	54.7	165.6	4	393.5	108.9	285.1	3
DEPRECIATION CHARGES . . .	921.1	139.8	781.2	1	17.8	3.1	14.7	10	21.8	3.6	18.3	3
RENTAL PAYMENTS.	192.4	94.4	98.1	3	3.4	2.4	1.0	10	3.4	2.1	(1.4)	13
	2211-WEAVING MILLS, COTTON				2253-KNIT OUTERWEAR MILLS				2262-FINISH PLTS, MANMADE FIBER, SILK			
ASSETS, BEGINNING OF YEAR.	1 829.3	440.7	1 388.6	1	506.3	144.5	361.8	3	854.9	264.1	590.8	1
CAPITAL EXPEND., NEW . .	187.4	34.1	153.3	2	53.2	4.2	49.0	11	78.9	12.7	66.2	5
CAPITAL EXPEND., USED. .	14.8	4.7	10.1	1	9.7	1.7	(8.1)	11	5.7	-	5.7	3
RETIREMENTS.	55.0	8.3	46.6	1	24.9	3.9	20.9	4	35.7	8.0	27.7	6
ASSETS, END OF YEAR. . . .	1 976.5	471.2	1 505.4	1	544.4	146.5	397.9	3	903.9	268.9	635.0	1
DEPRECIATION CHARGES . . .	103.6	16.6	87.0	1	41.0	6.6	34.5	4	53.1	8.8	44.3	3
RENTAL PAYMENTS.	8.9	3.7	5.2	5	21.9	15.0	6.9	5	(13.3)	(5.5)	(7.8)	29
	2221-WEAV'G MILLS, MANMADE FIBER, SILK				2254-KNIT UNDERWEAR MILLS				2269-FINISHING PLANTS, NEC			
ASSETS, BEGINNING OF YEAR.	2 772.4	616.0	2 156.5	1	136.0	51.7	84.3	4	244.8	67.1	177.6	6
CAPITAL EXPEND., NEW . .	259.0	22.7	236.4	1	14.8	4.2	10.6	3	22.8	(4.0)	18.8	12
CAPITAL EXPEND., USED. .	20.2	4.6	15.6	1	2.0	.5	1.5	4	(.7)	-	(.7)	24
RETIREMENTS.	93.2	9.2	84.0	1	6.5	3.0	3.5	7	9.3	(1.0)	8.3	7
ASSETS, END OF YEAR. . . .	2 958.5	634.0	2 324.5	1	146.4	53.4	93.0	4	258.9	70.1	188.8	5
DEPRECIATION CHARGES . . .	164.2	21.6	142.6	1	8.9	1.9	6.9	5	16.1	2.5	13.7	5
RENTAL PAYMENTS.	18.9	6.4	12.5	2	3.6	1.5	2.1	5	(3.9)	(2.1)	(1.8)	19
	2231-WEAVING AND FINISHING MILLS, WOOL				2257-CIRCULAR KNIT FABRIC MILLS				227-FLOOR COVERING MILLS			
ASSETS, BEGINNING OF YEAR.	165.4	53.5	111.9	8	1 086.5	204.1	882.3	1	1 004.8	329.7	675.2	2
CAPITAL EXPEND., NEW . .	18.0	4.2	(13.9)	14	113.0	14.5	98.5	12	82.5	12.2	70.2	8
CAPITAL EXPEND., USED. .	1.5	.1	1.4	1	(19.0)	(.6)	(18.4)	22	(16.1)	6.5	(9.6)	22
RETIREMENTS.	9.9	3.7	6.2	6	81.2	10.2	70.9	5	33.4	7.5	26.0	2
ASSETS, END OF YEAR. . . .	175.1	54.0	121.0	8	1 137.3	209.0	928.3	2	1 069.9	340.9	729.0	1
DEPRECIATION CHARGES . . .	7.8	1.5	6.2	7	94.9	8.8	86.2	3	70.0	13.0	57.1	3
RENTAL PAYMENTS.	1.6	1.1	.5	6	26.1	10.5	(15.6)	11	24.4	12.9	11.4	6
	2241-NARROW FABRIC MILLS				2258-WARP KNIT FABRIC MILLS				2271-WOVEN CARPETS AND RUGS			
ASSETS, BEGINNING OF YEAR.	224.3	66.4	157.9	7	435.4	121.6	313.8	3	(41.4)	(14.3)	(27.1)	19
CAPITAL EXPEND., NEW . .	(29.8)	(15.8)	14.0	46	55.8	19.6	36.2	8	(2.0)	(.2)	(1.9)	(A)
CAPITAL EXPEND., USED. .	(3.7)	(.1)	(3.6)	54	3.7	.1	3.6	13	.2	-	.2	1
RETIREMENTS.	(15.8)	(4.6)	(11.2)	22	25.6	4.5	21.1	4	(.8)	(.4)	(.3)	47
ASSETS, END OF YEAR. . . .	242.0	77.7	164.3	4	469.3	136.8	332.5	3	42.8	(14.0)	28.9	13
DEPRECIATION CHARGES . . .	15.6	(3.1)	12.4	10	37.0	5.3	31.7	3	(3.1)	(.5)	(2.6)	42
RENTAL PAYMENTS.	3.7	(2.5)	1.2	11	7.3	3.6	3.6	7	.8	(.3)	(.4)	9
	225-KNITTING MILLS				2259-KNITTING MILLS, NEC				2272-TUFTED CARPETS AND RUGS			
ASSETS, BEGINNING OF YEAR.	2 717.0	679.5	2 037.5	1	16.8	(4.8)	12.0	11	918.3	304.6	613.7	1
CAPITAL EXPEND., NEW . .	270.2	50.8	219.3	6	(1.3)	(.2)	(1.2)	25	77.0	11.3	65.7	4
CAPITAL EXPEND., USED. .	39.8	3.6	36.2	12	(Z)	(Z)	(Z)	71	(15.8)	6.5	(9.3)	23
RETIREMENTS.	179.8	31.9	147.9	3	(.5)	(.1)	(.4)	20	31.6	6.8	24.8	2
ASSETS, END OF YEAR. . . .	2 847.2	702.1	2 145.1	1	17.7	(4.9)	12.8	11	979.5	315.6	663.9	1
DEPRECIATION CHARGES . . .	221.1	30.1	191.0	2	1.4	(.2)	1.1	10	64.5	12.1	52.4	1
RENTAL PAYMENTS.	65.8	34.9	30.8	5	.6	.5	(.1)	11	22.4	11.8	10.5	7
	2251-WOMEN'S HOSIERY, EXCEPT SOCKS				226-TEXTILE FINISHING, EXCEPT WOOL				2279-CARPETS AND RUGS, NEC			
ASSETS, BEGINNING OF YEAR.	327.9	101.3	226.7	5	1 460.5	433.1	1 027.4	1	45.1	10.8	34.4	6
CAPITAL EXPEND., NEW . .	(18.3)	(4.9)	13.3	15	134.3	22.3	112.1	4	(3.4)	(.8)	(2.7)	20
CAPITAL EXPEND., USED. .	1.2	.1	1.1	6	28.9	6.4	22.5	2	-	-	-	1
RETIREMENTS.	35.7	9.5	26.2	2	67.1	14.0	53.2	3	1.1	(.2)	.9	11
ASSETS, END OF YEAR. . . .	311.7	96.8	214.9	5	1 556.6	447.9	1 108.9	1	47.6	11.3	36.3	6
DEPRECIATION CHARGES . . .	20.1	4.2	15.9	6	91.1	14.8	76.3	2	2.4	.3	2.1	4
RENTAL PAYMENTS.	3.0	1.4	1.6	5	(20.6)	9.7	(10.9)	19	1.3	.8	.5	13

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	228-YARN AND THREAD MILLS			
ASSETS, BEGINNING OF YEAR.	2 491.3	599.5	1 891.9	1
CAPITAL EXPEND., NEW . .	185.7	22.9	162.9	4
CAPITAL EXPEND., USED. .	32.4	6.1	26.3	3
RETIREMENTS.	91.8	7.1	84.7	3
ASSETS, END OF YEAR. . . .	2 617.7	621.4	1 996.3	1
DEPRECIATION CHARGES . . .	163.7	24.0	139.7	2
RENTAL PAYMENTS.	20.6	9.6	11.0	5
	2281-YARN MILLS, EXCEPT WOOL			
ASSETS, BEGINNING OF YEAR.	1 584.6	383.2	1 201.5	2
CAPITAL EXPEND., NEW . .	114.5	14.1	100.4	2
CAPITAL EXPEND., USED. .	24.4	5.2	19.2	1
RETIREMENTS.	64.7	5.0	59.7	1
ASSETS, END OF YEAR. . . .	1 658.8	397.5	1 261.4	2
DEPRECIATION CHARGES . . .	98.4	15.3	83.1	2
RENTAL PAYMENTS.	8.8	3.6	5.2	5
	2282-THROWING AND WINDING MILLS			
ASSETS, BEGINNING OF YEAR.	680.9	158.0	522.9	1
CAPITAL EXPEND., NEW . .	55.4	(6.8)	48.6	10
CAPITAL EXPEND., USED. .	6.8	.9	5.9	10
RETIREMENTS.	22.9	(1.8)	21.1	10
ASSETS, END OF YEAR. . . .	720.3	163.9	556.4	1
DEPRECIATION CHARGES . . .	52.1	7.0	45.2	6
RENTAL PAYMENTS.	9.0	(4.7)	(4.3)	9
	2283-WOOL YARN MILLS			
ASSETS, BEGINNING OF YEAR.	37.8	9.2	28.6	6
CAPITAL EXPEND., NEW . .	(3.2)	-	(3.2)	60
CAPITAL EXPEND., USED. .	.8	-	.7	1
RETIREMENTS.	(.9)	.1	(.7)	22
ASSETS, END OF YEAR. . . .	40.9	9.1	31.9	4
DEPRECIATION CHARGES . . .	2.4	.3	2.1	5
RENTAL PAYMENTS.	(1.1)	.4	(.6)	40
	2284-THREAD MILLS			
ASSETS, BEGINNING OF YEAR.	187.9	49.2	138.8	3
CAPITAL EXPEND., NEW . .	12.6	2.0	10.6	10
CAPITAL EXPEND., USED. .	.5	-	.5	1
RETIREMENTS.	3.4	(.2)	3.2	9
ASSETS, END OF YEAR. . . .	197.6	50.9	146.7	2
DEPRECIATION CHARGES . . .	10.8	1.5	9.3	9
RENTAL PAYMENTS.	1.8	(.9)	.9	8
	229-MISCELLANEOUS TEXTILE GOODS			
ASSETS, BEGINNING OF YEAR.	1 327.2	374.1	953.2	2
CAPITAL EXPEND., NEW . .	118.7	31.7	86.9	7
CAPITAL EXPEND., USED. .	5.7	.8	4.9	5
RETIREMENTS.	54.9	12.3	42.5	3
ASSETS, END OF YEAR. . . .	1 396.7	394.2	1 002.5	2
DEPRECIATION CHARGES . . .	84.0	15.1	68.9	2
RENTAL PAYMENTS.	27.9	13.7	14.2	5
	2291-FELT GOODS, EXC WOVEN FELT, HATS			
ASSETS, BEGINNING OF YEAR.	75.3	22.4	53.0	5
CAPITAL EXPEND., NEW . .	(5.5)	(1.4)	(4.1)	38
CAPITAL EXPEND., USED. .	.3	-	.3	11
RETIREMENTS.	1.3	(.1)	1.1	13
ASSETS, END OF YEAR. . . .	79.9	23.7	56.2	4
DEPRECIATION CHARGES . . .	4.3	.7	3.7	8
RENTAL PAYMENTS.	.9	.5	.4	5
	2292-LACE GOODS			
ASSETS, BEGINNING OF YEAR.	24.2	10.1	14.2	10
CAPITAL EXPEND., NEW . .	(4.9)	(1.9)	(3.1)	71
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	(1.0)	(.2)	(.7)	27
ASSETS, END OF YEAR. . . .	28.2	11.8	16.5	5
DEPRECIATION CHARGES . . .	(1.1)	(.2)	.8	16
RENTAL PAYMENTS.	.8	.7	.1	10
	2293-PADDINGS AND UPHOLSTERY FILLING			
ASSETS, BEGINNING OF YEAR.	61.8	22.1	39.7	7
CAPITAL EXPEND., NEW . .	(8.6)	(2.0)	(6.6)	29
CAPITAL EXPEND., USED. .	(.4)	-	(.4)	37
RETIREMENTS.	4.0	1.3	2.7	7
ASSETS, END OF YEAR. . . .	66.8	22.8	44.0	5
DEPRECIATION CHARGES . . .	4.2	.9	3.3	7
RENTAL PAYMENTS.	(2.9)	(1.7)	(1.2)	28
	2294-PROCESSED TEXTILE WASTE			
ASSETS, BEGINNING OF YEAR.	(33.9)	(11.9)	22.0	15
CAPITAL EXPEND., NEW . .	7.1	2.0	(5.2)	13
CAPITAL EXPEND., USED. .	.4	-	.3	6
RETIREMENTS.	(2.9)	(.8)	(2.1)	43
ASSETS, END OF YEAR. . . .	38.5	(13.1)	25.4	14
DEPRECIATION CHARGES . . .	2.4	.7	1.7	12
RENTAL PAYMENTS.	(1.2)	(.7)	(.4)	45
	2295-COATED FABRICS, NOT RUBBERIZED			
ASSETS, BEGINNING OF YEAR.	331.1	87.9	243.2	3
CAPITAL EXPEND., NEW . .	(30.2)	(9.9)	20.4	18
CAPITAL EXPEND., USED. .	2.1	.2	1.9	10
RETIREMENTS.	18.0	4.4	13.6	3
ASSETS, END OF YEAR. . . .	345.4	93.6	251.9	2
DEPRECIATION CHARGES . . .	20.8	3.4	17.4	2
RENTAL PAYMENTS.	8.1	4.3	3.8	8
	2296-TIRE CORD AND FABRIC			
ASSETS, BEGINNING OF YEAR.	261.0	66.8	194.2	1
CAPITAL EXPEND., NEW . .	7.0	.5	6.6	1
CAPITAL EXPEND., USED. .	.9	.2	.8	1
RETIREMENTS.	5.4	1.0	4.4	1
ASSETS, END OF YEAR. . . .	263.6	66.4	197.1	1
DEPRECIATION CHARGES . . .	14.2	2.7	11.5	1
RENTAL PAYMENTS.	1.8	.7	1.0	1
	2297-NONWOVEN FABRICS			
ASSETS, BEGINNING OF YEAR.	317.8	86.3	231.4	2
CAPITAL EXPEND., NEW . .	39.6	10.1	29.5	2
CAPITAL EXPEND., USED. .	.9	.3	.6	2
RETIREMENTS.	12.3	1.9	10.5	2
ASSETS, END OF YEAR. . . .	346.0	94.9	251.1	2
DEPRECIATION CHARGES . . .	23.5	3.8	19.7	2
RENTAL PAYMENTS.	3.8	2.3	1.6	4
	2298-CORDAGE AND TWINE			
ASSETS, BEGINNING OF YEAR.	115.5	37.1	78.4	9
CAPITAL EXPEND., NEW . .	(7.1)	(1.2)	(5.9)	21
CAPITAL EXPEND., USED. .	.4	-	.4	1
RETIREMENTS.	6.1	1.7	4.4	8
ASSETS, END OF YEAR. . . .	117.0	36.7	80.3	9
DEPRECIATION CHARGES . . .	6.4	1.4	5.0	9
RENTAL PAYMENTS.	2.1	1.2	.9	10
	2299-TEXTILE GOODS, NEC			
ASSETS, BEGINNING OF YEAR.	106.6	29.3	77.3	6
CAPITAL EXPEND., NEW . .	(8.5)	(2.9)	(5.6)	22
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	3.9	.9	3.0	6
ASSETS, END OF YEAR. . . .	111.4	31.3	80.1	6
DEPRECIATION CHARGES . . .	7.1	1.3	5.8	6
RENTAL PAYMENTS.	6.4	1.6	4.8	8
	23-APPAREL, OTHER TEXTILE PRODS			
ASSETS, BEGINNING OF YEAR.	3 773.6	1 276.7	2 497.1	1
CAPITAL EXPEND., NEW . .	528.9	127.3	401.6	3
CAPITAL EXPEND., USED. .	114.3	24.1	90.2	3
RETIREMENTS.	311.6	80.5	231.6	4
ASSETS, END OF YEAR. . . .	4 105.3	1 347.7	2 757.3	1
DEPRECIATION CHARGES . . .	329.1	64.7	264.4	5
RENTAL PAYMENTS.	326.6	231.6	94.9	4
	2311-MEN'S AND BOYS' SUITS AND COATS			
ASSETS, BEGINNING OF YEAR.	253.8	93.5	160.4	2
CAPITAL EXPEND., NEW . .	27.7	5.7	22.0	6
CAPITAL EXPEND., USED. .	(4.2)	(3.5)	.7	38
RETIREMENTS.	14.3	4.3	10.0	7
ASSETS, END OF YEAR. . . .	271.4	98.4	173.1	2
DEPRECIATION CHARGES . . .	18.2	4.2	14.0	2
RENTAL PAYMENTS.	22.5	12.5	10.0	3
	232-MEN'S AND BOYS' FURNISHINGS			
ASSETS, BEGINNING OF YEAR.	929.0	339.6	589.4	2
CAPITAL EXPEND., NEW . .	118.0	33.2	84.8	3
CAPITAL EXPEND., USED. .	13.3	6.8	6.5	6
RETIREMENTS.	72.3	26.8	45.6	6
ASSETS, END OF YEAR. . . .	988.0	352.8	635.2	2
DEPRECIATION CHARGES . . .	80.4	17.2	63.2	2
RENTAL PAYMENTS.	61.6	38.3	23.3	3
	2321-MEN'S, BOYS' SHIRTS, NIGHTWEAR			
ASSETS, BEGINNING OF YEAR.	280.6	89.3	191.4	4
CAPITAL EXPEND., NEW . .	29.6	(9.7)	20.0	7
CAPITAL EXPEND., USED. .	(3.7)	(2.3)	1.5	19
RETIREMENTS.	28.0	10.1	17.9	12
ASSETS, END OF YEAR. . . .	286.0	91.1	194.9	3
DEPRECIATION CHARGES . . .	25.4	5.5	19.9	3
RENTAL PAYMENTS.	16.1	10.8	5.3	7
	2322-MEN'S AND BOYS' UNDERWEAR			
ASSETS, BEGINNING OF YEAR.	38.7	18.2	20.5	3
CAPITAL EXPEND., NEW . .	2.2	.4	1.8	1
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	1.4	.7	.7	7
ASSETS, END OF YEAR. . . .	39.8	18.0	21.8	3
DEPRECIATION CHARGES . . .	2.2	.7	1.5	1
RENTAL PAYMENTS.	2.3	1.4	.9	2
	2323-MEN'S AND BOYS' NECKWEAR			
ASSETS, BEGINNING OF YEAR.	13.3	(3.3)	10.0	13
CAPITAL EXPEND., NEW . .	3.1	(.8)	2.3	13
CAPITAL EXPEND., USED. .	(Z)	(Z)	(Z)	75
RETIREMENTS.	(1.4)	(.3)	1.1	33
ASSETS, END OF YEAR. . . .	15.0	(3.8)	11.3	9
DEPRECIATION CHARGES . . .	1.3	(.2)	1.1	7
RENTAL PAYMENTS.	(2.8)	(2.6)	(.2)	24

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	2327-MEN'S AND BOYS' SEPARATE TROUSERS			
ASSETS, BEGINNING OF YEAR.	192.0	75.6	116.4	3
CAPITAL EXPEND., NEW . .	21.1	4.5	16.6	6
CAPITAL EXPEND., USED. .	1.5	.7	(.7)	13
RETIREMENTS.	14.4	6.1	8.3	5
ASSETS, END OF YEAR. . . .	200.1	74.7	125.4	3
DEPRECIATION CHARGES . . .	14.9	3.4	11.5	3
RENTAL PAYMENTS.	12.2	6.2	6.0	5
	2328-MEN'S AND BOYS' WORK CLOTHING			
ASSETS, BEGINNING OF YEAR.	308.2	124.2	183.9	2
CAPITAL EXPEND., NEW . .	45.1	14.3	30.8	5
CAPITAL EXPEND., USED. .	6.8	3.6	3.3	2
RETIREMENTS.	20.4	7.9	12.5	11
ASSETS, END OF YEAR. . . .	339.7	134.2	205.5	2
DEPRECIATION CHARGES . . .	26.3	5.9	20.4	2
RENTAL PAYMENTS.	19.0	10.3	8.6	3
	2329-MEN'S AND BOYS' CLOTHING, NEC			
ASSETS, BEGINNING OF YEAR.	96.2	29.1	67.1	4
CAPITAL EXPEND., NEW . .	16.9	3.5	13.4	5
CAPITAL EXPEND., USED. .	(1.0)	(.2)	(.8)	17
RETIREMENTS.	6.8	1.7	5.1	9
ASSETS, END OF YEAR. . . .	107.3	31.0	76.3	4
DEPRECIATION CHARGES . . .	10.2	1.5	8.8	5
RENTAL PAYMENTS.	9.2	7.0	2.2	5
	233-WOMEN'S AND MISSES' OUTERWEAR			
ASSETS, BEGINNING OF YEAR.	914.6	272.9	641.7	1
CAPITAL EXPEND., NEW . .	188.7	48.2	140.5	6
CAPITAL EXPEND., USED. .	78.5	5.6	72.9	3
RETIREMENTS.	120.9	22.5	98.6	3
ASSETS, END OF YEAR. . . .	1 060.9	304.2	756.6	1
DEPRECIATION CHARGES . . .	93.2	17.6	75.5	4
RENTAL PAYMENTS.	119.7	95.0	24.8	4
	2331-WOMEN'S, MISSES' BLOUSES, WAISTS			
ASSETS, BEGINNING OF YEAR.	160.8	43.8	117.0	5
CAPITAL EXPEND., NEW . .	30.1	(5.2)	24.9	11
CAPITAL EXPEND., USED. .	(2.7)	(1.0)	(1.7)	40
RETIREMENTS.	12.0	3.3	8.7	10
ASSETS, END OF YEAR. . . .	181.7	46.8	134.9	4
DEPRECIATION CHARGES . . .	17.8	3.6	14.2	4
RENTAL PAYMENTS.	20.2	16.1	(4.1)	8
	2335-WOMEN'S AND MISSES' DRESSES			
ASSETS, BEGINNING OF YEAR.	287.0	78.8	208.2	4
CAPITAL EXPEND., NEW . .	74.5	14.9	59.6	9
CAPITAL EXPEND., USED. .	(2.0)	(1.2)	(.8)	52
RETIREMENTS.	27.8	(6.9)	21.1	8
ASSETS, END OF YEAR. . . .	335.7	88.0	247.6	3
DEPRECIATION CHARGES . . .	30.0	5.3	24.7	4
RENTAL PAYMENTS.	46.3	37.4	8.9	4
	2337-WOMEN'S, MISSES' SUITS AND COATS			
ASSETS, BEGINNING OF YEAR.	226.9	73.5	153.5	6
CAPITAL EXPEND., NEW . .	25.0	8.6	16.4	11
CAPITAL EXPEND., USED. .	67.6	.3	67.3	1
RETIREMENTS.	63.8	6.5	57.3	4
ASSETS, END OF YEAR. . . .	255.8	75.9	179.9	5
DEPRECIATION CHARGES . . .	21.8	4.3	17.4	11
RENTAL PAYMENTS.	27.7	23.4	4.3	10
	2339-WOMEN'S, MISSES' OUTERWEAR, NEC			
ASSETS, BEGINNING OF YEAR.	239.8	76.8	163.1	7
CAPITAL EXPEND., NEW . .	59.1	(19.4)	39.6	13
CAPITAL EXPEND., USED. .	6.2	3.1	3.1	8
RETIREMENTS.	17.3	5.8	11.5	11
ASSETS, END OF YEAR. . . .	287.7	93.6	194.2	7
DEPRECIATION CHARGES . . .	23.7	4.5	19.2	8
RENTAL PAYMENTS.	25.6	18.2	7.5	10
	234-WOMEN'S, CHILDREN'S UNDERGARMS			
ASSETS, BEGINNING OF YEAR.	256.7	89.8	166.9	3
CAPITAL EXPEND., NEW . .	24.2	6.7	17.5	7
CAPITAL EXPEND., USED. .	(1.2)	(.6)	(.7)	20
RETIREMENTS.	14.0	4.2	9.7	11
ASSETS, END OF YEAR. . . .	268.2	92.8	175.4	3
DEPRECIATION CHARGES . . .	22.1	4.7	17.4	2
RENTAL PAYMENTS.	17.9	11.9	6.0	5
	2341-WOMEN'S AND CHILDREN'S UNDERWEAR			
ASSETS, BEGINNING OF YEAR.	201.7	72.9	128.8	3
CAPITAL EXPEND., NEW . .	20.1	5.9	14.2	8
CAPITAL EXPEND., USED. .	(.9)	(.4)	(.6)	26
RETIREMENTS.	10.4	3.2	(7.1)	14
ASSETS, END OF YEAR. . . .	212.4	75.9	136.5	3
DEPRECIATION CHARGES . . .	15.9	3.6	12.2	3
RENTAL PAYMENTS.	12.7	8.7	4.0	5
	2342-BRASSIERES AND ALLIED GARMENTS			
ASSETS, BEGINNING OF YEAR.	55.0	16.9	38.1	5
CAPITAL EXPEND., NEW . .	4.1	(.9)	3.3	8
CAPITAL EXPEND., USED. .	.3	.2	(.1)	14
RETIREMENTS.	3.6	(1.0)	(2.6)	14
ASSETS, END OF YEAR. . . .	55.8	16.9	38.9	5
DEPRECIATION CHARGES . . .	6.2	1.1	5.1	5
RENTAL PAYMENTS.	5.2	3.2	(2.0)	11
	235-HATS, CAPS, AND MILLINERY			
ASSETS, BEGINNING OF YEAR.	(41.4)	(11.8)	(29.6)	24
CAPITAL EXPEND., NEW . .	(4.3)	(.3)	(4.0)	31
CAPITAL EXPEND., USED. .	.3	-	(.3)	12
RETIREMENTS.	(3.0)	(1.1)	(1.9)	43
ASSETS, END OF YEAR. . . .	(43.0)	(11.0)	(32.0)	21
DEPRECIATION CHARGES . . .	(3.7)	(.4)	(3.3)	28
RENTAL PAYMENTS.	(4.7)	(3.5)	(1.2)	16
	2351-MILLINERY			
ASSETS, BEGINNING OF YEAR.	(9.9)	(.3)	(9.6)	66
CAPITAL EXPEND., NEW . .	(.1)	-	(.1)	89
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	(1.0)	-	(1.0)	80
ASSETS, END OF YEAR. . . .	(9.0)	(.2)	(8.8)	64
DEPRECIATION CHARGES . . .	(1.4)	-	(1.4)	66
RENTAL PAYMENTS.	(1.6)	(1.5)	(.1)	36
	2352-HATS AND CAPS, EXCEPT MILLINERY			
ASSETS, BEGINNING OF YEAR.	(31.5)	(11.5)	(20.0)	24
CAPITAL EXPEND., NEW . .	(4.2)	(.3)	(3.9)	32
CAPITAL EXPEND., USED. .	.3	-	.3	12
RETIREMENTS.	(2.0)	(1.1)	(.9)	51
ASSETS, END OF YEAR. . . .	(34.0)	(10.7)	23.3	20
DEPRECIATION CHARGES . . .	(2.3)	(.4)	(1.9)	20
RENTAL PAYMENTS.	(3.1)	(2.0)	(1.1)	16
	236-CHILDREN'S OUTERWEAR			
ASSETS, BEGINNING OF YEAR.	192.6	69.8	122.9	5
CAPITAL EXPEND., NEW . .	15.3	2.9	12.5	10
CAPITAL EXPEND., USED. .	(3.0)	(1.3)	(1.7)	24
RETIREMENTS.	15.9	4.5	11.4	7
ASSETS, END OF YEAR. . . .	195.0	69.5	125.7	4
DEPRECIATION CHARGES . . .	16.6	3.4	13.2	5
RENTAL PAYMENTS.	(19.6)	(13.8)	(5.8)	20
	2361-CHILDREN'S DRESSES AND BLOUSES			
ASSETS, BEGINNING OF YEAR.	102.3	39.8	62.6	7
CAPITAL EXPEND., NEW . .	(7.5)	(1.8)	5.7	15
CAPITAL EXPEND., USED. .	(.6)	(.2)	(.5)	35
RETIREMENTS.	6.8	(2.2)	4.5	13
ASSETS, END OF YEAR. . . .	103.7	39.6	64.2	6
DEPRECIATION CHARGES . . .	8.8	(1.8)	6.9	9
RENTAL PAYMENTS.	(11.5)	(8.8)	(2.7)	33
	2363-CHILDREN'S COATS AND SUITS			
ASSETS, BEGINNING OF YEAR.	(13.7)	(1.8)	(11.9)	24
CAPITAL EXPEND., NEW . .	(1.2)	(.1)	(1.1)	48
CAPITAL EXPEND., USED. .	(.2)	-	(.2)	29
RETIREMENTS.	(.5)	-	(.5)	40
ASSETS, END OF YEAR. . . .	(14.5)	(1.8)	(12.7)	21
DEPRECIATION CHARGES . . .	(.9)	(.1)	(.9)	15
RENTAL PAYMENTS.	(1.8)	(1.2)	(.6)	16
	2369-CHILDREN'S OUTERWEAR, NEC			
ASSETS, BEGINNING OF YEAR.	76.6	28.2	48.4	4
CAPITAL EXPEND., NEW . .	6.7	(1.0)	(5.7)	14
CAPITAL EXPEND., USED. .	(2.2)	(1.1)	(1.1)	31
RETIREMENTS.	8.7	2.3	6.4	6
ASSETS, END OF YEAR. . . .	76.8	28.0	48.8	4
DEPRECIATION CHARGES . . .	6.9	1.5	5.5	3
RENTAL PAYMENTS.	6.2	3.7	2.5	8
	2371-FUR GOODS			
ASSETS, BEGINNING OF YEAR.	(6.7)	(1.4)	(5.3)	36
CAPITAL EXPEND., NEW . .	(.9)	(.2)	(.7)	31
CAPITAL EXPEND., USED. .	.2	.1	.1	1
RETIREMENTS.	(1.6)	(.3)	(1.3)	67
ASSETS, END OF YEAR. . . .	(6.2)	(1.4)	(4.8)	29
DEPRECIATION CHARGES . . .	(.8)	(.3)	(.5)	56
RENTAL PAYMENTS.	(1.7)	(1.5)	(.2)	22
	238-MISC APPAREL AND ACCESSORIES			
ASSETS, BEGINNING OF YEAR.	133.8	46.1	87.7	6
CAPITAL EXPEND., NEW . .	22.2	(4.7)	17.4	12
CAPITAL EXPEND., USED. .	(1.7)	(.6)	(1.0)	30
RETIREMENTS.	(9.5)	(3.1)	(6.4)	22
ASSETS, END OF YEAR. . . .	148.1	48.4	99.8	6
DEPRECIATION CHARGES . . .	10.1	2.1	8.0	5
RENTAL PAYMENTS.	(17.3)	12.3	4.9	42
	2381-FABRIC DRESS AND WORK GLOVES			
ASSETS, BEGINNING OF YEAR.	31.8	(10.8)	21.0	7
CAPITAL EXPEND., NEW . .	3.9	(.5)	3.3	9
CAPITAL EXPEND., USED. .	.1	-	.1	1
RETIREMENTS.	(.9)	(.2)	(.7)	49
ASSETS, END OF YEAR. . . .	34.9	(11.2)	23.7	6
DEPRECIATION CHARGES . . .	2.2	(.5)	1.7	7
RENTAL PAYMENTS.	(1.0)	(.4)	(.7)	21

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2384-ROBES AND DRESSING GOWNS				
ASSETS, BEGINNING OF YEAR.	(15.1)	(3.7)	(11.4)	21
CAPITAL EXPEND., NEW . .	(4.6)	(.8)	(3.8)	15
CAPITAL EXPEND., USED. .	(.8)	.3	(.5)	50
RETIREMENTS.	(2.8)	(1.8)	(1.1)	64
ASSETS, END OF YEAR. . . .	(17.7)	(3.0)	14.7	17
DEPRECIATION CHARGES . . .	1.5	(.1)	1.3	14
RENTAL PAYMENTS.	3.4	(2.1)	(1.3)	14
2385-WATERPROOF OUTERGARMENTS				
ASSETS, BEGINNING OF YEAR.	38.5	17.0	21.5	9
CAPITAL EXPEND., NEW . .	(6.2)	(2.1)	(4.1)	35
CAPITAL EXPEND., USED. .	-	-	-	22
RETIREMENTS.	(2.7)	(.4)	2.3	15
ASSETS, END OF YEAR. . . .	42.1	18.8	23.4	12
DEPRECIATION CHARGES . . .	2.4	.7	1.8	9
RENTAL PAYMENTS.	3.5	(2.0)	(1.5)	13
2386-LEATHER AND SHEEP LINED CLOTHING				
ASSETS, BEGINNING OF YEAR.	(8.3)	(.8)	(7.5)	34
CAPITAL EXPEND., NEW . .	(2.4)	(1.0)	(1.4)	32
CAPITAL EXPEND., USED. .	(.1)	-	(.1)	(A)
RETIREMENTS.	(.3)	-	(.3)	(A)
ASSETS, END OF YEAR. . . .	(10.4)	(1.8)	(8.6)	28
DEPRECIATION CHARGES . . .	(.8)	(.1)	(.7)	22
RENTAL PAYMENTS.	(2.5)	(2.1)	(.3)	(A)
2387-APPAREL BELTS				
ASSETS, BEGINNING OF YEAR.	22.6	(9.4)	13.2	9
CAPITAL EXPEND., NEW . .	(1.7)	(.1)	(1.6)	21
CAPITAL EXPEND., USED. .	(.2)	(.2)	-	66
RETIREMENTS.	(1.8)	(.5)	(1.3)	20
ASSETS, END OF YEAR. . . .	22.7	(9.2)	13.5	10
DEPRECIATION CHARGES . . .	1.7	(.5)	1.2	11
RENTAL PAYMENTS.	4.7	3.8	(.9)	11
2389-APPAREL AND ACCESSORIES, NEC				
ASSETS, BEGINNING OF YEAR.	(17.4)	(4.4)	(13.1)	20
CAPITAL EXPEND., NEW . .	(3.5)	(.2)	(3.2)	22
CAPITAL EXPEND., USED. .	(.4)	(.1)	(.3)	47
RETIREMENTS.	(1.0)	(.3)	(.6)	49
ASSETS, END OF YEAR. . . .	(20.4)	(4.4)	(16.0)	16
DEPRECIATION CHARGES . . .	(1.6)	(.2)	(1.4)	18
RENTAL PAYMENTS.	(2.2)	(2.0)	(.2)	28
239-MISC FABRICATED TEXTILE PRODS				
ASSETS, BEGINNING OF YEAR.	1 045.1	351.9	693.1	2
CAPITAL EXPEND., NEW . .	127.6	25.4	102.1	7
CAPITAL EXPEND., USED. .	(11.9)	5.7	6.2	15
RETIREMENTS.	60.1	13.7	46.8	13
ASSETS, END OF YEAR. . . .	1 124.5	369.4	754.7	2
DEPRECIATION CHARGES . . .	(84.0)	14.8	69.2	16
RENTAL PAYMENTS.	61.6	43.0	18.7	6
2391-CURTAINS AND DRAPERIES				
ASSETS, BEGINNING OF YEAR.	94.8	34.5	60.2	5
CAPITAL EXPEND., NEW . .	7.7	(2.2)	5.5	13
CAPITAL EXPEND., USED. .	(1.2)	(.6)	.6	19
RETIREMENTS.	12.6	5.2	7.7	7
ASSETS, END OF YEAR. . . .	91.1	32.1	58.6	4
DEPRECIATION CHARGES . . .	7.2	1.5	5.7	6
RENTAL PAYMENTS.	8.9	7.6	(1.3)	10
2392-HOUSEFURNISHINGS, NEC				
ASSETS, BEGINNING OF YEAR.	298.1	101.6	196.6	5
CAPITAL EXPEND., NEW . .	23.7	5.3	18.4	8
CAPITAL EXPEND., USED. .	4.3	2.7	(1.5)	9
RETIREMENTS.	14.1	(3.0)	11.1	13
ASSETS, END OF YEAR. . . .	312.0	106.6	205.5	5
DEPRECIATION CHARGES . . .	22.2	4.2	18.0	5
RENTAL PAYMENTS.	13.5	10.2	3.3	7
2393-TEXTILE BAGS				
ASSETS, BEGINNING OF YEAR.	43.4	13.2	30.2	8
CAPITAL EXPEND., NEW . .	(8.4)	(3.2)	(5.3)	29
CAPITAL EXPEND., USED. .	(.5)	-	(.4)	21
RETIREMENTS.	(2.5)	(1.1)	(1.4)	21
ASSETS, END OF YEAR. . . .	49.8	15.2	34.5	6
DEPRECIATION CHARGES . . .	3.7	(.7)	3.0	11
RENTAL PAYMENTS.	(2.1)	(1.6)	(.5)	19
2394-CANVAS AND RELATED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	(67.4)	(23.7)	(43.6)	20
CAPITAL EXPEND., NEW . .	7.7	(1.6)	6.1	14
CAPITAL EXPEND., USED. .	(.8)	-	(.8)	81
RETIREMENTS.	(4.1)	(1.0)	(3.1)	(A)
ASSETS, END OF YEAR. . . .	(71.8)	(24.3)	(47.4)	18
DEPRECIATION CHARGES . . .	(5.4)	(1.3)	(4.1)	(A)
RENTAL PAYMENTS.	7.8	6.1	(1.8)	11
2395-PLEATING AND STITCHING				
ASSETS, BEGINNING OF YEAR.	(91.4)	(25.9)	(65.4)	15
CAPITAL EXPEND., NEW . .	(7.6)	(.8)	(6.8)	21
CAPITAL EXPEND., USED. .	(.9)	(.4)	(.5)	36
RETIREMENTS.	(6.6)	(1.0)	(5.6)	39
ASSETS, END OF YEAR. . . .	93.3	(26.1)	67.1	14
DEPRECIATION CHARGES . . .	(8.5)	(1.3)	(7.2)	15
RENTAL PAYMENTS.	(5.1)	(3.1)	(2.0)	18
2396-AUTOMOTIVE AND APPAREL TRIMMINGS				
ASSETS, BEGINNING OF YEAR.	249.0	90.4	158.5	2
CAPITAL EXPEND., NEW . .	36.0	6.2	29.8	6
CAPITAL EXPEND., USED. .	(1.2)	(.2)	1.0	17
RETIREMENTS.	12.5	(1.2)	11.3	5
ASSETS, END OF YEAR. . . .	273.7	95.7	178.0	2
DEPRECIATION CHARGES . . .	19.9	3.3	16.6	5
RENTAL PAYMENTS.	10.9	8.3	2.6	7
2397-SCHIFFLI MACHINE EMBROIDERIES				
ASSETS, BEGINNING OF YEAR.	31.0	6.9	24.1	12
CAPITAL EXPEND., NEW . .	(3.5)	.1	(3.4)	25
CAPITAL EXPEND., USED. .	.1	-	.1	1
RETIREMENTS.	(.8)	.1	.7	(A)
ASSETS, END OF YEAR. . . .	(33.8)	(6.9)	(26.9)	27
DEPRECIATION CHARGES . . .	(2.0)	(.2)	(1.8)	31
RENTAL PAYMENTS.	(1.8)	.7	(1.1)	59
2399-FABRICATED TEXTILE PRODUCTS, NEC				
ASSETS, BEGINNING OF YEAR.	170.0	55.7	114.5	10
CAPITAL EXPEND., NEW . .	(32.9)	(6.1)	(26.8)	22
CAPITAL EXPEND., USED. .	(3.0)	(1.8)	(1.2)	49
RETIREMENTS.	(7.0)	(1.1)	(5.9)	56
ASSETS, END OF YEAR. . . .	198.9	62.4	136.5	8
DEPRECIATION CHARGES . . .	15.2	(2.4)	12.7	7
RENTAL PAYMENTS.	(11.4)	(5.3)	(6.1)	26
24-LUMBER AND WOOD PRODUCTS				
ASSETS, BEGINNING OF YEAR.	11 258.6	2 430.2	8 828.4	1
CAPITAL EXPEND., NEW . .	1 709.5	275.8	1 433.6	1
CAPITAL EXPEND., USED. .	150.4	21.4	129.0	6
RETIREMENTS.	666.1	125.3	541.0	1
ASSETS, END OF YEAR. . . .	12 452.4	2 602.0	9 850.0	1
DEPRECIATION CHARGES . . .	1 128.5	167.0	961.4	2
RENTAL PAYMENTS.	243.4	96.5	146.4	4
2411-LOGGING CAMPS, LOG CONTRACTORS				
ASSETS, BEGINNING OF YEAR.	2 086.0	179.6	1 906.8	1
CAPITAL EXPEND., NEW . .	436.5	36.9	399.6	3
CAPITAL EXPEND., USED. .	(48.3)	(S)	(48.0)	15
RETIREMENTS.	149.6	12.8	136.8	8
ASSETS, END OF YEAR. . . .	2 421.3	204.0	2 217.7	1
DEPRECIATION CHARGES . . .	259.2	19.8	239.4	4
RENTAL PAYMENTS.	70.2	(6.0)	64.2	11
242-SAWMILLS AND PLANING MILLS				
ASSETS, BEGINNING OF YEAR.	4 216.8	868.0	3 349.0	1
CAPITAL EXPEND., NEW . .	622.6	90.8	531.8	1
CAPITAL EXPEND., USED. .	62.1	9.2	52.9	7
RETIREMENTS.	298.0	53.9	244.1	1
ASSETS, END OF YEAR. . . .	4 603.5	914.2	3 689.6	1
DEPRECIATION CHARGES . . .	437.3	63.2	374.1	2
RENTAL PAYMENTS.	47.7	18.4	29.3	7
2421-SAWMILLS, PLANING MILLS, GENERAL				
ASSETS, BEGINNING OF YEAR.	3 865.4	753.0	3 112.6	1
CAPITAL EXPEND., NEW . .	571.1	77.5	493.7	4
CAPITAL EXPEND., USED. .	56.9	7.6	49.3	7
RETIREMENTS.	268.6	45.5	223.1	9
ASSETS, END OF YEAR. . . .	4 224.8	792.7	3 432.4	1
DEPRECIATION CHARGES . . .	406.8	(57.6)	349.2	2
RENTAL PAYMENTS.	42.5	(15.9)	26.6	8
2426-HARDWOOD DIMENSION AND FLOORING				
ASSETS, BEGINNING OF YEAR.	281.8	96.2	185.5	5
CAPITAL EXPEND., NEW . .	40.3	(9.9)	30.4	13
CAPITAL EXPEND., USED. .	(5.0)	(1.6)	(3.4)	24
RETIREMENTS.	(23.1)	(7.0)	(16.0)	34
ASSETS, END OF YEAR. . . .	304.1	100.7	203.4	5
DEPRECIATION CHARGES . . .	22.7	4.4	18.3	5
RENTAL PAYMENTS.	(4.2)	(2.2)	(2.0)	17
2429-SPECIAL PRODUCT SAWMILLS, NEC				
ASSETS, BEGINNING OF YEAR.	(69.6)	(18.7)	(50.9)	20
CAPITAL EXPEND., NEW . .	(11.2)	(3.5)	(7.7)	27
CAPITAL EXPEND., USED. .	(.2)	-	(.2)	21
RETIREMENTS.	(6.3)	(1.4)	(5.0)	23
ASSETS, END OF YEAR. . . .	(74.7)	(20.9)	(53.8)	18
DEPRECIATION CHARGES . . .	(7.8)	(1.2)	(6.6)	19
RENTAL PAYMENTS.	(1.0)	(.3)	(.7)	28
243-MILLWORK, PLYWOOD, STRUC MEMBS				
ASSETS, BEGINNING OF YEAR.	2 427.2	640.7	1 786.4	1
CAPITAL EXPEND., NEW . .	298.4	69.9	228.4	4
CAPITAL EXPEND., USED. .	19.5	4.4	15.1	7
RETIREMENTS.	113.0	29.8	83.4	4
ASSETS, END OF YEAR. . . .	2 632.1	685.2	1 946.6	1
DEPRECIATION CHARGES . . .	203.5	37.1	166.4	2
RENTAL PAYMENTS.	57.7	34.9	22.7	4

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2431-MILLWORK				
ASSETS, BEGINNING OF YEAR.	545.5	207.2	338.3	4
CAPITAL EXPEND., NEW . .	97.8	37.3	60.5	10
CAPITAL EXPEND., USED. .	9.5	(3.3)	6.2	9
RETIREMENTS.	29.3	7.2	22.2	8
ASSETS, END OF YEAR. . . .	623.5	240.5	382.8	3
DEPRECIATION CHARGES . . .	50.5	13.2	37.3	7
RENTAL PAYMENTS.	24.7	14.2	10.4	6
2434-WOOD KITCHEN CABINETS				
ASSETS, BEGINNING OF YEAR.	241.7	93.0	148.7	5
CAPITAL EXPEND., NEW . .	45.0	(14.2)	30.8	11
CAPITAL EXPEND., USED. .	(1.0)	-	(1.0)	20
RETIREMENTS.	(13.1)	2.8	(10.4)	21
ASSETS, END OF YEAR. . . .	274.6	104.5	170.0	4
DEPRECIATION CHARGES . . .	22.3	5.6	16.7	7
RENTAL PAYMENTS.	18.0	13.7	4.3	9
2435-HARDWOOD VENEER AND PLYWOOD				
ASSETS, BEGINNING OF YEAR.	258.6	73.3	185.3	5
CAPITAL EXPEND., NEW . .	29.8	3.8	26.1	5
CAPITAL EXPEND., USED. .	(2.7)	.4	(2.3)	31
RETIREMENTS.	10.0	1.7	8.3	8
ASSETS, END OF YEAR. . . .	281.2	75.8	205.4	5
DEPRECIATION CHARGES . . .	22.8	4.0	18.8	7
RENTAL PAYMENTS.	4.8	(3.4)	1.4	11
2436-SOFTWOOD VENEER AND PLYWOOD				
ASSETS, BEGINNING OF YEAR.	1 255.1	223.5	1 031.6	2
CAPITAL EXPEND., NEW . .	104.6	9.6	94.9	3
CAPITAL EXPEND., USED. .	5.4	.5	4.9	6
RETIREMENTS.	53.2	16.8	36.3	4
ASSETS, END OF YEAR. . . .	1 312.0	216.8	1 095.1	2
DEPRECIATION CHARGES . . .	96.0	11.7	84.3	2
RENTAL PAYMENTS.	4.7	(1.4)	3.2	9
2439-STRUCTURAL WOOD MEMBERS, NEC				
ASSETS, BEGINNING OF YEAR.	126.2	43.7	82.5	7
CAPITAL EXPEND., NEW . .	(21.3)	(5.0)	16.3	15
CAPITAL EXPEND., USED. .	(.8)	(.1)	(.7)	24
RETIREMENTS.	(7.5)	(1.3)	(6.2)	16
ASSETS, END OF YEAR. . . .	140.9	47.5	93.3	6
DEPRECIATION CHARGES . . .	11.9	2.6	9.4	7
RENTAL PAYMENTS.	5.5	(2.2)	3.3	11
244-WOOD CONTAINERS				
ASSETS, BEGINNING OF YEAR.	283.2	(83.0)	200.0	1
CAPITAL EXPEND., NEW . .	37.1	(6.9)	30.2	13
CAPITAL EXPEND., USED. .	(5.7)	(.8)	(4.9)	23
RETIREMENTS.	(15.6)	(5.0)	(10.6)	17
ASSETS, END OF YEAR. . . .	310.5	(85.7)	224.5	1
DEPRECIATION CHARGES . . .	38.1	7.7	30.4	13
RENTAL PAYMENTS.	(15.0)	(10.3)	(4.5)	22
2441-NAILED WOOD BOXES AND SHOOK				
ASSETS, BEGINNING OF YEAR.	45.0	(11.7)	33.2	10
CAPITAL EXPEND., NEW . .	(6.2)	(1.2)	(5.1)	28
CAPITAL EXPEND., USED. .	(.8)	-	(.8)	37
RETIREMENTS.	(3.1)	(1.2)	(1.8)	50
ASSETS, END OF YEAR. . . .	49.0	11.7	37.2	9
DEPRECIATION CHARGES . . .	(4.7)	(1.0)	(3.6)	19
RENTAL PAYMENTS.	(2.7)	(2.2)	(.6)	24
2448-WOOD PALLETS AND SKIDS				
ASSETS, BEGINNING OF YEAR.	(169.9)	(48.7)	(121.0)	17
CAPITAL EXPEND., NEW . .	(28.1)	(5.2)	(22.9)	16
CAPITAL EXPEND., USED. .	(4.0)	(.7)	(3.4)	32
RETIREMENTS.	(9.4)	(2.9)	(6.5)	21
ASSETS, END OF YEAR. . . .	192.6	(51.6)	(140.8)	13
DEPRECIATION CHARGES . . .	(28.3)	(5.3)	(23.0)	21
RENTAL PAYMENTS.	(10.3)	(7.3)	(2.9)	30
2449-WOOD CONTAINERS, NEC				
ASSETS, BEGINNING OF YEAR.	(68.4)	(22.6)	45.8	17
CAPITAL EXPEND., NEW . .	(2.8)	(.6)	(2.2)	19
CAPITAL EXPEND., USED. .	(.9)	.1	(.7)	15
RETIREMENTS.	(3.1)	(.8)	(2.3)	18
ASSETS, END OF YEAR. . . .	(68.9)	(22.5)	(46.4)	17
DEPRECIATION CHARGES . . .	5.1	(1.3)	3.8	14
RENTAL PAYMENTS.	(1.9)	(.8)	(1.1)	27
245-WOOD BUILDINGS AND MOBILE HOMES				
ASSETS, BEGINNING OF YEAR.	474.6	263.9	210.6	3
CAPITAL EXPEND., NEW . .	121.2	47.4	73.8	8
CAPITAL EXPEND., USED. .	4.5	2.3	2.2	7
RETIREMENTS.	25.2	10.3	14.9	5
ASSETS, END OF YEAR. . . .	575.1	303.3	271.8	3
DEPRECIATION CHARGES . . .	42.8	15.1	27.6	4
RENTAL PAYMENTS.	27.7	13.6	14.1	6
2451-MOBILE HOMES				
ASSETS, BEGINNING OF YEAR.	263.4	161.4	102.0	5
CAPITAL EXPEND., NEW . .	73.7	(32.1)	(41.5)	11
CAPITAL EXPEND., USED. .	3.0	2.0	1.0	6
RETIREMENTS.	15.1	6.0	9.2	7
ASSETS, END OF YEAR. . . .	325.0	189.6	135.4	5
DEPRECIATION CHARGES . . .	24.2	9.8	14.5	6
RENTAL PAYMENTS.	13.3	8.8	4.5	10
2452-PREFABRICATED WOOD BUILDINGS				
ASSETS, BEGINNING OF YEAR.	211.2	102.5	108.6	4
CAPITAL EXPEND., NEW . .	47.5	15.3	(32.2)	11
CAPITAL EXPEND., USED. .	(1.4)	(.2)	(1.2)	16
RETIREMENTS.	10.1	4.4	5.7	7
ASSETS, END OF YEAR. . . .	250.1	113.7	136.4	3
DEPRECIATION CHARGES . . .	18.6	5.4	13.2	4
RENTAL PAYMENTS.	14.4	4.8	9.6	7
249-MISCELLANEOUS WOOD PRODUCTS				
ASSETS, BEGINNING OF YEAR.	1 770.7	394.9	1 375.6	1
CAPITAL EXPEND., NEW . .	193.5	23.8	169.8	10
CAPITAL EXPEND., USED. .	10.2	4.3	5.9	11
RETIREMENTS.	64.7	13.4	51.3	10
ASSETS, END OF YEAR. . . .	1 909.8	409.6	1 499.9	1
DEPRECIATION CHARGES . . .	147.6	24.2	123.4	3
RENTAL PAYMENTS.	25.1	13.3	11.6	8
2491-WOOD PRESERVING				
ASSETS, BEGINNING OF YEAR.	259.2	(45.9)	213.3	5
CAPITAL EXPEND., NEW . .	(30.5)	(2.1)	(28.5)	15
CAPITAL EXPEND., USED. .	(1.6)	-	(1.6)	40
RETIREMENTS.	14.4	(2.7)	11.7	9
ASSETS, END OF YEAR. . . .	277.0	45.3	231.7	4
DEPRECIATION CHARGES . . .	25.9	(4.2)	21.7	6
RENTAL PAYMENTS.	(5.2)	(.6)	(4.6)	21
2492-PARTICLEBOARD				
ASSETS, BEGINNING OF YEAR.	442.0	77.2	364.9	3
CAPITAL EXPEND., NEW . .	31.3	2.8	28.4	5
CAPITAL EXPEND., USED. .	1.7	.2	1.4	1
RETIREMENTS.	(8.1)	(1.5)	(6.6)	27
ASSETS, END OF YEAR. . . .	466.9	78.7	388.1	3
DEPRECIATION CHARGES . . .	36.1	5.7	30.3	3
RENTAL PAYMENTS.	1.1	(.1)	1.0	4
2499-WOOD PRODUCTS, NEC				
ASSETS, BEGINNING OF YEAR.	1 069.5	271.9	797.4	3
CAPITAL EXPEND., NEW . .	131.7	18.9	(112.8)	14
CAPITAL EXPEND., USED. .	6.9	(4.1)	(2.9)	13
RETIREMENTS.	42.2	(9.3)	33.0	14
ASSETS, END OF YEAR. . . .	1 165.9	285.6	880.1	1
DEPRECIATION CHARGES . . .	85.7	14.3	71.4	4
RENTAL PAYMENTS.	18.8	12.6	6.1	9
25-FURNITURE AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	3 621.6	1 532.0	2 089.4	1
CAPITAL EXPEND., NEW . .	447.3	142.5	304.9	4
CAPITAL EXPEND., USED. .	36.3	15.8	20.5	12
RETIREMENTS.	173.6	67.3	106.3	4
ASSETS, END OF YEAR. . . .	3 931.7	1 622.9	2 308.6	1
DEPRECIATION CHARGES . . .	275.9	69.0	206.9	2
RENTAL PAYMENTS.	169.8	109.5	60.2	4
251-HOUSEHOLD FURNITURE				
ASSETS, BEGINNING OF YEAR.	2 329.7	1 020.8	1 308.8	1
CAPITAL EXPEND., NEW . .	258.5	82.6	175.9	5
CAPITAL EXPEND., USED. .	(21.0)	(9.5)	11.4	15
RETIREMENTS.	119.3	47.5	71.8	4
ASSETS, END OF YEAR. . . .	2 489.8	1 065.5	1 424.4	1
DEPRECIATION CHARGES . . .	171.2	45.4	125.9	2
RENTAL PAYMENTS.	100.5	61.9	38.7	6
2511-WOOD HOUSEHOLD FURNITURE				
ASSETS, BEGINNING OF YEAR.	1 243.0	519.7	723.4	2
CAPITAL EXPEND., NEW . .	130.4	38.5	91.8	8
CAPITAL EXPEND., USED. .	(9.5)	(4.6)	(4.9)	30
RETIREMENTS.	49.9	18.2	31.7	6
ASSETS, END OF YEAR. . . .	1 333.0	544.6	788.5	2
DEPRECIATION CHARGES . . .	89.0	22.6	66.4	2
RENTAL PAYMENTS.	33.4	(20.3)	13.0	14
2512-UPHOLSTERED HOUSEHOLD FURNITURE				
ASSETS, BEGINNING OF YEAR.	458.6	247.5	211.0	5
CAPITAL EXPEND., NEW . .	63.9	(24.8)	39.1	13
CAPITAL EXPEND., USED. .	(3.2)	(1.7)	(1.5)	24
RETIREMENTS.	24.1	10.3	13.7	11
ASSETS, END OF YEAR. . . .	501.6	263.7	237.9	4
DEPRECIATION CHARGES . . .	32.6	10.4	22.1	4
RENTAL PAYMENTS.	24.4	15.3	9.1	8
2514-METAL HOUSEHOLD FURNITURE				
ASSETS, BEGINNING OF YEAR.	206.8	82.3	124.5	4
CAPITAL EXPEND., NEW . .	24.0	4.1	19.8	8
CAPITAL EXPEND., USED. .	3.1	(1.4)	1.8	14
RETIREMENTS.	8.0	1.4	6.6	8
ASSETS, END OF YEAR. . . .	225.9	86.4	139.5	3
DEPRECIATION CHARGES . . .	17.3	4.0	13.3	4
RENTAL PAYMENTS.	14.2	7.8	6.3	7

See footnotes at end of table.

Table 2. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2515-MATTRESSES AND BEDSPRINGS				
ASSETS, BEGINNING OF YEAR.	227.0	98.4	128.6	3
CAPITAL EXPEND., NEW . .	(18.8)	(6.4)	12.3	15
CAPITAL EXPEND., USED. .	(2.5)	(1.4)	(1.1)	32
RETIREMENTS.	29.5	15.8	13.7	2
ASSETS, END OF YEAR. . . .	218.8	90.4	128.4	3
DEPRECIATION CHARGES . . .	17.9	4.9	13.1	5
RENTAL PAYMENTS.	25.1	(16.2)	8.9	12
2517-WOOD TV AND RADIO CABINETS				
ASSETS, BEGINNING OF YEAR.	77.2	35.4	41.8	4
CAPITAL EXPEND., NEW . .	11.1	5.1	6.0	6
CAPITAL EXPEND., USED. .	1.9	.6	1.3	1
RETIREMENTS.	4.2	1.3	2.9	6
ASSETS, END OF YEAR. . . .	86.0	39.8	46.2	4
DEPRECIATION CHARGES . . .	4.8	1.4	3.4	5
RENTAL PAYMENTS.	(1.5)	(.8)	(.8)	15
2519-HOUSEHOLD FURNITURE, NEC				
ASSETS, BEGINNING OF YEAR.	117.0	37.4	79.5	3
CAPITAL EXPEND., NEW . .	(10.4)	(3.6)	6.8	15
CAPITAL EXPEND., USED. .	.8	-	.8	1
RETIREMENTS.	3.7	(.5)	3.3	9
ASSETS, END OF YEAR. . . .	124.4	40.5	83.9	3
DEPRECIATION CHARGES . . .	9.6	1.9	7.7	3
RENTAL PAYMENTS.	1.9	1.4	.5	12
252-OFFICE FURNITURE				
ASSETS, BEGINNING OF YEAR.	485.2	223.7	261.4	2
CAPITAL EXPEND., NEW . .	65.3	22.9	42.4	4
CAPITAL EXPEND., USED. .	3.0	1.4	1.5	1
RETIREMENTS.	14.6	4.2	10.4	7
ASSETS, END OF YEAR. . . .	538.9	243.9	294.9	2
DEPRECIATION CHARGES . . .	35.8	9.6	26.1	2
RENTAL PAYMENTS.	14.6	8.2	6.4	4
2521-WOOD OFFICE FURNITURE				
ASSETS, BEGINNING OF YEAR.	113.9	54.3	59.6	5
CAPITAL EXPEND., NEW . .	25.8	11.6	14.3	10
CAPITAL EXPEND., USED. .	1.5	.8	.7	1
RETIREMENTS.	(3.0)	(.7)	2.3	15
ASSETS, END OF YEAR. . . .	138.3	66.0	72.2	3
DEPRECIATION CHARGES . . .	8.5	2.3	6.1	4
RENTAL PAYMENTS.	4.4	3.3	(1.1)	11
2522-METAL OFFICE FURNITURE				
ASSETS, BEGINNING OF YEAR.	371.3	169.5	201.8	2
CAPITAL EXPEND., NEW . .	39.5	11.4	28.1	3
CAPITAL EXPEND., USED. .	1.5	.6	.9	1
RETIREMENTS.	11.7	3.5	8.1	8
ASSETS, END OF YEAR. . . .	400.6	177.9	222.7	2
DEPRECIATION CHARGES . . .	27.3	7.3	20.0	2
RENTAL PAYMENTS.	10.3	4.9	5.3	4
2531-PUBLIC BLDG , RELATED FURNITURE				
ASSETS, BEGINNING OF YEAR.	152.1	(50.1)	102.0	11
CAPITAL EXPEND., NEW . .	(26.5)	(8.2)	(18.3)	15
CAPITAL EXPEND., USED. .	(1.9)	1.1	(.7)	20
RETIREMENTS.	(10.0)	(2.7)	7.3	24
ASSETS, END OF YEAR. . . .	170.5	56.7	113.8	9
DEPRECIATION CHARGES . . .	12.5	2.6	9.9	6
RENTAL PAYMENTS.	(12.9)	(8.7)	4.3	25
254-PARTITIONS AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	482.9	180.5	302.3	3
CAPITAL EXPEND., NEW . .	61.8	18.3	43.5	9
CAPITAL EXPEND., USED. .	(4.4)	(.9)	(3.5)	21
RETIREMENTS.	23.2	(11.2)	12.0	13
ASSETS, END OF YEAR. . . .	525.9	188.5	337.3	3
DEPRECIATION CHARGES . . .	40.6	8.4	32.2	7
RENTAL PAYMENTS.	27.6	21.5	6.1	6
2541-WOOD PARTITIONS AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	164.1	68.0	95.9	6
CAPITAL EXPEND., NEW . .	21.0	6.0	15.0	10
CAPITAL EXPEND., USED. .	(1.9)	(.2)	(1.7)	44
RETIREMENTS.	(10.5)	(4.7)	5.9	17
ASSETS, END OF YEAR. . . .	176.5	69.6	106.7	5
DEPRECIATION CHARGES . . .	14.2	3.2	11.0	6
RENTAL PAYMENTS.	14.2	11.6	(2.6)	9
2542-METAL PARTITIONS AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	318.9	112.5	206.4	4
CAPITAL EXPEND., NEW . .	40.8	12.2	(28.5)	12
CAPITAL EXPEND., USED. .	(2.5)	.7	(1.8)	17
RETIREMENTS.	(12.7)	(6.5)	(6.2)	18
ASSETS, END OF YEAR. . . .	349.4	118.9	230.6	3
DEPRECIATION CHARGES . . .	26.4	5.2	21.2	10
RENTAL PAYMENTS.	13.4	9.9	(3.5)	7
259-MISC FURNITURE AND FIXTURES				
ASSETS, BEGINNING OF YEAR.	171.7	56.8	114.9	6
CAPITAL EXPEND., NEW . .	35.2	10.5	24.7	9
CAPITAL EXPEND., USED. .	(6.1)	(2.8)	(3.3)	42
RETIREMENTS.	6.4	(1.7)	4.7	13
ASSETS, END OF YEAR. . . .	206.6	68.4	138.2	5
DEPRECIATION CHARGES . . .	15.8	2.9	12.8	5
RENTAL PAYMENTS.	14.1	9.3	4.8	10
2591-DRAPERY HARDWARE, BLINDS, SHADES				
ASSETS, BEGINNING OF YEAR.	79.0	29.0	50.0	9
CAPITAL EXPEND., NEW . .	20.5	5.8	14.7	11
CAPITAL EXPEND., USED. .	(.7)	.5	(.2)	22
RETIREMENTS.	(2.0)	(.2)	(1.9)	33
ASSETS, END OF YEAR. . . .	98.2	35.1	63.0	6
DEPRECIATION CHARGES . . .	7.9	1.7	6.2	7
RENTAL PAYMENTS.	5.5	(2.7)	(2.8)	10
2599-FURNITURE AND FIXTURES, NEC				
ASSETS, BEGINNING OF YEAR.	92.7	27.8	64.9	8
CAPITAL EXPEND., NEW . .	(14.7)	(4.7)	(10.1)	16
CAPITAL EXPEND., USED. .	(5.4)	(2.3)	(3.1)	47
RETIREMENTS.	4.4	(1.5)	2.9	11
ASSETS, END OF YEAR. . . .	108.4	33.2	75.2	6
DEPRECIATION CHARGES . . .	7.9	(1.3)	6.6	7
RENTAL PAYMENTS.	(8.6)	6.6	(2.0)	15
26-PAPER AND ALLIED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	28 362.6	4 997.2	23 365.4	1
CAPITAL EXPEND., NEW . .	3 352.2	332.6	3 019.6	1
CAPITAL EXPEND., USED. .	228.6	41.7	186.9	5
RETIREMENTS.	572.2	74.7	497.8	2
ASSETS, END OF YEAR. . . .	31 371.1	5 297.0	26 074.0	1
DEPRECIATION CHARGES . . .	1 602.8	213.3	1 389.5	1
RENTAL PAYMENTS.	322.7	131.3	191.3	3
2611-PULPMILLS				
ASSETS, BEGINNING OF YEAR.	2 433.0	286.8	2 146.2	1
CAPITAL EXPEND., NEW . .	302.0	13.4	288.6	2
CAPITAL EXPEND., USED. .	(.7)	-	(.7)	53
RETIREMENTS.	23.5	(.5)	22.9	4
ASSETS, END OF YEAR. . . .	2 712.2	299.6	2 412.6	1
DEPRECIATION CHARGES . . .	112.0	9.7	102.3	1
RENTAL PAYMENTS.	10.1	1.0	9.1	1
2621-PAPERMILLS, EXCEPT BUILDING PAPER				
ASSETS, BEGINNING OF YEAR.	10 290.3	1 558.8	8 731.5	1
CAPITAL EXPEND., NEW . .	1 116.7	70.4	1 046.3	1
CAPITAL EXPEND., USED. .	112.8	12.4	100.4	1
RETIREMENTS.	122.6	13.5	109.0	1
ASSETS, END OF YEAR. . . .	11 397.2	1 628.1	9 769.1	1
DEPRECIATION CHARGES . . .	507.9	67.2	440.6	1
RENTAL PAYMENTS.	51.4	7.3	44.1	1
2631-PAPERBOARD MILLS				
ASSETS, BEGINNING OF YEAR.	7 044.3	902.3	6 142.0	1
CAPITAL EXPEND., NEW . .	951.4	75.5	875.9	2
CAPITAL EXPEND., USED. .	17.1	2.5	14.6	1
RETIREMENTS.	157.7	12.7	145.0	1
ASSETS, END OF YEAR. . . .	7 855.1	967.5	6 887.6	1
DEPRECIATION CHARGES . . .	394.0	32.8	361.2	1
RENTAL PAYMENTS.	29.2	3.3	25.9	2
264-MISC CONVERTED PAPER PRODUCTS				
ASSETS, BEGINNING OF YEAR.	4 114.2	1 018.5	3 095.8	1
CAPITAL EXPEND., NEW . .	519.5	98.6	420.8	3
CAPITAL EXPEND., USED. .	(53.0)	(20.4)	32.6	19
RETIREMENTS.	128.8	(28.1)	100.9	5
ASSETS, END OF YEAR. . . .	4 557.8	1 109.6	3 448.2	1
DEPRECIATION CHARGES . . .	286.5	55.5	231.1	2
RENTAL PAYMENTS.	106.7	61.8	44.8	6
2641-PAPER COATING AND GLAZING				
ASSETS, BEGINNING OF YEAR.	1 002.5	259.7	742.8	2
CAPITAL EXPEND., NEW . .	92.9	12.9	79.9	3
CAPITAL EXPEND., USED. .	6.0	4.4	(1.7)	10
RETIREMENTS.	17.3	2.2	15.1	5
ASSETS, END OF YEAR. . . .	1 084.1	274.8	809.3	2
DEPRECIATION CHARGES . . .	70.4	17.6	52.8	4
RENTAL PAYMENTS.	16.0	(7.1)	8.8	7
2642-ENVELOPES				
ASSETS, BEGINNING OF YEAR.	279.6	50.9	228.7	3
CAPITAL EXPEND., NEW . .	23.2	2.8	20.4	12
CAPITAL EXPEND., USED. .	(4.5)	-	(4.5)	30
RETIREMENTS.	11.2	1.3	9.9	3
ASSETS, END OF YEAR. . . .	296.0	52.4	243.7	3
DEPRECIATION CHARGES . . .	18.3	2.2	16.2	3
RENTAL PAYMENTS.	10.8	7.7	(3.0)	6
2643-BAGS, EXCEPT TEXTILE BAGS				
ASSETS, BEGINNING OF YEAR.	885.6	193.4	692.2	3
CAPITAL EXPEND., NEW . .	114.4	(22.9)	91.5	10
CAPITAL EXPEND., USED. .	(15.8)	(4.8)	11.0	16
RETIREMENTS.	28.8	6.9	21.8	8
ASSETS, END OF YEAR. . . .	987.0	214.2	772.8	3
DEPRECIATION CHARGES . . .	66.1	9.8	56.3	2
RENTAL PAYMENTS.	(29.0)	17.1	(11.9)	21

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2645-DIE-CUT PAPER AND BOARD				
ASSETS, BEGINNING OF YEAR.	178.4	50.9	127.6	6
CAPITAL EXPEND., NEW . .	(17.7)	(3.8)	13.8	17
CAPITAL EXPEND., USED. .	5.0	(z)	5.0	1
RETIREMENTS.	(13.5)	(5.3)	(8.3)	26
ASSETS, END OF YEAR. . . .	187.6	49.4	138.1	5
DEPRECIATION CHARGES . . .	11.2	(2.5)	8.7	11
RENTAL PAYMENTS.	8.0	5.2	(2.8)	11
2646-PRESSED AND MOLDED PULP GOODS				
ASSETS, BEGINNING OF YEAR.	186.4	41.7	144.5	1
CAPITAL EXPEND., NEW . .	10.5	.9	9.6	1
CAPITAL EXPEND., USED. .	1.6	-	1.6	1
RETIREMENTS.	3.4	.2	3.2	1
ASSETS, END OF YEAR. . . .	195.1	42.6	152.5	1
DEPRECIATION CHARGES . . .	9.1	1.4	7.8	1
RENTAL PAYMENTS.	.7	.5	.3	1
2647-SANITARY PAPER PRODUCTS				
ASSETS, BEGINNING OF YEAR.	985.6	224.3	761.2	1
CAPITAL EXPEND., NEW . .	196.7	38.3	158.4	1
CAPITAL EXPEND., USED. .	1.5	.3	1.2	1
RETIREMENTS.	30.0	2.9	27.1	3
ASSETS, END OF YEAR. . . .	1 153.7	260.1	893.6	1
DEPRECIATION CHARGES . . .	68.2	11.6	56.6	1
RENTAL PAYMENTS.	17.1	10.0	7.1	2
2648-STATIONERY PRODUCTS				
ASSETS, BEGINNING OF YEAR.	136.3	41.5	94.8	3
CAPITAL EXPEND., NEW . .	(13.4)	4.2	(9.2)	34
CAPITAL EXPEND., USED. .	(1.3)	(.5)	(.9)	43
RETIREMENTS.	2.3	(.3)	1.9	9
ASSETS, END OF YEAR. . . .	148.7	45.8	102.9	5
DEPRECIATION CHARGES . . .	8.5	1.8	6.7	7
RENTAL PAYMENTS.	6.7	(4.5)	2.2	10
2649-CONVERTED PAPER PRODUCTS, NEC				
ASSETS, BEGINNING OF YEAR.	460.1	156.3	304.0	4
CAPITAL EXPEND., NEW . .	50.8	(12.7)	38.0	12
CAPITAL EXPEND., USED. .	(17.2)	(10.4)	(6.8)	53
RETIREMENTS.	(22.4)	(9.0)	13.5	20
ASSETS, END OF YEAR. . . .	505.6	170.4	335.3	4
DEPRECIATION CHARGES . . .	34.6	8.5	26.1	8
RENTAL PAYMENTS.	18.4	9.7	(8.7)	10
265-PAPERBOARD CONTAINERS AND BOXES				
ASSETS, BEGINNING OF YEAR.	4 169.9	1 161.5	3 008.5	1
CAPITAL EXPEND., NEW . .	446.0	72.4	373.6	3
CAPITAL EXPEND., USED. .	42.3	6.0	36.3	7
RETIREMENTS.	129.6	18.8	110.9	3
ASSETS, END OF YEAR. . . .	4 528.6	1 221.1	3 307.5	1
DEPRECIATION CHARGES . . .	282.3	45.4	236.9	4
RENTAL PAYMENTS.	122.9	57.0	66.0	3
2651-FOLDING PAPERBOARD BOXES				
ASSETS, BEGINNING OF YEAR.	787.7	187.4	600.3	3
CAPITAL EXPEND., NEW . .	88.7	13.6	75.1	5
CAPITAL EXPEND., USED. .	(12.5)	(.5)	(12.0)	17
RETIREMENTS.	35.5	7.3	28.3	4
ASSETS, END OF YEAR. . . .	853.3	194.3	659.1	3
DEPRECIATION CHARGES . . .	57.6	8.4	49.2	2
RENTAL PAYMENTS.	20.9	14.2	(6.7)	7
2652-SETUP PAPERBOARD BOXES				
ASSETS, BEGINNING OF YEAR.	90.0	19.4	70.6	9
CAPITAL EXPEND., NEW . .	32.9	(.7)	32.2	7
CAPITAL EXPEND., USED. .	(.4)	-	(.4)	45
RETIREMENTS.	(4.2)	(.3)	(3.8)	30
ASSETS, END OF YEAR. . . .	119.2	(19.8)	99.4	7
DEPRECIATION CHARGES . . .	(16.0)	(.8)	(15.2)	58
RENTAL PAYMENTS.	(6.7)	(4.5)	(2.2)	18
2653-CORRUGATED AND SOLID FIBER BOXES				
ASSETS, BEGINNING OF YEAR.	2 337.1	715.1	1 622.0	1
CAPITAL EXPEND., NEW . .	250.5	44.3	206.2	4
CAPITAL EXPEND., USED. .	22.7	5.0	17.7	8
RETIREMENTS.	59.3	(7.8)	51.5	5
ASSETS, END OF YEAR. . . .	2 551.1	756.7	1 794.4	1
DEPRECIATION CHARGES . . .	152.6	27.0	125.6	2
RENTAL PAYMENTS.	72.6	28.0	44.6	4
2654-SANITARY FOOD CONTAINERS				
ASSETS, BEGINNING OF YEAR.	680.7	161.8	519.0	2
CAPITAL EXPEND., NEW . .	46.1	9.2	36.9	3
CAPITAL EXPEND., USED. .	2.2	.2	2.0	1
RETIREMENTS.	16.4	(.8)	15.6	3
ASSETS, END OF YEAR. . . .	712.7	170.4	542.3	2
DEPRECIATION CHARGES . . .	38.2	5.9	32.2	2
RENTAL PAYMENTS.	12.2	5.2	7.0	8
2655-FIBER CANS, DRUMS, SIMILAR PRODS				
ASSETS, BEGINNING OF YEAR.	274.4	77.8	196.6	2
CAPITAL EXPEND., NEW . .	27.8	4.6	23.2	8
CAPITAL EXPEND., USED. .	4.5	.2	4.3	2
RETIREMENTS.	14.3	2.6	11.7	4
ASSETS, END OF YEAR. . . .	292.3	80.0	212.3	2
DEPRECIATION CHARGES . . .	17.9	3.2	14.6	2
RENTAL PAYMENTS.	10.5	5.1	(5.5)	5
2661-BUILDING PAPER AND BOARD MILLS				
ASSETS, BEGINNING OF YEAR.	310.9	69.5	241.4	1
CAPITAL EXPEND., NEW . .	16.6	2.2	14.4	8
CAPITAL EXPEND., USED. .	2.7	.5	2.3	1
RETIREMENTS.	10.0	1.0	9.0	2
ASSETS, END OF YEAR. . . .	320.2	71.2	249.0	1
DEPRECIATION CHARGES . . .	20.1	2.6	17.5	1
RENTAL PAYMENTS.	2.4	.9	1.5	3
27-PRINTING AND PUBLISHING				
ASSETS, BEGINNING OF YEAR.	13 873.3	3 831.9	10 041.2	1
CAPITAL EXPEND., NEW . .	1 799.7	329.7	1 470.0	1
CAPITAL EXPEND., USED. .	198.0	68.6	129.4	1
RETIREMENTS.	631.5	93.1	539.1	1
ASSETS, END OF YEAR. . . .	15 239.3	4 137.1	11 101.5	1
DEPRECIATION CHARGES . . .	1 110.1	180.8	929.3	2
RENTAL PAYMENTS.	604.1	345.3	258.2	2
2711-NEWSPAPERS				
ASSETS, BEGINNING OF YEAR.	4 609.3	1 567.7	3 042.0	1
CAPITAL EXPEND., NEW . .	554.4	120.1	434.3	4
CAPITAL EXPEND., USED. .	(47.4)	(25.7)	21.7	20
RETIREMENTS.	184.7	35.6	149.4	6
ASSETS, END OF YEAR. . . .	5 026.3	1 677.8	3 348.6	1
DEPRECIATION CHARGES . . .	348.8	69.5	279.3	3
RENTAL PAYMENTS.	108.8	50.9	57.7	5
2721-PERIODICALS				
ASSETS, BEGINNING OF YEAR.	682.0	376.1	306.0	5
CAPITAL EXPEND., NEW . .	86.3	18.9	67.4	9
CAPITAL EXPEND., USED. .	6.1	3.7	(2.4)	8
RETIREMENTS.	49.1	13.3	36.0	5
ASSETS, END OF YEAR. . . .	725.1	385.3	339.8	5
DEPRECIATION CHARGES . . .	50.7	14.4	36.3	7
RENTAL PAYMENTS.	98.5	63.2	35.3	5
273-BOOKS				
ASSETS, BEGINNING OF YEAR.	1 285.2	378.7	906.4	1
CAPITAL EXPEND., NEW . .	156.3	(37.6)	118.7	1
CAPITAL EXPEND., USED. .	(21.7)	(9.8)	(11.9)	24
RETIREMENTS.	78.1	13.2	65.1	5
ASSETS, END OF YEAR. . . .	1 385.1	413.1	971.9	1
DEPRECIATION CHARGES . . .	101.8	14.8	86.9	3
RENTAL PAYMENTS.	88.0	49.2	38.7	3
2731-BOOK PUBLISHING				
ASSETS, BEGINNING OF YEAR.	627.3	218.9	408.3	3
CAPITAL EXPEND., NEW . .	77.9	14.5	63.4	6
CAPITAL EXPEND., USED. .	(13.2)	(7.4)	(5.8)	37
RETIREMENTS.	37.9	4.9	33.2	3
ASSETS, END OF YEAR. . . .	680.4	235.9	444.3	3
DEPRECIATION CHARGES . . .	52.7	8.6	44.0	3
RENTAL PAYMENTS.	70.0	38.1	31.8	3
2732-BOOK PRINTING				
ASSETS, BEGINNING OF YEAR.	657.8	159.8	498.1	3
CAPITAL EXPEND., NEW . .	(78.4)	(23.1)	(55.3)	22
CAPITAL EXPEND., USED. .	(8.6)	(2.5)	(6.1)	19
RETIREMENTS.	40.2	8.3	31.9	10
ASSETS, END OF YEAR. . . .	704.6	177.1	527.6	2
DEPRECIATION CHARGES . . .	49.1	6.2	42.9	4
RENTAL PAYMENTS.	18.0	11.1	6.9	9
2741-MISCELLANEOUS PUBLISHING				
ASSETS, BEGINNING OF YEAR.	276.8	89.1	187.8	11
CAPITAL EXPEND., NEW . .	72.1	(24.6)	(47.5)	9
CAPITAL EXPEND., USED. .	(3.2)	(.6)	(2.5)	33
RETIREMENTS.	(4.2)	(.2)	(4.0)	(A)
ASSETS, END OF YEAR. . . .	347.9	114.1	233.8	5
DEPRECIATION CHARGES . . .	26.1	5.6	20.6	7
RENTAL PAYMENTS.	27.2	11.5	15.6	6
275-COMMERCIAL PRINTING				
ASSETS, BEGINNING OF YEAR.	5 024.2	1 015.8	4 007.7	1
CAPITAL EXPEND., NEW . .	688.4	99.3	589.1	1
CAPITAL EXPEND., USED. .	(80.7)	(16.6)	(64.1)	17
RETIREMENTS.	225.7	(24.7)	201.1	7
ASSETS, END OF YEAR. . . .	5 567.5	1 107.0	4 459.8	1
DEPRECIATION CHARGES . . .	417.5	55.8	361.8	3
RENTAL PAYMENTS.	190.3	113.1	77.0	4
2751-COMMERCIAL PRINTING, LETTERPRESS				
ASSETS, BEGINNING OF YEAR.	1 309.1	295.1	1 013.6	2
CAPITAL EXPEND., NEW . .	198.4	27.5	170.9	8
CAPITAL EXPEND., USED. .	(16.5)	(4.2)	(12.3)	22
RETIREMENTS.	58.1	(11.0)	47.2	14
ASSETS, END OF YEAR. . . .	1 465.9	315.8	1 149.6	2
DEPRECIATION CHARGES . . .	106.4	15.2	91.2	3
RENTAL PAYMENTS.	48.8	33.3	15.5	6

See footnotes at end of table.

Table 2. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2752-COMMERCIAL PRINTING, LITHOGRAPHIC				
ASSETS, BEGINNING OF YEAR.	3 116.9	583.6	2 533.0	1
CAPITAL EXPEND., NEW . .	376.4	49.5	326.8	6
CAPITAL EXPEND., USED. .	(61.6)	(10.8)	(50.7)	21
RETIREMENTS.	148.7	(11.5)	137.2	9
ASSETS, END OF YEAR. . . .	3 406.1	632.5	2 773.4	1
DEPRECIATION CHARGES . . .	270.2	35.2	235.0	5
RENTAL PAYMENTS.	131.6	73.4	58.0	5
2753-ENGRAVING AND PLATE PRINTING				
ASSETS, BEGINNING OF YEAR.	89.7	(20.0)	69.7	12
CAPITAL EXPEND., NEW . .	18.7	2.9	15.8	9
CAPITAL EXPEND., USED. .	(.5)	(.1)	(.4)	29
RETIREMENTS.	(3.1)	(.3)	(2.7)	19
ASSETS, END OF YEAR. . . .	105.8	(22.6)	83.2	10
DEPRECIATION CHARGES . . .	6.5	(.9)	5.7	9
RENTAL PAYMENTS.	4.8	3.9	(.9)	14
2754-COMMERCIAL PRINTING, GRAVURE				
ASSETS, BEGINNING OF YEAR.	508.4	117.0	391.4	3
CAPITAL EXPEND., NEW . .	95.0	19.4	75.6	2
CAPITAL EXPEND., USED. .	(2.2)	(1.5)	(.7)	22
RETIREMENTS.	15.8	1.8	14.0	6
ASSETS, END OF YEAR. . . .	589.7	136.1	453.6	2
DEPRECIATION CHARGES . . .	34.4	4.5	29.9	3
RENTAL PAYMENTS.	5.0	(2.5)	2.6	10
2761-MANIFOLD BUSINESS FORMS				
ASSETS, BEGINNING OF YEAR.	842.1	158.4	683.8	3
CAPITAL EXPEND., NEW . .	90.8	10.4	80.4	8
CAPITAL EXPEND., USED. .	(16.9)	(5.3)	(11.6)	54
RETIREMENTS.	41.3	(2.8)	38.5	12
ASSETS, END OF YEAR. . . .	908.4	171.2	737.3	3
DEPRECIATION CHARGES . . .	57.7	6.5	51.2	3
RENTAL PAYMENTS.	21.9	14.8	7.2	10
2771-GREETING CARD PUBLISHING				
ASSETS, BEGINNING OF YEAR.	227.8	98.8	128.9	4
CAPITAL EXPEND., NEW . .	19.2	5.9	13.4	4
CAPITAL EXPEND., USED. .	(2.0)	.5	(1.5)	19
RETIREMENTS.	10.6	(.8)	9.8	5
ASSETS, END OF YEAR. . . .	238.4	104.4	134.0	4
DEPRECIATION CHARGES . . .	14.5	3.8	10.7	5
RENTAL PAYMENTS.	10.2	3.4	6.8	5
278-BLANKBOOKS AND BOOKBINDING				
ASSETS, BEGINNING OF YEAR.	430.8	85.0	345.8	4
CAPITAL EXPEND., NEW . .	57.1	8.6	48.5	12
CAPITAL EXPEND., USED. .	(10.3)	(5.6)	(4.8)	37
RETIREMENTS.	11.0	(.6)	10.4	11
ASSETS, END OF YEAR. . . .	487.2	98.6	388.6	4
DEPRECIATION CHARGES . . .	36.7	5.7	31.0	4
RENTAL PAYMENTS.	28.5	19.7	8.8	6
2782-BLANKBOOKS AND LOOSELEAF BINDERS				
ASSETS, BEGINNING OF YEAR.	260.8	66.5	194.3	4
CAPITAL EXPEND., NEW . .	40.3	7.5	(32.8)	14
CAPITAL EXPEND., USED. .	(4.9)	3.6	(1.3)	16
RETIREMENTS.	4.9	(.3)	4.7	13
ASSETS, END OF YEAR. . . .	301.2	77.3	223.8	3
DEPRECIATION CHARGES . . .	23.5	4.8	18.7	3
RENTAL PAYMENTS.	13.2	7.8	5.3	6
2789-BOOKBINDING AND RELATED WORK				
ASSETS, BEGINNING OF YEAR.	170.0	(18.5)	151.5	8
CAPITAL EXPEND., NEW . .	(16.8)	(1.1)	(15.7)	23
CAPITAL EXPEND., USED. .	(5.4)	(2.0)	(3.4)	70
RETIREMENTS.	(6.1)	.4	(5.8)	16
ASSETS, END OF YEAR. . . .	186.0	(21.3)	164.8	8
DEPRECIATION CHARGES . . .	13.2	(.9)	12.3	7
RENTAL PAYMENTS.	15.3	(11.8)	(3.5)	11
279-PRINTING TRADE SERVICES				
ASSETS, BEGINNING OF YEAR.	495.2	62.3	432.9	1
CAPITAL EXPEND., NEW . .	75.1	(4.3)	70.8	14
CAPITAL EXPEND., USED. .	(9.7)	(.8)	(8.9)	45
RETIREMENTS.	(26.6)	(1.8)	(24.8)	18
ASSETS, END OF YEAR. . . .	553.3	65.6	487.8	2
DEPRECIATION CHARGES . . .	56.2	4.7	51.5	3
RENTAL PAYMENTS.	30.7	19.6	11.1	8
2791-TYPESETTING				
ASSETS, BEGINNING OF YEAR.	213.8	(15.1)	198.6	10
CAPITAL EXPEND., NEW . .	(33.7)	(2.5)	(31.2)	22
CAPITAL EXPEND., USED. .	(2.8)	.2	(2.6)	57
RETIREMENTS.	(14.3)	(.4)	(13.9)	21
ASSETS, END OF YEAR. . . .	235.9	(17.3)	218.5	9
DEPRECIATION CHARGES . . .	28.1	1.8	26.3	2
RENTAL PAYMENTS.	19.5	11.6	7.9	11
2793-PHOTOENGRAVING				
ASSETS, BEGINNING OF YEAR.	59.7	(4.3)	55.5	8
CAPITAL EXPEND., NEW . .	(5.9)	(.4)	(5.5)	28
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	(1.9)	(.3)	(1.6)	55
ASSETS, END OF YEAR. . . .	64.0	(4.4)	59.7	8
DEPRECIATION CHARGES . . .	5.2	(.3)	4.9	10
RENTAL PAYMENTS.	(4.4)	(3.6)	(.8)	21
2794-ELECTROTYPING AND STEREOTYPING				
ASSETS, BEGINNING OF YEAR.	(7.8)	(1.3)	6.6	19
CAPITAL EXPEND., NEW . .	-	-	-	1
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	(1.7)	(.8)	(1.0)	77
ASSETS, END OF YEAR. . . .	6.1	.5	5.6	10
DEPRECIATION CHARGES . . .	(.2)	-	(.2)	34
RENTAL PAYMENTS.	.3	.3	-	11
2795-LITHOGRAPHIC PLATEMAKING SERVICES				
ASSETS, BEGINNING OF YEAR.	213.8	(41.7)	172.1	8
CAPITAL EXPEND., NEW . .	(35.5)	(1.4)	(34.1)	21
CAPITAL EXPEND., USED. .	(6.7)	(.6)	(6.1)	61
RETIREMENTS.	(8.7)	(.3)	(8.4)	38
ASSETS, END OF YEAR. . . .	247.3	(43.4)	204.0	7
DEPRECIATION CHARGES . . .	(22.7)	(2.6)	(20.0)	15
RENTAL PAYMENTS.	(6.5)	(4.1)	(2.5)	16
28-CHEMICALS AND ALLIED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	58 531.2	11 440.4	47 090.6	1
CAPITAL EXPEND., NEW . .	8 180.7	1 222.4	6 957.4	1
CAPITAL EXPEND., USED. .	211.4	49.3	162.0	3
RETIREMENTS.	1 623.1	264.6	1 358.4	1
ASSETS, END OF YEAR. . . .	65 300.3	12 447.9	52 851.8	1
DEPRECIATION CHARGES . . .	4 001.4	577.9	3 423.4	1
RENTAL PAYMENTS.	513.3	157.2	355.8	3
281-INDUSTRIAL INORGANIC CHEMICALS				
ASSETS, BEGINNING OF YEAR.	7 648.7	1 218.0	6 430.7	1
CAPITAL EXPEND., NEW . .	1 000.4	123.6	876.7	2
CAPITAL EXPEND., USED. .	31.3	3.0	28.1	7
RETIREMENTS.	178.6	20.8	157.7	1
ASSETS, END OF YEAR. . . .	8 501.7	1 323.7	7 177.9	1
DEPRECIATION CHARGES . . .	543.0	54.8	488.1	2
RENTAL PAYMENTS.	67.2	9.1	58.1	2
2812-ALKALIES AND CHLORINE				
ASSETS, BEGINNING OF YEAR.	1 608.9	215.3	1 393.5	1
CAPITAL EXPEND., NEW . .	218.1	22.0	196.0	2
CAPITAL EXPEND., USED. .	.3	-	.3	1
RETIREMENTS.	54.2	8.5	45.7	2
ASSETS, END OF YEAR. . . .	1 773.1	228.8	1 544.3	1
DEPRECIATION CHARGES . . .	72.5	6.9	65.6	2
RENTAL PAYMENTS.	20.7	1.3	19.3	3
2813-INDUSTRIAL GASES				
ASSETS, BEGINNING OF YEAR.	1 457.1	140.1	1 316.9	2
CAPITAL EXPEND., NEW . .	238.6	(17.8)	220.7	3
CAPITAL EXPEND., USED. .	22.6	1.6	21.0	9
RETIREMENTS.	35.5	2.7	32.8	2
ASSETS, END OF YEAR. . . .	1 682.8	156.8	1 525.9	2
DEPRECIATION CHARGES . . .	95.6	6.7	88.9	2
RENTAL PAYMENTS.	16.5	1.7	14.8	6
2816-INORGANIC PIGMENTS				
ASSETS, BEGINNING OF YEAR.	851.0	153.5	697.5	2
CAPITAL EXPEND., NEW . .	126.8	12.3	114.5	5
CAPITAL EXPEND., USED. .	(1.3)	.3	(1.0)	23
RETIREMENTS.	21.0	2.8	18.2	2
ASSETS, END OF YEAR. . . .	958.1	163.2	794.9	2
DEPRECIATION CHARGES . . .	56.7	7.1	49.6	2
RENTAL PAYMENTS.	4.8	(1.8)	2.9	6
2819-INDUSTRIAL INORGANIC CHEM , NEC				
ASSETS, BEGINNING OF YEAR.	3 731.7	709.7	3 022.7	1
CAPITAL EXPEND., NEW . .	417.0	71.6	345.4	2
CAPITAL EXPEND., USED. .	(6.9)	(1.1)	(5.8)	15
RETIREMENTS.	67.9	6.7	61.0	2
ASSETS, END OF YEAR. . . .	4 087.7	774.9	3 312.9	1
DEPRECIATION CHARGES . . .	318.2	34.1	284.0	3
RENTAL PAYMENTS.	25.3	4.3	21.0	3
282-PLASTICS MATERIALS, SYNTHETICS				
ASSETS, BEGINNING OF YEAR.	13 678.1	2 575.4	11 102.7	1
CAPITAL EXPEND., NEW . .	1 309.2	146.0	1 163.2	1
CAPITAL EXPEND., USED. .	35.0	4.0	31.0	1
RETIREMENTS.	506.8	81.2	425.6	1
ASSETS, END OF YEAR. . . .	14 515.5	2 644.2	11 871.3	1
DEPRECIATION CHARGES . . .	839.8	123.7	716.0	1
RENTAL PAYMENTS.	63.4	11.4	52.1	3
2821-PLASTICS MATERIALS AND RESINS				
ASSETS, BEGINNING OF YEAR.	5 934.7	1 212.9	4 721.8	1
CAPITAL EXPEND., NEW . .	880.8	94.2	786.6	1
CAPITAL EXPEND., USED. .	19.4	2.9	16.5	1
RETIREMENTS.	121.7	27.5	94.2	3
ASSETS, END OF YEAR. . . .	6 713.1	1 282.5	5 430.7	1
DEPRECIATION CHARGES . . .	391.8	56.6	335.2	1
RENTAL PAYMENTS.	35.0	5.5	29.5	5

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
2822-SYNTHETIC RUBBER				
ASSETS, BEGINNING OF YEAR.	722.5	100.9	621.6	1
CAPITAL EXPEND., NEW . .	52.6	3.7	48.8	1
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	8.1	.3	7.8	2
ASSETS, END OF YEAR. . . .	767.2	104.3	662.9	1
DEPRECIATION CHARGES . . .	38.8	4.1	34.6	1
RENTAL PAYMENTS.	5.4	1.6	3.9	8
2823-CELLULOSIC MANMADE FIBERS				
ASSETS, BEGINNING OF YEAR.	801.1	131.6	669.4	1
CAPITAL EXPEND., NEW . .	29.3	1.1	28.2	1
CAPITAL EXPEND., USED. .	4.2	-	4.2	1
RETIREMENTS.	49.6	6.8	42.8	1
ASSETS, END OF YEAR. . . .	784.9	126.0	659.0	1
DEPRECIATION CHARGES . . .	39.5	4.0	35.5	1
RENTAL PAYMENTS.	3.7	.3	3.5	1
2824-ORGANIC FIBERS, NONCELLULOSIC				
ASSETS, BEGINNING OF YEAR.	6 219.8	1 130.0	5 089.9	1
CAPITAL EXPEND., NEW . .	346.7	47.1	299.6	3
CAPITAL EXPEND., USED. .	11.2	1.1	10.1	1
RETIREMENTS.	327.4	46.6	280.8	1
ASSETS, END OF YEAR. . . .	6 250.3	1 131.5	5 118.8	1
DEPRECIATION CHARGES . . .	369.7	59.0	310.7	1
RENTAL PAYMENTS.	19.2	4.0	15.2	1
283-DRUGS				
ASSETS, BEGINNING OF YEAR.	4 755.2	1 930.6	2 824.6	1
CAPITAL EXPEND., NEW . .	576.2	155.6	420.6	2
CAPITAL EXPEND., USED. .	6.2	3.9	2.3	12
RETIREMENTS.	112.3	21.3	91.0	5
ASSETS, END OF YEAR. . . .	5 225.3	2 068.8	3 156.5	1
DEPRECIATION CHARGES . . .	287.1	76.4	210.7	2
RENTAL PAYMENTS.	77.3	26.3	50.8	11
2831-BIOLOGICAL PRODUCTS				
ASSETS, BEGINNING OF YEAR.	303.1	145.1	158.0	4
CAPITAL EXPEND., NEW . .	(40.9)	(13.0)	27.9	18
CAPITAL EXPEND., USED. .	(.3)	(.1)	(.3)	54
RETIREMENTS.	5.8	1.6	4.2	4
ASSETS, END OF YEAR. . . .	338.5	156.6	182.0	3
DEPRECIATION CHARGES . . .	21.4	7.8	13.6	3
RENTAL PAYMENTS.	6.7	3.2	3.5	5
2833-MEDICINALS AND BOTANICALS				
ASSETS, BEGINNING OF YEAR.	1 053.1	237.5	815.7	2
CAPITAL EXPEND., NEW . .	117.0	17.3	99.7	5
CAPITAL EXPEND., USED. .	.3	.1	.2	1
RETIREMENTS.	21.4	3.2	18.3	4
ASSETS, END OF YEAR. . . .	1 148.9	251.7	897.3	2
DEPRECIATION CHARGES . . .	62.9	8.7	54.2	4
RENTAL PAYMENTS.	(3.7)	(2.0)	1.7	23
2834-PHARMACEUTICAL PREPARATIONS				
ASSETS, BEGINNING OF YEAR.	3 398.9	1 548.1	1 850.9	1
CAPITAL EXPEND., NEW . .	418.4	125.3	293.1	1
CAPITAL EXPEND., USED. .	5.6	3.7	(1.9)	13
RETIREMENTS.	85.1	16.6	68.5	6
ASSETS, END OF YEAR. . . .	3 737.8	1 660.5	2 077.3	1
DEPRECIATION CHARGES . . .	202.8	60.0	142.8	4
RENTAL PAYMENTS.	66.8	(21.2)	(45.6)	12
284-SOAPS, CLEANERS, TOILET GOODS				
ASSETS, BEGINNING OF YEAR.	2 872.6	910.4	1 962.0	1
CAPITAL EXPEND., NEW . .	350.5	72.2	278.3	4
CAPITAL EXPEND., USED. .	(22.9)	(11.9)	10.7	20
RETIREMENTS.	73.9	10.4	63.6	4
ASSETS, END OF YEAR. . . .	3 172.2	984.0	2 187.8	1
DEPRECIATION CHARGES . . .	179.6	33.9	145.8	2
RENTAL PAYMENTS.	65.0	35.5	29.4	4
2841-SOAP AND OTHER DETERGENTS				
ASSETS, BEGINNING OF YEAR.	1 321.0	336.5	984.4	1
CAPITAL EXPEND., NEW . .	143.0	17.4	125.5	7
CAPITAL EXPEND., USED. .	(9.6)	(5.2)	4.0	46
RETIREMENTS.	30.3	4.1	26.3	2
ASSETS, END OF YEAR. . . .	1 443.2	355.0	1 088.1	1
DEPRECIATION CHARGES . . .	73.7	11.3	62.4	2
RENTAL PAYMENTS.	16.7	8.6	8.0	7
2842-POLISHES AND SANITATION GOODS				
ASSETS, BEGINNING OF YEAR.	432.3	167.2	265.1	3
CAPITAL EXPEND., NEW . .	54.4	12.2	42.2	10
CAPITAL EXPEND., USED. .	7.1	3.0	4.2	4
RETIREMENTS.	15.8	2.0	(13.9)	12
ASSETS, END OF YEAR. . . .	478.0	180.3	297.6	3
DEPRECIATION CHARGES . . .	29.7	6.6	23.1	6
RENTAL PAYMENTS.	14.9	8.4	6.5	8
2843-SURFACE ACTIVE AGENTS				
ASSETS, BEGINNING OF YEAR.	286.6	66.2	220.4	4
CAPITAL EXPEND., NEW . .	46.2	12.4	33.8	9
CAPITAL EXPEND., USED. .	(1.0)	(.8)	(.1)	40
RETIREMENTS.	(6.9)	(1.9)	(5.0)	24
ASSETS, END OF YEAR. . . .	326.9	77.6	249.3	4
DEPRECIATION CHARGES . . .	22.4	3.3	19.1	3
RENTAL PAYMENTS.	(4.6)	(1.7)	(2.9)	14
2844-TOILET PREPARATIONS				
ASSETS, BEGINNING OF YEAR.	832.8	340.6	492.2	2
CAPITAL EXPEND., NEW . .	106.9	30.2	76.7	4
CAPITAL EXPEND., USED. .	5.2	2.9	2.3	4
RETIREMENTS.	20.9	2.5	18.4	1
ASSETS, END OF YEAR. . . .	924.0	371.2	552.8	2
DEPRECIATION CHARGES . . .	53.8	12.6	41.2	2
RENTAL PAYMENTS.	28.8	16.8	12.0	4
2851-PAINTS AND ALLIED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	1 233.7	516.6	717.0	2
CAPITAL EXPEND., NEW . .	179.6	50.0	129.6	4
CAPITAL EXPEND., USED. .	11.9	(6.1)	5.8	11
RETIREMENTS.	57.4	22.9	34.6	4
ASSETS, END OF YEAR. . . .	1 367.8	549.9	817.9	2
DEPRECIATION CHARGES . . .	129.4	36.6	92.8	3
RENTAL PAYMENTS.	34.9	18.1	16.9	6
286-INDUSTRIAL ORGANIC CHEMICALS				
ASSETS, BEGINNING OF YEAR.	20 538.1	2 794.2	17 743.9	1
CAPITAL EXPEND., NEW . .	3 321.7	505.3	2 815.9	1
CAPITAL EXPEND., USED. .	39.8	11.1	28.7	2
RETIREMENTS.	500.6	59.0	441.6	1
ASSETS, END OF YEAR. . . .	23 398.6	3 251.6	20 146.9	1
DEPRECIATION CHARGES . . .	1 462.7	172.8	1 289.9	1
RENTAL PAYMENTS.	106.5	20.0	86.3	1
2861-GUM AND WOOD CHEMICALS				
ASSETS, BEGINNING OF YEAR.	175.1	28.2	146.9	4
CAPITAL EXPEND., NEW . .	24.6	10.2	14.4	8
CAPITAL EXPEND., USED. .	8.2	2.0	6.2	4
RETIREMENTS.	(.7)	-	(.7)	29
ASSETS, END OF YEAR. . . .	207.2	40.4	166.8	4
DEPRECIATION CHARGES . . .	11.5	1.8	9.7	4
RENTAL PAYMENTS.	1.4	(Z)	1.3	8
2865-CYCLIC CRUDES AND INTERMEDIATES				
ASSETS, BEGINNING OF YEAR.	3 882.0	593.0	3 289.0	1
CAPITAL EXPEND., NEW . .	441.0	53.0	388.0	1
CAPITAL EXPEND., USED. .	5.5	2.1	3.4	7
RETIREMENTS.	150.5	22.5	128.0	1
ASSETS, END OF YEAR. . . .	4 177.9	625.6	3 552.4	1
DEPRECIATION CHARGES . . .	276.7	31.9	244.8	1
RENTAL PAYMENTS.	19.1	5.2	13.9	1
2869-INDUSTRIAL ORGANIC CHEMICALS, NEC				
ASSETS, BEGINNING OF YEAR.	16 481.0	2 173.0	14 308.0	1
CAPITAL EXPEND., NEW . .	2 855.6	442.0	2 413.6	1
CAPITAL EXPEND., USED. .	26.2	7.1	19.1	1
RETIREMENTS.	349.3	36.4	312.9	1
ASSETS, END OF YEAR. . . .	19 013.4	2 585.7	16 427.7	1
DEPRECIATION CHARGES . . .	1 174.5	139.1	1 035.4	1
RENTAL PAYMENTS.	85.9	14.8	71.2	1
287-AGRICULTURAL CHEMICALS				
ASSETS, BEGINNING OF YEAR.	5 633.5	851.0	4 782.6	1
CAPITAL EXPEND., NEW . .	1 169.7	104.0	1 065.7	2
CAPITAL EXPEND., USED. .	55.2	5.2	50.0	3
RETIREMENTS.	128.8	31.9	97.0	4
ASSETS, END OF YEAR. . . .	6 729.6	928.3	5 801.3	1
DEPRECIATION CHARGES . . .	404.0	47.4	356.6	1
RENTAL PAYMENTS.	62.0	17.5	44.4	3
2873-NITROGENOUS FERTILIZERS				
ASSETS, BEGINNING OF YEAR.	2 519.8	261.5	2 258.3	1
CAPITAL EXPEND., NEW . .	796.1	38.5	757.6	2
CAPITAL EXPEND., USED. .	48.2	2.4	45.7	1
RETIREMENTS.	48.3	(17.2)	31.1	9
ASSETS, END OF YEAR. . . .	3 315.8	285.3	3 030.5	1
DEPRECIATION CHARGES . . .	168.1	13.9	154.1	1
RENTAL PAYMENTS.	23.7	8.4	15.3	2
2874-PHOSPHATIC FERTILIZERS				
ASSETS, BEGINNING OF YEAR.	1 713.8	231.4	1 482.4	1
CAPITAL EXPEND., NEW . .	111.8	13.8	98.0	3
CAPITAL EXPEND., USED. .	1.7	-	1.7	7
RETIREMENTS.	21.9	1.9	20.0	2
ASSETS, END OF YEAR. . . .	1 805.3	243.3	1 562.0	1
DEPRECIATION CHARGES . . .	122.7	12.8	109.9	1
RENTAL PAYMENTS.	23.0	4.5	18.5	2
2875-FERTILIZERS, MIXING ONLY				
ASSETS, BEGINNING OF YEAR.	377.9	133.0	244.9	4
CAPITAL EXPEND., NEW . .	(42.6)	(10.6)	(32.0)	16
CAPITAL EXPEND., USED. .	(4.1)	(1.9)	(2.3)	39
RETIREMENTS.	37.4	9.8	27.6	5
ASSETS, END OF YEAR. . . .	387.2	135.7	251.6	4
DEPRECIATION CHARGES . . .	30.6	9.3	21.3	9
RENTAL PAYMENTS.	(6.1)	(1.5)	4.6	15

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	2879-AGRICULTURAL CHEMICALS, NEC			
ASSETS, BEGINNING OF YEAR.	1 022.1	225.1	797.0	1
CAPITAL EXPEND., NEW . .	219.3	41.2	178.1	4
CAPITAL EXPEND., USED. .	1.2	.9	.4	4
RETIREMENTS.	21.3	(3.0)	18.3	9
ASSETS, END OF YEAR. . . .	1 221.3	264.1	957.2	1
DEPRECIATION CHARGES . . .	82.6	11.4	71.2	2
RENTAL PAYMENTS.	(9.2)	(3.0)	6.1	15
	289-MISCELLANEOUS CHEMICAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	2 171.2	644.2	1 527.1	1
CAPITAL EXPEND., NEW . .	273.8	66.4	207.4	3
CAPITAL EXPEND., USED. .	(9.2)	(4.3)	5.0	24
RETIREMENTS.	84.7	17.4	47.3	3
ASSETS, END OF YEAR. . . .	2 389.6	697.4	1 692.2	1
DEPRECIATION CHARGES . . .	155.8	32.3	123.6	12
RENTAL PAYMENTS.	37.0	19.2	17.7	5
	2891-ADHESIVES AND SEALANTS			
ASSETS, BEGINNING OF YEAR.	377.0	137.7	239.3	4
CAPITAL EXPEND., NEW . .	38.4	(9.4)	29.0	7
CAPITAL EXPEND., USED. .	(2.4)	(.3)	2.1	51
RETIREMENTS.	14.6	2.8	11.8	7
ASSETS, END OF YEAR. . . .	403.2	144.6	258.6	4
DEPRECIATION CHARGES . . .	29.9	7.2	22.7	3
RENTAL PAYMENTS.	10.1	(5.3)	(4.8)	11
	2892-EXPLOSIVES			
ASSETS, BEGINNING OF YEAR.	166.8	(64.7)	102.1	10
CAPITAL EXPEND., NEW . .	25.2	7.0	18.1	12
CAPITAL EXPEND., USED. .	.6	.1	.5	1
RETIREMENTS.	9.1	4.0	5.2	5
ASSETS, END OF YEAR. . . .	183.5	(68.0)	115.5	3
DEPRECIATION CHARGES . . .	13.8	5.1	8.7	8
RENTAL PAYMENTS.	2.3	(1.1)	1.3	10
	2893-PRINTING INK			
ASSETS, BEGINNING OF YEAR.	170.1	64.5	105.6	4
CAPITAL EXPEND., NEW . .	15.1	3.4	11.7	5
CAPITAL EXPEND., USED. .	(2.6)	(2.3)	(.4)	65
RETIREMENTS.	14.3	4.1	10.2	1
ASSETS, END OF YEAR. . . .	173.5	66.1	107.4	4
DEPRECIATION CHARGES . . .	10.2	2.5	7.7	4
RENTAL PAYMENTS.	5.6	3.2	2.5	6
	2895-CARBON BLACK			
ASSETS, BEGINNING OF YEAR.	308.4	58.6	249.7	1
CAPITAL EXPEND., NEW . .	22.7	1.5	21.2	1
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	2.2	.4	1.8	1
ASSETS, END OF YEAR. . . .	328.9	59.8	269.1	1
DEPRECIATION CHARGES . . .	16.6	2.5	14.0	1
RENTAL PAYMENTS.	.2	-	.2	1
	2899-CHEMICAL PREPARATIONS, NEC			
ASSETS, BEGINNING OF YEAR.	1 149.0	318.6	830.4	2
CAPITAL EXPEND., NEW . .	172.4	45.1	127.4	5
CAPITAL EXPEND., USED. .	(3.6)	(1.5)	2.1	17
RETIREMENTS.	24.5	6.2	18.3	4
ASSETS, END OF YEAR. . . .	1 300.5	359.0	941.5	2
DEPRECIATION CHARGES . . .	(85.3)	15.0	(70.3)	21
RENTAL PAYMENTS.	18.7	9.7	8.9	6
	29-PETROLEUM AND COAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	23 677.4	9 335.1	14 342.2	1
CAPITAL EXPEND., NEW . .	2 250.7	607.0	1 643.7	1
CAPITAL EXPEND., USED. .	98.8	39.7	59.1	10
RETIREMENTS.	309.3	124.9	184.5	2
ASSETS, END OF YEAR. . . .	25 717.5	9 856.8	15 860.5	1
DEPRECIATION CHARGES . . .	1 068.2	394.9	673.2	1
RENTAL PAYMENTS.	136.0	33.4	102.4	3
	2911-PETROLEUM REFINING			
ASSETS, BEGINNING OF YEAR.	22 162.6	8 966.2	13 196.4	1
CAPITAL EXPEND., NEW . .	2 100.0	582.8	1 517.2	1
CAPITAL EXPEND., USED. .	76.3	25.8	50.4	1
RETIREMENTS.	262.5	112.9	149.7	1
ASSETS, END OF YEAR. . . .	24 076.4	9 462.0	14 614.4	1
DEPRECIATION CHARGES . . .	956.5	378.6	577.9	1
RENTAL PAYMENTS.	99.7	25.1	74.6	1
	295-PAVING AND ROOFING MATERIALS			
ASSETS, BEGINNING OF YEAR.	1 065.1	240.9	824.2	1
CAPITAL EXPEND., NEW . .	111.8	(18.1)	93.7	9
CAPITAL EXPEND., USED. .	(16.9)	(9.3)	(7.6)	51
RETIREMENTS.	30.4	(7.7)	22.9	10
ASSETS, END OF YEAR. . . .	1 163.4	260.6	902.6	2
DEPRECIATION CHARGES . . .	84.8	11.3	73.5	2
RENTAL PAYMENTS.	25.5	3.8	21.6	14
	2951-PAVING MIXTURES AND BLOCKS			
ASSETS, BEGINNING OF YEAR.	599.5	113.0	486.4	2
CAPITAL EXPEND., NEW . .	(54.7)	(5.9)	48.8	18
CAPITAL EXPEND., USED. .	(8.0)	(1.1)	7.0	21
RETIREMENTS.	(18.2)	(5.0)	13.2	15
ASSETS, END OF YEAR. . . .	644.1	115.0	529.0	2
DEPRECIATION CHARGES . . .	48.3	5.5	42.8	2
RENTAL PAYMENTS.	(18.4)	(1.9)	(16.5)	21
	2952-ASPHALT FELTS AND COATINGS			
ASSETS, BEGINNING OF YEAR.	465.6	127.8	337.7	3
CAPITAL EXPEND., NEW . .	57.1	12.2	44.9	4
CAPITAL EXPEND., USED. .	(8.9)	(8.2)	.7	95
RETIREMENTS.	12.3	(2.7)	9.7	7
ASSETS, END OF YEAR. . . .	519.3	145.6	373.6	3
DEPRECIATION CHARGES . . .	36.5	5.8	30.7	5
RENTAL PAYMENTS.	7.0	1.9	5.1	10
	299-MISC PETROLEUM, COAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	449.6	128.0	321.6	5
CAPITAL EXPEND., NEW . .	38.8	(6.1)	32.8	7
CAPITAL EXPEND., USED. .	(5.6)	(4.5)	1.0	63
RETIREMENTS.	(16.4)	4.4	(12.0)	26
ASSETS, END OF YEAR. . . .	477.7	134.2	343.4	1
DEPRECIATION CHARGES . . .	26.9	5.0	21.9	9
RENTAL PAYMENTS.	(10.8)	(4.5)	(6.3)	20
	2992-LUBRICATING OILS AND GREASES			
ASSETS, BEGINNING OF YEAR.	304.9	108.5	196.4	5
CAPITAL EXPEND., NEW . .	24.3	(4.5)	19.8	9
CAPITAL EXPEND., USED. .	(4.8)	(4.5)	.3	73
RETIREMENTS.	(15.3)	4.0	(11.3)	28
ASSETS, END OF YEAR. . . .	318.7	113.5	205.2	6
DEPRECIATION CHARGES . . .	18.4	4.4	(14.0)	13
RENTAL PAYMENTS.	(7.9)	(3.9)	(4.0)	17
	2999-PETROLEUM AND COAL PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	144.8	19.5	125.2	7
CAPITAL EXPEND., NEW . .	14.6	(1.6)	13.0	9
CAPITAL EXPEND., USED. .	.7	-	.7	11
RETIREMENTS.	1.1	(.4)	.7	7
ASSETS, END OF YEAR. . . .	159.0	20.8	138.2	7
DEPRECIATION CHARGES . . .	8.5	.6	7.8	9
RENTAL PAYMENTS.	(2.9)	.6	(2.2)	59
	30-RUBBER, MISC PLASTICS PROD			
ASSETS, BEGINNING OF YEAR.	14 774.0	3 582.5	11 191.8	1
CAPITAL EXPEND., NEW . .	1 700.2	329.9	1 370.3	1
CAPITAL EXPEND., USED. .	129.7	35.6	94.1	7
RETIREMENTS.	566.9	80.3	486.8	2
ASSETS, END OF YEAR. . . .	16 036.9	3 867.6	12 169.4	1
DEPRECIATION CHARGES . . .	1 131.4	160.0	971.4	1
RENTAL PAYMENTS.	284.2	152.3	131.5	3
	3011-TIRES AND INNER TUBES			
ASSETS, BEGINNING OF YEAR.	4 232.8	919.3	3 313.6	1
CAPITAL EXPEND., NEW . .	286.4	38.0	248.4	1
CAPITAL EXPEND., USED. .	17.4	.2	17.4	1
RETIREMENTS.	80.6	3.6	80.6	3
ASSETS, END OF YEAR. . . .	4 456.0	953.8	3 502.2	1
DEPRECIATION CHARGES . . .	262.3	35.3	227.0	1
RENTAL PAYMENTS.	25.2	7.1	18.1	1
	3021-RUBBER AND PLASTICS FOOTWEAR			
ASSETS, BEGINNING OF YEAR.	156.2	40.3	115.9	2
CAPITAL EXPEND., NEW . .	11.3	(.9)	10.4	3
CAPITAL EXPEND., USED. .	.7	-	.7	5
RETIREMENTS.	9.2	.7	8.5	2
ASSETS, END OF YEAR. . . .	159.0	40.5	118.5	2
DEPRECIATION CHARGES . . .	11.0	1.6	9.4	2
RENTAL PAYMENTS.	5.1	2.6	2.5	4
	3031-RECLAIMED RUBBER			
ASSETS, BEGINNING OF YEAR.	27.4	4.3	23.0	2
CAPITAL EXPEND., NEW . .	.1	-	.1	12
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	.6	.1	-	3
ASSETS, END OF YEAR. . . .	26.8	4.3	.5	2
DEPRECIATION CHARGES . . .	1.1	.1	1.0	3
RENTAL PAYMENTS.	(Z)	(Z)	(Z)	50
	3041-RUBBER, PLASTICS HOSE AND BELTING			
ASSETS, BEGINNING OF YEAR.	739.4	219.3	520.1	2
CAPITAL EXPEND., NEW . .	55.9	15.0	40.9	2
CAPITAL EXPEND., USED. .	1.6	.3	1.3	8
RETIREMENTS.	17.5	(.9)	16.6	4
ASSETS, END OF YEAR. . . .	779.5	233.8	545.7	2
DEPRECIATION CHARGES . . .	38.6	6.3	32.3	2
RENTAL PAYMENTS.	13.1	4.4	8.6	4
	3069-FABRICATED RUBBER PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	(1 481.5)	416.9	(1 064.6)	74
CAPITAL EXPEND., NEW . .	154.7	31.5	123.2	7
CAPITAL EXPEND., USED. .	12.6	4.1	8.5	5
RETIREMENTS.	47.0	(6.5)	40.6	7
ASSETS, END OF YEAR. . . .	(1 601.7)	446.1	(1 155.7)	80
DEPRECIATION CHARGES . . .	118.2	20.9	97.2	5
RENTAL PAYMENTS.	29.8	14.2	15.5	4

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
3079-MISCELLANEOUS PLASTICS PRODUCTS				
ASSETS, BEGINNING OF YEAR.	8 136.7	1 982.4	6 154.5	1
CAPITAL EXPEND., NEW . .	1 191.8	244.4	947.4	1
CAPITAL EXPEND., USED. .	97.3	31.0	66.3	10
RETIREMENTS.	412.0	68.5	343.5	3
ASSETS, END OF YEAR. . . .	9 013.8	2 189.2	6 824.7	1
DEPRECIATION CHARGES . . .	700.3	95.8	604.5	2
RENTAL PAYMENTS.	211.0	124.1	86.7	4
31-LEATHER AND LEATHER PRODUCTS				
ASSETS, BEGINNING OF YEAR.	895.9	327.0	568.9	2
CAPITAL EXPEND., NEW . .	109.0	25.6	83.3	7
CAPITAL EXPEND., USED. .	12.9	4.9	8.0	10
RETIREMENTS.	45.0	9.2	35.9	8
ASSETS, END OF YEAR. . . .	972.7	348.4	624.3	2
DEPRECIATION CHARGES . . .	71.7	15.5	56.2	4
RENTAL PAYMENTS.	64.0	31.1	32.9	3
3111-LEATHER TANNING AND FINISHING				
ASSETS, BEGINNING OF YEAR.	213.6	70.1	143.5	5
CAPITAL EXPEND., NEW . .	38.7	(7.5)	31.2	14
CAPITAL EXPEND., USED. .	(2.3)	(1.2)	(1.1)	38
RETIREMENTS.	(6.3)	(1.1)	(5.2)	29
ASSETS, END OF YEAR. . . .	248.3	77.6	170.7	4
DEPRECIATION CHARGES . . .	18.0	(4.2)	13.8	9
RENTAL PAYMENTS.	5.6	(3.1)	(2.6)	12
3131-BOOT, SHOE CUT STOCK AND FINDINGS				
ASSETS, BEGINNING OF YEAR.	49.7	18.1	31.7	9
CAPITAL EXPEND., NEW . .	(2.9)	(1.2)	(1.7)	25
CAPITAL EXPEND., USED. .	(.5)	(.1)	.4	20
RETIREMENTS.	3.6	1.0	2.7	8
ASSETS, END OF YEAR. . . .	49.4	18.4	31.1	10
DEPRECIATION CHARGES . . .	3.2	.8	2.4	9
RENTAL PAYMENTS.	1.4	(.7)	.7	13
314-FOOTWEAR, EXCEPT RUBBER				
ASSETS, BEGINNING OF YEAR.	435.6	164.6	271.0	2
CAPITAL EXPEND., NEW . .	40.4	12.1	28.4	10
CAPITAL EXPEND., USED. .	6.3	2.4	3.8	4
RETIREMENTS.	24.1	5.1	19.0	4
ASSETS, END OF YEAR. . . .	458.2	173.9	284.2	2
DEPRECIATION CHARGES . . .	32.1	6.9	25.2	2
RENTAL PAYMENTS.	36.2	10.5	25.8	2
3142-HOUSE SLIPPERS				
ASSETS, BEGINNING OF YEAR.	24.7	8.0	16.7	7
CAPITAL EXPEND., NEW . .	2.0	.7	1.3	3
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	.9	.1	.8	11
ASSETS, END OF YEAR. . . .	25.8	8.6	17.2	7
DEPRECIATION CHARGES . . .	1.7	.2	1.5	10
RENTAL PAYMENTS.	1.3	.9	(.4)	8
3143-MEN'S FOOTWEAR, EXCEPT ATHLETIC				
ASSETS, BEGINNING OF YEAR.	179.7	65.7	113.9	1
CAPITAL EXPEND., NEW . .	14.3	3.4	10.9	1
CAPITAL EXPEND., USED. .	2.9	1.2	1.6	1
RETIREMENTS.	8.6	1.5	7.0	1
ASSETS, END OF YEAR. . . .	188.3	68.9	119.4	1
DEPRECIATION CHARGES . . .	14.0	2.9	11.1	2
RENTAL PAYMENTS.	17.0	4.1	12.9	1
3144-WOMEN'S FOOTWEAR, EXCEPT ATHLETIC				
ASSETS, BEGINNING OF YEAR.	137.2	55.0	82.2	4
CAPITAL EXPEND., NEW . .	12.2	2.6	(9.5)	13
CAPITAL EXPEND., USED. .	1.9	.7	1.2	9
RETIREMENTS.	7.2	2.5	4.7	7
ASSETS, END OF YEAR. . . .	144.0	55.8	88.2	3
DEPRECIATION CHARGES . . .	9.4	2.3	7.1	4
RENTAL PAYMENTS.	12.6	(4.0)	8.6	3
3149-FOOTWEAR, EXCEPT RUBBER, NEC				
ASSETS, BEGINNING OF YEAR.	94.0	35.8	58.2	4
CAPITAL EXPEND., NEW . .	(12.0)	(5.3)	6.7	28
CAPITAL EXPEND., USED. .	1.5	.5	1.0	9
RETIREMENTS.	7.5	1.0	6.5	10
ASSETS, END OF YEAR. . . .	100.0	40.6	59.4	5
DEPRECIATION CHARGES . . .	6.9	1.4	5.5	4
RENTAL PAYMENTS.	5.3	(1.5)	3.9	9
3151-LEATHER GLOVES AND MITTENS				
ASSETS, BEGINNING OF YEAR.	(14.8)	(3.9)	10.9	18
CAPITAL EXPEND., NEW . .	(2.4)	(.5)	(1.9)	27
CAPITAL EXPEND., USED. .	.2	.1	(.1)	13
RETIREMENTS.	(.4)	(.1)	(.3)	(A)
ASSETS, END OF YEAR. . . .	17.0	4.3	12.6	6
DEPRECIATION CHARGES . . .	(3.0)	(.7)	(2.3)	47
RENTAL PAYMENTS.	(1.2)	(1.1)	(.1)	19
3161-LUGGAGE				
ASSETS, BEGINNING OF YEAR.	77.0	30.5	46.6	7
CAPITAL EXPEND., NEW . .	(9.5)	(1.2)	(8.3)	18
CAPITAL EXPEND., USED. .	(.9)	.3	(.6)	15
RETIREMENTS.	3.9	(.2)	3.8	9
ASSETS, END OF YEAR. . . .	83.5	31.8	51.7	6
DEPRECIATION CHARGES . . .	5.2	1.1	4.1	6
RENTAL PAYMENTS.	6.1	4.9	1.2	11
317-WOMEN'S HANDBAGS AND PURSES				
ASSETS, BEGINNING OF YEAR.	69.6	20.4	49.1	5
CAPITAL EXPEND., NEW . .	11.5	2.3	9.3	11
CAPITAL EXPEND., USED. .	(.9)	(.4)	(.5)	46
RETIREMENTS.	4.9	1.5	3.4	6
ASSETS, END OF YEAR. . . .	77.1	21.5	55.5	4
DEPRECIATION CHARGES . . .	7.1	.8	6.2	5
RENTAL PAYMENTS.	11.0	8.6	2.5	8
3171-WOMEN'S HANDBAGS AND PURSES				
ASSETS, BEGINNING OF YEAR.	35.9	9.3	26.6	8
CAPITAL EXPEND., NEW . .	(6.9)	(1.5)	(5.4)	15
CAPITAL EXPEND., USED. .	(.3)	-	(.3)	67
RETIREMENTS.	2.2	.4	1.8	9
ASSETS, END OF YEAR. . . .	40.8	10.4	30.4	6
DEPRECIATION CHARGES . . .	3.6	.4	3.1	7
RENTAL PAYMENTS.	7.1	5.8	(1.3)	12
3172-PERSONAL LEATHER GOODS, NEC				
ASSETS, BEGINNING OF YEAR.	33.7	11.1	22.6	6
CAPITAL EXPEND., NEW . .	4.7	(.8)	(3.9)	14
CAPITAL EXPEND., USED. .	(.7)	(1.4)	(.3)	58
RETIREMENTS.	2.7	1.1	1.6	8
ASSETS, END OF YEAR. . . .	36.3	11.2	25.1	5
DEPRECIATION CHARGES . . .	3.5	.4	3.1	8
RENTAL PAYMENTS.	3.9	2.8	(1.1)	8
3199-LEATHER GOODS, NEC				
ASSETS, BEGINNING OF YEAR.	(35.6)	(19.6)	(16.0)	19
CAPITAL EXPEND., NEW . .	(3.6)	(.9)	(2.6)	27
CAPITAL EXPEND., USED. .	(1.8)	(.4)	(1.4)	39
RETIREMENTS.	(1.7)	(.1)	(1.6)	32
ASSETS, END OF YEAR. . . .	(39.2)	(20.8)	18.5	16
DEPRECIATION CHARGES . . .	(3.2)	(.9)	(2.3)	15
RENTAL PAYMENTS.	(2.3)	(2.1)	(.2)	24
32-STONE, CLAY, GLASS PRODUCTS				
ASSETS, BEGINNING OF YEAR.	18 511.0	4 438.2	14 072.6	1
CAPITAL EXPEND., NEW . .	2 017.5	346.0	1 671.5	1
CAPITAL EXPEND., USED. .	133.8	24.6	109.1	9
RETIREMENTS.	592.2	80.0	512.4	3
ASSETS, END OF YEAR. . . .	20 070.0	4 728.8	15 340.9	1
DEPRECIATION CHARGES . . .	1 247.4	191.3	1 056.0	2
RENTAL PAYMENTS.	225.1	82.9	142.0	4
3211-FLAT GLASS				
ASSETS, BEGINNING OF YEAR.	1 291.9	331.4	960.5	1
CAPITAL EXPEND., NEW . .	81.2	11.7	69.4	1
CAPITAL EXPEND., USED. .	4.2	.3	3.9	1
RETIREMENTS.	10.2	1.0	9.2	1
ASSETS, END OF YEAR. . . .	1 367.0	342.4	1 024.7	1
DEPRECIATION CHARGES . . .	78.1	8.6	69.5	1
RENTAL PAYMENTS.	4.3	1.5	2.7	1
322-GLASS, PRESSED OR BLOWN				
ASSETS, BEGINNING OF YEAR.	3 030.0	778.5	2 251.5	1
CAPITAL EXPEND., NEW . .	372.8	59.9	313.0	2
CAPITAL EXPEND., USED. .	14.3	2.5	11.8	2
RETIREMENTS.	92.6	6.3	86.3	1
ASSETS, END OF YEAR. . . .	3 324.5	834.6	2 489.9	1
DEPRECIATION CHARGES . . .	211.9	29.0	183.0	1
RENTAL PAYMENTS.	26.4	13.9	12.5	2
3221-GLASS CONTAINERS				
ASSETS, BEGINNING OF YEAR.	1 776.3	465.8	1 310.6	1
CAPITAL EXPEND., NEW . .	220.0	34.1	186.0	1
CAPITAL EXPEND., USED. .	10.3	2.1	8.2	1
RETIREMENTS.	51.6	1.1	50.4	1
ASSETS, END OF YEAR. . . .	1 955.1	500.8	1 454.3	1
DEPRECIATION CHARGES . . .	128.8	15.6	113.3	1
RENTAL PAYMENTS.	15.6	8.5	7.1	2
3229-PRESSED AND BLOWN GLASS, NEC				
ASSETS, BEGINNING OF YEAR.	1 253.7	312.7	940.9	1
CAPITAL EXPEND., NEW . .	152.8	25.8	127.0	5
CAPITAL EXPEND., USED. .	4.0	(.4)	3.6	4
RETIREMENTS.	41.1	5.1	35.9	1
ASSETS, END OF YEAR. . . .	1 369.4	333.8	1 035.6	1
DEPRECIATION CHARGES . . .	83.1	13.4	69.7	1
RENTAL PAYMENTS.	10.8	5.4	5.4	4
3231-PRODUCTS OF PURCHASED GLASS				
ASSETS, BEGINNING OF YEAR.	472.9	130.3	342.6	4
CAPITAL EXPEND., NEW . .	75.5	23.5	52.0	8
CAPITAL EXPEND., USED. .	(5.0)	1.6	(3.4)	21
RETIREMENTS.	15.1	(2.7)	12.4	9
ASSETS, END OF YEAR. . . .	538.3	152.7	385.6	3
DEPRECIATION CHARGES . . .	30.4	5.5	24.9	6
RENTAL PAYMENTS.	19.6	9.8	9.8	7

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3241-CEMENT, HYDRAULIC			
ASSETS, BEGINNING OF YEAR.	3 979.4	863.2	3 116.1	1
CAPITAL EXPEND., NEW . .	296.6	41.6	255.1	1
CAPITAL EXPEND., USED. .	7.0	3.5	(3.5)	8
RETIREMENTS.	106.0	11.0	95.0	10
ASSETS, END OF YEAR. . . .	4 176.9	897.3	3 279.6	1
DEPRECIATION CHARGES . . .	214.3	35.7	178.6	1
RENTAL PAYMENTS.	16.1	2.5	13.6	3
	325-STRUCTURAL CLAY PRODUCTS			
ASSETS, BEGINNING OF YEAR.	1 047.8	310.7	737.2	2
CAPITAL EXPEND., NEW . .	72.7	(16.0)	56.7	10
CAPITAL EXPEND., USED. .	(5.0)	(.7)	(4.4)	20
RETIREMENTS.	(37.3)	(9.0)	(28.3)	15
ASSETS, END OF YEAR. . . .	1 088.3	318.3	770.0	2
DEPRECIATION CHARGES . . .	60.7	13.4	47.4	4
RENTAL PAYMENTS.	(6.8)	(1.8)	(5.0)	18
	3251-BRICK AND STRUCTURAL CLAY TILE			
ASSETS, BEGINNING OF YEAR.	488.9	140.1	348.8	12
CAPITAL EXPEND., NEW . .	(43.6)	(10.6)	33.1	16
CAPITAL EXPEND., USED. .	(2.1)	(.4)	(1.7)	46
RETIREMENTS.	8.8	(2.4)	6.4	10
ASSETS, END OF YEAR. . . .	525.8	148.6	377.2	4
DEPRECIATION CHARGES . . .	32.5	7.6	24.9	7
RENTAL PAYMENTS.	(2.7)	(.3)	(2.4)	36
	3253-CERAMIC WALL AND FLOOR TILE			
ASSETS, BEGINNING OF YEAR.	133.9	42.1	91.7	7
CAPITAL EXPEND., NEW . .	(6.3)	(.4)	(5.9)	18
CAPITAL EXPEND., USED. .	.6	-	.5	1
RETIREMENTS.	(.9)	(.1)	(.8)	42
ASSETS, END OF YEAR. . . .	139.9	42.5	97.4	7
DEPRECIATION CHARGES . . .	6.8	1.4	5.4	6
RENTAL PAYMENTS.	(.8)	(.2)	.6	15
	3255-CLAY REFRACTORIES			
ASSETS, BEGINNING OF YEAR.	322.7	93.7	229.0	6
CAPITAL EXPEND., NEW . .	17.7	4.0	13.8	5
CAPITAL EXPEND., USED. .	.7	.2	(.5)	12
RETIREMENTS.	(12.8)	(2.7)	(10.1)	43
ASSETS, END OF YEAR. . . .	328.4	95.1	233.3	5
DEPRECIATION CHARGES . . .	16.4	3.2	13.2	7
RENTAL PAYMENTS.	(2.5)	(.8)	(1.7)	26
	3259-STRUCTURAL CLAY PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	102.4	(34.8)	67.5	12
CAPITAL EXPEND., NEW . .	(5.0)	(1.0)	4.0	17
CAPITAL EXPEND., USED. .	1.6	-	1.6	14
RETIREMENTS.	14.8	3.8	11.0	4
ASSETS, END OF YEAR. . . .	94.3	(32.1)	62.2	13
DEPRECIATION CHARGES . . .	5.0	(1.2)	3.9	10
RENTAL PAYMENTS.	(.8)	(.5)	(.3)	43
	326-POTTERY AND RELATED PRODUCTS			
ASSETS, BEGINNING OF YEAR.	529.8	195.8	334.0	3
CAPITAL EXPEND., NEW . .	49.0	13.1	36.0	7
CAPITAL EXPEND., USED. .	1.6	(.1)	1.4	6
RETIREMENTS.	12.9	3.7	(9.3)	14
ASSETS, END OF YEAR. . . .	567.6	205.4	362.1	2
DEPRECIATION CHARGES . . .	28.0	6.7	21.3	5
RENTAL PAYMENTS.	(10.1)	(6.1)	4.0	30
	3261-VITREOUS PLUMBING FIXTURES			
ASSETS, BEGINNING OF YEAR.	161.5	75.6	85.9	1
CAPITAL EXPEND., NEW . .	7.0	1.9	5.1	3
CAPITAL EXPEND., USED. .	.6	.1	.5	2
RETIREMENTS.	5.2	2.4	2.8	2
ASSETS, END OF YEAR. . . .	163.9	75.2	88.7	1
DEPRECIATION CHARGES . . .	7.1	2.3	4.8	2
RENTAL PAYMENTS.	1.9	.3	1.5	3
	3262-VITREOUS CHINA FOOD UTENSILS			
ASSETS, BEGINNING OF YEAR.	51.0	16.8	34.2	1
CAPITAL EXPEND., NEW . .	5.1	1.5	3.6	1
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	.8	.1	.7	1
ASSETS, END OF YEAR. . . .	55.6	18.3	37.3	1
DEPRECIATION CHARGES . . .	2.5	.6	1.9	1
RENTAL PAYMENTS.	.7	-	.6	1
	3263-FINE EARTHENWARE FOOD UTENSILS			
ASSETS, BEGINNING OF YEAR.	34.9	10.6	24.3	3
CAPITAL EXPEND., NEW . .	1.4	(.2)	1.2	14
CAPITAL EXPEND., USED. .	(Z)	(Z)	(Z)	90
RETIREMENTS.	.6	-	(.5)	10
ASSETS, END OF YEAR. . . .	35.8	(10.8)	25.0	2
DEPRECIATION CHARGES . . .	1.5	.4	1.1	3
RENTAL PAYMENTS.	.6	.1	.5	7
	3264-PORCELAIN ELECTRICAL SUPPLIES			
ASSETS, BEGINNING OF YEAR.	198.5	63.8	134.7	3
CAPITAL EXPEND., NEW . .	20.5	5.1	15.4	3
CAPITAL EXPEND., USED. .	.6	-	.6	1
RETIREMENTS.	2.0	(.3)	1.7	10
ASSETS, END OF YEAR. . . .	217.6	68.6	148.9	3
DEPRECIATION CHARGES . . .	10.6	2.2	8.4	3
RENTAL PAYMENTS.	(1.5)	(.7)	.8	25
	3269-POTTERY PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	83.9	(28.9)	(54.9)	12
CAPITAL EXPEND., NEW . .	(15.1)	(4.4)	(10.7)	22
CAPITAL EXPEND., USED. .	-	-	-	84
RETIREMENTS.	(4.4)	(.9)	(3.5)	39
ASSETS, END OF YEAR. . . .	94.7	(32.5)	62.2	9
DEPRECIATION CHARGES . . .	(6.3)	(1.2)	(5.1)	20
RENTAL PAYMENTS.	(5.4)	(4.8)	(.6)	54
	327-CONCRETE, GYPSUM, PLASTER PRODS			
ASSETS, BEGINNING OF YEAR.	4 881.9	967.2	3 914.6	1
CAPITAL EXPEND., NEW . .	727.4	110.9	616.5	2
CAPITAL EXPEND., USED. .	(74.6)	(10.3)	(64.2)	15
RETIREMENTS.	214.1	28.5	185.9	5
ASSETS, END OF YEAR. . . .	5 469.9	1 060.0	4 409.5	4
DEPRECIATION CHARGES . . .	415.8	55.4	360.3	4
RENTAL PAYMENTS.	89.7	22.1	67.4	6
	3271-CONCRETE BLOCK AND BRICK			
ASSETS, BEGINNING OF YEAR.	511.8	98.3	413.3	2
CAPITAL EXPEND., NEW . .	62.2	(11.4)	50.8	12
CAPITAL EXPEND., USED. .	(6.5)	(.1)	(6.5)	47
RETIREMENTS.	19.9	(4.9)	15.0	13
ASSETS, END OF YEAR. . . .	560.7	104.9	455.6	3
DEPRECIATION CHARGES . . .	44.9	5.6	39.3	10
RENTAL PAYMENTS.	(10.2)	(5.0)	(5.2)	15
	3272-CONCRETE PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	1 058.8	246.5	812.4	1
CAPITAL EXPEND., NEW . .	144.3	29.7	114.6	10
CAPITAL EXPEND., USED. .	(7.4)	1.1	(6.3)	15
RETIREMENTS.	47.3	(9.2)	38.3	7
ASSETS, END OF YEAR. . . .	1 163.2	268.1	895.1	2
DEPRECIATION CHARGES . . .	88.3	13.8	74.5	3
RENTAL PAYMENTS.	25.8	8.6	17.1	10
	3273-READY-MIXED CONCRETE			
ASSETS, BEGINNING OF YEAR.	2 368.9	354.9	2 014.2	1
CAPITAL EXPEND., NEW . .	461.5	61.4	400.1	4
CAPITAL EXPEND., USED. .	(57.0)	(8.6)	(48.4)	18
RETIREMENTS.	129.3	11.5	117.8	7
ASSETS, END OF YEAR. . . .	2 758.3	413.4	2 344.8	1
DEPRECIATION CHARGES . . .	238.6	28.4	210.2	6
RENTAL PAYMENTS.	47.6	7.8	39.8	10
	3274-LIME			
ASSETS, BEGINNING OF YEAR.	375.5	46.3	329.3	2
CAPITAL EXPEND., NEW . .	27.7	(3.7)	24.0	8
CAPITAL EXPEND., USED. .	1.6	-	1.6	1
RETIREMENTS.	6.2	(1.6)	4.7	11
ASSETS, END OF YEAR. . . .	398.6	48.4	350.2	2
DEPRECIATION CHARGES . . .	22.1	1.8	20.4	3
RENTAL PAYMENTS.	1.6	-	1.6	13
	3275-GYPSUM PRODUCTS			
ASSETS, BEGINNING OF YEAR.	566.9	221.2	345.6	2
CAPITAL EXPEND., NEW . .	31.7	4.7	27.0	2
CAPITAL EXPEND., USED. .	(1.9)	(.5)	1.4	56
RETIREMENTS.	11.4	1.3	10.2	3
ASSETS, END OF YEAR. . . .	589.0	225.2	363.8	2
DEPRECIATION CHARGES . . .	21.9	5.8	16.1	2
RENTAL PAYMENTS.	4.4	.6	3.8	4
	3281-CUT STONE AND STONE PRODUCTS			
ASSETS, BEGINNING OF YEAR.	145.6	34.4	111.1	8
CAPITAL EXPEND., NEW . .	(10.1)	(1.8)	(8.2)	18
CAPITAL EXPEND., USED. .	(3.1)	(.4)	(2.7)	37
RETIREMENTS.	5.8	(.9)	4.8	14
ASSETS, END OF YEAR. . . .	152.9	35.7	117.2	8
DEPRECIATION CHARGES . . .	11.0	1.5	9.4	7
RENTAL PAYMENTS.	(4.0)	(2.8)	(1.3)	17
	329-MISC NONMETALLIC MINERAL PRODS			
ASSETS, BEGINNING OF YEAR.	3 131.7	826.7	2 304.9	1
CAPITAL EXPEND., NEW . .	332.1	67.4	264.7	4
CAPITAL EXPEND., USED. .	19.1	5.3	13.8	10
RETIREMENTS.	98.1	16.9	81.1	3
ASSETS, END OF YEAR. . . .	3 384.8	882.5	2 502.5	1
DEPRECIATION CHARGES . . .	196.9	35.3	161.6	2
RENTAL PAYMENTS.	48.0	22.3	25.8	5
	3291-ABRASIVE PRODUCTS			
ASSETS, BEGINNING OF YEAR.	595.3	186.8	408.5	3
CAPITAL EXPEND., NEW . .	55.1	(14.0)	41.1	13
CAPITAL EXPEND., USED. .	(5.5)	2.3	(3.2)	23
RETIREMENTS.	21.5	5.4	16.2	5
ASSETS, END OF YEAR. . . .	634.5	197.7	436.7	3
DEPRECIATION CHARGES . . .	37.0	8.4	28.6	4
RENTAL PAYMENTS.	20.4	(11.0)	9.4	11

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3292-ASBESTOS PRODUCTS			
ASSETS, BEGINNING OF YEAR.	361.6	87.2	274.4	3
CAPITAL EXPEND., NEW . .	24.5	4.7	19.8	2
CAPITAL EXPEND., USED. .	(1.7)	(.2)	(1.5)	16
RETIREMENTS.	13.2	2.7	10.5	2
ASSETS, END OF YEAR. . . .	374.5	89.3	285.2	2
DEPRECIATION CHARGES . . .	20.4	3.0	17.4	2
RENTAL PAYMENTS.	2.6	(.8)	1.8	9
	3293-GASKETS, PACKING, SEALING DEVICES			
ASSETS, BEGINNING OF YEAR.	373.0	112.9	260.1	3
CAPITAL EXPEND., NEW . .	44.0	7.5	36.5	4
CAPITAL EXPEND., USED. .	(4.8)	(2.2)	(2.6)	18
RETIREMENTS.	14.3	2.9	11.4	11
ASSETS, END OF YEAR. . . .	407.5	119.7	287.8	3
DEPRECIATION CHARGES . . .	27.8	5.1	22.7	3
RENTAL PAYMENTS.	8.3	4.3	4.1	6
	3295-MINERALS, GROUND OR TREATED			
ASSETS, BEGINNING OF YEAR.	526.4	93.9	432.6	3
CAPITAL EXPEND., NEW . .	46.9	(7.3)	39.6	9
CAPITAL EXPEND., USED. .	(4.8)	-	(4.8)	22
RETIREMENTS.	20.9	3.2	17.6	3
ASSETS, END OF YEAR. . . .	557.3	98.0	459.6	3
DEPRECIATION CHARGES . . .	33.6	4.2	29.3	4
RENTAL PAYMENTS.	5.2	(1.3)	(3.9)	13
	3296-MINERAL WOOL			
ASSETS, BEGINNING OF YEAR.	749.4	202.1	547.3	3
CAPITAL EXPEND., NEW . .	87.4	13.5	73.9	4
CAPITAL EXPEND., USED. .	.6	-	.6	11
RETIREMENTS.	18.6	1.2	17.4	6
ASSETS, END OF YEAR. . . .	818.9	214.4	604.4	2
DEPRECIATION CHARGES . . .	48.5	8.2	40.3	3
RENTAL PAYMENTS.	7.4	(2.7)	4.7	9
	3297-NONCLAY REFRACTORIES			
ASSETS, BEGINNING OF YEAR.	329.6	88.3	241.3	4
CAPITAL EXPEND., NEW . .	42.2	8.7	33.5	9
CAPITAL EXPEND., USED. .	1.1	-	1.0	5
RETIREMENTS.	3.7	(.4)	3.3	12
ASSETS, END OF YEAR. . . .	369.2	96.6	272.5	3
DEPRECIATION CHARGES . . .	17.0	3.1	13.9	2
RENTAL PAYMENTS.	(1.5)	(.2)	1.3	15
	3299-NONMETALLIC MINERAL PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	196.3	(55.5)	140.7	10
CAPITAL EXPEND., NEW . .	(31.9)	11.7	(20.2)	19
CAPITAL EXPEND., USED. .	(.6)	(.5)	(.1)	46
RETIREMENTS.	(5.8)	(1.1)	(4.8)	30
ASSETS, END OF YEAR. . . .	223.0	66.7	156.2	4
DEPRECIATION CHARGES . . .	(12.6)	(3.2)	(9.4)	16
RENTAL PAYMENTS.	(2.7)	(2.0)	(.7)	23
	33-PRIMARY METAL INDUSTRIES			
ASSETS, BEGINNING OF YEAR.	55 272.7	10 708.2	44 563.3	1
CAPITAL EXPEND., NEW . .	4 549.3	653.9	3 895.3	1
CAPITAL EXPEND., USED. .	262.7	38.9	223.8	3
RETIREMENTS.	1 773.1	285.4	1 488.0	1
ASSETS, END OF YEAR. . . .	58 311.6	11 115.8	47 195.5	1
DEPRECIATION CHARGES . . .	2 482.9	325.6	2 157.5	1
RENTAL PAYMENTS.	330.3	85.9	244.2	3
	331-BLAST FURNACE, BASIC STEEL PROD			
ASSETS, BEGINNING OF YEAR.	35 244.9	5 806.9	29 438.1	1
CAPITAL EXPEND., NEW . .	2 412.0	267.8	2 144.1	1
CAPITAL EXPEND., USED. .	100.3	11.7	88.6	4
RETIREMENTS.	1 235.0	197.3	1 037.9	1
ASSETS, END OF YEAR. . . .	36 522.1	5 889.1	30 632.9	1
DEPRECIATION CHARGES . . .	1 311.7	147.4	1 164.3	1
RENTAL PAYMENTS.	152.2	23.9	128.3	2
	3312-BLAST FURNACES AND STEEL MILLS			
ASSETS, BEGINNING OF YEAR.	32 329.7	5 147.8	27 181.8	1
CAPITAL EXPEND., NEW . .	2 113.3	223.6	1 889.6	1
CAPITAL EXPEND., USED. .	85.1	11.0	74.1	2
RETIREMENTS.	1 163.5	188.5	975.0	1
ASSETS, END OF YEAR. . . .	33,364.6	5 193.9	28 170.6	1
DEPRECIATION CHARGES . . .	1 156.9	126.8	1 030.1	1
RENTAL PAYMENTS.	117.7	8.7	108.9	1
	3313-ELECTROMETALLURGICAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	802.6	157.4	645.2	1
CAPITAL EXPEND., NEW . .	53.0	4.1	48.9	2
CAPITAL EXPEND., USED. .	.3	-	.3	1
RETIREMENTS.	20.7	1.9	18.8	1
ASSETS, END OF YEAR. . . .	835.2	159.6	675.6	1
DEPRECIATION CHARGES . . .	40.8	4.0	36.8	1
RENTAL PAYMENTS.	2.1	-	2.1	1
	3315-STEEL WIRE AND RELATED PRODUCTS			
ASSETS, BEGINNING OF YEAR.	658.3	178.9	479.4	3
CAPITAL EXPEND., NEW . .	73.8	13.6	60.2	6
CAPITAL EXPEND., USED. .	(11.6)	.6	(11.0)	26
RETIREMENTS.	19.0	3.5	15.5	5
ASSETS, END OF YEAR. . . .	724.7	189.5	535.1	3
DEPRECIATION CHARGES . . .	42.0	7.0	35.0	4
RENTAL PAYMENTS.	15.5	7.4	8.1	6
	3316-COLD FINISHING OF STEEL SHAPES			
ASSETS, BEGINNING OF YEAR.	727.6	154.4	573.2	1
CAPITAL EXPEND., NEW . .	46.4	5.5	40.9	2
CAPITAL EXPEND., USED. .	.4	-	.4	1
RETIREMENTS.	21.0	2.3	18.7	1
ASSETS, END OF YEAR. . . .	753.5	157.7	595.8	1
DEPRECIATION CHARGES . . .	35.2	4.5	30.7	1
RENTAL PAYMENTS.	(8.2)	(3.1)	5.1	16
	3317-STEEL PIPE AND TUBES			
ASSETS, BEGINNING OF YEAR.	726.8	168.3	558.4	2
CAPITAL EXPEND., NEW . .	125.5	21.0	104.5	3
CAPITAL EXPEND., USED. .	(2.9)	-	(2.8)	41
RETIREMENTS.	11.0	(1.0)	10.0	10
ASSETS, END OF YEAR. . . .	844.2	188.4	655.8	2
DEPRECIATION CHARGES . . .	36.8	5.1	31.7	5
RENTAL PAYMENTS.	8.8	(4.6)	4.1	9
	332-IRON AND STEEL FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	4 914.1	1 198.1	3 715.9	4
CAPITAL EXPEND., NEW . .	649.5	126.4	523.1	2
CAPITAL EXPEND., USED. .	28.0	8.5	19.5	13
RETIREMENTS.	115.1	22.0	93.1	6
ASSETS, END OF YEAR. . . .	5 476.5	1 311.0	4 165.5	4
DEPRECIATION CHARGES . . .	381.6	48.8	332.8	2
RENTAL PAYMENTS.	42.7	12.2	30.6	14
	3321-GRAY IRON FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	3 502.9	845.5	2 657.3	1
CAPITAL EXPEND., NEW . .	500.1	100.8	399.2	2
CAPITAL EXPEND., USED. .	18.6	4.3	14.3	7
RETIREMENTS.	65.9	9.0	57.0	7
ASSETS, END OF YEAR. . . .	3 955.6	941.7	3 013.8	1
DEPRECIATION CHARGES . . .	281.7	32.4	249.2	2
RENTAL PAYMENTS.	(27.4)	(7.8)	19.6	21
	3322-MALLEABLE IRON FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	326.4	61.2	265.1	5
CAPITAL EXPEND., NEW . .	29.7	7.1	22.6	3
CAPITAL EXPEND., USED. .	(4.3)	(2.0)	(2.4)	72
RETIREMENTS.	8.9	(.3)	8.5	6
ASSETS, END OF YEAR. . . .	351.6	70.0	281.6	4
DEPRECIATION CHARGES . . .	22.3	2.6	19.7	4
RENTAL PAYMENTS.	2.4	(.2)	2.2	7
	3324-STEEL INVESTMENT FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	95.0	32.6	(62.4)	14
CAPITAL EXPEND., NEW . .	10.5	(1.7)	8.8	12
CAPITAL EXPEND., USED. .	(.7)	(.4)	(.4)	47
RETIREMENTS.	5.5	2.5	3.0	7
ASSETS, END OF YEAR. . . .	100.6	32.2	68.5	12
DEPRECIATION CHARGES . . .	7.2	1.6	5.6	12
RENTAL PAYMENTS.	(2.2)	(1.3)	(.9)	28
	3325-STEEL FOUNDRIES, NEC			
ASSETS, BEGINNING OF YEAR.	989.8	258.7	731.1	2
CAPITAL EXPEND., NEW . .	109.3	16.7	92.6	4
CAPITAL EXPEND., USED. .	(4.4)	(1.9)	(2.5)	29
RETIREMENTS.	34.8	(10.2)	24.6	13
ASSETS, END OF YEAR. . . .	1 068.7	267.1	801.5	2
DEPRECIATION CHARGES . . .	70.5	12.2	58.2	2
RENTAL PAYMENTS.	10.8	(2.9)	(7.9)	6
	333-PRIMARY NONFERROUS METALS			
ASSETS, BEGINNING OF YEAR.	5 862.2	1 425.7	4 436.5	1
CAPITAL EXPEND., NEW . .	583.9	109.9	474.0	1
CAPITAL EXPEND., USED. .	57.6	8.5	49.1	1
RETIREMENTS.	115.1	19.8	95.3	1
ASSETS, END OF YEAR. . . .	6 388.8	1 524.3	4 864.5	1
DEPRECIATION CHARGES . . .	250.9	43.5	207.3	1
RENTAL PAYMENTS.	25.5	5.8	19.8	1
	3331-PRIMARY COPPER			
ASSETS, BEGINNING OF YEAR.	1 538.0	333.3	1 204.7	1
CAPITAL EXPEND., NEW . .	(D)	(D)	(D)	1
CAPITAL EXPEND., USED. .	(D)	(D)	(D)	1
RETIREMENTS.	(D)	(D)	(D)	1
ASSETS, END OF YEAR. . . .	1 748.7	343.1	1 405.6	1
DEPRECIATION CHARGES . . .	68.0	9.3	58.7	1
RENTAL PAYMENTS.	2.6	-	2.6	1
	3332-PRIMARY LEAD			
ASSETS, BEGINNING OF YEAR.	151.5	69.7	81.9	1
CAPITAL EXPEND., NEW . .	(D)	(D)	(D)	1
CAPITAL EXPEND., USED. .	(D)	(D)	(D)	1
RETIREMENTS.	(D)	(D)	(D)	1
ASSETS, END OF YEAR. . . .	214.2	132.1	82.0	1
DEPRECIATION CHARGES . . .	7.4	4.0	3.4	1
RENTAL PAYMENTS.	.9	.5	.4	1

See footnotes at end of table.

Table 2. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3333-PRIMARY ZINC			
ASSETS, BEGINNING OF YEAR.	265.3	40.3	225.0	2
CAPITAL EXPEND., NEW . .	41.0	5.4	35.6	1
CAPITAL EXPEND., USED. .	-	-	-	1
RETIREMENTS.	13.3	4.0	9.3	1
ASSETS, END OF YEAR. . . .	292.9	41.6	251.3	2
DEPRECIATION CHARGES . . .	12.3	1.2	11.1	1
RENTAL PAYMENTS.	(.7)	(.1)	.6	24
	3334-PRIMARY ALUMINUM			
ASSETS, BEGINNING OF YEAR.	3 287.3	876.9	2 410.3	1
CAPITAL EXPEND., NEW . .	158.6	22.2	136.4	1
CAPITAL EXPEND., USED. .	39.8	-	39.8	1
RETIREMENTS.	34.2	3.2	31.0	1
ASSETS, END OF YEAR. . . .	3 451.6	896.1	2 555.5	1
DEPRECIATION CHARGES . . .	115.6	24.7	90.9	1
RENTAL PAYMENTS.	19.3	4.9	14.4	1
	3339-PRIMARY NONFERROUS METALS, NEC			
ASSETS, BEGINNING OF YEAR.	620.1	105.5	514.6	2
CAPITAL EXPEND., NEW . .	93.6	7.3	86.3	2
CAPITAL EXPEND., USED. .	(.8)	-	(.8)	39
RETIREMENTS.	33.0	1.4	31.7	1
ASSETS, END OF YEAR. . . .	681.5	111.4	570.0	2
DEPRECIATION CHARGES . . .	47.6	4.3	43.3	2
RENTAL PAYMENTS.	2.0	(.2)	1.8	2
	3341-SECONDARY NONFERROUS METALS			
ASSETS, BEGINNING OF YEAR.	640.1	171.8	468.3	3
CAPITAL EXPEND., NEW . .	110.3	35.4	74.8	5
CAPITAL EXPEND., USED. .	9.0	(1.1)	7.9	14
RETIREMENTS.	14.7	2.6	12.0	5
ASSETS, END OF YEAR. . . .	744.7	205.7	539.0	3
DEPRECIATION CHARGES . . .	49.3	8.1	41.2	5
RENTAL PAYMENTS.	9.1	(2.0)	7.1	9
	335-NONFERROUS ROLLING AND DRAWING			
ASSETS, BEGINNING OF YEAR.	6 944.9	1 674.3	5 270.6	1
CAPITAL EXPEND., NEW . .	479.5	65.7	413.8	3
CAPITAL EXPEND., USED. .	43.0	1.1	41.8	5
RETIREMENTS.	209.5	29.1	180.6	1
ASSETS, END OF YEAR. . . .	7 257.8	1 712.1	5 545.6	1
DEPRECIATION CHARGES . . .	344.9	54.8	290.2	1
RENTAL PAYMENTS.	58.6	18.7	39.6	2
	3351-COPPER ROLLING AND DRAWING			
ASSETS, BEGINNING OF YEAR.	1 110.0	273.8	836.2	1
CAPITAL EXPEND., NEW . .	67.1	7.9	59.2	5
CAPITAL EXPEND., USED. .	8.0	.1	7.8	1
RETIREMENTS.	41.9	4.0	38.0	1
ASSETS, END OF YEAR. . . .	1 143.2	277.9	865.3	1
DEPRECIATION CHARGES . . .	49.4	7.9	41.5	1
RENTAL PAYMENTS.	7.3	1.2	6.1	3
	3353-ALUMINUM SHEET, PLATE, AND FOIL			
ASSETS, BEGINNING OF YEAR.	2 243.7	462.5	1 781.2	1
CAPITAL EXPEND., NEW . .	160.3	19.6	140.7	2
CAPITAL EXPEND., USED. .	1.1	.5	.6	1
RETIREMENTS.	28.8	(.4)	28.3	2
ASSETS, END OF YEAR. . . .	2 376.2	482.1	1 894.1	1
DEPRECIATION CHARGES . . .	97.0	13.8	83.2	1
RENTAL PAYMENTS.	8.4	1.7	6.8	2
	3354-ALUMINUM EXTRUDED PRODUCTS			
ASSETS, BEGINNING OF YEAR.	566.5	144.0	422.5	2
CAPITAL EXPEND., NEW . .	48.1	8.9	39.2	9
CAPITAL EXPEND., USED. .	(3.9)	(.1)	(3.9)	45
RETIREMENTS.	14.2	(.6)	13.6	4
ASSETS, END OF YEAR. . . .	604.4	152.4	452.0	2
DEPRECIATION CHARGES . . .	31.5	5.8	25.7	2
RENTAL PAYMENTS.	11.6	3.9	7.6	4
	3355-ALUMINUM ROLLING AND DRAWING, NEC			
ASSETS, BEGINNING OF YEAR.	223.9	54.6	169.3	1
CAPITAL EXPEND., NEW . .	16.0	2.2	13.8	2
CAPITAL EXPEND., USED. .	.5	-	.5	2
RETIREMENTS.	6.3	.4	5.9	1
ASSETS, END OF YEAR. . . .	234.1	56.4	177.7	1
DEPRECIATION CHARGES . . .	14.5	1.8	12.7	2
RENTAL PAYMENTS.	1.9	.9	1.0	3
	3356-NONFERROUS ROLLING & DRAWING, NEC			
ASSETS, BEGINNING OF YEAR.	729.0	183.8	545.2	2
CAPITAL EXPEND., NEW . .	32.7	5.0	28.0	5
CAPITAL EXPEND., USED. .	.5	-	.5	6
RETIREMENTS.	12.0	3.0	9.0	2
ASSETS, END OF YEAR. . . .	750.4	185.8	564.5	2
DEPRECIATION CHARGES . . .	38.0	6.4	31.6	2
RENTAL PAYMENTS.	6.1	2.1	4.0	8
	3357-NONFERROUS WIREDRAW'G, INSULATING			
ASSETS, BEGINNING OF YEAR.	2 071.7	555.5	1 516.2	1
CAPITAL EXPEND., NEW . .	155.2	22.1	133.1	8
CAPITAL EXPEND., USED. .	29.0	(.4)	28.5	5
RETIREMENTS.	106.4	20.6	85.7	1
ASSETS, END OF YEAR. . . .	2 149.5	557.4	1 592.1	1
DEPRECIATION CHARGES . . .	114.6	19.1	95.5	1
RENTAL PAYMENTS.	23.3	9.1	14.1	4
	336-NONFERROUS FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	1 103.6	298.3	805.1	2
CAPITAL EXPEND., NEW . .	167.1	35.7	131.4	6
CAPITAL EXPEND., USED. .	(16.4)	(6.4)	(10.0)	28
RETIREMENTS.	(58.5)	(11.2)	47.4	15
ASSETS, END OF YEAR. . . .	1 228.5	329.2	899.2	1
DEPRECIATION CHARGES . . .	90.2	(17.0)	73.1	8
RENTAL PAYMENTS.	19.5	12.4	7.2	7
	3361-ALUMINUM FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	725.9	196.6	529.1	3
CAPITAL EXPEND., NEW . .	128.5	25.8	102.7	6
CAPITAL EXPEND., USED. .	(13.5)	(5.4)	(8.1)	33
RETIREMENTS.	(42.4)	(8.2)	(34.3)	20
ASSETS, END OF YEAR. . . .	825.5	219.7	605.7	2
DEPRECIATION CHARGES . . .	63.0	(12.2)	50.7	11
RENTAL PAYMENTS.	11.4	7.1	4.3	10
	3362-BRASS, BRONZE, COPPER FOUNDRIES			
ASSETS, BEGINNING OF YEAR.	155.3	45.9	109.3	9
CAPITAL EXPEND., NEW . .	(20.1)	(5.3)	(14.8)	24
CAPITAL EXPEND., USED. .	(.6)	-	(.6)	52
RETIREMENTS.	5.8	1.4	4.4	6
ASSETS, END OF YEAR. . . .	170.2	49.8	120.3	7
DEPRECIATION CHARGES . . .	10.9	2.1	8.8	8
RENTAL PAYMENTS.	(2.9)	(2.1)	(.8)	18
	3369-NONFERROUS FOUNDRIES, NEC			
ASSETS, BEGINNING OF YEAR.	222.4	55.7	166.7	5
CAPITAL EXPEND., NEW . .	18.4	(4.6)	13.8	10
CAPITAL EXPEND., USED. .	2.3	1.0	1.4	1
RETIREMENTS.	(10.3)	(1.6)	8.7	25
ASSETS, END OF YEAR. . . .	232.9	59.7	173.2	5
DEPRECIATION CHARGES . . .	16.3	2.7	13.6	5
RENTAL PAYMENTS.	5.2	(3.2)	2.0	12
	339-MISC PRIMARY METAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	(563.0)	133.2	429.8	36
CAPITAL EXPEND., NEW . .	146.9	(13.0)	133.9	9
CAPITAL EXPEND., USED. .	(8.5)	1.7	(6.8)	18
RETIREMENTS.	25.2	(3.5)	21.7	14
ASSETS, END OF YEAR. . . .	(693.2	(144.4)	(548.8)	29
DEPRECIATION CHARGES . . .	(54.3)	5.9	(48.4)	17
RENTAL PAYMENTS.	22.5	10.8	(11.8)	14
	3398-METAL HEAT TREATING			
ASSETS, BEGINNING OF YEAR.	310.1	73.6	236.6	6
CAPITAL EXPEND., NEW . .	(43.2)	(11.2)	(32.0)	28
CAPITAL EXPEND., USED. .	(5.4)	.6	(4.8)	29
RETIREMENTS.	(12.5)	(1.4)	(11.1)	28
ASSETS, END OF YEAR. . . .	346.2	84.0	262.3	6
DEPRECIATION CHARGES . . .	28.0	3.4	24.6	5
RENTAL PAYMENTS.	(18.9)	9.2	(9.7)	17
	3399-PRIMARY METAL PRODUCTS, NEC			
ASSETS, BEGINNING OF YEAR.	252.8	59.6	193.2	7
CAPITAL EXPEND., NEW . .	103.7	(1.8)	101.9	3
CAPITAL EXPEND., USED. .	3.1	1.1	2.0	3
RETIREMENTS.	12.7	2.1	10.7	4
ASSETS, END OF YEAR. . . .	347.0	60.5	286.5	3
DEPRECIATION CHARGES . . .	(26.2)	2.5	(23.7)	35
RENTAL PAYMENTS.	3.7	(1.6)	2.1	11
	34-FABRICATED METAL PRODUCTS			
ASSETS, BEGINNING OF YEAR.	23 743.9	6 350.7	17 393.8	1
CAPITAL EXPEND., NEW . .	2 761.8	481.0	2 280.8	7
CAPITAL EXPEND., USED. .	304.8	82.1	222.5	6
RETIREMENTS.	892.6	160.4	732.2	2
ASSETS, END OF YEAR. . . .	25 917.9	6 753.3	19 164.5	1
DEPRECIATION CHARGES . . .	1 786.8	322.8	1 464.0	1
RENTAL PAYMENTS.	612.9	323.4	289.7	3
	341-METAL CANS, SHIPPING CONTAINERS			
ASSETS, BEGINNING OF YEAR.	2 417.2	415.7	2 001.5	1
CAPITAL EXPEND., NEW . .	205.7	25.0	180.7	2
CAPITAL EXPEND., USED. .	26.3	5.5	20.9	2
RETIREMENTS.	97.9	5.7	92.2	2
ASSETS, END OF YEAR. . . .	2 551.3	440.4	2 110.8	1
DEPRECIATION CHARGES . . .	144.6	13.4	131.2	1
RENTAL PAYMENTS.	38.3	24.9	13.4	2
	3411-METAL CANS			
ASSETS, BEGINNING OF YEAR.	2 172.3	360.4	1 811.9	1
CAPITAL EXPEND., NEW . .	172.7	18.6	154.1	1
CAPITAL EXPEND., USED. .	25.0	5.2	19.8	2
RETIREMENTS.	89.7	5.3	84.4	1
ASSETS, END OF YEAR. . . .	2 280.3	378.9	1 901.4	1
DEPRECIATION CHARGES . . .	128.5	11.1	117.4	1
RENTAL PAYMENTS.	31.8	21.7	10.1	2

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3412-METAL BARRELS, DRUMS, AND PAILS			
ASSETS, BEGINNING OF YEAR.	244.9	55.3	189.6	4
CAPITAL EXPEND., NEW . .	33.0	6.4	26.6	7
CAPITAL EXPEND., USED. .	1.3	.3	1.1	4
RETIREMENTS.	8.2	(.4)	7.8	12
ASSETS, END OF YEAR. . . .	271.0	61.5	209.4	3
DEPRECIATION CHARGES . . .	16.1	2.3	13.8	3
RENTAL PAYMENTS.	6.5	3.2	3.3	6
	342-CUTLERY, HANDTOOLS AND HARDWARE			
ASSETS, BEGINNING OF YEAR.	2 208.3	642.4	1 565.9	1
CAPITAL EXPEND., NEW . .	304.1	43.6	260.6	3
CAPITAL EXPEND., USED. .	(41.0)	(16.7)	24.3	19
RETIREMENTS.	116.1	(15.7)	100.5	6
ASSETS, END OF YEAR. . . .	2 437.4	687.1	1 750.1	1
DEPRECIATION CHARGES . . .	163.8	34.3	129.5	2
RENTAL PAYMENTS.	49.8	24.7	25.1	5
	3421-CUTLERY			
ASSETS, BEGINNING OF YEAR.	191.1	56.4	134.8	5
CAPITAL EXPEND., NEW . .	24.0	5.5	18.5	5
CAPITAL EXPEND., USED. .	.4	-	.4	13
RETIREMENTS.	4.9	(.5)	4.4	5
ASSETS, END OF YEAR. . . .	210.7	61.5	149.2	5
DEPRECIATION CHARGES . . .	18.5	2.9	15.6	6
RENTAL PAYMENTS.	2.3	(1.4)	.9	11
	3423-HAND AND EDGE TOOLS, NEC			
ASSETS, BEGINNING OF YEAR.	587.5	175.3	412.2	3
CAPITAL EXPEND., NEW . .	69.8	12.1	57.7	6
CAPITAL EXPEND., USED. .	9.0	.7	8.4	4
RETIREMENTS.	(38.2)	(11.8)	(26.4)	17
ASSETS, END OF YEAR. . . .	628.1	176.3	451.8	3
DEPRECIATION CHARGES . . .	47.9	12.7	35.2	2
RENTAL PAYMENTS.	15.9	8.3	7.6	5
	3425-HANDSAWS AND SAW BLADES			
ASSETS, BEGINNING OF YEAR.	107.9	28.0	79.9	10
CAPITAL EXPEND., NEW . .	18.0	(2.2)	15.8	13
CAPITAL EXPEND., USED. .	(1.3)	(.1)	(1.1)	26
RETIREMENTS.	(2.3)	(.2)	(2.1)	43
ASSETS, END OF YEAR. . . .	124.9	30.2	94.7	9
DEPRECIATION CHARGES . . .	8.1	(1.8)	6.3	11
RENTAL PAYMENTS.	(1.0)	(.5)	(.5)	29
	3429-HARDWARE, NEC			
ASSETS, BEGINNING OF YEAR.	1 321.8	382.7	939.0	2
CAPITAL EXPEND., NEW . .	192.3	23.8	168.6	4
CAPITAL EXPEND., USED. .	(30.3)	(15.9)	14.4	26
RETIREMENTS.	70.7	3.3	67.6	4
ASSETS, END OF YEAR. . . .	1 473.7	419.1	1 054.4	1
DEPRECIATION CHARGES . . .	89.3	16.9	72.4	2
RENTAL PAYMENTS.	30.6	14.5	16.1	7
	343-PLUMBING, HEATING, EXCEPT ELEC			
ASSETS, BEGINNING OF YEAR.	680.8	208.1	472.8	2
CAPITAL EXPEND., NEW . .	78.7	15.4	63.4	5
CAPITAL EXPEND., USED. .	4.3	.5	3.7	13
RETIREMENTS.	20.6	4.4	16.1	11
ASSETS, END OF YEAR. . . .	743.4	219.6	523.6	2
DEPRECIATION CHARGES . . .	49.8	9.9	39.9	5
RENTAL PAYMENTS.	17.8	8.7	9.0	7
	3431-METAL SANITARY WARE			
ASSETS, BEGINNING OF YEAR.	146.0	42.5	103.6	2
CAPITAL EXPEND., NEW . .	11.3	(1.8)	9.5	6
CAPITAL EXPEND., USED. .	(1.1)	-	(1.1)	32
RETIREMENTS.	(3.0)	.5	(2.4)	23
ASSETS, END OF YEAR. . . .	155.5	43.8	111.7	2
DEPRECIATION CHARGES . . .	8.3	1.5	6.8	2
RENTAL PAYMENTS.	(2.7)	(.8)	1.8	17
	3432-PLUMBING FITTINGS AND BRASS GOODS			
ASSETS, BEGINNING OF YEAR.	253.6	71.4	182.3	3
CAPITAL EXPEND., NEW . .	33.4	4.8	28.6	8
CAPITAL EXPEND., USED. .	(2.0)	.5	(1.5)	18
RETIREMENTS.	6.0	.7	5.2	6
ASSETS, END OF YEAR. . . .	283.1	75.9	207.1	2
DEPRECIATION CHARGES . . .	21.2	3.5	17.7	3
RENTAL PAYMENTS.	6.2	3.2	2.9	5
	3433-HEATING EQUIPMENT, EXC ELECTRIC			
ASSETS, BEGINNING OF YEAR.	281.2	94.2	186.9	5
CAPITAL EXPEND., NEW . .	34.0	8.8	25.3	8
CAPITAL EXPEND., USED. .	(1.2)	-	(1.1)	20
RETIREMENTS.	(11.6)	(3.2)	(8.5)	19
ASSETS, END OF YEAR. . . .	304.8	99.9	204.8	4
DEPRECIATION CHARGES . . .	20.3	(4.9)	15.4	12
RENTAL PAYMENTS.	8.9	4.6	(4.3)	12
	344-FABRICATED STRUC METAL PRODS			
ASSETS, BEGINNING OF YEAR.	5 280.3	1 799.4	3 481.1	1
CAPITAL EXPEND., NEW . .	622.0	157.8	464.4	1
CAPITAL EXPEND., USED. .	64.2	19.9	44.4	11
RETIREMENTS.	187.9	53.8	134.1	6
ASSETS, END OF YEAR. . . .	5 778.8	1 923.3	3 855.6	1
DEPRECIATION CHARGES . . .	396.9	82.1	314.8	2
RENTAL PAYMENTS.	191.7	103.0	88.8	4
	3441-FABRICATED STRUCTURAL METAL			
ASSETS, BEGINNING OF YEAR.	1 206.1	438.9	767.3	2
CAPITAL EXPEND., NEW . .	142.1	35.8	106.3	8
CAPITAL EXPEND., USED. .	(17.6)	(8.7)	(8.9)	29
RETIREMENTS.	47.5	17.8	29.7	5
ASSETS, END OF YEAR. . . .	1 318.3	465.6	852.7	1
DEPRECIATION CHARGES . . .	86.4	20.8	65.6	3
RENTAL PAYMENTS.	39.9	24.4	15.5	8
	3442-METAL DOORS, SASH, AND TRIM			
ASSETS, BEGINNING OF YEAR.	474.4	172.5	301.9	4
CAPITAL EXPEND., NEW . .	73.2	16.4	56.8	8
CAPITAL EXPEND., USED. .	(4.9)	.7	(4.2)	45
RETIREMENTS.	12.4	(2.6)	9.9	11
ASSETS, END OF YEAR. . . .	540.1	187.0	353.1	4
DEPRECIATION CHARGES . . .	39.7	8.1	31.6	4
RENTAL PAYMENTS.	33.5	20.7	12.8	6
	3443-FABRICATED PLATEWORK, BOILER SHOP			
ASSETS, BEGINNING OF YEAR.	1 980.8	651.9	1 329.0	1
CAPITAL EXPEND., NEW . .	182.8	56.2	126.6	5
CAPITAL EXPEND., USED. .	20.5	4.2	16.4	11
RETIREMENTS.	60.2	(18.8)	41.4	13
ASSETS, END OF YEAR. . . .	2 123.9	693.5	1 430.5	1
DEPRECIATION CHARGES . . .	137.0	27.0	110.0	4
RENTAL PAYMENTS.	42.2	17.6	24.6	8
	3444-SHEET METALWORK			
ASSETS, BEGINNING OF YEAR.	822.7	240.7	582.0	2
CAPITAL EXPEND., NEW . .	142.6	(29.4)	113.3	14
CAPITAL EXPEND., USED. .	(14.9)	(4.4)	(10.6)	18
RETIREMENTS.	35.7	(7.2)	(28.7)	14
ASSETS, END OF YEAR. . . .	944.6	267.2	677.1	2
DEPRECIATION CHARGES . . .	75.4	12.6	62.8	5
RENTAL PAYMENTS.	44.9	25.7	(19.2)	11
	3446-ARCHITECTURAL METALWORK			
ASSETS, BEGINNING OF YEAR.	201.4	73.8	127.6	6
CAPITAL EXPEND., NEW . .	(25.1)	(4.7)	20.4	21
CAPITAL EXPEND., USED. .	(1.1)	(.5)	.6	17
RETIREMENTS.	(6.6)	(1.4)	(5.5)	16
ASSETS, END OF YEAR. . . .	221.0	77.6	143.0	5
DEPRECIATION CHARGES . . .	18.7	4.4	14.3	7
RENTAL PAYMENTS.	10.6	(6.5)	(4.1)	14
	3448-PREFABRICATED METAL BUILDINGS			
ASSETS, BEGINNING OF YEAR.	334.3	119.9	214.4	3
CAPITAL EXPEND., NEW . .	32.1	8.7	23.4	6
CAPITAL EXPEND., USED. .	(2.0)	(.7)	1.3	16
RETIREMENTS.	9.7	1.6	8.2	3
ASSETS, END OF YEAR. . . .	358.7	127.8	230.9	2
DEPRECIATION CHARGES . . .	23.5	5.1	18.4	2
RENTAL PAYMENTS.	12.8	3.6	9.2	5
	3449-MISCELLANEOUS METALWORK			
ASSETS, BEGINNING OF YEAR.	260.6	101.7	158.9	5
CAPITAL EXPEND., NEW . .	24.1	(6.6)	17.6	12
CAPITAL EXPEND., USED. .	(3.2)	.7	(2.4)	21
RETIREMENTS.	15.8	4.4	11.4	7
ASSETS, END OF YEAR. . . .	272.2	104.6	167.6	5
DEPRECIATION CHARGES . . .	16.2	4.1	12.1	6
RENTAL PAYMENTS.	7.8	(4.5)	(3.4)	14
	345-SCREW MACHINE PROD , BOLTS, ETC			
ASSETS, BEGINNING OF YEAR.	1 814.5	385.6	1 429.0	1
CAPITAL EXPEND., NEW . .	222.7	27.2	195.5	4
CAPITAL EXPEND., USED. .	(42.6)	(5.7)	(36.9)	18
RETIREMENTS.	66.9	(19.3)	47.6	7
ASSETS, END OF YEAR. . . .	2 013.0	399.2	1 613.7	1
DEPRECIATION CHARGES . . .	141.9	18.7	123.2	2
RENTAL PAYMENTS.	46.8	25.8	21.1	5
	3451-SCREW MACHINE PRODUCTS			
ASSETS, BEGINNING OF YEAR.	573.5	99.3	474.3	3
CAPITAL EXPEND., NEW . .	105.4	(7.2)	98.2	6
CAPITAL EXPEND., USED. .	(20.8)	(2.0)	(18.8)	34
RETIREMENTS.	14.4	2.4	12.0	11
ASSETS, END OF YEAR. . . .	685.3	106.0	579.3	3
DEPRECIATION CHARGES . . .	49.1	4.6	44.5	5
RENTAL PAYMENTS.	20.2	12.5	7.7	7
	3452-BOLTS, NUTS, RIVETS, AND WASHERS			
ASSETS, BEGINNING OF YEAR.	1 241.0	286.3	954.7	2
CAPITAL EXPEND., NEW . .	117.3	20.1	97.3	4
CAPITAL EXPEND., USED. .	21.8	(3.8)	18.0	8
RETIREMENTS.	52.5	16.9	35.6	8
ASSETS, END OF YEAR. . . .	1 327.6	293.2	1 034.5	2
DEPRECIATION CHARGES . . .	92.8	14.1	78.7	2
RENTAL PAYMENTS.	26.6	13.3	13.3	6

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
346-METAL FORGINGS AND STAMPINGS				
ASSETS, BEGINNING OF YEAR.	5 781.8	1 365.6	4 416.2	1
CAPITAL EXPEND., NEW . .	646.0	78.7	567.3	3
CAPITAL EXPEND., USED. .	50.9	12.7	38.2	6
RETIREMENTS.	144.4	14.2	130.3	5
ASSETS, END OF YEAR. . . .	6 334.3	1 442.8	4 891.5	1
DEPRECIATION CHARGES . . .	449.2	69.4	379.8	2
RENTAL PAYMENTS.	(101.8)	45.1	(56.8)	17
3462-IRON AND STEEL FORGINGS				
ASSETS, BEGINNING OF YEAR.	955.8	210.1	745.7	2
CAPITAL EXPEND., NEW . .	136.4	17.0	119.4	4
CAPITAL EXPEND., USED. .	8.7	1.2	7.6	8
RETIREMENTS.	25.1	2.6	22.5	3
ASSETS, END OF YEAR. . . .	1 075.8	225.7	850.1	2
DEPRECIATION CHARGES . . .	71.6	11.4	60.2	3
RENTAL PAYMENTS.	7.8	(2.1)	5.7	9
3463-NONFERROUS FORGINGS				
ASSETS, BEGINNING OF YEAR.	155.2	35.2	120.1	5
CAPITAL EXPEND., NEW . .	13.6	3.6	10.0	5
CAPITAL EXPEND., USED. .	1.0	.5	.5	1
RETIREMENTS.	6.3	.6	5.8	3
ASSETS, END OF YEAR. . . .	163.5	38.7	124.7	5
DEPRECIATION CHARGES . . .	7.9	1.2	6.7	3
RENTAL PAYMENTS.	3.6	1.5	2.1	8
3465-AUTOMOTIVE STAMPINGS				
ASSETS, BEGINNING OF YEAR.	3 278.8	790.6	2 488.3	1
CAPITAL EXPEND., NEW . .	314.8	28.8	286.0	5
CAPITAL EXPEND., USED. .	20.8	4.5	16.3	10
RETIREMENTS.	70.1	(3.6)	66.5	9
ASSETS, END OF YEAR. . . .	3 544.3	820.3	2 724.1	1
DEPRECIATION CHARGES . . .	266.3	41.9	224.4	2
RENTAL PAYMENTS.	(37.5)	13.6	(23.9)	38
3466-CROWNS AND CLOSURES				
ASSETS, BEGINNING OF YEAR.	156.3	29.3	127.1	2
CAPITAL EXPEND., NEW . .	17.8	2.1	15.7	5
CAPITAL EXPEND., USED. .	.3	-	.3	1
RETIREMENTS.	5.3	(.2)	5.1	12
ASSETS, END OF YEAR. . . .	169.1	31.1	137.9	2
DEPRECIATION CHARGES . . .	9.6	.9	8.7	3
RENTAL PAYMENTS.	2.8	1.6	1.2	7
3469-METAL STAMPINGS, NEC				
ASSETS, BEGINNING OF YEAR.	1 235.6	300.5	935.1	1
CAPITAL EXPEND., NEW . .	163.5	27.2	136.3	5
CAPITAL EXPEND., USED. .	20.0	6.5	13.6	11
RETIREMENTS.	37.5	7.2	30.3	8
ASSETS, END OF YEAR. . . .	1 381.6	327.0	1 054.6	1
DEPRECIATION CHARGES . . .	93.8	14.0	79.8	4
RENTAL PAYMENTS.	(50.1)	26.3	(23.8)	17
347-METAL SERVICES, NEC				
ASSETS, BEGINNING OF YEAR.	1 084.8	265.1	820.2	2
CAPITAL EXPEND., NEW . .	140.5	22.1	118.4	13
CAPITAL EXPEND., USED. .	(11.2)	(4.7)	(6.6)	19
RETIREMENTS.	(80.3)	(19.3)	(61.4)	15
ASSETS, END OF YEAR. . . .	1 156.3	272.6	883.8	1
DEPRECIATION CHARGES . . .	87.4	14.9	72.5	4
RENTAL PAYMENTS.	48.7	31.4	17.3	10
3471-PLATING AND POLISHING				
ASSETS, BEGINNING OF YEAR.	591.4	145.0	446.6	3
CAPITAL EXPEND., NEW . .	(84.6)	(15.3)	(69.3)	20
CAPITAL EXPEND., USED. .	(6.1)	(1.7)	(4.4)	25
RETIREMENTS.	(38.9)	(8.0)	(31.2)	30
ASSETS, END OF YEAR. . . .	643.2	154.1	489.0	3
DEPRECIATION CHARGES . . .	51.4	8.7	42.8	6
RENTAL PAYMENTS.	31.9	20.1	(11.9)	14
3479-METAL COATING AND ALLIED SERVICES				
ASSETS, BEGINNING OF YEAR.	493.5	120.1	373.6	4
CAPITAL EXPEND., NEW . .	55.9	(6.8)	49.1	12
CAPITAL EXPEND., USED. .	(5.1)	(2.9)	(2.2)	30
RETIREMENTS.	41.4	(11.3)	30.2	4
ASSETS, END OF YEAR. . . .	513.1	118.5	394.8	4
DEPRECIATION CHARGES . . .	36.0	6.2	29.8	6
RENTAL PAYMENTS.	16.8	11.3	(5.5)	11
348-ORDNANCE AND ACCESSORIES, NEC				
ASSETS, BEGINNING OF YEAR.	584.2	152.9	431.2	2
CAPITAL EXPEND., NEW . .	83.6	15.0	68.6	3
CAPITAL EXPEND., USED. .	4.2	2.7	1.4	1
RETIREMENTS.	14.8	1.1	13.7	11
ASSETS, END OF YEAR. . . .	657.2	169.8	487.5	2
DEPRECIATION CHARGES . . .	41.5	6.9	34.6	5
RENTAL PAYMENTS.	19.1	8.3	10.8	12
3482-SMALL ARMS AMMUNITION				
ASSETS, BEGINNING OF YEAR.	228.9	(76.4)	152.5	1
CAPITAL EXPEND., NEW . .	42.5	5.6	36.8	5
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	(4.1)	(.7)	(3.4)	38
ASSETS, END OF YEAR. . . .	267.5	(81.3)	186.2	1
DEPRECIATION CHARGES . . .	16.6	2.9	13.7	11
RENTAL PAYMENTS.	(1.6)	(.4)	(1.3)	(A)
3483-AMMUNITION, EXC SMALL ARMS, NEC				
ASSETS, BEGINNING OF YEAR.	74.0	21.4	52.5	2
CAPITAL EXPEND., NEW . .	8.0	1.8	6.2	1
CAPITAL EXPEND., USED. .	2.9	2.6	.3	1
RETIREMENTS.	4.5	.6	3.9	1
ASSETS, END OF YEAR. . . .	80.4	25.3	55.1	2
DEPRECIATION CHARGES . . .	4.9	1.1	3.8	1
RENTAL PAYMENTS.	4.3	2.1	2.2	1
3484-SMALL ARMS				
ASSETS, BEGINNING OF YEAR.	213.5	44.8	168.8	4
CAPITAL EXPEND., NEW . .	21.9	5.8	16.1	6
CAPITAL EXPEND., USED. .	.8	.1	.7	2
RETIREMENTS.	5.9	(.3)	5.6	4
ASSETS, END OF YEAR. . . .	230.3	50.3	180.0	4
DEPRECIATION CHARGES . . .	15.0	1.7	13.3	4
RENTAL PAYMENTS.	6.4	(3.3)	3.1	12
3489-ORDNANCE AND ACCESSORIES NEC				
ASSETS, BEGINNING OF YEAR.	67.8	10.4	57.4	5
CAPITAL EXPEND., NEW . .	11.3	(S)	9.5	4
CAPITAL EXPEND., USED. .	.2	(S)	(S)	3
RETIREMENTS.	(.3)	(S)	(S)	27
ASSETS, END OF YEAR. . . .	79.0	12.8	66.3	4
DEPRECIATION CHARGES . . .	5.0	1.3	3.7	8
RENTAL PAYMENTS.	6.7	2.5	4.2	3
349-MISC FABRICATED METAL PRODUCTS				
ASSETS, BEGINNING OF YEAR.	3 891.8	1 115.7	2 776.2	1
CAPITAL EXPEND., NEW . .	458.3	96.2	362.2	4
CAPITAL EXPEND., USED. .	(60.0)	(13.7)	46.4	16
RETIREMENTS.	163.9	27.0	137.1	9
ASSETS, END OF YEAR. . . .	4 246.3	1 198.6	3 047.6	1
DEPRECIATION CHARGES . . .	311.7	73.4	238.3	2
RENTAL PAYMENTS.	98.9	51.5	47.5	3
3493-STEEL SPRINGS, EXCEPT WIRE				
ASSETS, BEGINNING OF YEAR.	117.2	36.0	81.3	4
CAPITAL EXPEND., NEW . .	14.0	(2.1)	11.9	5
CAPITAL EXPEND., USED. .	1.3	.3	1.0	11
RETIREMENTS.	(1.0)	-	(.9)	19
ASSETS, END OF YEAR. . . .	131.5	38.3	93.2	4
DEPRECIATION CHARGES . . .	8.1	1.4	6.7	4
RENTAL PAYMENTS.	1.5	(.8)	.7	14
3494-VALVES AND PIPE FITTINGS				
ASSETS, BEGINNING OF YEAR.	1 656.7	452.6	1 204.1	2
CAPITAL EXPEND., NEW . .	204.3	43.5	160.8	6
CAPITAL EXPEND., USED. .	(34.0)	(8.5)	(25.5)	20
RETIREMENTS.	78.3	12.3	(66.1)	6
ASSETS, END OF YEAR. . . .	1 816.6	492.3	1 324.3	2
DEPRECIATION CHARGES . . .	148.9	41.3	107.7	3
RENTAL PAYMENTS.	34.6	12.4	22.2	3
3495-WIRE SPRINGS				
ASSETS, BEGINNING OF YEAR.	217.1	(61.2)	155.9	9
CAPITAL EXPEND., NEW . .	25.7	(4.4)	21.3	11
CAPITAL EXPEND., USED. .	(4.5)	(1.3)	(3.2)	39
RETIREMENTS.	10.7	3.0	7.8	4
ASSETS, END OF YEAR. . . .	236.5	63.8	172.6	8
DEPRECIATION CHARGES . . .	17.4	(2.7)	14.7	11
RENTAL PAYMENTS.	7.1	(4.1)	3.0	11
3496-MISC FABRICATED WIRE PRODUCTS				
ASSETS, BEGINNING OF YEAR.	371.7	116.6	255.2	4
CAPITAL EXPEND., NEW . .	(58.7)	(14.5)	(44.2)	17
CAPITAL EXPEND., USED. .	(2.2)	(.4)	(1.8)	18
RETIREMENTS.	6.6	(.7)	5.9	9
ASSETS, END OF YEAR. . . .	426.0	130.8	295.3	4
DEPRECIATION CHARGES . . .	27.6	5.1	22.5	4
RENTAL PAYMENTS.	11.9	6.1	5.8	9
3497-METAL FOIL AND LEAF				
ASSETS, BEGINNING OF YEAR.	222.0	54.7	167.3	3
CAPITAL EXPEND., NEW . .	15.4	(1.4)	14.0	7
CAPITAL EXPEND., USED. .	(.6)	-	(.6)	17
RETIREMENTS.	7.9	(1.2)	(6.7)	15
ASSETS, END OF YEAR. . . .	230.1	54.9	175.2	3
DEPRECIATION CHARGES . . .	12.0	1.7	10.3	4
RENTAL PAYMENTS.	3.9	2.5	1.4	8
3498-FABRICATED PIPE AND FITTINGS				
ASSETS, BEGINNING OF YEAR.	411.7	129.7	282.0	4
CAPITAL EXPEND., NEW . .	45.5	11.4	34.0	7
CAPITAL EXPEND., USED. .	4.1	.6	3.5	12
RETIREMENTS.	(19.5)	(.3)	(19.3)	58
ASSETS, END OF YEAR. . . .	441.8	141.4	300.3	3
DEPRECIATION CHARGES . . .	30.6	6.9	23.8	5
RENTAL PAYMENTS.	10.6	5.7	4.9	7

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
3499-FABRICATED METAL PRODUCTS, NEC				
ASSETS, BEGINNING OF YEAR.	895.3	264.9	630.5	2
CAPITAL EXPEND., NEW . .	94.8	(18.9)	75.9	11
CAPITAL EXPEND., USED. .	(13.4)	2.7	(10.7)	47
RETIREMENTS.	(39.8)	(9.5)	(30.4)	16
ASSETS, END OF YEAR. . . .	963.7	277.0	686.6	2
DEPRECIATION CHARGES . . .	67.0	(14.4)	52.6	6
RENTAL PAYMENTS.	29.3	19.9	9.4	6
35-MACHINERY, EXCEPT ELECTRICAL				
ASSETS, BEGINNING OF YEAR.	32 563.6	9 316.5	23 247.3	1
CAPITAL EXPEND., NEW . .	4 435.9	933.0	3 502.5	1
CAPITAL EXPEND., USED. .	426.9	148.9	278.0	5
RETIREMENTS.	1 334.2	186.1	1 148.3	1
ASSETS, END OF YEAR. . . .	36 091.8	10 212.1	25 879.0	1
DEPRECIATION CHARGES . . .	2 494.3	401.1	2 093.4	1
RENTAL PAYMENTS.	848.6	397.0	451.4	2
351-ENGINES AND TURBINES				
ASSETS, BEGINNING OF YEAR.	3 282.2	928.2	2 354.0	1
CAPITAL EXPEND., NEW . .	329.5	44.2	285.1	1
CAPITAL EXPEND., USED. .	(17.4)	(5.9)	(11.5)	26
RETIREMENTS.	54.1	4.8	49.3	1
ASSETS, END OF YEAR. . . .	3 574.8	973.6	2 601.3	1
DEPRECIATION CHARGES . . .	222.9	35.9	187.2	1
RENTAL PAYMENTS.	40.2	(9.2)	30.9	4
3511-TURBINES, TURBINE GENERATOR SETS				
ASSETS, BEGINNING OF YEAR.	1 176.5	307.8	868.7	1
CAPITAL EXPEND., NEW . .	45.4	5.7	39.7	2
CAPITAL EXPEND., USED. .	1.9	.4	1.5	1
RETIREMENTS.	14.4	2.1	12.3	1
ASSETS, END OF YEAR. . . .	1 209.4	311.8	897.6	1
DEPRECIATION CHARGES . . .	73.6	12.1	61.6	1
RENTAL PAYMENTS.	13.6	3.1	10.6	1
3519-INTERNAL COMBUSTION ENGINES, NEC				
ASSETS, BEGINNING OF YEAR.	2 105.7	620.4	1 485.3	1
CAPITAL EXPEND., NEW . .	284.0	38.5	245.4	1
CAPITAL EXPEND., USED. .	(15.5)	(5.5)	(10.0)	29
RETIREMENTS.	39.7	2.7	37.0	2
ASSETS, END OF YEAR. . . .	2 365.4	661.7	1 703.7	1
DEPRECIATION CHARGES . . .	149.4	23.8	125.6	1
RENTAL PAYMENTS.	26.6	(6.2)	20.4	5
352-FARM AND GARDEN MACHINERY				
ASSETS, BEGINNING OF YEAR.	2 309.4	736.4	1 573.1	1
CAPITAL EXPEND., NEW . .	368.4	75.8	292.6	2
CAPITAL EXPEND., USED. .	19.2	6.1	13.1	13
RETIREMENTS.	88.7	13.0	75.7	4
ASSETS, END OF YEAR. . . .	2 608.3	805.3	1 803.1	1
DEPRECIATION CHARGES . . .	173.8	32.1	141.7	1
RENTAL PAYMENTS.	60.9	18.9	41.9	5
3523-FARM MACHINERY AND EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	2 016.7	636.2	1 380.6	2
CAPITAL EXPEND., NEW . .	338.9	70.5	268.4	3
CAPITAL EXPEND., USED. .	(15.6)	(4.2)	11.4	15
RETIREMENTS.	76.1	11.0	65.1	5
ASSETS, END OF YEAR. . . .	2 295.1	699.9	1 595.3	1
DEPRECIATION CHARGES . . .	151.3	27.2	124.1	2
RENTAL PAYMENTS.	51.8	(14.9)	36.7	8
3524-LAWN AND GARDEN EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	292.7	100.2	192.5	2
CAPITAL EXPEND., NEW . .	29.5	5.3	24.2	3
CAPITAL EXPEND., USED. .	(3.6)	(2.0)	1.7	22
RETIREMENTS.	12.6	2.1	10.6	9
ASSETS, END OF YEAR. . . .	313.2	105.4	207.8	2
DEPRECIATION CHARGES . . .	22.5	4.8	17.7	2
RENTAL PAYMENTS.	9.1	3.9	5.1	7
353-CONSTRUCTION, RELATED MACHINERY				
ASSETS, BEGINNING OF YEAR.	6 069.3	2 039.4	4 029.9	1
CAPITAL EXPEND., NEW . .	928.8	266.1	662.6	2
CAPITAL EXPEND., USED. .	55.1	13.9	41.2	7
RETIREMENTS.	223.8	33.3	190.1	1
ASSETS, END OF YEAR. . . .	6 829.4	2 286.1	4 543.3	3
DEPRECIATION CHARGES . . .	458.1	88.0	370.1	1
RENTAL PAYMENTS.	123.1	40.3	82.6	2
3531-CONSTRUCTION MACHINERY				
ASSETS, BEGINNING OF YEAR.	3 429.9	1 150.8	2 279.0	1
CAPITAL EXPEND., NEW . .	497.5	150.4	347.1	2
CAPITAL EXPEND., USED. .	11.5	3.0	8.4	8
RETIREMENTS.	114.7	17.1	97.6	1
ASSETS, END OF YEAR. . . .	3 824.2	1 287.2	2 537.0	1
DEPRECIATION CHARGES . . .	256.8	45.7	211.1	1
RENTAL PAYMENTS.	50.1	11.1	39.0	3
3532-MINING MACHINERY				
ASSETS, BEGINNING OF YEAR.	423.6	144.1	279.4	3
CAPITAL EXPEND., NEW . .	70.6	24.9	45.7	5
CAPITAL EXPEND., USED. .	(9.3)	(3.7)	(5.6)	34
RETIREMENTS.	14.3	2.6	11.7	5
ASSETS, END OF YEAR. . . .	489.1	170.1	318.9	3
DEPRECIATION CHARGES . . .	29.7	5.8	23.9	3
RENTAL PAYMENTS.	11.2	(2.8)	8.3	6
3533-OILFIELD MACHINERY				
ASSETS, BEGINNING OF YEAR.	1 097.4	300.5	796.8	2
CAPITAL EXPEND., NEW . .	247.8	61.1	186.6	2
CAPITAL EXPEND., USED. .	14.9	2.7	12.2	6
RETIREMENTS.	54.2	4.3	49.8	1
ASSETS, END OF YEAR. . . .	1 305.9	360.0	945.8	2
DEPRECIATION CHARGES . . .	94.3	18.4	75.9	2
RENTAL PAYMENTS.	27.7	10.1	17.7	2
3534-ELEVATORS AND MOVING STAIRWAYS				
ASSETS, BEGINNING OF YEAR.	161.3	69.8	91.5	4
CAPITAL EXPEND., NEW . .	(9.2)	(2.3)	(6.9)	21
CAPITAL EXPEND., USED. .	(.2)	(.1)	(.1)	65
RETIREMENTS.	3.9	1.0	2.8	6
ASSETS, END OF YEAR. . . .	166.8	71.1	95.7	5
DEPRECIATION CHARGES . . .	8.2	2.1	6.1	3
RENTAL PAYMENTS.	4.2	(2.5)	1.7	12
3535-CONVEYORS AND CONVEYING EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	323.0	145.0	178.0	3
CAPITAL EXPEND., NEW . .	33.3	9.0	24.2	6
CAPITAL EXPEND., USED. .	5.4	1.9	3.5	9
RETIREMENTS.	12.0	3.5	8.1	11
ASSETS, END OF YEAR. . . .	349.7	152.4	197.6	6
DEPRECIATION CHARGES . . .	21.5	5.7	15.8	3
RENTAL PAYMENTS.	11.3	(6.5)	4.8	11
3536-HOISTS, CRANES, AND MONORAILS				
ASSETS, BEGINNING OF YEAR.	174.9	(59.6)	115.3	5
CAPITAL EXPEND., NEW . .	(17.9)	(5.0)	12.9	17
CAPITAL EXPEND., USED. .	(2.1)	(.8)	(1.4)	26
RETIREMENTS.	4.9	(.3)	4.5	7
ASSETS, END OF YEAR. . . .	190.1	(65.0)	125.1	4
DEPRECIATION CHARGES . . .	16.3	(3.5)	12.8	10
RENTAL PAYMENTS.	6.2	(3.0)	3.2	10
3537-INDUSTRIAL TRUCKS AND TRACTORS				
ASSETS, BEGINNING OF YEAR.	459.3	169.5	289.9	3
CAPITAL EXPEND., NEW . .	52.6	(13.4)	39.2	9
CAPITAL EXPEND., USED. .	11.7	(1.9)	9.9	14
RETIREMENTS.	20.0	(4.4)	15.5	3
ASSETS, END OF YEAR. . . .	503.7	180.3	373.3	3
DEPRECIATION CHARGES . . .	31.3	6.8	24.5	3
RENTAL PAYMENTS.	12.4	(4.5)	7.9	6
354-METALWORKING MACHINERY				
ASSETS, BEGINNING OF YEAR.	4 359.4	1 066.6	3 293.1	5
CAPITAL EXPEND., NEW . .	486.0	82.1	403.9	4
CAPITAL EXPEND., USED. .	(57.9)	(8.2)	(49.7)	16
RETIREMENTS.	180.8	23.7	157.1	8
ASSETS, END OF YEAR. . . .	4 722.4	1 133.2	3 588.8	4
DEPRECIATION CHARGES . . .	286.2	43.8	242.5	3
RENTAL PAYMENTS.	114.4	57.3	57.2	5
3541-MACHINE TOOLS, METAL-CUTTING				
ASSETS, BEGINNING OF YEAR.	953.2	278.8	674.5	3
CAPITAL EXPEND., NEW . .	107.9	19.1	88.8	9
CAPITAL EXPEND., USED. .	(5.8)	.9	(5.0)	26
RETIREMENTS.	32.7	3.9	28.5	7
ASSETS, END OF YEAR. . . .	1 034.6	294.8	739.8	2
DEPRECIATION CHARGES . . .	53.2	9.4	43.8	2
RENTAL PAYMENTS.	19.8	(6.6)	13.2	6
3542-MACHINE TOOLS, METAL-FORMING				
ASSETS, BEGINNING OF YEAR.	433.3	130.5	302.8	4
CAPITAL EXPEND., NEW . .	24.5	(2.6)	21.9	9
CAPITAL EXPEND., USED. .	(2.0)	.5	(1.5)	22
RETIREMENTS.	16.5	(4.5)	12.0	14
ASSETS, END OF YEAR. . . .	443.3	129.1	314.2	4
DEPRECIATION CHARGES . . .	23.9	4.7	19.2	3
RENTAL PAYMENTS.	7.6	3.4	(4.2)	14
3544-SPECIAL DIES, TOOLS, JIGS, ETC				
ASSETS, BEGINNING OF YEAR.	1 381.8	235.4	1 146.4	2
CAPITAL EXPEND., NEW . .	208.4	(31.7)	176.7	10
CAPITAL EXPEND., USED. .	(35.1)	(4.2)	(30.9)	24
RETIREMENTS.	61.1	(6.0)	55.1	14
ASSETS, END OF YEAR. . . .	1 564.2	265.3	1 298.1	1
DEPRECIATION CHARGES . . .	105.5	10.9	94.5	6
RENTAL PAYMENTS.	53.6	32.1	(21.5)	10
3545-MACHINE TOOL ACCESSORIES				
ASSETS, BEGINNING OF YEAR.	751.8	183.9	568.2	3
CAPITAL EXPEND., NEW . .	75.0	14.3	60.7	8
CAPITAL EXPEND., USED. .	(9.5)	2.5	(7.0)	20
RETIREMENTS.	37.0	7.7	29.5	12
ASSETS, END OF YEAR. . . .	799.2	193.0	606.4	3
DEPRECIATION CHARGES . . .	53.1	8.8	44.2	7
RENTAL PAYMENTS.	17.5	(9.3)	8.2	10

See footnotes at end of table.

Table 2. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
3546-POWER DRIVEN HANDTOOLS				
ASSETS, BEGINNING OF YEAR.	358.2	91.1	267.1	1
CAPITAL EXPEND., NEW . .	38.4	7.2	31.2	2
CAPITAL EXPEND., USED. .	.6	-	.6	6
RETIREMENTS.	13.4	.6	12.8	1
ASSETS, END OF YEAR. . . .	383.8	97.7	286.0	1
DEPRECIATION CHARGES . . .	25.5	3.8	21.7	3
RENTAL PAYMENTS.	8.1	1.8	6.3	3
3547-ROLLING MILL MACHINERY				
ASSETS, BEGINNING OF YEAR.	225.0	54.9	170.1	5
CAPITAL EXPEND., NEW . .	(10.2)	(1.1)	(9.1)	21
CAPITAL EXPEND., USED. .	(4.5)	.1	(4.4)	47
RETIREMENTS.	(3.3)	(.1)	3.3	15
ASSETS, END OF YEAR. . . .	236.3	56.1	180.2	4
DEPRECIATION CHARGES . . .	8.5	1.7	6.8	4
RENTAL PAYMENTS.	(1.8)	(.7)	1.1	17
3549-METALWORKING MACHINERY, NEC				
ASSETS, BEGINNING OF YEAR.	256.1	92.1	164.0	4
CAPITAL EXPEND., NEW . .	21.6	6.1	15.6	10
CAPITAL EXPEND., USED. .	.4	-	.4	11
RETIREMENTS.	(16.9)	(1.0)	(15.9)	51
ASSETS, END OF YEAR. . . .	261.3	97.2	164.1	4
DEPRECIATION CHARGES . . .	16.7	4.4	12.3	3
RENTAL PAYMENTS.	6.0	3.3	2.7	9
355-SPECIAL INDUSTRY MACHINERY				
ASSETS, BEGINNING OF YEAR.	2 506.1	764.7	1 741.4	8
CAPITAL EXPEND., NEW . .	265.7	60.7	205.0	6
CAPITAL EXPEND., USED. .	(47.1)	(30.7)	16.4	26
RETIREMENTS.	142.2	24.8	117.6	5
ASSETS, END OF YEAR. . . .	2 676.7	831.3	1 845.7	7
DEPRECIATION CHARGES . . .	186.2	34.4	151.8	3
RENTAL PAYMENTS.	71.8	36.7	35.3	5
3551-FOOD PRODUCTS MACHINERY				
ASSETS, BEGINNING OF YEAR.	490.0	148.7	341.3	3
CAPITAL EXPEND., NEW . .	43.8	(8.8)	35.0	6
CAPITAL EXPEND., USED. .	(2.1)	(.6)	1.4	18
RETIREMENTS.	41.6	(5.2)	36.4	4
ASSETS, END OF YEAR. . . .	494.3	153.0	341.8	3
DEPRECIATION CHARGES . . .	36.1	6.6	29.5	3
RENTAL PAYMENTS.	10.8	6.4	4.4	8
3552-TEXTILE MACHINERY				
ASSETS, BEGINNING OF YEAR.	351.4	93.5	257.8	5
CAPITAL EXPEND., NEW . .	(46.5)	(10.8)	(35.7)	19
CAPITAL EXPEND., USED. .	(4.0)	(2.3)	(1.8)	22
RETIREMENTS.	(16.1)	(2.2	(13.9)	26
ASSETS, END OF YEAR. . . .	385.8	104.4	281.4	4
DEPRECIATION CHARGES . . .	28.4	5.4	23.0	5
RENTAL PAYMENTS.	(10.2)	(7.3)	2.9	20
3553-WOODWORKING MACHINERY				
ASSETS, BEGINNING OF YEAR.	124.2	36.3	87.8	6
CAPITAL EXPEND., NEW . .	18.6	(3.6)	15.0	13
CAPITAL EXPEND., USED. .	(2.2)	1.1	(1.0)	18
RETIREMENTS.	(4.8)	(1.3)	(3.5)	36
ASSETS, END OF YEAR. . . .	140.2	39.7	100.4	5
DEPRECIATION CHARGES . . .	10.0	1.6	8.5	8
RENTAL PAYMENTS.	(4.0)	(1.5)	(2.6)	27
3554-PAPER INDUSTRIES MACHINERY				
ASSETS, BEGINNING OF YEAR.	237.5	82.2	155.3	3
CAPITAL EXPEND., NEW . .	12.8	4.1	8.7	4
CAPITAL EXPEND., USED. .	3.5	.8	2.6	2
RETIREMENTS.	(14.3)	(3.2)	(11.1)	23
ASSETS, END OF YEAR. . . .	239.5	83.9	155.5	3
DEPRECIATION CHARGES . . .	13.8	4.3	9.5	6
RENTAL PAYMENTS.	6.3	(2.0)	4.3	11
3555-PRINTING TRADES MACHINERY				
ASSETS, BEGINNING OF YEAR.	351.6	87.2	264.4	3
CAPITAL EXPEND., NEW . .	43.6	13.1	30.5	7
CAPITAL EXPEND., USED. .	(4.7)	.1	(4.6)	21
RETIREMENTS.	30.9	7.9	23.1	4
ASSETS, END OF YEAR. . . .	368.9	92.5	276.4	3
DEPRECIATION CHARGES . . .	29.7	3.5	26.2	9
RENTAL PAYMENTS.	13.6	7.1	(6.5)	9
3559-SPECIAL INDUSTRY MACHINERY, NEC				
ASSETS, BEGINNING OF YEAR.	951.5	316.8	634.8	2
CAPITAL EXPEND., NEW . .	100.3	(20.2)	80.1	11
CAPITAL EXPEND., USED. .	(30.7)	(25.7)	5.0	40
RETIREMENTS.	34.5	4.9	29.7	8
ASSETS, END OF YEAR. . . .	1 048.0	357.8	690.1	2
DEPRECIATION CHARGES . . .	68.2	13.0	55.1	5
RENTAL PAYMENTS.	26.9	12.4	14.6	9
356-GENERAL INDUSTRIAL MACHINERY				
ASSETS, BEGINNING OF YEAR.	5 049.0	1 367.5	3 681.6	1
CAPITAL EXPEND., NEW . .	577.8	121.3	456.5	3
CAPITAL EXPEND., USED. .	52.2	12.0	40.2	9
RETIREMENTS.	168.6	22.8	146.0	3
ASSETS, END OF YEAR. . . .	5 510.4	1 478.1	4 032.2	1
DEPRECIATION CHARGES . . .	351.1	61.4	289.8	2
RENTAL PAYMENTS.	109.2	47.0	62.2	3
3561-PUMPS AND PUMPING EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	973.1	267.5	705.6	2
CAPITAL EXPEND., NEW . .	128.2	27.1	101.1	8
CAPITAL EXPEND., USED. .	9.1	1.1	8.0	8
RETIREMENTS.	25.8	3.6	22.3	7
ASSETS, END OF YEAR. . . .	1 084.5	292.2	792.4	2
DEPRECIATION CHARGES . . .	69.7	10.6	59.0	3
RENTAL PAYMENTS.	19.9	6.8	13.1	4
3562-BALL AND ROLLER BEARINGS				
ASSETS, BEGINNING OF YEAR.	1 305.7	281.8	1 023.9	1
CAPITAL EXPEND., NEW . .	133.8	21.3	112.5	1
CAPITAL EXPEND., USED. .	10.7	.8	9.9	2
RETIREMENTS.	39.4	.8	38.5	2
ASSETS, END OF YEAR. . . .	1 410.8	303.1	1 107.7	1
DEPRECIATION CHARGES . . .	82.1	(12.4)	69.7	6
RENTAL PAYMENTS.	10.1	2.7	7.3	3
3563-AIR AND GAS COMPRESSORS				
ASSETS, BEGINNING OF YEAR.	456.4	128.1	328.4	3
CAPITAL EXPEND., NEW . .	57.3	10.9	46.4	4
CAPITAL EXPEND., USED. .	2.5	(.3)	2.2	11
RETIREMENTS.	24.7	6.3	18.4	5
ASSETS, END OF YEAR. . . .	491.5	133.0	358.6	3
DEPRECIATION CHARGES . . .	36.7	6.7	29.9	6
RENTAL PAYMENTS.	15.2	5.2	10.0	2
3564-BLOWERS AND FANS				
ASSETS, BEGINNING OF YEAR.	316.6	128.5	188.1	5
CAPITAL EXPEND., NEW . .	41.2	13.9	27.3	9
CAPITAL EXPEND., USED. .	(4.9)	(3.1)	(1.8)	17
RETIREMENTS.	11.7	2.1	9.6	9
ASSETS, END OF YEAR. . . .	350.9	143.4	207.5	5
DEPRECIATION CHARGES . . .	18.8	4.9	13.9	4
RENTAL PAYMENTS.	9.4	(5.1)	4.2	11
3565-INDUSTRIAL PATTERNS				
ASSETS, BEGINNING OF YEAR.	89.6	(23.1)	66.5	13
CAPITAL EXPEND., NEW . .	(10.4)	(1.7)	(8.7)	35
CAPITAL EXPEND., USED. .	(1.4)	.1	(1.3)	48
RETIREMENTS.	(5.3)	(.9)	(4.5)	29
ASSETS, END OF YEAR. . . .	96.1	(24.0)	72.0	12
DEPRECIATION CHARGES . . .	(6.7)	(1.1)	(5.5)	15
RENTAL PAYMENTS.	(4.7)	(3.6)	(1.1)	19
3566-SPEED CHANGERS, DRIVES, AND GEARS				
ASSETS, BEGINNING OF YEAR.	529.0	107.0	422.1	3
CAPITAL EXPEND., NEW . .	56.6	12.1	44.6	6
CAPITAL EXPEND., USED. .	(9.5)	(1.2)	(8.3)	39
RETIREMENTS.	11.1	(1.1)	10.0	7
ASSETS, END OF YEAR. . . .	584.1	119.1	465.0	3
DEPRECIATION CHARGES . . .	43.3	(8.2)	35.1	7
RENTAL PAYMENTS.	8.9	3.1	5.8	7
3567-INDUSTRIAL FURNACES AND OVENS				
ASSETS, BEGINNING OF YEAR.	156.3	70.7	85.5	6
CAPITAL EXPEND., NEW . .	(16.2)	(2.5)	13.7	17
CAPITAL EXPEND., USED. .	(2.1)	.7	(1.4)	37
RETIREMENTS.	3.1	(.7)	2.4	13
ASSETS, END OF YEAR. . . .	171.6	73.3	98.2	5
DEPRECIATION CHARGES . . .	10.1	2.6	7.5	5
RENTAL PAYMENTS.	5.5	(2.9)	2.7	12
3568-POWER TRANSMISSION EQUIPMENT, NEC				
ASSETS, BEGINNING OF YEAR.	581.8	134.1	447.7	2
CAPITAL EXPEND., NEW . .	52.1	(8.9)	43.3	7
CAPITAL EXPEND., USED. .	3.7	.9	2.9	3
RETIREMENTS.	22.1	1.1	21.0	10
ASSETS, END OF YEAR. . . .	615.6	142.8	472.9	2
DEPRECIATION CHARGES . . .	38.9	4.9	33.9	3
RENTAL PAYMENTS.	9.5	(2.8)	6.7	6
3569-GENERAL INDUSTRIAL MACHINERY, NEC				
ASSETS, BEGINNING OF YEAR.	640.5	226.7	413.8	4
CAPITAL EXPEND., NEW . .	81.9	22.9	58.9	9
CAPITAL EXPEND., USED. .	(8.3)	(3.8)	4.5	30
RETIREMENTS.	25.5	(6.2)	19.3	12
ASSETS, END OF YEAR. . . .	705.2	247.2	457.9	4
DEPRECIATION CHARGES . . .	45.0	9.7	35.2	5
RENTAL PAYMENTS.	26.1	14.7	11.4	8
357-OFFICE AND COMPUTING MACHINES				
ASSETS, BEGINNING OF YEAR.	3 563.3	983.7	2 579.5	6
CAPITAL EXPEND., NEW . .	795.1	171.6	623.5	2
CAPITAL EXPEND., USED. .	(96.1)	58.3	(37.8)	17
RETIREMENTS.	249.2	34.3	214.9	2
ASSETS, END OF YEAR. . . .	4 205.3	1 179.2	3 025.9	5
DEPRECIATION CHARGES . . .	365.1	44.8	320.3	2
RENTAL PAYMENTS.	138.4	82.9	55.4	3

See footnotes at end of table.

Table 2. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3573-ELECTRONIC COMPUTING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	2 550.5	657.6	1 892.9	1
CAPITAL EXPEND., NEW . .	612.2	112.4	499.8	2
CAPITAL EXPEND., USED. .	(67.7)	53.2	(14.5)	24
RETIREMENTS.	188.4	18.4	170.0	2
ASSETS, END OF YEAR. . . .	3 042.0	804.8	2 237.2	1
DEPRECIATION CHARGES . . .	276.0	33.1	242.9	3
RENTAL PAYMENTS.	112.4	68.5	43.9	4
	3574-CALCULATING, ACCOUNTING MACHINES			
ASSETS, BEGINNING OF YEAR.	254.2	96.3	157.9	1
CAPITAL EXPEND., NEW . .	55.0	26.0	29.0	1
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	33.0	10.9	22.2	1
ASSETS, END OF YEAR. . . .	276.3	111.4	164.9	1
DEPRECIATION CHARGES . . .	23.4	3.7	19.7	1
RENTAL PAYMENTS.	3.8	1.8	2.0	6
	3576-SCALES, BALANCES, EXC LABORATORY			
ASSETS, BEGINNING OF YEAR.	75.7	27.1	48.6	4
CAPITAL EXPEND., NEW . .	6.7	(1.3)	5.5	8
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	4.6	(.1)	4.5	4
ASSETS, END OF YEAR. . . .	78.0	28.3	49.7	4
DEPRECIATION CHARGES . . .	5.3	1.0	4.3	5
RENTAL PAYMENTS.	2.5	1.7	(.8)	13
	3579-OFFICE MACHINES, TYPEWRITERS, ETC			
ASSETS, BEGINNING OF YEAR.	682.7	202.6	480.1	1
CAPITAL EXPEND., NEW . .	121.3	32.0	89.3	4
CAPITAL EXPEND., USED. .	28.1	5.1	23.0	1
RETIREMENTS.	23.2	5.0	18.2	10
ASSETS, END OF YEAR. . . .	808.8	234.7	574.1	1
DEPRECIATION CHARGES . . .	60.5	7.0	53.4	3
RENTAL PAYMENTS.	19.7	10.9	8.8	5
	358-REFRIGERATION AND SERVICE MACH			
ASSETS, BEGINNING OF YEAR.	2 621.9	867.0	1 755.0	8
CAPITAL EXPEND., NEW . .	280.7	49.9	230.9	2
CAPITAL EXPEND., USED. .	15.8	5.3	10.4	9
RETIREMENTS.	109.3	14.7	94.5	4
ASSETS, END OF YEAR. . . .	2 809.1	907.5	1 901.7	7
DEPRECIATION CHARGES . . .	192.4	34.8	157.6	2
RENTAL PAYMENTS.	73.0	33.2	39.9	3
	3581-AUTOMATIC MERCHANDISING MACHINES			
ASSETS, BEGINNING OF YEAR.	88.3	28.1	(60.3)	14
CAPITAL EXPEND., NEW . .	(10.5)	(1.8)	(8.6)	25
CAPITAL EXPEND., USED. .	2.5	-	2.5	1
RETIREMENTS.	(1.7)	(.1)	(1.6)	16
ASSETS, END OF YEAR. . . .	(99.6)	29.8	(69.8)	15
DEPRECIATION CHARGES . . .	(6.9)	(1.2)	(5.7)	18
RENTAL PAYMENTS.	(3.0)	(2.3)	.7	16
	3582-COMMERCIAL LAUNDRY EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	33.8	(9.9)	(23.9)	12
CAPITAL EXPEND., NEW . .	(1.8)	(.2)	(1.6)	28
CAPITAL EXPEND., USED. .	(.4)	.2	(.3)	29
RETIREMENTS.	(4.9)	(.3)	(4.6)	64
ASSETS, END OF YEAR. . . .	31.1	10.0	21.2	12
DEPRECIATION CHARGES . . .	(2.5)	(.8)	(1.7)	24
RENTAL PAYMENTS.	(2.3)	(2.0)	(.3)	26
	3585-REFRIGERATION, HEATING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	2 160.7	705.0	1 455.7	1
CAPITAL EXPEND., NEW . .	229.6	39.6	189.9	2
CAPITAL EXPEND., USED. .	7.7	1.6	6.1	3
RETIREMENTS.	86.7	11.6	75.1	1
ASSETS, END OF YEAR. . . .	2 311.2	734.6	1 576.6	1
DEPRECIATION CHARGES . . .	155.2	26.1	129.1	1
RENTAL PAYMENTS.	50.8	17.9	32.8	2
	3586-MEASURING AND DISPENSING PUMPS			
ASSETS, BEGINNING OF YEAR.	83.1	28.6	54.5	10
CAPITAL EXPEND., NEW . .	6.3	(.9)	5.4	7
CAPITAL EXPEND., USED. .	(1.2)	(.5)	.7	59
RETIREMENTS.	4.7	(.2)	4.5	6
ASSETS, END OF YEAR. . . .	86.0	29.9	56.1	10
DEPRECIATION CHARGES . . .	5.9	1.0	4.9	8
RENTAL PAYMENTS.	1.5	(.2)	1.3	7
	3589-SERVICE INDUSTRY MACHINERY, NEC			
ASSETS, BEGINNING OF YEAR.	256.0	95.4	160.6	7
CAPITAL EXPEND., NEW . .	32.7	7.3	25.3	10
CAPITAL EXPEND., USED. .	(4.0)	(3.1)	(.8)	27
RETIREMENTS.	11.4	(2.6)	8.8	14
ASSETS, END OF YEAR. . . .	281.2	103.3	178.0	6
DEPRECIATION CHARGES . . .	21.9	5.7	16.2	9
RENTAL PAYMENTS.	15.4	10.7	4.7	12
	359-MISC MACHINERY, EXC ELEC			
ASSETS, BEGINNING OF YEAR.	2 802.8	563.0	2 239.7	7
CAPITAL EXPEND., NEW . .	403.9	61.5	342.4	5
CAPITAL EXPEND., USED. .	66.2	8.5	57.8	10
RETIREMENTS.	117.5	15.0	102.8	13
ASSETS, END OF YEAR. . . .	3 155.4	617.8	2 537.0	1
DEPRECIATION CHARGES . . .	258.5	26.1	232.4	4
RENTAL PAYMENTS.	117.6	71.4	46.3	6
	3592-CARBURETORS, PISTONS, RINGS, ETC			
ASSETS, BEGINNING OF YEAR.	469.2	102.3	366.9	1
CAPITAL EXPEND., NEW . .	77.9	16.1	61.8	1
CAPITAL EXPEND., USED. .	6.1	1.1	5.1	5
RETIREMENTS.	14.3	.3	14.0	1
ASSETS, END OF YEAR. . . .	538.9	119.1	419.8	1
DEPRECIATION CHARGES . . .	30.7	3.7	27.1	2
RENTAL PAYMENTS.	5.8	(1.7)	4.1	5
	3599-MACHINERY, EXCEPT ELECTRICAL, NEC			
ASSETS, BEGINNING OF YEAR.	2 333.7	460.7	1 872.8	1
CAPITAL EXPEND., NEW . .	325.9	(45.4)	280.5	6
CAPITAL EXPEND., USED. .	60.0	(7.4)	52.7	11
RETIREMENTS.	(103.2)	(14.6)	(88.8)	15
ASSETS, END OF YEAR. . . .	2 616.5	498.8	2 117.2	1
DEPRECIATION CHARGES . . .	227.7	22.5	205.3	4
RENTAL PAYMENTS.	111.9	69.7	42.2	7
	36-ELECTRIC, ELECTRONIC EQUIP			
ASSETS, BEGINNING OF YEAR.	21 845.9	6 716.2	15 129.5	1
CAPITAL EXPEND., NEW . .	2 873.2	512.7	2 360.2	1
CAPITAL EXPEND., USED. .	248.8	83.3	165.5	2
RETIREMENTS.	1 045.0	134.7	910.3	1
ASSETS, END OF YEAR. . . .	23 922.5	7 177.5	16 744.7	1
DEPRECIATION CHARGES . . .	1 710.5	291.9	1 418.5	1
RENTAL PAYMENTS.	529.8	249.8	279.9	1
	361-ELECTRIC DISTRIBUTING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	1 365.1	464.0	901.0	1
CAPITAL EXPEND., NEW . .	141.5	21.0	120.6	3
CAPITAL EXPEND., USED. .	9.2	1.4	7.7	9
RETIREMENTS.	49.6	7.5	42.1	3
ASSETS, END OF YEAR. . . .	1 466.2	478.9	987.2	1
DEPRECIATION CHARGES . . .	83.7	17.2	66.5	3
RENTAL PAYMENTS.	27.4	11.8	15.5	4
	3612-TRANSFORMERS			
ASSETS, BEGINNING OF YEAR.	618.1	213.4	404.7	4
CAPITAL EXPEND., NEW . .	69.0	7.2	61.7	5
CAPITAL EXPEND., USED. .	3.8	(.9)	2.9	9
RETIREMENTS.	24.7	3.7	21.0	4
ASSETS, END OF YEAR. . . .	666.2	217.9	448.3	3
DEPRECIATION CHARGES . . .	38.9	8.0	30.9	2
RENTAL PAYMENTS.	10.0	3.7	6.3	8
	3613-SWITCHGEAR, SWITCHBOARD APPARATUS			
ASSETS, BEGINNING OF YEAR.	747.0	250.6	496.4	2
CAPITAL EXPEND., NEW . .	72.6	13.8	58.9	4
CAPITAL EXPEND., USED. .	5.3	.5	(4.8)	14
RETIREMENTS.	25.0	3.8	21.1	3
ASSETS, END OF YEAR. . . .	800.0	261.1	538.9	2
DEPRECIATION CHARGES . . .	44.9	9.2	35.6	4
RENTAL PAYMENTS.	17.4	8.2	9.2	4
	362-ELECTRICAL INDUSTRIAL APPARATUS			
ASSETS, BEGINNING OF YEAR.	2 689.7	810.8	1 878.7	7
CAPITAL EXPEND., NEW . .	313.6	61.8	251.8	2
CAPITAL EXPEND., USED. .	19.0	6.7	12.3	8
RETIREMENTS.	83.4	15.2	68.1	5
ASSETS, END OF YEAR. . . .	2 938.8	864.0	2 076.2	7
DEPRECIATION CHARGES . . .	190.7	31.9	158.6	2
RENTAL PAYMENTS.	50.5	19.8	30.8	3
	3621-MOTORS AND GENERATORS			
ASSETS, BEGINNING OF YEAR.	1 295.1	344.0	950.9	1
CAPITAL EXPEND., NEW . .	158.1	25.3	132.8	2
CAPITAL EXPEND., USED. .	6.0	(1.3)	4.7	5
RETIREMENTS.	54.8	11.6	43.2	6
ASSETS, END OF YEAR. . . .	1 404.4	359.0	1 045.3	1
DEPRECIATION CHARGES . . .	92.8	13.5	79.2	2
RENTAL PAYMENTS.	21.8	7.4	14.4	4
	3622-INDUSTRIAL CONTROLS			
ASSETS, BEGINNING OF YEAR.	553.5	231.6	321.9	2
CAPITAL EXPEND., NEW . .	59.8	12.5	47.3	7
CAPITAL EXPEND., USED. .	3.9	(2.2)	1.7	13
RETIREMENTS.	18.4	2.1	16.3	3
ASSETS, END OF YEAR. . . .	598.9	244.2	354.6	2
DEPRECIATION CHARGES . . .	40.5	9.0	31.4	2
RENTAL PAYMENTS.	18.3	6.3	12.0	4
	3623-WELDING APPARATUS, ELECTRIC			
ASSETS, BEGINNING OF YEAR.	208.9	70.1	138.9	6
CAPITAL EXPEND., NEW . .	41.0	15.5	25.5	4
CAPITAL EXPEND., USED. .	6.3	1.3	5.0	3
RETIREMENTS.	(4.2)	(.9)	(3.3)	18
ASSETS, END OF YEAR. . . .	251.8	86.0	165.8	5
DEPRECIATION CHARGES . . .	15.5	3.5	12.1	8
RENTAL PAYMENTS.	5.6	(3.7)	1.8	13

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3624-CARBON AND GRAPHITE PRODUCTS			
ASSETS, BEGINNING OF YEAR.	452.2	112.3	339.9	3
CAPITAL EXPEND., NEW . .	37.0	(4.9)	32.1	9
CAPITAL EXPEND., USED. .	(.9)	(.6)	.3	53
RETIREMENTS.	(3.1)	(.2)	(2.9)	17
ASSETS, END OF YEAR. . . .	487.0	117.5	369.4	3
DEPRECIATION CHARGES . . .	26.8	4.1	22.8	6
RENTAL PAYMENTS.	1.3	(.4)	(.9)	12
	3629-ELEC INDUSTRIAL APPARATUS, NEC			
ASSETS, BEGINNING OF YEAR.	179.9	52.9	127.1	6
CAPITAL EXPEND., NEW . .	17.7	(3.6)	14.1	12
CAPITAL EXPEND., USED. .	(1.9)	(1.4)	(.5)	63
RETIREMENTS.	(2.8)	(.5)	(2.3)	24
ASSETS, END OF YEAR. . . .	196.7	57.3	139.4	5
DEPRECIATION CHARGES . . .	15.1	1.9	13.2	5
RENTAL PAYMENTS.	(3.6)	1.9	(1.7)	16
	363-HOUSEHOLD APPLIANCES			
ASSETS, BEGINNING OF YEAR.	2 167.8	741.8	1 426.0	1
CAPITAL EXPEND., NEW . .	212.1	42.8	169.2	3
CAPITAL EXPEND., USED. .	46.4	21.9	24.6	1
RETIREMENTS.	121.4	26.7	94.4	3
ASSETS, END OF YEAR. . . .	2 305.1	779.8	1 525.4	1
DEPRECIATION CHARGES . . .	160.2	34.1	126.1	1
RENTAL PAYMENTS.	40.5	15.1	25.3	2
	3631-HOUSEHOLD COOKING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	331.2	132.4	198.8	2
CAPITAL EXPEND., NEW . .	35.7	8.6	27.1	2
CAPITAL EXPEND., USED. .	4.8	2.2	2.6	1
RETIREMENTS.	10.8	.6	10.2	3
ASSETS, END OF YEAR. . . .	360.9	142.6	218.3	2
DEPRECIATION CHARGES . . .	22.8	5.7	17.1	3
RENTAL PAYMENTS.	7.2	2.0	5.2	3
	3632-HOUSEHOLD REFRIGERATORS, FREEZERS			
ASSETS, BEGINNING OF YEAR.	518.6	173.5	345.1	1
CAPITAL EXPEND., NEW . .	46.7	10.3	36.4	2
CAPITAL EXPEND., USED. .	1.9	.7	1.3	1
RETIREMENTS.	16.8	1.5	15.3	1
ASSETS, END OF YEAR. . . .	550.4	183.1	367.4	1
DEPRECIATION CHARGES . . .	44.7	11.4	33.3	1
RENTAL PAYMENTS.	9.3	3.5	5.8	1
	3633-HOUSEHOLD LAUNDRY EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	411.4	150.2	261.2	1
CAPITAL EXPEND., NEW . .	26.8	7.2	19.6	1
CAPITAL EXPEND., USED. .	(.1)	-	(.1)	51
RETIREMENTS.	32.3	16.5	15.8	1
ASSETS, END OF YEAR. . . .	406.0	140.8	265.2	1
DEPRECIATION CHARGES . . .	23.2	4.9	18.3	1
RENTAL PAYMENTS.	1.4	.4	1.0	3
	3634-ELECTRIC HOUSEWARES AND FANS			
ASSETS, BEGINNING OF YEAR.	456.9	144.1	312.8	2
CAPITAL EXPEND., NEW . .	52.2	(9.3)	42.9	8
CAPITAL EXPEND., USED. .	10.6	2.5	8.1	3
RETIREMENTS.	41.6	(7.4)	34.2	8
ASSETS, END OF YEAR. . . .	478.0	148.5	329.5	1
DEPRECIATION CHARGES . . .	33.7	5.6	28.2	5
RENTAL PAYMENTS.	11.1	5.8	5.2	4
	3635-HOUSEHOLD VACUUM CLEANERS			
ASSETS, BEGINNING OF YEAR.	144.2	47.9	96.3	4
CAPITAL EXPEND., NEW . .	16.0	(.6)	15.4	4
CAPITAL EXPEND., USED. .	1.2	.2	.9	1
RETIREMENTS.	6.6	(.1)	6.5	5
ASSETS, END OF YEAR. . . .	154.8	48.6	106.2	4
DEPRECIATION CHARGES . . .	11.1	1.8	9.3	3
RENTAL PAYMENTS.	3.7	.9	2.8	2
	3636-SEWING MACHINES			
ASSETS, BEGINNING OF YEAR.	112.1	27.1	85.0	7
CAPITAL EXPEND., NEW . .	(7.2)	(.6)	(6.6)	19
CAPITAL EXPEND., USED. .	1.8	-	1.8	2
RETIREMENTS.	3.2	(.1)	3.1	10
ASSETS, END OF YEAR. . . .	117.9	27.6	90.3	7
DEPRECIATION CHARGES . . .	8.0	.8	7.1	5
RENTAL PAYMENTS.	2.8	(1.1)	1.7	13
	3639-HOUSEHOLD APPLIANCES, NEC			
ASSETS, BEGINNING OF YEAR.	193.4	66.6	126.7	3
CAPITAL EXPEND., NEW . .	27.4	6.2	21.3	8
CAPITAL EXPEND., USED. .	26.0	16.2	9.8	1
RETIREMENTS.	(9.7)	.5	(9.2)	17
ASSETS, END OF YEAR. . . .	237.1	88.5	148.5	2
DEPRECIATION CHARGES . . .	16.7	3.8	12.8	2
RENTAL PAYMENTS.	5.1	1.4	3.7	3
	364-ELEC LIGHTING, WIRING EQUIP			
ASSETS, BEGINNING OF YEAR.	2 109.7	589.2	1 520.5	9
CAPITAL EXPEND., NEW . .	226.8	41.5	185.2	3
CAPITAL EXPEND., USED. .	17.1	6.1	11.1	11
RETIREMENTS.	84.3	15.0	69.4	3
ASSETS, END OF YEAR. . . .	2 269.0	621.7	1 647.3	9
DEPRECIATION CHARGES . . .	148.0	25.8	122.2	2
RENTAL PAYMENTS.	57.4	32.6	24.8	4
	3641-ELECTRIC LAMPS			
ASSETS, BEGINNING OF YEAR.	561.2	126.9	434.3	1
CAPITAL EXPEND., NEW . .	35.7	5.5	30.2	2
CAPITAL EXPEND., USED. .	6.4	-	6.4	1
RETIREMENTS.	14.6	.9	13.7	1
ASSETS, END OF YEAR. . . .	588.7	131.4	457.2	1
DEPRECIATION CHARGES . . .	35.3	6.1	29.2	1
RENTAL PAYMENTS.	3.2	1.4	(1.8)	14
	3643-CURRENT-CARRYING WIRING DEVICES			
ASSETS, BEGINNING OF YEAR.	408.6	102.2	306.3	3
CAPITAL EXPEND., NEW . .	59.5	13.5	46.0	6
CAPITAL EXPEND., USED. .	1.9	.8	1.1	5
RETIREMENTS.	14.2	(1.4)	12.9	6
ASSETS, END OF YEAR. . . .	455.8	115.2	340.6	2
DEPRECIATION CHARGES . . .	32.4	4.7	27.7	3
RENTAL PAYMENTS.	11.6	6.9	4.7	7
	3644-NONCURRENT-CARRYING WIR'G DEVICES			
ASSETS, BEGINNING OF YEAR.	395.5	130.5	264.9	3
CAPITAL EXPEND., NEW . .	35.0	10.5	24.5	9
CAPITAL EXPEND., USED. .	(3.3)	(2.2)	1.1	41
RETIREMENTS.	12.8	(3.8)	9.0	10
ASSETS, END OF YEAR. . . .	421.0	139.5	281.5	3
DEPRECIATION CHARGES . . .	25.2	5.5	19.8	4
RENTAL PAYMENTS.	10.0	4.8	5.2	5
	3645-RESIDENTIAL LIGHTING FIXTURES			
ASSETS, BEGINNING OF YEAR.	119.0	41.4	77.6	6
CAPITAL EXPEND., NEW . .	10.9	(2.5)	8.4	13
CAPITAL EXPEND., USED. .	(1.8)	(1.0)	.8	30
RETIREMENTS.	(9.4)	(4.1)	5.4	16
ASSETS, END OF YEAR. . . .	122.2	40.8	81.4	6
DEPRECIATION CHARGES . . .	8.2	1.8	6.4	7
RENTAL PAYMENTS.	14.3	10.2	4.2	8
	3646-COMMERCIAL LIGHTING FIXTURES			
ASSETS, BEGINNING OF YEAR.	162.6	47.7	114.9	3
CAPITAL EXPEND., NEW . .	(20.8)	(3.1)	(17.7)	15
CAPITAL EXPEND., USED. .	.5	.3	.2	1
RETIREMENTS.	7.2	(1.2)	6.1	14
ASSETS, END OF YEAR. . . .	176.4	49.9	126.7	3
DEPRECIATION CHARGES . . .	11.6	1.8	9.7	3
RENTAL PAYMENTS.	11.3	6.1	5.2	7
	3647-VEHICULAR LIGHTING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	284.8	76.3	208.5	3
CAPITAL EXPEND., NEW . .	48.2	(3.3)	44.8	3
CAPITAL EXPEND., USED. .	1.1	.1	1.0	1
RETIREMENTS.	18.7	2.7	16.0	4
ASSETS, END OF YEAR. . . .	315.4	77.0	238.5	3
DEPRECIATION CHARGES . . .	22.0	3.0	19.0	2
RENTAL PAYMENTS.	2.5	(.7)	(1.9)	8
	3648-LIGHTING EQUIPMENT, NEC			
ASSETS, BEGINNING OF YEAR.	178.0	64.1	113.9	4
CAPITAL EXPEND., NEW . .	(16.7)	(3.1)	13.6	16
CAPITAL EXPEND., USED. .	(2.1)	(1.7)	.4	50
RETIREMENTS.	7.3	.9	6.4	9
ASSETS, END OF YEAR. . . .	189.5	68.0	121.4	3
DEPRECIATION CHARGES . . .	13.2	2.9	10.3	3
RENTAL PAYMENTS.	4.4	(2.6)	1.9	14
	365-RADIO, TV RECEIVING EQUIPMENT			
ASSETS, BEGINNING OF YEAR.	903.6	355.4	548.3	1
CAPITAL EXPEND., NEW . .	130.9	29.8	101.1	3
CAPITAL EXPEND., USED. .	23.0	9.2	13.7	1
RETIREMENTS.	41.9	3.9	38.0	6
ASSETS, END OF YEAR. . . .	1 015.6	390.5	625.1	1
DEPRECIATION CHARGES . . .	73.0	15.2	57.8	2
RENTAL PAYMENTS.	34.9	15.8	19.0	4
	3651-RADIO AND TV RECEIVING SETS			
ASSETS, BEGINNING OF YEAR.	706.4	295.6	410.9	1
CAPITAL EXPEND., NEW . .	104.6	26.4	78.2	3
CAPITAL EXPEND., USED. .	22.8	9.1	13.7	1
RETIREMENTS.	31.1	(2.8)	28.3	7
ASSETS, END OF YEAR. . . .	802.8	328.3	474.5	1
DEPRECIATION CHARGES . . .	56.3	12.6	43.7	1
RENTAL PAYMENTS.	23.4	8.4	15.0	2
	3652-PHONO RECORDS, PRERECORDED TAPE			
ASSETS, BEGINNING OF YEAR.	197.2	59.8	137.4	4
CAPITAL EXPEND., NEW . .	26.3	3.4	22.9	9
CAPITAL EXPEND., USED. .	(.1)	(.1)	-	73
RETIREMENTS.	10.8	(1.1)	9.7	10
ASSETS, END OF YEAR. . . .	212.8	62.2	150.6	4
DEPRECIATION CHARGES . . .	16.7	2.6	14.1	8
RENTAL PAYMENTS.	11.5	(7.4)	4.0	10

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
366-COMMUNICATION EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	5 001.2	1 607.8	3 393.4	4
CAPITAL EXPEND., NEW . .	674.0	109.6	564.5	2
CAPITAL EXPEND., USED. .	45.0	13.3	31.7	2
RETIREMENTS.	289.4	37.9	251.5	2
ASSETS, END OF YEAR. . . .	5 430.8	1 692.7	3 738.1	4
DEPRECIATION CHARGES . . .	407.4	68.7	338.7	2
RENTAL PAYMENTS.	169.4	83.6	85.7	2
3661-TELEPHONE AND TELEGRAPH APPARATUS				
ASSETS, BEGINNING OF YEAR.	1 983.7	600.1	1 383.6	1
CAPITAL EXPEND., NEW . .	208.2	13.4	194.9	1
CAPITAL EXPEND., USED. .	17.0	4.4	12.6	1
RETIREMENTS.	109.5	7.7	101.8	1
ASSETS, END OF YEAR. . . .	2 099.4	610.2	1 489.3	1
DEPRECIATION CHARGES . . .	142.1	18.3	123.8	1
RENTAL PAYMENTS.	34.2	9.0	25.2	4
3662-RADIO AND TV COMMUNICATION EQUIP				
ASSETS, BEGINNING OF YEAR.	3 017.5	1 007.6	2 009.9	1
CAPITAL EXPEND., NEW . .	465.8	96.2	369.6	2
CAPITAL EXPEND., USED. .	28.0	8.9	19.0	4
RETIREMENTS.	180.0	30.2	149.7	3
ASSETS, END OF YEAR. . . .	3 331.3	1 082.6	2 248.8	1
DEPRECIATION CHARGES . . .	265.3	50.4	214.9	3
RENTAL PAYMENTS.	135.2	74.6	60.5	2
367-ELECTRONIC COMPONENTS, ACCESS				
ASSETS, BEGINNING OF YEAR.	5 480.0	1 541.7	3 938.2	1
CAPITAL EXPEND., NEW . .	780.6	129.2	651.2	3
CAPITAL EXPEND., USED. .	78.0	22.7	55.3	3
RETIREMENTS.	312.3	21.8	290.6	2
ASSETS, END OF YEAR. . . .	6 026.1	1 671.9	4 354.0	3
DEPRECIATION CHARGES . . .	487.1	71.9	415.2	1
RENTAL PAYMENTS.	107.4	52.2	55.3	3
3671-ELECTRON TUBES, RECEIVING TYPE				
ASSETS, BEGINNING OF YEAR.	679.7	190.6	489.1	2
CAPITAL EXPEND., NEW . .	51.7	15.5	36.2	1
CAPITAL EXPEND., USED. .	3.1	.3	2.9	1
RETIREMENTS.	48.8	2.6	46.2	1
ASSETS, END OF YEAR. . . .	685.7	203.7	482.0	2
DEPRECIATION CHARGES . . .	35.1	6.3	28.8	4
RENTAL PAYMENTS.	10.9	5.0	5.9	2
3674-SEMICONDUCTORS, RELATED DEVICES				
ASSETS, BEGINNING OF YEAR.	2 401.3	705.7	1 695.6	1
CAPITAL EXPEND., NEW . .	409.4	62.4	347.0	2
CAPITAL EXPEND., USED. .	38.8	8.3	30.5	2
RETIREMENTS.	146.9	(6.0)	140.9	4
ASSETS, END OF YEAR. . . .	2 702.7	770.5	1 932.2	1
DEPRECIATION CHARGES . . .	239.9	36.0	203.9	1
RENTAL PAYMENTS.	41.8	17.5	24.3	6
3675-ELECTRONIC CAPACITORS				
ASSETS, BEGINNING OF YEAR.	218.3	49.4	168.9	3
CAPITAL EXPEND., NEW . .	31.0	4.8	26.2	3
CAPITAL EXPEND., USED. .	2.0	.2	1.8	1
RETIREMENTS.	11.6	1.8	9.8	4
ASSETS, END OF YEAR. . . .	239.7	52.6	187.1	3
DEPRECIATION CHARGES . . .	20.4	2.7	17.7	3
RENTAL PAYMENTS.	6.5	3.0	3.5	5
3676-ELECTRONIC RESISTORS				
ASSETS, BEGINNING OF YEAR.	201.5	41.2	160.3	3
CAPITAL EXPEND., NEW . .	19.9	(1.4)	18.6	4
CAPITAL EXPEND., USED. .	3.7	.7	3.0	1
RETIREMENTS.	12.4	1.2	11.2	3
ASSETS, END OF YEAR. . . .	212.7	42.0	170.7	3
DEPRECIATION CHARGES . . .	16.5	1.5	15.0	3
RENTAL PAYMENTS.	5.0	1.6	3.4	4
3677-ELECTRONIC COILS AND TRANSFORMERS				
ASSETS, BEGINNING OF YEAR.	87.4	(24.5)	62.9	12
CAPITAL EXPEND., NEW . .	(9.3)	(1.4)	(7.9)	91
CAPITAL EXPEND., USED. .	(.9)	-	(.8)	24
RETIREMENTS.	(3.5)	(.4)	(3.1)	15
ASSETS, END OF YEAR. . . .	94.1	(25.5)	68.5	7
DEPRECIATION CHARGES . . .	9.9	(1.2)	8.7	6
RENTAL PAYMENTS.	(3.1)	(2.3)	(.7)	15
3678-ELECTRONIC CONNECTORS				
ASSETS, BEGINNING OF YEAR.	304.5	75.1	229.4	2
CAPITAL EXPEND., NEW . .	38.8	3.6	35.2	2
CAPITAL EXPEND., USED. .	2.3	1.2	(1.1)	8
RETIREMENTS.	13.2	2.5	10.7	4
ASSETS, END OF YEAR. . . .	332.4	77.3	255.1	1
DEPRECIATION CHARGES . . .	26.6	3.8	22.8	1
RENTAL PAYMENTS.	5.6	2.9	2.7	4
3679-ELECTRONIC COMPONENTS, NEC				
ASSETS, BEGINNING OF YEAR.	1 587.3	455.3	1 132.0	2
CAPITAL EXPEND., NEW . .	220.3	(40.2)	180.2	7
CAPITAL EXPEND., USED. .	27.2	12.0	15.2	8
RETIREMENTS.	76.0	7.2	68.8	3
ASSETS, END OF YEAR. . . .	1 758.8	500.2	1 258.5	2
DEPRECIATION CHARGES . . .	138.7	20.3	118.4	2
RENTAL PAYMENTS.	34.6	19.9	14.8	5
369-MISC ELEC EQUIPMENT, SUPPLIES				
ASSETS, BEGINNING OF YEAR.	2 128.8	605.5	1 523.4	1
CAPITAL EXPEND., NEW . .	393.7	77.0	316.6	9
CAPITAL EXPEND., USED. .	11.1	2.0	9.1	6
RETIREMENTS.	62.6	6.6	56.1	3
ASSETS, END OF YEAR. . . .	2 471.0	677.9	1 793.0	8
DEPRECIATION CHARGES . . .	160.3	27.1	133.2	2
RENTAL PAYMENTS.	42.4	18.9	23.6	3
3691-STORAGE BATTERIES				
ASSETS, BEGINNING OF YEAR.	489.0	149.6	339.4	2
CAPITAL EXPEND., NEW . .	138.0	(36.9)	101.0	13
CAPITAL EXPEND., USED. .	1.0	.7	.3	6
RETIREMENTS.	12.0	(.9)	11.1	9
ASSETS, END OF YEAR. . . .	616.0	186.4	429.6	3
DEPRECIATION CHARGES . . .	43.3	7.9	35.4	2
RENTAL PAYMENTS.	8.8	2.4	6.4	5
3692-PRIMARY BATTERIES, DRY AND WET				
ASSETS, BEGINNING OF YEAR.	162.9	42.7	120.2	1
CAPITAL EXPEND., NEW . .	33.0	4.5	28.5	2
CAPITAL EXPEND., USED. .	.3	(z)	.2	1
RETIREMENTS.	9.6	.3	9.2	1
ASSETS, END OF YEAR. . . .	186.6	46.9	139.7	1
DEPRECIATION CHARGES . . .	11.8	1.9	9.9	1
RENTAL PAYMENTS.	1.2	.5	.7	1
3693-X-RAY APPARATUS AND TUBES				
ASSETS, BEGINNING OF YEAR.	342.0	168.3	173.7	2
CAPITAL EXPEND., NEW . .	55.8	11.6	44.3	4
CAPITAL EXPEND., USED. .	(2.3)	(1.1)	1.3	24
RETIREMENTS.	10.4	(2.0)	8.4	7
ASSETS, END OF YEAR. . . .	389.7	178.9	210.8	2
DEPRECIATION CHARGES . . .	31.1	9.0	22.1	6
RENTAL PAYMENTS.	16.0	9.6	6.3	5
3694-ENGINE ELECTRICAL EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	924.7	191.1	733.7	1
CAPITAL EXPEND., NEW . .	149.2	21.5	127.7	4
CAPITAL EXPEND., USED. .	4.8	(.2)	4.6	2
RETIREMENTS.	19.8	(1.7)	18.1	4
ASSETS, END OF YEAR. . . .	1 058.9	211.0	847.9	1
DEPRECIATION CHARGES . . .	60.2	6.3	53.9	1
RENTAL PAYMENTS.	9.8	2.9	6.9	4
3699-ELECTRICAL EQUIP , SUPPLIES, NEC				
ASSETS, BEGINNING OF YEAR.	210.2	53.9	156.4	4
CAPITAL EXPEND., NEW . .	(17.7)	(2.5)	(15.2)	19
CAPITAL EXPEND., USED. .	2.7	-	2.7	2
RETIREMENTS.	10.9	1.6	9.2	5
ASSETS, END OF YEAR. . . .	219.8	54.7	165.1	4
DEPRECIATION CHARGES . . .	14.0	2.1	11.9	5
RENTAL PAYMENTS.	(6.6)	3.4	(3.3)	15
37-TRANSPORTATION EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	28 978.2	8 889.0	20 089.1	1
CAPITAL EXPEND., NEW . .	4 685.1	714.5	3 970.6	4
CAPITAL EXPEND., USED. .	158.1	29.9	128.3	8
RETIREMENTS.	1 976.7	165.8	1 811.0	1
ASSETS, END OF YEAR. . . .	31 844.7	9 467.5	22 376.8	1
DEPRECIATION CHARGES . . .	1 894.8	344.1	1 550.6	1
RENTAL PAYMENTS.	475.1	178.3	296.8	2
371-MOTOR VEHICLES AND EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	17 818.2	4 726.1	13 092.0	1
CAPITAL EXPEND., NEW . .	3 649.9	454.3	3 195.4	1
CAPITAL EXPEND., USED. .	73.9	10.5	63.5	4
RETIREMENTS.	1 550.4	63.9	1 486.5	1
ASSETS, END OF YEAR. . . .	19 991.7	5 127.0	14 864.3	1
DEPRECIATION CHARGES . . .	1 188.6	163.9	1 024.7	1
RENTAL PAYMENTS.	158.7	48.3	110.5	2
3711-MOTOR VEHICLES AND CAR BODIES				
ASSETS, BEGINNING OF YEAR.	6 732.8	2 177.4	4 555.4	1
CAPITAL EXPEND., NEW . .	1 703.4	228.1	1 475.1	1
CAPITAL EXPEND., USED. .	6.6	.1	6.5	1
RETIREMENTS.	870.4	42.3	828.1	1
ASSETS, END OF YEAR. . . .	7 572.2	2 363.2	5 208.9	1
DEPRECIATION CHARGES . . .	399.9	72.7	327.2	1
RENTAL PAYMENTS.	58.7	9.8	48.8	1
3713-TRUCK AND BUS BODIES				
ASSETS, BEGINNING OF YEAR.	341.1	131.2	209.8	6
CAPITAL EXPEND., NEW . .	47.2	12.7	34.5	9
CAPITAL EXPEND., USED. .	(2.4)	(.5)	(1.9)	38
RETIREMENTS.	(18.5)	(2.8)	(15.6)	26
ASSETS, END OF YEAR. . . .	372.3	141.7	230.5	5
DEPRECIATION CHARGES . . .	23.6	5.6	18.0	5
RENTAL PAYMENTS.	9.4	(6.0)	(3.4)	14

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
3714-MOTOR VEHICLE PARTS, ACCESSORIES				
ASSETS, BEGINNING OF YEAR.	10 367.2	2 249.6	8 117.5	1
CAPITAL EXPEND., NEW . .	1 848.3	189.7	1 658.6	1
CAPITAL EXPEND., USED. .	59.3	6.2	53.1	4
RETIREMENTS.	648.1	15.6	632.4	2
ASSETS, END OF YEAR. . . .	11 626.7	2 430.0	9 196.7	1
DEPRECIATION CHARGES . . .	738.4	78.1	660.3	1
RENTAL PAYMENTS.	82.3	28.4	53.9	4
3715-TRUCK TRAILERS				
ASSETS, BEGINNING OF YEAR.	271.0	109.0	162.0	4
CAPITAL EXPEND., NEW . .	36.9	15.5	21.4	7
CAPITAL EXPEND., USED. .	2.1	(.3)	1.8	9
RETIREMENTS.	9.9	1.5	8.4	10
ASSETS, END OF YEAR. . . .	300.1	123.3	176.8	3
DEPRECIATION CHARGES . . .	19.2	5.0	14.1	4
RENTAL PAYMENTS.	6.3	(2.6)	3.7	9
3716-MOTOR HOMES				
ASSETS, BEGINNING OF YEAR.	(106.1)	(58.8)	(47.3)	16
CAPITAL EXPEND., NEW . .	14.1	(8.3)	(5.8)	11
CAPITAL EXPEND., USED. .	3.6	3.3	.3	12
RETIREMENTS.	(3.7)	(1.7)	(2.0)	61
ASSETS, END OF YEAR. . . .	120.2	(68.8)	(51.4)	14
DEPRECIATION CHARGES . . .	(7.6)	(2.6)	(5.0)	33
RENTAL PAYMENTS.	(2.1)	(1.4)	(.7)	52
372-AIRCRAFT AND PARTS				
ASSETS, BEGINNING OF YEAR.	6 040.2	2 167.1	3 873.1	3
CAPITAL EXPEND., NEW . .	508.7	91.3	417.5	2
CAPITAL EXPEND., USED. .	(49.0)	10.0	(38.8)	25
RETIREMENTS.	245.5	34.7	210.8	2
ASSETS, END OF YEAR. . . .	6 352.4	2 233.8	4 118.6	1
DEPRECIATION CHARGES . . .	363.6	84.0	279.6	2
RENTAL PAYMENTS.	163.7	52.2	111.7	3
3721-AIRCRAFT				
ASSETS, BEGINNING OF YEAR.	2 666.1	1 099.4	1 566.7	1
CAPITAL EXPEND., NEW . .	201.9	39.9	162.0	1
CAPITAL EXPEND., USED. .	22.7	8.6	14.0	5
RETIREMENTS.	92.2	9.7	82.5	1
ASSETS, END OF YEAR. . . .	2 798.5	1 138.3	1 660.3	1
DEPRECIATION CHARGES . . .	157.9	48.4	109.5	1
RENTAL PAYMENTS.	63.6	28.0	35.6	1
3724-AIRCRAFT ENGINES AND ENGINE PARTS				
ASSETS, BEGINNING OF YEAR.	1 953.3	565.3	1 388.0	1
CAPITAL EXPEND., NEW . .	172.0	25.2	146.8	3
CAPITAL EXPEND., USED. .	(19.2)	1.0	(18.2)	62
RETIREMENTS.	90.9	9.9	81.0	2
ASSETS, END OF YEAR. . . .	2 053.6	581.6	1 472.1	2
DEPRECIATION CHARGES . . .	115.8	19.0	96.8	3
RENTAL PAYMENTS.	57.0	8.9	48.1	4
3728-AIRCRAFT EQUIPMENT, NEC				
ASSETS, BEGINNING OF YEAR.	1 420.8	502.4	918.4	2
CAPITAL EXPEND., NEW . .	134.8	(26.2)	108.6	6
CAPITAL EXPEND., USED. .	7.1	(.4)	6.6	12
RETIREMENTS.	62.4	(15.1)	47.3	7
ASSETS, END OF YEAR. . . .	1 500.3	513.9	986.3	2
DEPRECIATION CHARGES . . .	89.9	16.5	73.4	6
RENTAL PAYMENTS.	43.2	15.2	27.9	7
373-SHIP, BOAT BUILDING, REPAIRING				
ASSETS, BEGINNING OF YEAR.	2 330.9	1 009.5	1 321.4	1
CAPITAL EXPEND., NEW . .	220.1	107.3	112.8	1
CAPITAL EXPEND., USED. .	9.1	2.2	6.9	7
RETIREMENTS.	86.1	50.8	35.4	8
ASSETS, END OF YEAR. . . .	2 473.9	1 068.1	1 405.8	1
DEPRECIATION CHARGES . . .	161.0	55.5	105.5	3
RENTAL PAYMENTS.	60.3	28.8	31.5	8
3731-SHIP BUILDING AND REPAIRING				
ASSETS, BEGINNING OF YEAR.	2 090.0	888.2	1 201.7	2
CAPITAL EXPEND., NEW . .	178.7	91.7	87.0	13
CAPITAL EXPEND., USED. .	7.2	1.4	5.8	9
RETIREMENTS.	72.4	47.0	(25.4)	9
ASSETS, END OF YEAR. . . .	2 203.5	934.3	1 269.1	2
DEPRECIATION CHARGES . . .	139.9	47.7	92.1	3
RENTAL PAYMENTS.	39.4	15.7	23.7	3
3732-BOAT BUILDING AND REPAIRING				
ASSETS, BEGINNING OF YEAR.	240.9	121.3	119.7	7
CAPITAL EXPEND., NEW . .	41.4	(15.6)	25.8	12
CAPITAL EXPEND., USED. .	1.9	.7	(1.2)	11
RETIREMENTS.	(13.7)	(3.8)	(10.0)	19
ASSETS, END OF YEAR. . . .	270.4	133.8	136.7	7
DEPRECIATION CHARGES . . .	21.1	(7.8)	13.4	7
RENTAL PAYMENTS.	(20.9)	(13.1)	(7.8)	21
3743-RAILROAD EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	860.0	267.6	592.4	1
CAPITAL EXPEND., NEW . .	80.5	17.4	63.1	3
CAPITAL EXPEND., USED. .	6.9	3.5	3.4	1
RETIREMENTS.	(21.9)	(1.5)	(20.4)	20
ASSETS, END OF YEAR. . . .	925.5	286.9	638.6	1
DEPRECIATION CHARGES . . .	47.3	10.0	37.3	1
RENTAL PAYMENTS.	12.5	(4.9)	7.6	8
3751-MOTORCYCLES, BICYCLES, AND PARTS				
ASSETS, BEGINNING OF YEAR.	150.9	44.7	106.2	3
CAPITAL EXPEND., NEW . .	18.6	4.6	13.9	3
CAPITAL EXPEND., USED. .	1.0	-	.9	5
RETIREMENTS.	4.3	.3	4.0	9
ASSETS, END OF YEAR. . . .	166.1	49.0	117.1	3
DEPRECIATION CHARGES . . .	12.7	3.1	9.6	3
RENTAL PAYMENTS.	5.5	(3.3)	2.1	10
376-GUIDED MISSILES, SPACE VEHICLES				
ASSETS, BEGINNING OF YEAR.	1 414.0	528.9	885.2	1
CAPITAL EXPEND., NEW . .	163.6	27.6	136.0	1
CAPITAL EXPEND., USED. .	12.8	3.0	9.6	1
RETIREMENTS.	57.1	11.2	45.8	1
ASSETS, END OF YEAR. . . .	1 533.4	548.3	985.5	1
DEPRECIATION CHARGES . . .	94.8	21.2	73.7	1
RENTAL PAYMENTS.	56.8	31.2	25.5	1
3761-GUIDED MISSILES, SPACE VEHICLES				
ASSETS, BEGINNING OF YEAR.	979.2	352.9	626.3	1
CAPITAL EXPEND., NEW . .	125.5	21.8	103.7	1
CAPITAL EXPEND., USED. .	11.1	3.0	8.1	1
RETIREMENTS.	36.6	2.3	34.3	1
ASSETS, END OF YEAR. . . .	1 079.2	375.4	703.8	1
DEPRECIATION CHARGES . . .	70.2	14.0	56.2	1
RENTAL PAYMENTS.	45.6	26.9	18.6	1
3764-SPACE PROPULSION UNITS AND PARTS				
ASSETS, BEGINNING OF YEAR.	349.7	144.3	205.5	1
CAPITAL EXPEND., NEW . .	25.2	5.0	20.2	1
CAPITAL EXPEND., USED. .	1.4	-	1.5	1
RETIREMENTS.	10.9	1.4	9.5	1
ASSETS, END OF YEAR. . . .	365.4	147.8	217.7	1
DEPRECIATION CHARGES . . .	19.7	6.0	13.7	1
RENTAL PAYMENTS.	6.4	1.8	4.6	1
3769-SPACE VEHICLE EQUIPMENT, NEC				
ASSETS, BEGINNING OF YEAR.	85.1	31.7	53.3	2
CAPITAL EXPEND., NEW . .	12.9	.8	12.1	3
CAPITAL EXPEND., USED. .	.2	-	.2	1
RETIREMENTS.	9.5	7.5	2.1	3
ASSETS, END OF YEAR. . . .	88.7	25.1	63.6	1
DEPRECIATION CHARGES . . .	5.0	1.2	3.8	2
RENTAL PAYMENTS.	4.8	2.6	2.3	3
379-MISC TRANSPORTATION EQUIPMENT				
ASSETS, BEGINNING OF YEAR.	363.9	145.2	218.7	3
CAPITAL EXPEND., NEW . .	43.9	12.1	31.9	8
CAPITAL EXPEND., USED. .	(5.4)	.6	(4.8)	17
RETIREMENTS.	11.4	(3.4)	8.0	12
ASSETS, END OF YEAR. . . .	401.9	154.4	247.3	3
DEPRECIATION CHARGES . . .	26.8	6.5	20.3	10
RENTAL PAYMENTS.	17.4	9.5	7.8	7
3792-TRAVEL TRAILERS AND CAMPERS				
ASSETS, BEGINNING OF YEAR.	142.7	75.8	66.9	5
CAPITAL EXPEND., NEW . .	21.8	(7.9)	13.9	14
CAPITAL EXPEND., USED. .	(1.4)	.1	(1.4)	19
RETIREMENTS.	7.3	(3.1)	4.3	12
ASSETS, END OF YEAR. . . .	158.6	80.7	77.9	4
DEPRECIATION CHARGES . . .	12.2	3.4	8.8	4
RENTAL PAYMENTS.	9.4	5.4	4.0	8
3795-TANKS AND TANK COMPONENTS				
ASSETS, BEGINNING OF YEAR.	82.3	21.1	61.3	1
CAPITAL EXPEND., NEW . .	12.7	3.1	9.6	1
CAPITAL EXPEND., USED. .	2.2	.6	1.7	1
RETIREMENTS.	1.8	-	1.7	1
ASSETS, END OF YEAR. . . .	95.5	24.7	70.8	1
DEPRECIATION CHARGES . . .	4.0	.7	3.4	1
RENTAL PAYMENTS.	2.8	1.0	1.8	1
3799-TRANSPORTATION EQUIPMENT, NEC				
ASSETS, BEGINNING OF YEAR.	138.9	(48.3)	90.5	6
CAPITAL EXPEND., NEW . .	9.4	(1.0)	8.4	13
CAPITAL EXPEND., USED. .	(1.8)	(Z)	(1.8)	48
RETIREMENTS.	(2.3)	(.3)	(2.0)	45
ASSETS, END OF YEAR. . . .	147.7	(49.0)	98.7	5
DEPRECIATION CHARGES . . .	(10.5)	(2.4)	(8.1)	25
RENTAL PAYMENTS.	(5.3)	(3.2)	(2.1)	18
38-INSTRUMENTS, RELATED PRODUCTS				
ASSETS, BEGINNING OF YEAR.	7 732.0	2 712.5	5 019.4	1
CAPITAL EXPEND., NEW . .	930.5	225.9	704.6	2
CAPITAL EXPEND., USED. .	54.2	24.4	29.8	13
RETIREMENTS.	296.4	70.4	226.0	4
ASSETS, END OF YEAR. . . .	8 420.2	2 892.2	5 528.0	1
DEPRECIATION CHARGES . . .	602.0	125.3	476.7	1
RENTAL PAYMENTS.	212.4	100.4	111.8	3

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	3811-ENGINEERING, SCIENTIFIC INSTRU			
ASSETS, BEGINNING OF YEAR.	413.0	154.0	259.0	4
CAPITAL EXPEND., NEW . .	51.4	(11.1)	40.3	10
CAPITAL EXPEND., USED. .	(1.4)	(.9)	.5	23
RETIREMENTS.	22.6	(2.3)	20.3	9
ASSETS, END OF YEAR. . . .	443.2	163.7	279.5	3
DEPRECIATION CHARGES . . .	38.1	9.8	28.3	3
RENTAL PAYMENTS.	19.2	10.4	8.8	5
	382-MEASURING, CONTROLLING DEVICES			
ASSETS, BEGINNING OF YEAR.	1 707.4	649.9	1 057.5	1
CAPITAL EXPEND., NEW . .	277.4	74.9	202.5	4
CAPITAL EXPEND., USED. .	(24.5)	(10.6)	(13.8)	15
RETIREMENTS.	107.8	28.3	79.5	3
ASSETS, END OF YEAR. . . .	1 901.5	707.1	1 194.4	1
DEPRECIATION CHARGES . . .	135.5	28.7	106.8	2
RENTAL PAYMENTS.	71.2	30.4	40.7	3
	3822-ENVIRONMENTAL CONTROLS			
ASSETS, BEGINNING OF YEAR.	260.4	93.3	167.1	2
CAPITAL EXPEND., NEW . .	50.1	10.6	39.4	2
CAPITAL EXPEND., USED. .	7.4	2.0	5.4	1
RETIREMENTS.	15.1	.6	14.5	2
ASSETS, END OF YEAR. . . .	302.8	105.3	197.5	2
DEPRECIATION CHARGES . . .	23.3	4.2	19.1	2
RENTAL PAYMENTS.	4.8	1.3	3.4	4
	3823-PROCESS CONTROL INSTRUMENTS			
ASSETS, BEGINNING OF YEAR.	415.9	153.4	262.6	3
CAPITAL EXPEND., NEW . .	50.3	14.1	36.3	6
CAPITAL EXPEND., USED. .	4.0	2.8	1.2	9
RETIREMENTS.	27.6	6.7	20.9	4
ASSETS, END OF YEAR. . . .	442.6	163.5	279.1	4
DEPRECIATION CHARGES . . .	31.1	6.5	24.6	5
RENTAL PAYMENTS.	17.1	7.0	10.1	7
	3824-FLUID METERS AND COUNTING DEVICES			
ASSETS, BEGINNING OF YEAR.	207.5	71.5	136.0	3
CAPITAL EXPEND., NEW . .	19.6	5.1	14.5	4
CAPITAL EXPEND., USED. .	(3.8)	(1.2)	(2.6)	71
RETIREMENTS.	13.3	4.2	9.0	2
ASSETS, END OF YEAR. . . .	217.7	73.6	144.1	4
DEPRECIATION CHARGES . . .	14.9	3.0	11.9	3
RENTAL PAYMENTS.	3.2	1.2	2.0	5
	3825-INSTRU TO MEASURE ELECTRICITY			
ASSETS, BEGINNING OF YEAR.	584.7	243.5	341.2	3
CAPITAL EXPEND., NEW . .	105.0	30.3	74.8	8
CAPITAL EXPEND., USED. .	(8.0)	(4.5)	(3.5)	28
RETIREMENTS.	42.5	15.8	26.7	7
ASSETS, END OF YEAR. . . .	655.2	262.5	392.8	3
DEPRECIATION CHARGES . . .	46.8	11.0	35.7	3
RENTAL PAYMENTS.	27.8	13.3	14.5	4
	3829-MEASUR'G, CONTROL'G DEVICES, NEC			
ASSETS, BEGINNING OF YEAR.	238.9	88.3	150.6	6
CAPITAL EXPEND., NEW . .	52.4	(14.8)	37.6	12
CAPITAL EXPEND., USED. .	(1.3)	.2	(1.1)	56
RETIREMENTS.	9.3	1.0	8.4	6
ASSETS, END OF YEAR. . . .	283.2	102.3	181.0	5
DEPRECIATION CHARGES . . .	19.5	4.0	15.4	6
RENTAL PAYMENTS.	18.4	7.6	10.8	5
	3832-OPTICAL INSTRUMENTS AND LENSES			
ASSETS, BEGINNING OF YEAR.	286.8	110.0	176.8	5
CAPITAL EXPEND., NEW . .	56.0	(15.9)	(40.1)	12
CAPITAL EXPEND., USED. .	(1.6)	(.1)	(1.5)	54
RETIREMENTS.	(9.5)	(.9)	(8.6)	(A)
ASSETS, END OF YEAR. . . .	334.9	125.1	209.8	3
DEPRECIATION CHARGES . . .	(24.8)	(5.7)	(19.1)	17
RENTAL PAYMENTS.	12.9	(5.1)	(7.8)	11
	384-MEDICAL INSTRUMENTS, SUPPLIES			
ASSETS, BEGINNING OF YEAR.	1 154.7	451.2	703.4	1
CAPITAL EXPEND., NEW . .	169.9	38.8	131.1	6
CAPITAL EXPEND., USED. .	(13.1)	(8.0)	5.0	42
RETIREMENTS.	51.0	9.9	41.3	5
ASSETS, END OF YEAR. . . .	1 286.7	488.1	798.2	2
DEPRECIATION CHARGES . . .	91.0	20.1	70.9	3
RENTAL PAYMENTS.	42.3	24.6	17.5	9
	3841-SURGICAL AND MEDICAL INSTRUMENTS			
ASSETS, BEGINNING OF YEAR.	427.9	159.3	268.6	5
CAPITAL EXPEND., NEW . .	76.6	17.0	59.6	3
CAPITAL EXPEND., USED. .	4.2	2.0	2.1	3
RETIREMENTS.	14.6	1.3	13.4	5
ASSETS, END OF YEAR. . . .	494.0	177.1	316.9	4
DEPRECIATION CHARGES . . .	36.6	7.4	29.2	3
RENTAL PAYMENTS.	(17.0)	(9.3)	7.7	20
	3842-SURGICAL APPLIANCES AND SUPPLIES			
ASSETS, BEGINNING OF YEAR.	591.7	237.7	353.7	4
CAPITAL EXPEND., NEW . .	75.8	(17.5)	58.3	13
CAPITAL EXPEND., USED. .	(7.8)	(6.0)	1.8	69
RETIREMENTS.	28.7	4.4	24.5	8
ASSETS, END OF YEAR. . . .	646.6	256.8	389.3	3
DEPRECIATION CHARGES . . .	44.8	10.6	34.2	4
RENTAL PAYMENTS.	19.7	(12.4)	7.1	10
	3843-DENTAL EQUIPMENT AND SUPPLIES			
ASSETS, BEGINNING OF YEAR.	135.2	54.1	81.1	9
CAPITAL EXPEND., NEW . .	17.5	(4.3)	13.3	11
CAPITAL EXPEND., USED. .	(1.1)	-	(1.0)	30
RETIREMENTS.	7.7	4.2	(3.5)	7
ASSETS, END OF YEAR. . . .	146.1	54.2	92.0	9
DEPRECIATION CHARGES . . .	9.6	2.1	7.5	8
RENTAL PAYMENTS.	5.6	(2.9)	2.7	9
	3851-OPHTHALMIC GOODS			
ASSETS, BEGINNING OF YEAR.	268.0	73.9	194.1	3
CAPITAL EXPEND., NEW . .	32.0	9.9	22.1	3
CAPITAL EXPEND., USED. .	4.4	.1	4.3	3
RETIREMENTS.	(10.6)	.5	(10.1)	15
ASSETS, END OF YEAR. . . .	295.8	83.4	210.4	3
DEPRECIATION CHARGES . . .	19.0	3.5	15.5	3
RENTAL PAYMENTS.	8.7	4.1	(4.6)	12
	3861-PHOTOGRAPHIC EQUIP AND SUPPLIES			
ASSETS, BEGINNING OF YEAR.	3 692.9	1 212.3	2 480.6	1
CAPITAL EXPEND., NEW . .	322.2	70.6	251.6	3
CAPITAL EXPEND., USED. .	(8.1)	(4.3)	3.9	21
RETIREMENTS.	81.3	22.8	58.5	3
ASSETS, END OF YEAR. . . .	3 941.9	1 264.4	2 677.6	1
DEPRECIATION CHARGES . . .	275.5	55.0	220.5	1
RENTAL PAYMENTS.	46.6	20.6	26.0	9
	3873-WATCHES, CLOCKS, AND WATCHCASES			
ASSETS, BEGINNING OF YEAR.	209.2	61.2	148.0	3
CAPITAL EXPEND., NEW . .	21.9	(4.7)	(17.1)	3
CAPITAL EXPEND., USED. .	(1.0)	.3	(.7)	17
RETIREMENTS.	13.6	5.9	7.7	5
ASSETS, END OF YEAR. . . .	218.5	60.4	158.1	3
DEPRECIATION CHARGES . . .	18.1	2.5	15.6	7
RENTAL PAYMENTS.	11.5	5.2	6.4	6
	39-MISC MANUFACTUR'G INDUSTRIES			
ASSETS, BEGINNING OF YEAR.	3 906.8	1 306.1	2 600.6	1
CAPITAL EXPEND., NEW . .	523.5	122.6	400.9	4
CAPITAL EXPEND., USED. .	49.8	18.4	31.4	7
RETIREMENTS.	223.3	47.9	175.4	7
ASSETS, END OF YEAR. . . .	4 256.7	1 399.3	2 857.5	1
DEPRECIATION CHARGES . . .	332.1	68.7	263.4	2
RENTAL PAYMENTS.	171.6	112.3	59.3	3
	391-JEWELRY, SILVER AND PLATED WARE			
ASSETS, BEGINNING OF YEAR.	406.7	119.7	286.9	4
CAPITAL EXPEND., NEW . .	41.4	7.2	34.1	8
CAPITAL EXPEND., USED. .	(4.4)	(1.6)	(2.8)	25
RETIREMENTS.	(21.2)	(2.8)	(18.3)	22
ASSETS, END OF YEAR. . . .	431.3	125.7	305.6	3
DEPRECIATION CHARGES . . .	34.3	7.1	27.2	11
RENTAL PAYMENTS.	18.8	13.2	6.2	6
	3911-JEWELRY, PRECIOUS METAL			
ASSETS, BEGINNING OF YEAR.	209.6	(62.1)	147.5	6
CAPITAL EXPEND., NEW . .	28.9	6.0	22.9	10
CAPITAL EXPEND., USED. .	(3.0)	(1.1)	(1.8)	32
RETIREMENTS.	(13.5)	(2.2)	(11.3)	34
ASSETS, END OF YEAR. . . .	228.0	67.0	161.0	5
DEPRECIATION CHARGES . . .	(19.7)	(2.9)	(16.8)	15
RENTAL PAYMENTS.	13.4	9.1	4.3	8
	3914-SILVERWARE AND PLATED WARE			
ASSETS, BEGINNING OF YEAR.	139.1	45.6	93.5	3
CAPITAL EXPEND., NEW . .	7.4	(.8)	6.6	5
CAPITAL EXPEND., USED. .	(.5)	.3	(.3)	24
RETIREMENTS.	3.2	(.5)	2.7	13
ASSETS, END OF YEAR. . . .	143.8	46.2	97.6	3
DEPRECIATION CHARGES . . .	7.6	1.4	6.3	2
RENTAL PAYMENTS.	3.2	1.6	1.6	8
	3915-JEWELERS' MATS , LAPIDARY WORK			
ASSETS, BEGINNING OF YEAR.	57.9	12.0	45.9	12
CAPITAL EXPEND., NEW . .	(5.1)	(.4)	(4.6)	16
CAPITAL EXPEND., USED. .	(1.0)	(.2)	(.7)	52
RETIREMENTS.	4.5	(.1)	4.2	8
ASSETS, END OF YEAR. . . .	59.5	12.5	47.0	11
DEPRECIATION CHARGES . . .	(7.0)	(2.9)	4.1	32
RENTAL PAYMENTS.	(2.3)	(2.0)	(.4)	17
	3931-MUSICAL INSTRUMENTS			
ASSETS, BEGINNING OF YEAR.	162.8	68.4	94.3	3
CAPITAL EXPEND., NEW . .	(16.9)	2.3	(14.7)	22
CAPITAL EXPEND., USED. .	(.6)	-	(.6)	16
RETIREMENTS.	5.5	(.7)	4.8	7
ASSETS, END OF YEAR. . . .	174.8	70.1	104.7	3
DEPRECIATION CHARGES . . .	12.4	2.9	9.6	4
RENTAL PAYMENTS.	8.2	6.1	2.1	10

See footnotes at end of table.

Table 2. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
394-TOYS AND SPORTING GOODS				
ASSETS, BEGINNING OF YEAR.	1 150.0	395.8	754.3	2
CAPITAL EXPEND., NEW . .	170.1	38.3	131.7	7
CAPITAL EXPEND., USED. .	(14.4)	(5.0)	(9.4)	16
RETIREMENTS.	(83.1)	(13.1)	(69.9)	16
ASSETS, END OF YEAR. . . .	1 251.4	425.9	825.5	1
DEPRECIATION CHARGES . . .	110.9	18.5	92.3	4
RENTAL PAYMENTS.	56.3	35.8	20.5	4
3942-DOLLS				
ASSETS, BEGINNING OF YEAR.	41.2	17.4	(23.8)	10
CAPITAL EXPEND., NEW . .	(4.7)	(.9)	(3.8)	21
CAPITAL EXPEND., USED. .	(.2)	(.1)	(.1)	66
RETIREMENTS.	(1.3)	(.1)	(1.1)	22
ASSETS, END OF YEAR. . . .	44.8	18.3	(26.6)	9
DEPRECIATION CHARGES . . .	3.8	(1.0)	(2.8)	13
RENTAL PAYMENTS.	5.2	3.8	1.4	9
3944-GAMES, TOYS, CHILDREN'S VEHICLES				
ASSETS, BEGINNING OF YEAR.	567.1	199.0	368.1	3
CAPITAL EXPEND., NEW . .	79.4	21.5	57.9	4
CAPITAL EXPEND., USED. .	2.1	.7	1.4	3
RETIREMENTS.	36.6	5.5	31.1	6
ASSETS, END OF YEAR. . . .	612.0	215.7	396.3	3
DEPRECIATION CHARGES . . .	55.7	8.4	47.3	4
RENTAL PAYMENTS.	30.0	19.4	10.6	4
3949-SPORTING AND ATHLETIC GOODS, NEC				
ASSETS, BEGINNING OF YEAR.	(541.7)	179.4	(362.4)	18
CAPITAL EXPEND., NEW . .	85.9	15.9	70.0	13
CAPITAL EXPEND., USED. .	(12.2)	(4.2)	(7.9)	19
RETIREMENTS.	(45.2)	(7.4)	(37.7)	29
ASSETS, END OF YEAR. . . .	(594.7)	192.0	402.7	5
DEPRECIATION CHARGES . . .	51.4	9.1	42.2	6
RENTAL PAYMENTS.	21.1	12.6	8.5	8
395-PENS, OFFICE AND ART GOODS				
ASSETS, BEGINNING OF YEAR.	346.3	102.8	243.5	3
CAPITAL EXPEND., NEW . .	51.6	11.3	40.3	3
CAPITAL EXPEND., USED. .	2.7	1.2	1.5	4
RETIREMENTS.	(16.7)	2.1	(14.6)	16
ASSETS, END OF YEAR. . . .	383.8	113.2	270.8	3
DEPRECIATION CHARGES . . .	24.1	3.9	20.2	3
RENTAL PAYMENTS.	13.2	7.8	5.3	4
3951-PENS AND MECHNICAL PENCILS				
ASSETS, BEGINNING OF YEAR.	173.0	48.2	124.8	2
CAPITAL EXPEND., NEW . .	31.2	8.7	22.4	3
CAPITAL EXPEND., USED. .	1.2	.2	1.0	1
RETIREMENTS.	5.3	(.3)	5.1	9
ASSETS, END OF YEAR. . . .	200.0	56.8	143.2	2
DEPRECIATION CHARGES . . .	11.6	1.9	9.8	3
RENTAL PAYMENTS.	3.8	2.1	1.7	6
3952-LEAD PENCILS AND ART GOODS				
ASSETS, BEGINNING OF YEAR.	63.7	23.2	40.5	4
CAPITAL EXPEND., NEW . .	10.2	1.5	8.7	5
CAPITAL EXPEND., USED. .	.1	.1	-	1
RETIREMENTS.	2.0	(.3)	1.7	8
ASSETS, END OF YEAR. . . .	72.0	24.5	47.6	4
DEPRECIATION CHARGES . . .	4.2	.9	3.4	4
RENTAL PAYMENTS.	3.6	2.5	1.0	7
3953-MARKING DEVICES				
ASSETS, BEGINNING OF YEAR.	57.1	(20.1)	37.1	14
CAPITAL EXPEND., NEW . .	(4.9)	(.3)	4.6	16
CAPITAL EXPEND., USED. .	(.1)	-	(.1)	69
RETIREMENTS.	(4.5)	(.5)	(4.0)	57
ASSETS, END OF YEAR. . . .	57.6	(19.9)	37.7	14
DEPRECIATION CHARGES . . .	3.9	(.7)	(3.1)	14
RENTAL PAYMENTS.	2.5	(1.1)	(1.3)	12
3955-CARBON PAPER AND INKED RIBBONS				
ASSETS, BEGINNING OF YEAR.	52.4	11.3	41.1	4
CAPITAL EXPEND., NEW . .	5.3	(.7)	4.6	9
CAPITAL EXPEND., USED. .	1.3	.9	.4	5
RETIREMENTS.	4.8	1.0	3.8	6
ASSETS, END OF YEAR. . . .	54.3	12.0	42.3	4
DEPRECIATION CHARGES . . .	4.4	.5	4.0	4
RENTAL PAYMENTS.	3.4	(2.1)	1.3	9
396-COSTUME JEWELRY AND NOTIONS				
ASSETS, BEGINNING OF YEAR.	393.7	100.2	293.5	2
CAPITAL EXPEND., NEW . .	(47.1)	(15.7)	31.5	20
CAPITAL EXPEND., USED. .	15.4	6.7	8.7	6
RETIREMENTS.	27.8	7.3	20.6	3
ASSETS, END OF YEAR. . . .	428.4	115.4	313.1	3
DEPRECIATION CHARGES . . .	25.8	3.7	22.0	3
RENTAL PAYMENTS.	15.0	8.4	6.5	6
3961-COSTUME JEWELRY				
ASSETS, BEGINNING OF YEAR.	82.7	31.1	51.6	7
CAPITAL EXPEND., NEW . .	(25.5)	(12.1)	(13.4)	36
CAPITAL EXPEND., USED. .	(.6)	(Z)	(.5)	38
RETIREMENTS.	2.9	(.5)	2.4	14
ASSETS, END OF YEAR. . . .	105.9	(42.7)	63.1	10
DEPRECIATION CHARGES . . .	6.3	1.4	4.9	6
RENTAL PAYMENTS.	5.6	3.3	2.3	12
3962-ARTIFICIAL FLOWERS				
ASSETS, BEGINNING OF YEAR.	29.6	13.8	15.7	9
CAPITAL EXPEND., NEW . .	(2.8)	(1.2)	(1.6)	24
CAPITAL EXPEND., USED. .	.7	.7	.1	1
RETIREMENTS.	(1.6)	(.4)	(1.1)	16
ASSETS, END OF YEAR. . . .	31.5	15.2	16.3	8
DEPRECIATION CHARGES . . .	1.7	.6	1.1	9
RENTAL PAYMENTS.	2.0	1.6	.4	12
3963-BUTTONS				
ASSETS, BEGINNING OF YEAR.	27.9	4.1	23.8	8
CAPITAL EXPEND., NEW . .	(.9)	(.2)	(.7)	15
CAPITAL EXPEND., USED. .	(.1)	-	(.1)	37
RETIREMENTS.	(.4)	-	(.4)	27
ASSETS, END OF YEAR. . . .	28.6	4.2	24.3	8
DEPRECIATION CHARGES . . .	1.9	.2	1.8	8
RENTAL PAYMENTS.	1.9	1.4	(.4)	10
3964-NEEDLES, PINS, AND FASTENERS				
ASSETS, BEGINNING OF YEAR.	253.6	51.2	202.4	2
CAPITAL EXPEND., NEW . .	18.0	2.2	15.7	6
CAPITAL EXPEND., USED. .	14.0	6.1	7.9	7
RETIREMENTS.	22.9	6.3	16.7	2
ASSETS, END OF YEAR. . . .	262.6	53.2	209.4	2
DEPRECIATION CHARGES . . .	15.8	1.6	14.2	3
RENTAL PAYMENTS.	5.5	2.1	3.4	5
399-MISCELLANEOUS MANUFACTURES				
ASSETS, BEGINNING OF YEAR.	1 447.1	519.1	928.1	2
CAPITAL EXPEND., NEW . .	196.1	47.7	148.4	4
CAPITAL EXPEND., USED. .	12.3	3.8	8.4	14
RETIREMENTS.	69.2	21.8	47.3	9
ASSETS, END OF YEAR. . . .	1 586.3	548.8	1 037.5	1
DEPRECIATION CHARGES . . .	124.6	32.5	92.1	3
RENTAL PAYMENTS.	59.5	41.1	18.5	7
3991-BROOMS AND BRUSHES				
ASSETS, BEGINNING OF YEAR.	158.8	60.3	98.5	7
CAPITAL EXPEND., NEW . .	17.6	(2.0)	(15.5)	14
CAPITAL EXPEND., USED. .	(2.8)	(2.0)	(.7)	33
RETIREMENTS.	5.6	(.9)	4.7	12
ASSETS, END OF YEAR. . . .	173.5	63.5	110.0	6
DEPRECIATION CHARGES . . .	12.5	3.3	(.9)	6
RENTAL PAYMENTS.	4.1	3.2	.9	12
3993-SIGNS AND ADVERTISING DISPLAYS				
ASSETS, BEGINNING OF YEAR.	352.6	124.7	227.9	8
CAPITAL EXPEND., NEW . .	41.8	(15.0)	26.8	12
CAPITAL EXPEND., USED. .	(5.0)	(.9)	(4.2)	26
RETIREMENTS.	16.0	(4.7)	11.3	10
ASSETS, END OF YEAR. . . .	383.5	135.9	247.7	8
DEPRECIATION CHARGES . . .	33.6	(9.5)	24.1	7
RENTAL PAYMENTS.	26.4	21.1	(5.3)	7
3995-BURIAL CASKETS				
ASSETS, BEGINNING OF YEAR.	120.8	48.7	72.1	6
CAPITAL EXPEND., NEW . .	17.1	3.3	13.8	6
CAPITAL EXPEND., USED. .	(.5)	-	(.4)	25
RETIREMENTS.	(8.2)	(4.2)	(4.0)	34
ASSETS, END OF YEAR. . . .	130.1	47.9	82.3	5
DEPRECIATION CHARGES . . .	8.2	1.9	6.3	8
RENTAL PAYMENTS.	(2.3)	(1.5)	(.9)	(A)
3996-HARD SURFACE FLOOR COVERINGS				
ASSETS, BEGINNING OF YEAR.	230.2	69.4	160.8	1
CAPITAL EXPEND., NEW . .	16.8	1.8	15.0	1
CAPITAL EXPEND., USED. .	.1	-	.1	1
RETIREMENTS.	4.4	.6	3.8	1
ASSETS, END OF YEAR. . . .	242.7	70.6	172.1	1
DEPRECIATION CHARGES . . .	12.0	1.7	10.3	1
RENTAL PAYMENTS.	1.7	.2	1.4	1
3999-MANUFACTURING INDUSTRIES, NEC				
ASSETS, BEGINNING OF YEAR.	584.7	216.0	368.8	3
CAPITAL EXPEND., NEW . .	102.9	(25.5)	(77.3)	4
CAPITAL EXPEND., USED. .	3.9	.9	3.0	10
RETIREMENTS.	(34.9)	(11.4)	(23.4)	15
ASSETS, END OF YEAR. . . .	656.6	231.0	(425.7)	3
DEPRECIATION CHARGES . . .	58.3	16.1	42.2	5
RENTAL PAYMENTS.	25.0	15.1	9.9	6

Figures in parentheses have standard errors of 15 percent or more. - Represents zero. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards. (Z) Less than 50 thousand dollars.

[1]For description of the standard error of estimate, see the section "Qualifications of the Data" in appendix B.

Table 3. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	UNITED STATES[2]				CONNECTICUT				ILLINOIS			
ASSETS, BEGINNING OF YEAR.	402 067.0	104 196.3	297 870.6	1	6 019.3	1 868.6	4 151.1	1	26 450.4	7 629.9	18 821.0	1
CAPITAL EXPEND., NEW . .	48 641.4	8 603.7	40 035.9	1	554.5	(117.9)	436.5	1	2 779.7	538.4	2 241.3	1
CAPITAL EXPEND., USED. .	3 265.9	867.6	2 398.3	1	58.8	17.8	41.0	10	166.2	41.4	124.8	5
RETIREMENTS.	14 954.0	2 415.8	12 538.4	1	215.7	42.1	173.7	4	1 076.4	173.1	903.5	2
ASSETS, END OF YEAR. . . .	439 020.3	111 257.7	327 762.6	1	6 416.9	1 962.2	4 454.8	1	28 319.9	8 036.6	20 283.6	1
DEPRECIATION CHARGES . . .	26 734.9	4 587.4	22 147.3	1	430.6	85.4	345.2	2	1 749.3	310.3	1 439.0	1
RENTAL PAYMENTS.	7 064.2	3 207.9	3 856.3	1	160.0	70.7	89.2	6	461.9	212.8	248.9	2
	ALABAMA				DELAWARE				INDIANA			
ASSETS, BEGINNING OF YEAR.	9 028.3	1 704.3	7 324.1	1	1 855.4	383.7	1 471.7	1	18 962.4	4 587.2	14 375.0	1
CAPITAL EXPEND., NEW . .	1 318.5	170.0	1 148.5	1	143.7	16.2	127.5	3	2 080.0	347.7	1 732.4	1
CAPITAL EXPEND., USED. .	52.7	15.1	37.6	8	(10.4)	(7.4)	(3.0)	43	80.5	20.4	60.1	6
RETIREMENTS.	226.8	31.9	194.9	3	62.4	13.0	49.5	2	535.6	65.3	470.4	2
ASSETS, END OF YEAR. . . .	10 172.8	1 857.6	8 315.3	1	1 947.0	394.3	1 552.7	1	20 587.4	4 889.9	15 697.0	1
DEPRECIATION CHARGES . . .	594.0	89.2	504.9	1	127.2	21.4	105.8	2	1 052.1	174.8	877.4	1
RENTAL PAYMENTS.	87.4	28.6	58.6	7	15.4	4.5	10.9	5	200.8	66.6	134.1	2
	ALASKA				DISTRICT OF COLUMBIA				IOWA			
ASSETS, BEGINNING OF YEAR.	692.3	165.4	526.9	2	263.7	103.1	160.5	3	5 705.3	1 587.0	4 118.2	1
CAPITAL EXPEND., NEW . .	190.4	20.1	170.3	11	(17.7)	(3.0)	14.7	18	752.8	179.2	573.6	2
CAPITAL EXPEND., USED. .	(5.7)	(3.1)	(2.7)	55	(1.6)	(1.3)	(.3)	54	31.4	(11.7)	19.8	9
RETIREMENTS.	11.5	(1.2)	(10.4)	14	25.5	(.5)	25.0	3	176.9	36.6	140.5	5
ASSETS, END OF YEAR. . . .	876.9	187.4	689.5	2	257.4	106.8	150.5	3	6 312.6	1 741.3	4 571.0	1
DEPRECIATION CHARGES . . .	35.3	11.2	24.1	8	15.8	3.1	12.7	5	405.7	73.4	332.3	5
RENTAL PAYMENTS.	(11.9)	(3.8)	8.1	15	7.7	2.9	4.8	7	97.7	28.6	69.0	3
	ARIZONA				FLORIDA				KANSAS			
ASSETS, BEGINNING OF YEAR.	2 219.4	562.2	1 657.3	1	6 904.8	1 505.1	5 399.6	1	3 159.6	1 005.2	2 154.3	1
CAPITAL EXPEND., NEW . .	207.9	(35.6)	172.2	3	720.1	120.2	599.8	1	351.3	96.4	254.9	3
CAPITAL EXPEND., USED. .	(16.9)	(1.5)	(15.4)	20	133.9	11.9	122.0	10	30.0	8.2	(21.9)	12
RETIREMENTS.	78.6	10.0	68.6	4	303.4	27.6	275.9	2	107.8	30.9	77.0	7
ASSETS, END OF YEAR. . . .	2 365.5	589.4	1 776.3	1	7 455.3	1 609.6	5 845.5	1	3 433.1	1 078.9	2 354.1	1
DEPRECIATION CHARGES . . .	153.3	23.4	130.0	2	487.1	66.3	420.8	2	211.6	46.0	165.6	3
RENTAL PAYMENTS.	39.9	19.8	20.1	5	160.5	70.5	90.0	4	55.7	(21.0)	34.7	7
	ARKANSAS				GEORGIA				KENTUCKY			
ASSETS, BEGINNING OF YEAR.	3 568.4	852.1	2 716.4	1	8 829.1	2 201.1	6 628.7	1	6 193.5	1 627.9	4 565.5	1
CAPITAL EXPEND., NEW . .	469.2	96.0	373.3	2	1 128.8	168.3	960.5	2	756.3	132.1	624.2	3
CAPITAL EXPEND., USED. .	70.7	8.7	61.9	2	84.6	(30.0)	54.5	12	80.2	12.5	67.7	8
RETIREMENTS.	115.0	17.2	97.8	10	290.4	45.8	244.8	3	187.6	25.0	162.8	5
ASSETS, END OF YEAR. . . .	3 993.3	939.5	3 053.7	1	9 752.1	2 353.6	7 399.0	1	6 842.4	1 747.4	5 094.6	1
DEPRECIATION CHARGES . . .	255.6	36.9	218.6	2	583.1	93.9	489.2	1	400.1	65.1	334.9	2
RENTAL PAYMENTS.	59.4	23.3	36.0	3	145.0	56.6	88.2	4	77.7	27.9	50.0	5
	CALIFORNIA				HAWAII				LOUISIANA			
ASSETS, BEGINNING OF YEAR.	27 268.5	8 158.9	19 108.8	1	699.0	235.7	463.3	2	12 039.4	2 508.7	9 530.7	1
CAPITAL EXPEND., NEW . .	3 550.1	697.7	2 852.3	1	54.6	(9.8)	44.9	13	2 072.8	373.2	1 699.6	1
CAPITAL EXPEND., USED. .	363.4	129.1	234.2	2	(4.8)	(.8)	(4.0)	24	62.6	19.1	43.6	3
RETIREMENTS.	1 139.2	198.8	940.4	2	14.3	3.1	(11.2)	10	265.5	20.6	244.9	3
ASSETS, END OF YEAR. . . .	30 042.8	8 787.0	21 255.8	1	744.1	243.2	501.0	2	13 909.3	2 880.3	11 029.0	1
DEPRECIATION CHARGES . . .	2 035.0	392.4	1 642.7	1	39.5	9.5	30.0	3	789.6	126.6	663.1	1
RENTAL PAYMENTS.	886.4	511.4	374.6	2	(20.7)	(8.3)	(12.4)	26	98.6	27.0	71.5	2
	COLORADO				IDAHO				MAINE			
ASSETS, BEGINNING OF YEAR.	3 084.9	907.4	2 177.4	1	1 290.8	277.4	1 013.4	1	2 522.4	507.5	2 014.8	1
CAPITAL EXPEND., NEW . .	459.8	95.7	364.1	3	181.2	48.0	133.1	7	220.9	29.2	191.7	3
CAPITAL EXPEND., USED. .	(26.8)	(8.5)	18.2	15	(8.9)	(1.2)	(7.8)	21	9.1	2.8	6.4	11
RETIREMENTS.	121.3	13.2	108.2	7	32.9	4.1	28.8	9	79.3	11.7	67.6	7
ASSETS, END OF YEAR. . . .	3 450.1	998.4	2 451.6	1	1 448.1	322.5	1 125.5	1	2 673.1	527.8	2 145.3	1
DEPRECIATION CHARGES . . .	247.3	40.0	207.3	2	91.8	12.4	79.3	3	181.7	44.8	136.9	3
RENTAL PAYMENTS.	71.7	34.6	37.1	9	21.6	5.8	15.7	8	42.6	8.2	34.5	8

See footnotes at end of table.

Table 3. **Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	MARYLAND			
ASSETS, BEGINNING OF YEAR.	5 736.1	1 587.7	4 148.6	1
CAPITAL EXPEND., NEW . .	502.7	141.6	361.1	3
CAPITAL EXPEND., USED. .	46.6	20.8	25.8	4
RETIREMENTS.	231.0	54.4	176.7	4
ASSETS, END OF YEAR. . . .	6 054.3	1 695.7	4 358.7	1
DEPRECIATION CHARGES . . .	323.9	56.7	267.2	2
RENTAL PAYMENTS.	89.2	41.7	47.5	5
	MASSACHUSETTS			
ASSETS, BEGINNING OF YEAR.	7 740.2	2 118.0	5 622.4	1
CAPITAL EXPEND., NEW . .	1 001.0	220.9	780.1	1
CAPITAL EXPEND., USED. .	110.2	(50.3)	59.9	11
RETIREMENTS.	347.3	55.8	291.5	3
ASSETS, END OF YEAR. . . .	8 504.0	2 333.4	6 170.9	1
DEPRECIATION CHARGES . . .	591.6	96.7	495.0	2
RENTAL PAYMENTS.	251.5	141.8	109.7	3
	MICHIGAN			
ASSETS, BEGINNING OF YEAR.	23 364.8	5 865.5	17 499.2	1
CAPITAL EXPEND., NEW . .	3 838.7	474.7	3 363.9	1
CAPITAL EXPEND., USED. .	163.0	32.2	130.8	7
RETIREMENTS.	1 555.1	119.3	1 436.0	1
ASSETS, END OF YEAR. . . .	25 811.5	6 253.1	19 558.0	1
DEPRECIATION CHARGES . . .	1 606.5	247.6	1 358.9	1
RENTAL PAYMENTS.	319.1	120.0	198.9	1
	MINNESOTA			
ASSETS, BEGINNING OF YEAR.	4 843.2	1 539.3	3 304.0	1
CAPITAL EXPEND., NEW . .	630.0	112.5	517.5	1
CAPITAL EXPEND., USED. .	39.7	(10.4)	(29.3)	14
RETIREMENTS.	150.1	22.2	128.0	3
ASSETS, END OF YEAR. . . .	5 362.7	1 639.9	3 722.9	1
DEPRECIATION CHARGES . . .	362.9	74.0	288.8	3
RENTAL PAYMENTS.	136.7	62.6	74.1	4
	MISSISSIPPI			
ASSETS, BEGINNING OF YEAR.	3 621.4	1 225.1	2 396.2	1
CAPITAL EXPEND., NEW . .	485.5	107.7	377.8	2
CAPITAL EXPEND., USED. .	34.6	(6.3)	28.3	13
RETIREMENTS.	89.3	20.8	68.5	5
ASSETS, END OF YEAR. . . .	4 052.1	1 318.4	2 733.8	1
DEPRECIATION CHARGES . . .	312.4	65.2	247.3	1
RENTAL PAYMENTS.	63.1	21.6	41.5	4
	MISSOURI			
ASSETS, BEGINNING OF YEAR.	6 549.6	1 894.8	4 654.8	1
CAPITAL EXPEND., NEW . .	798.4	138.2	660.2	3
CAPITAL EXPEND., USED. .	49.5	22.7	26.8	5
RETIREMENTS.	187.1	27.8	159.4	5
ASSETS, END OF YEAR. . . .	7 210.5	2 027.9	5 182.3	1
DEPRECIATION CHARGES . . .	446.7	76.2	370.5	3
RENTAL PAYMENTS.	116.3	53.5	62.8	4
	MONTANA			
ASSETS, BEGINNING OF YEAR.	1 040.2	244.6	795.7	2
CAPITAL EXPEND., NEW . .	117.5	29.7	87.8	5
CAPITAL EXPEND., USED. .	(8.5)	2.0	(6.5)	30
RETIREMENTS.	28.2	10.7	17.5	4
ASSETS, END OF YEAR. . . .	1 138.0	265.5	872.6	2
DEPRECIATION CHARGES . . .	51.7	7.6	44.0	3
RENTAL PAYMENTS.	(4.2)	(s)	(s)	43
	NEBRASKA			
ASSETS, BEGINNING OF YEAR.	1 688.7	514.8	1 173.9	1
CAPITAL EXPEND., NEW . .	187.5	42.0	145.6	11
CAPITAL EXPEND., USED. .	27.1	(3.2)	23.9	5
RETIREMENTS.	59.2	12.9	46.3	3
ASSETS, END OF YEAR. . . .	1 844.3	547.1	1 297.1	1
DEPRECIATION CHARGES . . .	113.0	21.4	91.6	2
RENTAL PAYMENTS.	47.0	(10.2)	36.7	5
	NEVADA			
ASSETS, BEGINNING OF YEAR.	327.6	72.1	255.4	4
CAPITAL EXPEND., NEW . .	48.7	(12.5)	36.2	13
CAPITAL EXPEND., USED. .	(3.8)	(.1)	(3.7)	51
RETIREMENTS.	13.3	3.1	10.2	7
ASSETS, END OF YEAR. . . .	366.8	81.6	284.8	4
DEPRECIATION CHARGES . . .	26.3	3.3	23.0	3
RENTAL PAYMENTS.	9.6	5.1	(4.5)	11
	NEW HAMPSHIRE			
ASSETS, BEGINNING OF YEAR.	1 240.4	366.3	874.1	1
CAPITAL EXPEND., NEW . .	161.7	(46.6)	115.0	7
CAPITAL EXPEND., USED. .	(8.3)	(3.6)	4.7	21
RETIREMENTS.	50.8	9.4	41.4	10
ASSETS, END OF YEAR. . . .	1 359.5	407.0	952.5	1
DEPRECIATION CHARGES . . .	92.7	17.5	75.2	3
RENTAL PAYMENTS.	27.2	10.7	16.5	9
	NEW JERSEY			
ASSETS, BEGINNING OF YEAR.	13 958.0	4 103.7	9 854.2	1
CAPITAL EXPEND., NEW . .	1 421.5	296.5	1 125.0	1
CAPITAL EXPEND., USED. .	129.6	(31.9)	97.7	9
RETIREMENTS.	500.8	92.7	408.2	3
ASSETS, END OF YEAR. . . .	15 008.2	4 339.3	10 668.7	1
DEPRECIATION CHARGES . . .	920.8	169.6	751.2	2
RENTAL PAYMENTS.	317.8	179.9	137.5	3
	NEW MEXICO			
ASSETS, BEGINNING OF YEAR.	765.5	158.5	607.0	2
CAPITAL EXPEND., NEW . .	75.6	20.9	54.7	7
CAPITAL EXPEND., USED. .	(6.8)	(1.7)	(5.2)	32
RETIREMENTS.	(17.3)	(1.8)	(15.6)	27
ASSETS, END OF YEAR. . . .	830.7	179.3	651.2	2
DEPRECIATION CHARGES . . .	59.2	7.9	51.3	4
RENTAL PAYMENTS.	(15.1)	(7.4)	(7.7)	22
	NEW YORK			
ASSETS, BEGINNING OF YEAR.	22 526.4	6 351.1	16 175.2	1
CAPITAL EXPEND., NEW . .	2 640.9	473.3	2 167.6	1
CAPITAL EXPEND., USED. .	179.1	41.3	137.8	6
RETIREMENTS.	1 189.2	215.2	974.3	2
ASSETS, END OF YEAR. . . .	24 157.2	6 650.4	17 506.3	1
DEPRECIATION CHARGES . . .	1 473.7	270.0	1 203.8	1
RENTAL PAYMENTS.	681.8	413.2	268.1	2
	NORTH CAROLINA			
ASSETS, BEGINNING OF YEAR.	13 460.1	3 522.6	9 937.7	1
CAPITAL EXPEND., NEW . .	1 398.0	251.2	1 146.8	1
CAPITAL EXPEND., USED. .	180.7	33.3	147.5	4
RETIREMENTS.	664.0	119.8	544.2	2
ASSETS, END OF YEAR. . . .	14 374.8	3 687.2	10 687.8	1
DEPRECIATION CHARGES . . .	991.6	179.7	811.9	2
RENTAL PAYMENTS.	174.5	73.9	100.6	4
	NORTH DAKOTA			
ASSETS, BEGINNING OF YEAR.	343.3	98.8	244.5	6
CAPITAL EXPEND., NEW . .	52.5	(14.8)	37.7	9
CAPITAL EXPEND., USED. .	(2.6)	(1.1)	(1.4)	34
RETIREMENTS.	6.2	(1.0)	5.2	11
ASSETS, END OF YEAR. . . .	392.1	113.7	278.5	5
DEPRECIATION CHARGES . . .	25.5	(6.7)	18.8	6
RENTAL PAYMENTS.	5.0	(2.9)	2.1	11
	OHIO			
ASSETS, BEGINNING OF YEAR.	29 433.6	7 127.6	22 305.7	1
CAPITAL EXPEND., NEW . .	2 828.9	445.1	2 383.7	1
CAPITAL EXPEND., USED. .	167.3	(66.5)	100.8	12
RETIREMENTS.	1 107.7	145.3	962.7	2
ASSETS, END OF YEAR. . . .	31 322.1	7 493.8	23 827.7	1
DEPRECIATION CHARGES . . .	1 853.5	268.7	1 584.8	1
RENTAL PAYMENTS.	430.0	176.2	253.3	3
	OKLAHOMA			
ASSETS, BEGINNING OF YEAR.	3 398.2	937.9	2 460.3	1
CAPITAL EXPEND., NEW . .	490.1	97.5	392.6	3
CAPITAL EXPEND., USED. .	24.6	5.9	18.7	6
RETIREMENTS.	81.7	31.6	50.2	3
ASSETS, END OF YEAR. . . .	3 831.2	1 009.6	2 821.5	1
DEPRECIATION CHARGES . . .	247.5	41.7	205.8	2
RENTAL PAYMENTS.	51.4	21.0	30.5	4
	OREGON			
ASSETS, BEGINNING OF YEAR.	4 401.6	886.8	3 514.9	1
CAPITAL EXPEND., NEW . .	581.5	86.7	494.8	3
CAPITAL EXPEND., USED. .	51.0	7.8	43.2	12
RETIREMENTS.	166.8	28.4	138.5	5
ASSETS, END OF YEAR. . . .	4 867.3	952.9	3 914.4	1
DEPRECIATION CHARGES . . .	375.0	(56.3)	318.7	2
RENTAL PAYMENTS.	90.6	43.3	47.1	7
	PENNSYLVANIA			
ASSETS, BEGINNING OF YEAR.	27 574.6	6 662.9	20 912.0	1
CAPITAL EXPEND., NEW . .	2 381.9	432.8	1 949.1	1
CAPITAL EXPEND., USED. .	137.6	(40.7)	96.9	8
RETIREMENTS.	842.0	190.9	651.3	2
ASSETS, END OF YEAR. . . .	29 252.1	6 945.6	22 305.8	1
DEPRECIATION CHARGES . . .	1 490.8	267.8	1 222.9	1
RENTAL PAYMENTS.	395.4	156.4	238.6	3
	RHODE ISLAND			
ASSETS, BEGINNING OF YEAR.	1 347.5	367.6	980.0	1
CAPITAL EXPEND., NEW . .	166.7	(41.5)	125.3	4
CAPITAL EXPEND., USED. .	13.7	(5.9)	7.8	13
RETIREMENTS.	(61.0)	(10.3)	(50.7)	17
ASSETS, END OF YEAR. . . .	1 466.9	404.6	1 062.4	1
DEPRECIATION CHARGES . . .	104.8	16.5	88.3	9
RENTAL PAYMENTS.	39.9	24.0	15.9	4
	SOUTH CAROLINA			
ASSETS, BEGINNING OF YEAR.	8 476.2	1 973.0	6 503.3	1
CAPITAL EXPEND., NEW . .	785.1	135.1	650.0	2
CAPITAL EXPEND., USED. .	56.0	(7.7)	48.3	11
RETIREMENTS.	222.1	31.5	190.8	2
ASSETS, END OF YEAR. . . .	9 095.3	2 084.4	7 010.8	1
DEPRECIATION CHARGES . . .	550.7	83.8	466.9	1
RENTAL PAYMENTS.	77.9	28.9	49.0	5

See footnotes at end of table.

Table 3. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation Charges, and Rental Payments for Buildings and Machinery for States: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

Item	Total	Buildings and other structures	Machinery and equipment	Standard error of estimate[1] for total (percent)
	SOUTH DAKOTA			
ASSETS, BEGINNING OF YEAR.	343.4	116.4	227.1	3
CAPITAL EXPEND., NEW . .	32.1	(6.5)	25.7	11
CAPITAL EXPEND., USED. .	(3.1)	.7	(2.4)	31
RETIREMENTS.	8.2	(1.3)	6.9	6
ASSETS, END OF YEAR. . . .	370.5	122.3	248.2	3
DEPRECIATION CHARGES . . .	25.8	5.4	20.4	3
RENTAL PAYMENTS.	6.9	2.3	4.6	11
	TENNESSEE			
ASSETS, BEGINNING OF YEAR.	9 380.4	2 287.0	7 093.3	1
CAPITAL EXPEND., NEW . .	1 032.0	179.3	852.7	2
CAPITAL EXPEND., USED. .	65.5	13.4	52.1	4
RETIREMENTS.	337.9	58.4	279.5	2
ASSETS, END OF YEAR. . . .	10 140.0	2 421.3	7 718.6	1
DEPRECIATION CHARGES . . .	669.3	111.9	557.4	1
RENTAL PAYMENTS.	137.8	50.7	87.1	3
	TEXAS			
ASSETS, BEGINNING OF YEAR.	31 998.1	7 396.3	24 601.8	1
CAPITAL EXPEND., NEW . .	4 949.7	829.5	4 120.2	1
CAPITAL EXPEND., USED. .	162.6	37.9	125.5	5
RETIREMENTS.	915.2	163.7	752.0	2
ASSETS, END OF YEAR. . . .	36 195.7	8 100.0	28 095.4	1
DEPRECIATION CHARGES . . .	2 116.8	352.0	1 764.8	1
RENTAL PAYMENTS.	393.2	146.7	246.0	3
	UTAH			
ASSETS, BEGINNING OF YEAR.	1 433.9	334.9	1 098.9	1
CAPITAL EXPEND., NEW . .	387.7	(58.0)	329.7	3
CAPITAL EXPEND., USED. .	(10.0)	1.7	(8.3)	17
RETIREMENTS.	(40.7)	(13.2)	27.6	19
ASSETS, END OF YEAR. . . .	1 790.8	381.5	1 409.3	1
DEPRECIATION CHARGES . . .	89.3	14.6	74.7	3
RENTAL PAYMENTS.	22.5	(10.9)	11.6	8
	VERMONT			
ASSETS, BEGINNING OF YEAR.	738.3	200.4	538.0	3
CAPITAL EXPEND., NEW . .	102.6	17.3	85.4	7
CAPITAL EXPEND., USED. .	6.7	1.9	4.9	9
RETIREMENTS.	(35.2)	(5.7)	(29.5)	23
ASSETS, END OF YEAR. . . .	812.5	213.9	598.7	2
DEPRECIATION CHARGES . . .	68.5	9.8	58.7	4
RENTAL PAYMENTS.	8.8	(3.2)	5.6	11
	VIRGINIA			
ASSETS, BEGINNING OF YEAR.	7 828.1	2 178.6	5 649.4	1
CAPITAL EXPEND., NEW . .	966.2	174.3	791.9	2
CAPITAL EXPEND., USED. .	(58.9)	(18.5)	40.4	15
RETIREMENTS.	228.6	60.7	168.0	2
ASSETS, END OF YEAR. . . .	8 624.6	2 310.8	6 313.7	1
DEPRECIATION CHARGES . . .	501.0	88.3	412.7	1
RENTAL PAYMENTS.	111.2	40.8	70.3	3
	WASHINGTON			
ASSETS, BEGINNING OF YEAR.	7 351.1	2 108.4	5 242.8	1
CAPITAL EXPEND., NEW . .	951.7	159.4	792.3	2
CAPITAL EXPEND., USED. .	93.1	15.0	78.1	5
RETIREMENTS.	264.2	(65.0)	199.4	8
ASSETS, END OF YEAR. . . .	8 131.7	2 217.8	5 913.8	1
DEPRECIATION CHARGES . . .	461.0	93.1	368.0	2
RENTAL PAYMENTS.	100.9	44.1	56.9	4
	WEST VIRGINIA			
ASSETS, BEGINNING OF YEAR.	4 650.6	796.3	3 854.3	1
CAPITAL EXPEND., NEW . .	408.7	53.3	355.5	2
CAPITAL EXPEND., USED. .	24.1	2.0	22.2	5
RETIREMENTS.	179.2	25.8	153.4	2
ASSETS, END OF YEAR. . . .	4 904.3	825.7	4 078.5	1
DEPRECIATION CHARGES . . .	249.6	31.4	218.2	1
RENTAL PAYMENTS.	33.8	11.4	22.4	6
	WISCONSIN			
ASSETS, BEGINNING OF YEAR.	9 302.8	2 672.2	6 630.6	1
CAPITAL EXPEND., NEW . .	1 159.9	205.6	954.3	2
CAPITAL EXPEND., USED. .	96.1	(28.9)	67.2	8
RETIREMENTS.	299.7	45.4	254.6	5
ASSETS, END OF YEAR. . . .	10 259.1	2 861.4	7 397.5	1
DEPRECIATION CHARGES . . .	617.1	113.4	503.7	1
RENTAL PAYMENTS.	171.9	66.2	105.7	2
	WYOMING			
ASSETS, BEGINNING OF YEAR.	397.2	99.2	298.0	3
CAPITAL EXPEND., NEW . .	(28.9)	(4.8)	24.1	15
CAPITAL EXPEND., USED. .	4.7	.1	4.6	11
RETIREMENTS.	8.2	1.6	6.6	6
ASSETS, END OF YEAR. . . .	422.5	102.5	320.1	3
DEPRECIATION CHARGES . . .	22.4	5.0	17.4	5
RENTAL PAYMENTS.	4.1	(.9)	3.2	6

Figures in parentheses have standard errors of 15 percent or more. (S) Withheld because the estimate did not meet publication standards.

[1]For a description of the standard error of estimate, see the section "Qualifications of the Data" in appendix B.

[2]Total figures may differ slightly from sum of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State.

Table 4. Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
	All industries	40,035.9	1,219.8	866.8	32,378.7	5,570.4	1
20	Food and kindred products	3,371.6	270.1	35.6	2,547.0	518.6	1
201	Meat products	391.8	(33.3)	(7.5)	259.7	(91.4)	3
2011	Meatpacking plants	175.4	(17.0)	(2.7)	(120.0)	(35.7)	3
2013	Sausages and other prepared meats	114.4	(7.4)	(1.9)	(71.5)	(33.6)	6
2016	Poultry dressing plants	89.8	(8.0)	(2.9)	(59.8)	(19.0)	1
2017	Poultry and egg processing	12.2	(.8)	(Z)	(8.4)	(3.0)	8
202	Dairy products	327.5	(50.9)	(4.7)	184.4	(87.6)	4
2021	Creamery butter	5.3	(.6)	(Z)	(4.0)	(.7)	6
2022	Cheese, natural and processed	45.1	(2.7)	(.1)	(29.8)	(12.5)	7
2023	Condensed and evaporated milk	(50.6)	(3.5)	(1.5)	(26.1)	(19.6)	16
2024	Ice cream and frozen desserts	38.7	(8.5)	(.2)	(20.2)	(9.9)	8
2026	Fluid milk	187.8	(35.6)	(2.9)	(104.4)	(44.9)	6
203	Preserved fruits and vegetables	369.1	(13.1)	(2.6)	294.5	(58.8)	3
2032	Canned specialties	34.9	(2.7)	(.1)	(29.8)	(2.2)	5
2033	Canned fruits and vegetables	118.8	(3.8)	(.9)	(88.6)	(25.6)	6
2034	Dehydrated fruits, vegetables, soups	34.8	(.2)	(Z)	(21.9)	(12.8)	8
2035	Pickles, sauces, salad dressings	40.8	(1.2)	(.4)	(34.0)	(5.1)	6
2037	Frozen fruits and vegetables	79.7	(2.7)	(.6)	(72.3)	(4.1)	10
2038	Frozen specialties	60.0	(2.4)	(.5)	(47.9)	(9.0)	6
204	Grain mill products	502.2	(25.6)	(2.4)	420.1	(54.3)	3
2041	Flour, other grain mill products	36.4	(2.3)	(.1)	(28.3)	(5.7)	10
2043	Cereal breakfast foods	70.7	(.1)	(.5)	(69.7)	(.3)	2
2044	Rice milling	29.1	(.4)	(.7)	(26.5)	(1.5)	2
2045	Blended and prepared flour	11.1	(1.0)	(.1)	(8.5)	(1.5)	7
2046	Wet corn milling	199.7	(.2)	-	(183.0)	(16.5)	4
2047	Dog, cat, and other pet food	55.7	(5.5)	(Z)	(46.7)	(3.6)	4
2048	Prepared feeds, n.e.c	99.5	(16.2)	(.9)	(57.2)	(25.2)	8
205	Bakery products	299.1	(34.1)	(.9)	223.1	(40.6)	4
2051	Bread, cake, and related products	239.9	(30.6)	(.8)	168.5	(39.7)	5
2052	Cookies and crackers	59.2	(3.6)	(.1)	(54.6)	(.9)	4
206	Sugar, confectionery products	239.4	(6.6)	(1.6)	209.7	(21.6)	2
2061	Raw cane sugar	37.2	(3.1)	-	(33.8)	.3	3
2062	Cane sugar refining	42.4	(.4)	(.9)	(40.6)	(.5)	1
2063	Beet sugar	32.8	(.3)	(Z)	(32.5)	-	1
2065	Confectionery products	85.1	(2.5)	(.5)	(68.8)	(13.4)	3
2066	Chocolate and cocoa products	23.6	(.2)	(Z)	16.0	(7.4)	1
2067	Chewing gum	18.3	(.1)	(.2)	(18.0)	-	1
207	Fats and oils	173.3	(11.8)	(.3)	136.0	(25.2)	5
2074	Cottonseed oil mills	9.9	(.6)	(Z)	(8.1)	(1.1)	9
2075	Soybean oil mills	58.5	(.2)	(.1)	(55.1)	(3.0)	2
2076	Vegetable oil mills, n.e.c	4.3	(.1)	-	(3.9)	(.4)	1
2077	Animal and marine fats and oils	(48.2)	(8.6)	-	(25.9)	(13.7)	17
2079	Shortening and cooking oils	52.4	(2.2)	(.2)	(43.1)	(6.9)	1
208	Beverages	818.4	(81.9)	(13.2)	656.6	(66.6)	3
2082	Malt beverages	344.8	(4.3)	(6.9)	(303.7)	(29.9)	3
2083	Malt	19.2	(Z)	-	(13.6)	(5.6)	5
2084	Wines, brandy, and brandy spirits	40.9	(.8)	(1.6)	(32.5)	(6.0)	9
2085	Distilled liquor, except brandy	26.4	(.3)	(Z)	(23.3)	(2.9)	4
2086	Bottled and canned soft drinks	359.8	(76.1)	(4.5)	(259.3)	(19.9)	4
2087	Flavoring extracts, sirups, n.e.c	27.2	(.5)	(.2)	(24.2)	(2.3)	8
209	Miscellaneous foods, kindred products	250.8	(12.9)	(2.5)	162.9	(72.4)	4
2091	Canned and cured seafoods	17.7	(.1)	(.1)	(11.0)	(6.4)	4
2092	Fresh or frozen packaged fish	34.7	(.9)	(.3)	(18.0)	(15.5)	12
2095	Roasted coffee	45.6	(1.9)	(.5)	(32.1)	(11.1)	12
2097	Manufactured ice	(12.6)	(.3)	(.1)	(4.1)	(8.2)	27
2098	Macaroni and spaghetti	7.3	(1.1)	(.1)	(4.8)	(1.3)	11
2099	Food preparations, n.e.c	132.9	(8.7)	(1.3)	(92.9)	30.0	5
21	Tobacco products	124.6	(6.1)	(.5)	(111.6)	(6.1)	1
2111	Cigarettes	76.6	5.0	.3	71.3	(Z)	1
2121	Cigars	2.9	.1	(Z)	2.6	(.2)	8
2131	Chewing and smoking tobacco	5.4	(.3)	(.1)	(3.4)	(1.5)	3
2141	Tobacco stemming and redrying	39.5	(.7)	(.1)	(34.3)	(4.4)	1

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
22	Textile mill products	1,068.9	(16.9)	(19.6)	900.3	(131.7)	2
2211	Weaving mills, cotton	153.3	.6	1.9	142.9	7.9	2
2221	Weaving mills, manmade fiber, silk	236.4	2.7	.5	228.2	4.9	1
2231	Weaving and finishing mills, wool	(13.9)	(.8)	(.3)	(10.0)	(2.8)	18
2241	Narrow fabric mills	14.0	.3	.1	12.7	.8	13
225	Knitting mills	219.3	(3.1)	(11.4)	(153.7)	(51.0)	7
2251	Women's hosiery, except socks	13.3	(.3)	(.2)	(11.6)	(1.2)	13
2252	Hosiery, n.e.c	10.5	(.3)	(.4)	(7.5)	(2.3)	12
2253	Knit outerwear mills	49.0	(.8)	(10.2)	(26.5)	(11.5)	12
2254	Knit underwear mills	10.6	.4	.2	8.9	1.1	3
2257	Circular knit fabric mills	98.5	(.9)	(.3)	(77.5)	(19.8)	14
2258	Warp knit fabric mills	36.2	(.3)	(.2)	(20.9)	(14.8)	9
2259	Knitting mills, n.e.c	(1.2)	(.1)	-	(.8)	(.3)	19
226	Textile finishing, except wool	112.1	(1.7)	(1.3)	(97.0)	(12.1)	4
2261	Finishing plants, cotton	27.1	(.4)	(.2)	(26.4)	(.1)	8
2262	Finishing plants, manmade fiber, silk	66.2	(.9)	(1.1)	(55.8)	(8.4)	5
2269	Finishing plants, n.e.c	18.8	(.4)	(Z)	(14.8)	(3.6)	12
227	Floor covering mills	70.2	(.7)	(.9)	(55.7)	(13.0)	7
2271	Woven carpets and rugs	(1.9)	-	-	(1.5)	(.3)	19
2272	Tufted carpets and rugs	65.7	(.7)	(.9)	(51.5)	(12.6)	4
2279	Carpets and rugs, n.e.c	(2.7)	(Z)	-	(2.6)	(Z)	17
228	Yarn and thread mills	162.9	(1.1)	(2.5)	(128.0)	(31.1)	4
2281	Yarn mills, except wool	100.4	(.7)	(1.8)	(87.7)	(10.2)	1
2282	Throwing and winding mills	48.6	(.3)	(.7)	(28.8)	(18.7)	12
2283	Wool yarn mills	(3.2)	-	-	3.2	-	61
2284	Thread mills	10.6	(.1)	(Z)	(8.3)	(2.2)	12
229	Miscellaneous textile goods	86.9	(5.9)	(.8)	(72.1)	(8.2)	6
2291	Felt goods, except woven felt, hats	(4.1)	(.1)	(Z)	(4.0)	-	38
2292	Lace goods	(3.1)	-	-	(3.1)	-	67
2293	Paddings and upholstery filling	(6.6)	(.2)	(.1)	(5.2)	(1.1)	36
2294	Processed textile waste	(5.2)	(.2)	-	(4.3)	(.6)	17
2295	Coated fabrics, not rubberized	20.4	(1.1)	(.6)	(17.3)	(1.4)	14
2296	Tire cord and fabric	6.6	(Z)	(Z)	(6.4)	(.2)	1
2297	Nonwoven fabrics	29.5	(3.6)	(Z)	(23.0)	(2.9)	2
2298	Cordage and twine	(5.9)	(.5)	(Z)	(4.2)	(1.2)	22
2299	Textile goods, n.e.c	(5.6)	(.1)	(Z)	(4.7)	(.8)	21
23	Apparel, other textile products	401.6	(17.5)	(13.9)	230.8	139.4	3
2311	Men's and boys' suits and coats	22.0	(.7)	(2.6)	(14.6)	(4.2)	6
232	Men's and boys' furnishings	84.8	(3.2)	(3.3)	(56.9)	(21.4)	3
2321	Men's, boys' shirts, nightwear	20.0	(.9)	(.9)	(13.0)	(5.2)	7
2322	Men's and boys' underwear	1.8	(.1)	-	(1.6)	(.1)	2
2323	Men's and boys' neckwear	2.2	(.2)	(Z)	(.9)	(1.1)	14
2327	Men's and boys' separate trousers	16.6	(.6)	(.9)	(11.1)	(4.0)	7
2328	Men's and boys' work clothing	30.8	(1.0)	(1.4)	(24.0)	(4.4)	6
2329	Men's and boys' clothing, n.e.c	13.4	(.4)	(.2)	(6.2)	(6.7)	6
233	Women's and misses' outerwear	140.5	(4.3)	(4.4)	(54.4)	(77.4)	6
2331	Women's, misses' blouses, waists	24.9	(.9)	(2.2)	(12.4)	(9.3)	13
2335	Women's and misses' dresses	59.6	(.9)	(.8)	(10.4)	(47.5)	10
2337	Women's, misses' suits and coats	16.4	(.9)	(.8)	(8.6)	(6.2)	13
2339	Women's, misses' outerwear, n.e.c	39.6	(1.6)	(.6)	(23.0)	(14.4)	12
234	Women's, children's undergarments	17.5	(.9)	(.1)	(9.7)	(6.8)	7
2341	Women's and children's underwear	14.2	(.7)	(.1)	(7.1)	(6.3)	8
2342	Brassieres and allied garments	3.3	(.2)	(Z)	(2.5)	(.6)	7
235	Hats, caps, and millinery	4.0	(1.2)	(.4)	(2.3)	(.1)	34
2351	Millinery	(.1)	(Z)	-	(.1)	(Z)	89
2352	Hats and caps, except millinery	3.9	(1.2)	(.4)	(2.3)	(.1)	35
236	Children's outerwear	12.5	(1.1)	(.1)	(5.9)	(5.4)	10
2361	Children's dresses and blouses	5.7	(.1)	(Z)	(2.2)	(3.4)	13
2363	Children's coats and suits	(1.1)	(Z)	(Z)	(.3)	(.8)	44
2369	Children's outerwear, n.e.c	(5.7)	(1.0)	(.1)	(3.4)	(1.2)	16
2371	Fur goods	(.7)	(D)	(D)	(D)	(D)	40

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
23	Apparel, other textile products--Con.						
238	Miscellaneous apparel and accessories..	17.4	(D)	(D)	(D)	(D)	13
2381	Fabric dress and work gloves.....	3.3	(D)	(D)	(D)	(D)	8
2384	Robes and dressing gowns.....	(3.8)	(.2)	(.1)	(3.1)	(.4)	18
2385	Waterproof outergarments.....	(4.1)	(.3)	(Z)	(3.1)	(.7)	44
2386	Leather and sheep lined clothing.....	(1.4)	(.2)	(.2)	(.3)	(.7)	33
2387	Apparel belts.....	(1.6)	(.1)	(.2)	(.7)	(.7)	19
2389	Apparel and accessories, n.e.c.....	(3.2)	(.1)	-	(1.9)	(1.2)	23
239	Miscellaneous fabricated textile prod..	102.1	(5.4)	(2.3)	(75.4)	(18.9)	7
2391	Curtains and draperies.....	5.5	(.7)	(.1)	(3.4)	(1.4)	12
2392	Housefurnishings, n.e.c.....	18.4	(.5)	(.5)	(13.6)	(3.8)	9
2393	Textile bags.....	(5.3)	(.2)	(.1)	(4.5)	(.5)	27
2394	Canvas and related products.....	6.1	(.8)	(.4)	(3.5)	(1.4)	13
2395	Pleating and stitching.....	(6.8)	(.1)	-	(5.5)	(1.2)	22
2396	Automotive and apparel trimmings.....	29.8	(1.9)	(.3)	(22.0)	(5.7)	7
2397	Schiffli machine embroideries.....	(3.4)	(.2)	(Z)	(2.8)	(.3)	28
2399	Fabricated textile products, n.e.c.....	(26.8)	(1.1)	(.9)	(20.1)	(4.6)	22
24	Lumber and wood products.....	1,433.6	(110.2)	(8.5)	795.0	519.9	1
2411	Logging camps, log contractors.....	399.6	(38.9)	(.3)	180.0	180.5	3
242	Sawmills and planing mills.....	531.8	(27.6)	(2.8)	328.8	172.6	4
2421	Sawmills, planing mills, general.....	493.7	(25.7)	(1.7)	308.5	157.8	4
2426	Hardwood dimension and flooring.....	30.4	(1.7)	(1.1)	(17.7)	(10.0)	12
2429	Special product sawmills, n.e.c.....	(7.7)	(.2)	(Z)	(2.6)	(4.8)	27
243	Millwork, plywood, structural members..	228.4	(15.8)	(3.5)	(134.2)	(75.1)	4
2431	Millwork.....	60.5	(5.9)	(2.2)	(28.9)	(23.5)	9
2434	Wood kitchen cabinets.....	30.8	(4.4)	(.3)	(11.5)	(14.6)	10
2435	Hardwood veneer and plywood.....	26.1	(.9)	(.4)	(13.5)	(11.2)	5
2436	Softwood veneer and plywood.....	94.9	(1.7)	(.5)	(73.8)	(18.9)	3
2439	Structural wood members, n.e.c.....	16.3	(3.0)	(Z)	(6.4)	(6.9)	14
244	Wood containers.....	30.2	(6.3)	(.2)	(12.8)	(10.9)	14
2441	Nailed wood boxes and shook.....	(5.1)	(.5)	(Z)	(1.5)	(3.0)	26
2448	Wood pallets and skids.....	(22.9)	(5.6)	(.1)	(9.8)	7.5	17
2449	Wood containers, n.e.c.....	(2.2)	(.2)	(.1)	(1.4)	(.4)	22
245	Wood buildings and mobile homes.....	73.8	(14.9)	(1.2)	(35.9)	(21.8)	11
2451	Mobile homes.....	(41.5)	(5.2)	(.6)	(23.8)	(12.0)	15
2452	Prefabricated wood buildings.....	(32.2)	(9.7)	(.6)	(12.1)	(9.8)	17
249	Miscellaneous wood products.....	169.8	(6.7)	(.6)	(103.4)	(59.0)	11
2491	Wood preserving.....	(28.5)	(1.9)	-	(17.7)	(8.8)	16
2492	Particleboard.....	28.4	(.6)	(.1)	(27.4)	(.4)	4
2499	Wood products, n.e.c.....	(112.8)	(4.1)	(.5)	(58.4)	(49.9)	16
25	Furniture and fixtures.....	304.9	(20.8)	(9.4)	(157.5)	(117.3)	4
251	Household furniture.....	175.9	(13.1)	(4.1)	(80.0)	(78.7)	5
2511	Wood household furniture.....	91.8	(4.7)	(.6)	(44.8)	(41.7)	7
2512	Upholstered household furniture.....	39.1	(5.5)	(2.8)	(10.7)	(20.0)	12
2514	Metal household furniture.....	19.8	(1.5)	(.4)	(11.9)	(6.0)	8
2515	Mattresses and bedsprings.....	(12.3)	(1.2)	(.3)	(3.4)	(7.5)	15
2517	Wood TV and radio cabinets.....	6.0	(Z)	-	(5.1)	(.8)	9
2519	Household furniture, n.e.c.....	6.8	(.1)	(Z)	(4.1)	(2.6)	14
252	Office furniture.....	42.4	(1.0)	(1.2)	(27.4)	(12.9)	4
2521	Wood office furniture.....	14.3	(.3)	(.1)	(5.5)	(8.4)	11
2522	Metal office furniture.....	28.1	(.7)	(1.1)	(21.9)	(4.5)	2
2531	Public buildings, related furniture.....	18.3	(.9)	(1.3)	(12.2)	(3.9)	16
254	Partitions and fixtures.....	43.5	(3.4)	(1.3)	(22.5)	(16.3)	11
2541	Wood partitions and fixtures.....	15.0	(1.8)	(.4)	(8.4)	(4.4)	10
2542	Metal partitions and fixtures.....	(28.5)	(1.7)	(.9)	(14.1)	(11.9)	16
259	Miscellaneous furniture and fixtures...	24.7	(2.4)	(1.5)	(15.4)	(5.4)	11
2591	Drapery hardware, blinds, shades.....	(14.7)	(.8)	(1.4)	(11.0)	(1.4)	15
2599	Furniture and fixtures, n.e.c.....	(10.1)	(1.5)	(.1)	(4.4)	(4.0)	16

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
26	Paper and allied products.....	3,019.6	(34.0)	(18.3)	2,665.7	301.6	1
2611	Pulpmills.....	288.6	.9	1.8	272.4	13.0	1
2621	Papermills, except building paper.....	1,046.3	10.7	6.0	945.9	83.6	1
2631	Paperboard mills.....	875.9	3.2	2.7	776.2	93.8	2
264	Miscellaneous converted paper products.	420.8	(5.1)	(4.6)	363.7	(47.5)	3
2641	Paper coating and glazing.....	79.9	.8	.3	70.9	8.0	3
2642	Envelopes.....	20.4	.4	.1	17.3	2.7	14
2643	Bags, except textile bags.....	91.5	1.3	2.2	66.9	21.1	9
2645	Die-cut paper and board.....	13.8	.4	.1	8.1	5.2	14
2646	Pressed and molded pulp goods.....	9.6	.1	.8	8.3	.3	1
2647	Sanitary paper products.....	158.4	.2	.6	154.5	3.2	1
2648	Stationery products.....	(9.2)	(.1)	(.4)	(7.2)	(1.4)	50
2649	Converted paper products, n.e.c.....	38.0	1.9	.2	30.5	5.6	11
265	Paperboard containers and boxes.....	373.6	(14.0)	(3.2)	293.3	(63.6)	3
2651	Folding paperboard boxes.....	75.1	2.4	.5	60.3	12.3	5
2652	Setup paperboard boxes.....	32.2	.5	(Z)	27.1	4.6	6
2653	Corrugated and solid fiber boxes.....	206.2	9.5	1.8	153.7	41.3	4
2654	Sanitary food containers.....	36.9	.5	.7	34.6	1.1	3
2655	Fiber cans, drums, similar products.....	23.2	1.1	.2	17.6	4.3	8
2661	Building paper and board mills.....	14.4	.1	-	14.2	.1	8
27	Printing and publishing.....	1,470.0	58.6	138.4	851.5	421.8	2
2711	Newspapers.....	434.3	(26.0)	(84.1)	246.0	(78.1)	4
2721	Periodicals.....	67.4	(1.4)	(10.0)	(18.5)	(37.5)	10
273	Books.....	118.7	(5.3)	(6.6)	(77.2)	(29.5)	11
2731	Book publishing.....	63.4	(2.6)	(4.4)	(45.6)	(10.8)	5
2732	Book printing.....	(55.3)	(2.7)	(2.2)	(31.6)	(18.7)	22
2741	Miscellaneous publishing.....	(47.5)	(.8)	(4.8)	(6.8)	(35.1)	32
275	Commercial printing.....	589.1	(17.8)	(17.7)	363.0	190.9	4
2751	Commercial printing, letterpress.....	170.9	(5.4)	(3.2)	84.8	(77.6)	8
2752	Commercial printing, lithographic.....	326.8	(11.8)	(13.6)	201.1	(100.5)	6
2753	Engraving and plate printing.....	15.8	(.3)	(.4)	(4.7)	(10.5)	10
2754	Commercial printing, gravure.....	75.6	(.3)	(.5)	(72.4)	(2.3)	3
2761	Manifold business forms.....	80.4	(.6)	(2.8)	(64.1)	(12.8)	9
2771	Greeting card publishing.....	13.4	(.6)	(.9)	(10.8)	(1.1)	5
278	Blankbooks and bookbinding.....	48.5	1.4	3.9	27.0	16.2	13
2782	Blankbooks and looseleaf binders.....	(32.8)	(.6)	3.8	(20.5)	(7.9)	16
2789	Bookbinding and related work.....	(15.7)	(.8)	.1	(6.5)	(8.3)	20
279	Printing trade services.....	70.8	(4.7)	(7.6)	(38.1)	(20.6)	14
2791	Typesetting.....	(31.2)	(2.7)	(7.6)	(11.7)	(9.3)	22
2793	Photoengraving.....	(5.5)	(.3)	(Z)	(2.8)	(2.4)	27
2794	Electrotyping and stereotyping.....	-	-	-	-	-	(X)
2795	Lithographic platemaking services.....	(34.1)	(1.7)	-	(23.6)	(8.9)	20
28	Chemicals and allied products.....	6,957.4	(60.4)	(50.0)	6,124.4	722.6	1
281	Industrial inorganic chemicals.....	876.7	(7.9)	(7.4)	822.2	39.2	1
2812	Alkalies and chlorine.....	196.0	(.5)	-	194.0	(1.6)	1
2813	Industrial gases.....	220.7	(1.9)	(3.3)	(202.6)	(13.0)	3
2816	Inorganic pigments.....	114.5	(.8)	(.4)	(100.4)	(13.0)	4
2819	Industrial inorganic chemicals, n.e.c....	345.4	(4.7)	(3.7)	325.5	(11.6)	2
282	Plastics materials, synthetics.....	1,163.2	(2.4)	(12.8)	1,093.8	54.1	1
2821	Plastics materials and resins.....	786.6	(2.1)	(.7)	756.2	(27.5)	1
2822	Synthetic rubber.....	48.8	(.1)	(Z)	(44.0)	(D)	1
2823	Cellulosic manmade fibers.....	28.2	(.1)	(.9)	(25.6)	(D)	1
2824	Organic fibers, noncellulosic.....	299.6	(.2)	(11.2)	268.0	(20.2)	3
283	Drugs.....	420.6	(9.8)	(11.8)	369.0	(29.9)	2
2831	Biological products.....	27.9	(1.7)	(.9)	(17.4)	(7.8)	13
2833	Medicinals and botanicals.....	99.7	(.6)	(1.4)	(93.8)	(3.9)	4
2834	Pharmaceutical preparations.....	293.1	(7.6)	(9.5)	257.8	(18.2)	1

See footnotes at end of table.

Table 4. Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
28	Chemicals and allied products--Con.						
284	Soaps, cleaners, toilet goods	278.3	(8.9)	(4.1)	231.3	(34.0)	4
2841	Soap and other detergents	125.5	(2.1)	(.2)	(102.3)	(21.0)	6
2842	Polishes and sanitation goods	42.2	(5.3)	(.6)	(34.8)	1.5	11
2843	Surface active agents	33.8	(.6)	(.2)	(27.3)	(5.7)	8
2844	Toilet preparations	76.7	(1.0)	(3.0)	(66.9)	(5.8)	4
2851	Paints and allied products	129.6	(4.8)	(3.5)	(87.5)	(33.8)	6
286	Industrial organic chemicals	2,815.9	(7.5)	(5.1)	2,471.6	331.8	1
2861	Gum and wood chemicals	14.4	(.2)	(.1)	(12.3)	(1.7)	10
2865	Cyclic crudes and intermediates	388.0	(1.4)	(.5)	331.7	(54.5)	1
2869	Industrial organic chemicals, n.e.c	2,413.6	(5.9)	(4.5)	2,127.6	275.6	1
287	Agricultural chemicals	1,065.7	(6.3)	(3.4)	897.9	158.1	2
2873	Nitrogenous fertilizers	757.6	(1.2)	(.3)	628.2	(127.9)	2
2874	Phosphatic fertilizers	98.0	(.8)	(1.0)	(85.5)	(10.7)	2
2875	Fertilizers, mixing only	(32.0)	(3.8)	(.7)	(23.9)	(3.6)	15
2879	Agricultural chemicals, n.e.c	178.1	(.6)	1.4	160.3	(15.8)	4
289	Miscellaneous chemical products	207.4	(12.6)	(1.9)	151.1	(41.8)	4
2891	Adhesives and sealants	29.0	(1.1)	(.4)	(22.4)	(5.1)	8
2892	Explosives	18.1	(2.9)	-	(11.9)	(3.4)	12
2893	Printing ink	11.7	(1.2)	(.1)	(8.3)	(2.2)	5
2895	Carbon black	21.2	(.1)	(.2)	(20.9)	-	1
2899	Chemical preparations, n.e.c	127.4	(7.4)	(1.1)	(87.7)	(31.2)	5
29	Petroleum and coal products	1,643.7	(29.7)	(2.7)	1,308.8	302.2	2
2911	Petroleum refining	1,517.2	(18.5)	(1.8)	1,215.9	280.7	1
295	Paving and roofing materials	93.7	(9.2)	(.2)	(68.3)	(16.0)	10
2951	Paving mixtures and blocks	48.8	(7.9)	(.2)	(30.3)	(10.4)	19
2952	Asphalt felts and coatings	44.9	(1.3)	(Z)	(38.0)	(5.6)	5
299	Miscellaneous petroleum, coal products.	32.8	(2.0)	(.7)	(24.6)	(5.5)	6
2992	Lubricating oils and greases	19.8	(1.9)	(.7)	(13.5)	(3.7)	8
2999	Petroleum and coal products, n.e.c	13.0	(.1)	-	(11.1)	(1.8)	8
30	Rubber, miscellaneous plastics prod..	1,370.3	(22.7)	(22.0)	1,005.8	319.6	2
3011	Tires and inner tubes	248.4	(D)	(D)	234.5	(D)	1
3021	Rubber and plastics footwear	10.4	(D)	(Z)	(10.1)	(D)	2
3031	Reclaimed rubber	.1	(Z)	-	.1	-	9
3041	Rubber, plastics hose and belting	40.9	(D)	(D)	(38.0)	(1.4)	3
3069	Fabricated rubber products, n.e.c	123.2	(2.3)	(1.8)	(79.1)	(39.9)	7
3079	Miscellaneous plastics products	947.4	(18.8)	(6.6)	644.0	278.0	2
31	Leather and leather products	83.3	(2.9)	(2.3)	(51.0)	(27.2)	6
3111	Leather tanning and finishing	31.2	(1.0)	(.7)	(20.3)	(9.2)	13
3131	Boot, shoe cut and findings	(1.7)	(.1)	-	(1.5)	(.2)	23
314	Footwear, except rubber	28.4	.4	1.0	20.0	6.9	5
3142	House slippers	1.3	(Z)	(Z)	(.3)	(1.0)	4
3143	Men's footwear, except athletic	10.9	(.2)	(.2)	(9.3)	(1.1)	1
3144	Women's footwear, except athletic	(9.5)	(.1)	(.2)	(5.6)	(3.6)	15
3149	Footwear, except rubber, n.e.c	6.7	(.1)	(.6)	(4.9)	(1.1)	5
3151	Leather gloves and mittens	(1.9)	(Z)	-	(1.2)	(.6)	28
3161	Luggage	(8.3)	(.2)	-	(3.7)	(4.4)	18
317	Women's handbags and purses	9.3	.5	.5	3.7	4.6	12
3171	Women's handbags and purses	(5.4)	(.4)	(.3)	(1.5)	(3.2)	18
3172	Personal leather goods, n.e.c	(3.9)	(.1)	(.2)	(2.3)	(1.3)	15
3199	Leather goods, n.e.c	(2.6)	(.6)	(.1)	(.4)	(1.5)	21

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
32	Stone, clay, glass products.....	1,671.5	204.9	(46.1)	1,101.4	319.2	2
3211	Flat glass.....	69.4	(D)	(D)	(63.3)	(4.9)	1
322	Glass, pressed or blown.....	313.0	(1.7)	(18.6)	272.6	(20.2)	3
3221	Glass containers.....	186.0	(1.0)	(.6)	183.1	1.3	1
3229	Pressed and blown glass, n.e.c.....	127.0	(.7)	(18.0)	(89.5)	(18.9)	5
3231	Products of purchased glass.....	52.0	(1.4)	(.7)	(37.0)	(12.9)	8
3241	Cement, hydraulic.....	255.1	(5.2)	(11.8)	177.4	(60.6)	1
325	Structural clay products.....	56.7	(D)	(D)	43.3	(6.2)	8
3251	Brick and structural clay tile.....	33.1	(4.8)	(.5)	(23.2)	(4.6)	12
3253	Ceramic wall and floor tile.....	(5.9)	(D)	-	(D)	(.7)	15
3255	Clay refractories.....	13.8	(.5)	(Z)	(12.7)	(.6)	6
3259	Structural clay products, n.e.c.....	4.0	(D)	(D)	(D)	(.3)	13
326	Pottery and related products.....	36.0	(.5)	(.5)	(26.8)	(8.2)	7
3261	Vitreous plumbing fixtures.....	5.1	(D)	(Z)	(D)	(.1)	3
3262	Vitreous china food utensils.....	3.6	(D)	(D)	3.1	(Z)	1
3263	Fine earthenware food utensils.....	1.2	(D)	(D)	(1.1)	-	12
3264	Porcelain electrical supplies.....	15.4	(D)	(Z)	(D)	(1.6)	4
3269	Pottery products, n.e.c.....	(10.7)	(D)	-	(D)	(6.5)	21
327	Concrete, gypsum, plaster products.....	616.5	180.9	(10.2)	252.4	173.0	4
3271	Concrete block and brick.....	50.8	(10.3)	(.8)	(18.7)	(21.1)	12
3272	Concrete products, n.e.c.....	114.6	(9.2)	(.5)	(45.5)	(59.4)	10
3273	Ready-mixed concrete.....	400.1	160.0	(7.9)	145.3	(86.9)	5
3274	Lime.....	24.0	(D)	(D)	(18.7)	4.4	9
3275	Gypsum products.....	27.0	(D)	(D)	(24.2)	1.2	1
3281	Cut stone and stone products.....	(8.2)	(D)	(D)	(4.9)	2.0	19
329	Miscellaneous nonmetallic mineral prod.	264.7	(7.9)	(1.8)	223.7	(31.2)	4
3291	Abrasive products.....	41.1	(D)	(D)	(36.2)	3.5	13
3292	Asbestos products.....	19.8	(D)	(D)	(18.4)	1.0	2
3293	Gaskets, packing, sealing devices.....	36.5	(D)	(D)	29.0	6.2	5
3295	Minerals, ground or treated.....	39.6	(2.2)	(Z)	(29.6)	(7.7)	8
3296	Mineral wool.....	73.9	(D)	(D)	(70.4)	(2.4)	3
3297	Nonclay refractories.....	33.5	(D)	(D)	(26.5)	(6.4)	9
3299	Nonmetallic mineral products, n.e.c.....	(20.2)	(2.6)	-	(13.6)	(4.0)	23
33	Primary metal industries.....	3,895.3	(41.1)	(41.1)	3,385.2	428.2	1
331	Blast furnace, basic steel products....	2,144.1	(14.6)	(28.0)	1,801.2	300.5	1
3312	Blast furnaces and steel mills.....	1,889.6	11.6	26.5	1,593.8	257.8	1
3313	Electrometallurgical products.....	48.9	(D)	(D)	41.1	7.3	2
3315	Steel wire and related products.....	60.2	(D)	(D)	48.0	11.0	6
3316	Cold finishing of steel shapes.....	40.9	(D)	(D)	37.4	2.0	2
3317	Steel pipe and tubes.....	104.5	(D)	(D)	(80.9)	22.4	3
332	Iron and steel foundries.....	523.1	(9.0)	(3.7)	470.3	(40.1)	2
3321	Gray iron foundries.....	399.2	(6.2)	(3.2)	351.2	(38.6)	2
3322	Malleable iron foundries.....	22.6	(D)	(D)	(20.4)	(.6)	3
3324	Steel investment foundries.....	8.8	(D)	(Z)	(8.2)	(D)	11
3325	Steel foundries, n.e.c.....	92.6	(D)	(D)	(90.5)	(D)	4
333	Primary nonferrous metals.....	474.0	2.2	2.1	468.4	1.4	1
3331	Primary copper.....	(D)	(D)	-	(D)	-	1
3332	Primary lead.....	(D)	(Z)	(Z)	(D)	(Z)	1
3333	Primary zinc.....	35.6	(Z)	-	(D)	(D)	2
3334	Primary aluminum.....	136.4	(1.6)	(D)	(132.7)	(D)	1
3339	Primary nonferrous metals, n.e.c.....	86.3	(D)	(D)	(84.8)	(1.0)	1
3341	Secondary nonferrous metals.....	74.8	(2.0)	(.5)	(55.2)	(17.1)	5
335	Nonferrous rolling and drawing.....	413.8	(6.6)	(5.1)	366.5	(35.6)	3
3351	Copper rolling and drawing.....	59.2	(.9)	(.9)	(54.5)	(2.9)	4
3353	Aluminum sheet, plate, and foil.....	140.7	(1.2)	(1.4)	(137.6)	(.5)	2
3354	Aluminum extruded products.....	39.2	(1.9)	(.5)	(27.1)	(9.8)	8
3355	Aluminum rolling and drawing, n.e.c.....	13.8	(D)	(D)	(11.2)	(2.0)	2
3356	Nonferrous rolling and drawing, n.e.c....	28.0	(D)	(D)	(24.4)	(2.1)	6
3357	Nonferrous wiredrawing, insulating.....	133.1	(1.6)	(1.5)	(111.7)	(18.3)	7

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
33	Primary metal industries--Con.						
336	Nonferrous foundries	131.4	(3.6)	(1.6)	111.4	(15.0)	5
3361	Aluminum foundries	102.7	(D)	(D)	(93.7)	(5.1)	6
3362	Brass, bronze, copper foundries	(14.8)	(D)	-	(D)	(7.5)	22
3369	Nonferrous foundries, n.e.c.	13.8	(D)	(D)	(D)	(2.4)	11
339	Miscellaneous primary metal products	133.9	(3.1)	(.1)	112.2	(18.5)	6
3398	Metal heat treating	(32.0)	(D)	(Z)	(14.4)	(D)	24
3399	Primary metal products, n.e.c.	101.9	(D)	(Z)	(97.8)	(D)	2
34	Fabricated metal products	2,280.8	(78.5)	(35.2)	1,822.6	344.7	1
341	Metal cans, shipping containers	180.7	(2.0)	(.7)	171.4	(6.7)	1
3411	Metal cans	154.1	(D)	(D)	150.6	(2.8)	1
3412	Metal barrels, drums, and pails	26.6	(D)	(D)	(20.7)	(3.9)	7
342	Cutlery, handtools and hardware	260.6	(7.3)	(5.7)	205.9	(41.6)	3
3421	Cutlery	18.5	(D)	(D)	(D)	(3.6)	4
3423	Hand and edge tools, n.e.c.	57.7	(D)	(D)	(47.1)	(8.6)	7
3425	Handsaws and saw blades	15.8	(D)	(Z)	(D)	(3.1)	11
3429	Hardware, n.e.c.	168.6	(5.2)	(5.1)	(132.0)	(26.3)	4
343	Plumbing, heating, except electric	63.3	(1.9)	(.8)	47.5	(13.1)	5
3431	Metal sanitary ware	9.5	(D)	(D)	(7.7)	(1.5)	6
3432	Plumbing fittings and brass goods	28.6	(D)	(D)	(20.1)	(8.1)	8
3433	Heating equipment, except electric	25.3	(1.5)	(.5)	(19.7)	(3.6)	8
344	Fabricated structural metal products	464.4	(32.5)	(12.9)	328.0	(90.9)	5
3441	Fabricated structural metal	106.3	(6.3)	(.7)	(78.9)	(20.4)	10
3442	Metal doors, sash, and trim	56.8	(6.9)	(6.0)	(33.3)	(10.6)	10
3443	Fabricated platework, boiler shop	126.6	(7.2)	(4.1)	(91.1)	(24.2)	4
3444	Sheet metalwork	113.3	(7.9)	(1.1)	(80.6)	(23.7)	4
3446	Architectural metalwork	(20.4)	(D)	(D)	(13.8)	(4.6)	26
3448	Prefabricated metal buildings	23.4	(.5)	(.6)	(17.7)	(4.6)	6
3449	Miscellaneous metalwork	17.6	(D)	(D)	12.7	2.9	12
345	Screw machine products, bolts, etc.	195.5	(4.9)	(2.2)	159.6	(28.9)	4
3451	Screw machine products	98.2	(2.7)	(.6)	(74.8)	(20.1)	6
3452	Bolts, nuts, rivets, and washers	97.3	(2.1)	(1.6)	(84.8)	(8.8)	4
346	Metal forgings and stampings	567.3	13.2	4.8	467.6	81.9	3
3462	Iron and steel forgings	119.4	(1.1)	(2.1)	(100.7)	(15.5)	5
3463	Nonferrous forgings	10.0	(D)	(Z)	(D)	(.3)	5
3465	Automotive stampings	286.0	(6.5)	(.7)	237.2	(41.6)	5
3466	Crowns and closures	15.7	(D)	(Z)	(D)	(1.6)	5
3469	Metal stampings, n.e.c.	136.3	(5.4)	(2.0)	(106.0)	(22.9)	5
347	Metal services, n.e.c.	118.4	(5.3)	(.6)	(83.0)	(29.5)	12
3471	Plating and polishing	(69.3)	(D)	(D)	(48.9)	(16.7)	19
3479	Metal coating and allied services	49.1	(D)	(D)	(34.2)	(12.8)	11
348	Ordnance and accessories, n.e.c.	68.6	(.6)	(1.4)	(65.5)	(1.2)	3
3482	Small arms ammunition	36.8	(D)	(D)	(36.5)	(Z)	5
3483	Ammunition, except small arms, n.e.c.	6.2	(D)	(D)	(5.9)	.1	1
3484	Small arms	16.1	(D)	(D)	(14.7)	(1.0)	9
3489	Ordnance and accessories, n.e.c.	9.5	(S)	(S)	(S)	(.1)	4
349	Miscellaneous fabricated metal products	362.2	(11.0)	(6.2)	294.2	(50.8)	4
3493	Steel springs, except wire	11.9	(D)	(D)	(10.9)	.8	4
3494	Valves and pipe fittings	160.8	(3.2)	(4.3)	(137.4)	(15.9)	6
3495	Wire springs	21.3	(D)	(D)	(17.0)	(3.3)	11
3496	Miscellaneous fabricated wire products	(44.2)	(D)	(D)	(33.1)	(8.8)	17
3497	Metal foil and leaf	14.0	(.6)	(Z)	12.9	(.5)	7
3498	Fabricated pipe and fittings	34.0	(2.0)	(.5)	(25.3)	(6.2)	7
3499	Fabricated metal products, n.e.c.	75.9	(2.5)	(.6)	(57.6)	15.2	9
35	Machinery, except electrical	3,502.5	(91.5)	228.4	2,754.9	427.6	1
351	Engines and turbines	285.1	(3.9)	(5.2)	272.7	(3.2)	1
3511	Turbines, turbine generator sets	39.7	(.3)	(1.5)	(36.4)	(1.5)	2
3519	Internal combustion engines, n.e.c.	245.4	(3.6)	(3.7)	236.4	(1.7)	1

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
35	Machinery, except electrical--Con.						
352	Farm and garden machinery	292.6	(8.1)	(8.8)	260.6	(15.1)	2
3523	Farm machinery and equipment	268.4	(7.6)	(8.3)	239.3	(13.2)	2
3524	Lawn and garden equipment	24.2	(.5)	(.5)	(21.3)	(1.9)	4
353	Construction, related machinery	662.6	(16.5)	(9.2)	580.9	(56.0)	2
3531	Construction machinery	347.1	(4.3)	(5.2)	313.9	(23.6)	2
3532	Mining machinery	45.7	(2.2)	(1.0)	(36.4)	(6.2)	6
3533	Oilfield machinery	186.6	(5.7)	(1.0)	166.7	(13.2	3
3534	Elevators and moving stairways	(6.9)	(.1)	(D)	(D)	(2.0)	17
3535	Conveyors and conveying equipment	24.2	(2.6)	(D)	(D)	(4.4)	5
3536	Hoists, cranes, and monorails	12.9	(.6)	(Z)	(12.0)	(.3)	14
3537	Industrial trucks and tractors	39.2	(1.0)	(.4)	(31.6)	6.2	6
354	Metalworking machinery	403.9	(17.2)	(9.1)	291.9	(85.7)	5
3541	Machine tools, metal-cutting	88.8	(2.2)	(3.6)	(73.5)	(9.6)	10
3542	Machine tools, metal-forming	21.9	(.8)	(1.2)	(17.2)	(2.8)	9
3544	Special dies, tools, jigs, etc	176.7	(11.2)	(1.6)	(107.8)	(56.1)	10
3545	Machine tool accessories	60.7	(2.0)	(1.5)	(48.6)	(8.7)	8
3546	Power driven handtools	31.2	(D)	(D)	(D)	(2.8)	2
3547	Rolling mill machinery	(9.1)	(D)	(D)	(D)	(1.7)	17
3549	Metalworking machinery, n.e.c	15.6	(.9)	(.2)	(10.3)	(4.1)	9
355	Special industry machinery	205.0	(7.8)	(4.9)	166.2	(25.9)	6
3551	Food products machinery	35.0	(.9)	(1.9)	(24.8)	(7.4)	6
3552	Textile machinery	(35.7)	(1.5)	(1.0)	(25.2)	(8.0)	19
3553	Woodworking machinery	15.0	(1.4)	(Z)	(13.0)	(.5)	14
3554	Paper industries machinery	8.7	(.4)	(.1)	(8.1)	-	6
3555	Printing trades machinery	30.5	(.7)	(.6)	(24.5)	4.7	9
3559	Special industry machinery, n.e.c	80.1	(2.9)	(1.3)	(70.6)	(5.3)	11
356	General industrial machinery	456.5	(12.1)	(10.0)	379.3	(55.2)	3
3561	Pumps and pumping equipment	101.1	(1.4)	(1.6)	(84.6)	(13.4)	9
3562	Ball and roller bearings	112.5	(2.6)	(.9)	(108.3)	(.6)	2
3563	Air and gas compressors	46.4	(1.2)	(1.6)	(40.8)	(2.8)	4
3564	Blowers and fans	27.3	(1.2)	(.5)	(21.4)	(4.2)	10
3565	Industrial patterns	(8.7)	(.5)	(.7)	(1.2)	(6.4)	33
3566	Speed changers, drives, and gears	44.6	(1.2)	(1.6)	(34.6)	(7.2)	8
3567	Industrial furnaces and ovens	13.7	(.3)	(.7)	(11.0)	(1.7)	12
3568	Power transmission equipment, n.e.c	43.3	(.3)	(.3)	(36.0)	(6.7)	6
3569	General industrial machinery, n.e.c	58.9	(3.3)	(2.1)	(41.4)	(12.1)	8
357	Office and computing machines	623.5	(2.5)	168.5	398.8	(53.8)	2
3573	Electronic computing equipment	499.8	(1.2)	155.4	299.2	(44.1)	2
3574	Calculating, accounting machines	29.0	(.1)	(1.9)	(25.1)	(1.9)	1
3576	Scales, balances, except laboratory	5.5	(.2)	(.4)	(4.2)	(.7)	9
3579	Office machines, typewriters, etc	89.3	(1.1)	(10.9)	(70.3)	(7.1)	6
358	Refrigeration and service machines	230.9	(8.1)	(7.2)	191.1	(24.5)	2
3581	Automatic merchandising machines	(8.6)	(.1)	(Z)	(4.7)	(3.8)	30
3582	Commercial laundry equipment	(1.6)	(.5)	-	(.6)	(.4)	32
3585	Refrigeration, heating equipment	189.9	(4.9)	(5.1)	164.3	15.6	2
3586	Measuring and dispensing pumps	5.4	(.4)	(.6)	(3.5)	(.8)	6
3589	Service industry machinery, n.e.c	25.3	(2.1)	(1.5)	(17.9)	(3.9)	9
359	Miscellaneous machinery, except electric	342.4	(15.3)	(5.4)	213.4	(108.3)	5
3592	Carburetors, pistons, rings, etc	61.8	(.8)	(2.5)	(56.8)	(1.8)	1
3599	Machinery, except electrical, n.e.c	280.5	(14.5)	(2.9)	(156.6)	(106.5)	6
36	Electric, electronic equipment	2,360.2	(43.1)	(84.0)	1,931.3	301.6	1
361	Electric distributing equipment	120.6	(3.1)	(3.1)	(77.9)	(36.4)	4
3612	Transformers	61.7	(.9)	(D)	(D)	(27.1)	6
3613	Switchgear, switchboard apparatus	58.9	(2.2)	(D)	(D)	(9.3)	4
362	Electrical industrial apparatus	251.8	(2.7)	(6.5)	205.7	(36.9)	2
3621	Motors and generators	132.8	(1.0)	(2.3)	(114.4)	(15.1)	2
3622	Industrial controls	47.3	(.6)	(3.3)	(30.6)	(12.8)	7
3623	Welding apparatus, electric	25.5	(.3)	(.1)	(22.0)	(3.0)	4
3624	Carbon and graphite products	32.1	(D)	(D)	(28.2)	2.9	8
3629	Electric industrial apparatus, n.e.c	14.1	(D)	(D)	(10.5)	3.1	12

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
36	Electric, electric equipment--Con.						
363	Household appliances	169.2	(6.8)	(1.8)	143.1	(17.5)	3
3631	Household cooking equipment	27.1	(.6)	(.1)	(24.6)	(1.8)	2
3632	Household refrigerators, freezers	36.4	(D)	(D)	(D)	(1.1)	2
3633	Household laundry equipment	19.6	(D)	(D)	(16.3)	(2.5)	1
3634	Electric housewares and fans	42.9	(.5)	(.7)	(32.5)	(9.2)	9
3635	Household vacuum cleaners	15.4	(D)	(Z)	(D)	(.3)	3
3636	Sewing machines	(6.6)	(.1)	(Z)	(6.5)	(Z)	16
3639	Household appliances, n.e.c	21.3	(.3)	(.2)	(18.2)	(2.6)	7
364	Electric lighting wiring equipment	185.2	(4.2)	(4.6)	150.6	(25.9)	3
3641	Electric lamps	30.2	(Z)	(.2)	(29.0)	(.9)	2
3643	Current-carrying wiring devices	46.0	(.7)	(1.0)	(37.1)	(7.3)	6
3644	Noncurrent-carrying wiring devices	24.5	(.3)	(.7)	(19.4)	(4.2)	9
3645	Residential lighting fixtures	8.4	(1.2)	(1.0)	(5.3)	(.8)	13
3646	Commercial lighting fixtures	(17.7)	(.6)	(.6)	(10.2)	(6.4)	17
3647	Vehicular lighting equipment	44.8	(D)	(D)	(41.8)	(1.0)	2
3648	Lighting equipment, n.e.c	13.6	(D)	(D)	(7.8)	(5.3)	13
365	Radio, TV receiving equipment	101.1	(3.4)	(2.1)	(86.1)	(9.5)	3
3651	Radio and TV receiving sets	78.2	(3.3)	(1.8)	(68.8)	(4.3)	2
3652	Phonographic records, prerecorded tape	22.9	(.1)	(.2)	(17.3)	(5.2)	10
366	Communication equipment	564.5	(9.5)	(30.9)	468.9	(55.1)	1
3661	Telephone and telegraph apparatus	194.9	(.6)	(7.0)	175.9	(11.3)	1
3662	Radio and TV communication equipment	369.6	(8.9)	(23.9)	292.9	(43.8)	2
367	Electronic components, accessories	651.2	(7.3)	(26.9)	537.9	(79.0)	3
3671	Electron tubes, receiving type	36.2	(.5)	(1.5)	(30.0)	(4.1)	1
3674	Semiconductors, related devices	347.0	(2.1)	(11.7)	314.1	(19.1)	2
3675	Electronic capacitors	26.2	(.3)	(.8)	(18.6)	(6.5)	2
3676	Electronic resistors	18.6	(.2)	(.3)	(17.6)	(.5)	3
3677	Electronic coils and transformers	(7.9)	(.2)	(.2)	(6.8)	(.7)	(A)
3678	Electronic connectors	35.2	(.3)	(.9)	(28.3)	(5.7)	2
3679	Electronic components, n.e.c	180.2	(3.7)	(11.5)	(122.5)	(42.4)	6
369	Miscellaneous electrical equipment, supplies	316.6	(6.1)	(7.9)	261.4	(41.2)	4
3691	Storage batteries	101.0	(2.4)	(.5)	(90.2)	(7.9)	10
3692	Primary batteries, dry and wet	28.5	(.3)	-	(27.4)	(.8)	2
3693	X-ray apparatus and tubes	44.3	(D)	(D)	(28.7)	(12.6)	3
3694	Engine electrical equipment	127.7	(D)	(D)	(107.7)	(12.5)	4
3699	Electrical equipment, supplies, n.e.c	(15.2)	(.1)	(.3)	(7.3)	(7.5)	21
37	Transporation equipment	3,970.6	(77.5)	(64.2)	3,744.1	(84.6)	1
371	Motor vehicles and equipment	3,195.4	(55.4)	(19.8)	3,071.6	(48.7)	1
3711	Motor vehicles and car bodies	1,475.1	(D)	(D)	(D)	(34.6)	1
3713	Truck and bus bodies	34.5	(2.2)	(.4)	(29.4)	(2.6)	8
3714	Motor vehicle parts, accessories	1,658.6	(D)	(D)	(D)	(10.5)	1
3715	Truck trailers	21.4	(1.9)	(1.3)	(17.5)	.7	10
3716	Motor homes	(5.8)	(D)	(D)	(D)	.3	30
372	Aircraft and parts	417.5	(8.1)	(16.2)	374.9	(18.2)	2
3721	Aircraft	162.0	(2.5)	(8.2)	150.4	(1.0)	1
3724	Aircraft engines and engine parts	146.8	(4.0)	(5.7)	(135.3)	(1.9)	3
3728	Aircraft equipment, n.e.c	108.6	(1.6)	(2.3)	(89.3)	(15.4)	6
373	Ship, boat building, repairing	112.8	(7.4)	(3.9)	90.4	(11.1)	11
3731	Ship building and repairing	87.0	(4.9)	(3.4)	(74.3)	(4.5)	13
3732	Boat building and repairing	25.8	(2.5)	(.5)	(16.2)	(6.6)	14
3743	Railroad equipment	63.1	(D)	(D)	(58.4)	(1.8)	2
3751	Motorcycles, bicycles, and parts	13.9	(D)	(D)	(12.8)	(1.0)	3
376	Guided missiles, space vehicles	136.0	(1.4)	(22.6)	(111.4)	(.5)	1
3761	Guided missiles, space vehicles	103.7	(.9)	(20.6)	(81.8)	.3	1
3764	Space propulsion units and parts	20.2	(D)	(D)	(18.9)	-	1
3769	Space vehicle equipment, n.e.c	12.1	(D)	(D)	(10.6)	(.2)	3
379	Miscellaneous transportation equipment	31.9	(3.4)	(.6)	(24.7)	(3.3)	6
3792	Travel trailers and campers	13.9	(D)	(D)	(8.9)	(2.0)	9
3795	Tanks and tank components	9.6	(D)	(D)	(9.4)	(Z)	1
3799	Transportation equipment, n.e.c	8.4	(D)	(D)	(6.4)	(1.3)	14

See footnotes at end of table.

Table 4. **Capital Expenditures for New Machinery and Equipment by Type for Industry Groups and Industries: 1977**—Con.

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

SIC code	Industry group and industry	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
		Total	Automobiles, trucks, etc., for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
		A	B	C	D	E	A
38	Instruments, related products	704.6	(14.7)	(37.0)	565.0	(88.0)	3
3811	Engineering, scientific instruments	40.3	(1.7)	(4.1)	(31.0)	(3.4)	5
382	Measuring, controlling devices	202.5	(4.6)	(11.5)	149.0	(37.4)	4
3822	Environmental controls	39.4	(.2)	(1.2)	(32.7)	(5.3)	2
3823	Process control instruments	36.3	(1.8)	(1.9)	(27.3)	(5.3)	9
3824	Fluid meters and counting devices	14.5	(.1)	(.3)	(11.8)	(2.3)	3
3825	Instruments to measure electricity	74.8	(1.3)	(4.7)	(54.1)	(14.6)	6
3829	Measuring, controlling devices, n.e.c.	37.6	(1.2)	(3.4)	(23.1)	(9.9)	14
3832	Optical instruments and lenses	40.1	(1.1)	(1.6)	(30.5)	(6.8)	15
384	Medical instruments, supplies	131.1	(2.9)	(3.4)	(105.5)	(19.3)	5
3841	Surgical and medical instruments	59.6	(1.6)	(2.4)	(45.5)	(10.1)	2
3842	Surgical appliances and supplies	58.3	(.9)	(.5)	(49.8)	(7.1)	11
3843	Dental equipment and supplies	13.3	(.4)	(.6)	(10.2)	(2.1)	10
3851	Ophthalmic goods	22.1	(.3)	(.4)	(18.4)	(3.0)	3
3861	Photographic equipment and supplies	251.6	(3.9)	(15.9)	214.7	(17.1)	2
3873	Watches, clocks, and watchcases	(17.1)	(.2)	(Z)	(15.9)	(1.0)	90
39	Miscellaneous manufacturing industries	400.9	(18.6)	(9.7)	324.8	(48.3)	5
391	Jewelry, silver and plated ware	34.1	(1.8)	(.5)	(25.7)	(6.1)	9
3911	Jewelry, precious metal	22.9	(D)	(D)	(16.9)	(4.8)	12
3914	Silverware and plated ware	6.6	(D)	(D)	(5.7)	(D)	4
3915	Jewelers' materials, lapidary work	(4.6)	(D)	(D)	(3.1)	(D)	18
3931	Musical instruments	(14.7)	(D)	(D)	(13.2)	(.5)	25
394	Toys and sporting goods	131.7	(D)	(D)	(107.0)	(17.1)	8
3942	Dolls	(3.8)	(D)	(D)	(2.7)	(.7)	19
3944	Games, toys, children's vehicles	57.9	(1.6)	(1.1)	47.0	(8.2)	3
3949	Sporting and athletic goods, n.e.c.	70.0	(3.0)	(1.6)	57.3	(8.2)	14
395	Pens, office and art goods	40.3	(.5)	(1.1)	(37.4)	(1.4)	3
3951	Pens and mechanical pencils	22.4	(D)	(.6)	21.4	(D)	4
3952	Lead pencils and art goods	8.7	(D)	(D)	(7.7)	(.5)	5
3953	Marking devices	4.6	(D)	(D)	(4.2)	(Z)	14
3955	Carbon paper and inked ribbons	4.6	(D)	(Z)	(4.1)	(D)	9
396	Costume jewelry and notions	31.5	(.6)	(.7)	(28.0)	(2.4)	8
3961	Costume jewelry	(13.4)	(D)	(Z)	(11.4)	(D)	18
3962	Artificial flowers	(1.6)	(D)	(D)	(1.2)	(D)	22
3963	Buttons	(.7)	(Z)	-	(D)	(D)	17
3964	Needles, pins, and fasteners	15.7	(D)	(D)	(D)	(D)	6
399	Miscellaneous manufactures	148.4	(10.7)	(3.9)	(113.5)	(20.8)	12
3991	Brooms and brushes	(15.5)	(.5)	(.5)	(13.7)	(1.0)	15
3993	Signs and advertising displays	26.8	(4.3)	(.7)	(17.4)	(4.4)	12
3995	Burial caskets	13.8	(2.1)	-	(10.5)	(1.3)	6
3996	Hard surface floor coverings	15.0	(D)	-	(14.5)	(D)	1
3999	Manufacturing industries, n.e.c.	(77.3)	(D)	(2.7)	(57.4)	(D)	22

- Represents zero. (A) Indicates standard errors of 100 percent or more. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards. (Z) Less than 50 thousand dollars.

[1]This category represents the total machinery and equipment expenditures for establishments that did not provide a breakdown of their expenditures for the three specific categories.

[2]For a description of the standard error of estimate, see the section "Qualifications of the Data" in appendix B. Standard error of estimates are provided for industry totals. Any total figure in parentheses has a relative standard error of 15 percent or more. Relative standard error for detail items (column B, C, D, and E) are not shown. The relative standard error for a detail item will exceed the relative standard error for the total item and will approximate the standard error for the total item multiplied by the square of the ratio of the total to detail items.

Table 5. Capital Expenditures for New Machinery and Equipment by Type for States: 1977

(All figures in millions of dollars except where noted. For explanation of terms, see appendix A. For description of annual survey of manufactures and estimating procedures used, see appendix B)

State	Expenditures for new machinery and equipment					Standard error of estimate[2] (percent) for column--
	Total	Automobiles, trucks, etc. for highway use	Computers and peripheral data processing equipment	All other expenditures for new machinery and equipment	Expenditures for new machinery and equipment, n.s.k.[1]	
	A	B	C	D	E	A
United States[3]	40,035.9	1,219.8	866.8	32,378.7	5,570.4	1
Alabama	1,148.5	24.4	9.1	983.8	131.0	2
Alaska	170.3	2.8	0.1	170.1	-2.7	12
Arizona	172.2	10.8	12.0	122.8	26.6	12
Arkansas	373.3	13.7	2.7	308.1	48.7	3
California	2,852.3	125.9	121.9	1,981.2	623.8	1
Colorado	364.1	9.8	37.1	277.6	39.7	3
Connecticut	436.5	14.7	9.4	370.9	41.5	2
Delaware	127.5	2.5	.5	112.5	12.0	2
District of Columbia	14.7	1.5	1.5	10.3	1.3	12
Florida	599.8	27.5	20.0	453.6	98.7	3
Georgia	960.5	31.0	10.5	788.7	130.4	2
Hawaii	(44.9)	2.6	5.1	33.1	4.1	15
Idaho	133.1	9.3	1.3	100.6	22.0	8
Illinois	2,241.3	53.7	39.0	1,852.6	295.9	1
Indiana	1,732.4	55.1	27.9	1,474.5	174.9	1
Iowa	573.6	17.7	9.8	439.7	106.4	2
Kansas	254.9	13.2	6.3	204.5	30.9	3
Kentucky	624.2	13.0	8.2	423.4	179.6	2
Louisiana	1,699.6	23.9	6.5	1,511.0	158.2	1
Maine	191.7	9.4	2.6	156.0	23.6	3
Maryland	361.1	10.8	6.6	299.6	44.1	3
Massachusetts	780.1	23.4	25.4	563.7	167.6	3
Michigan	3,363.9	73.2	51.2	3,045.1	194.4	1
Minnesota	517.5	25.1	22.3	369.8	100.3	4
Mississippi	377.8	13.6	7.0	268.8	88.3	3
Missouri	660.2	20.6	14.2	548.4	77.0	2
Montana	87.8	3.2	.7	75.8	8.2	5
Nebraska	145.6	6.6	1.3	107.7	29.9	9
Nevada	36.2	5.9	1.2	21.4	7.7	10
New Hampshire	115.0	2.6	2.6	86.5	23.3	4
New Jersey	1,125.0	34.9	24.7	819.1	246.3	1
New Mexico	54.7	3.8	.6	36.3	14.0	8
New York	2,167.6	49.2	80.9	1,629.1	408.3	1
North Carolina	1,146.8	39.8	16.1	1,003.0	87.9	1
North Dakota	37.7	5.2	.6	29.0	2.8	10
Ohio	2,383.7	63.5	38.3	2,023.7	258.2	1
Oklahoma	392.6	18.1	22.1	303.1	49.4	3
Oregon	494.8	17.5	8.6	359.8	108.9	2
Pennsylvania	1,949.1	60.8	40.4	1,545.9	302.0	1
Rhode Island	125.3	4.1	3.0	95.7	22.5	9
South Carolina	650.0	13.8	32.4	586.9	16.8	1
South Dakota	25.7	5.9	1.9	14.8	3.1	10
Tennessee	852.7	26.7	26.0	658.1	142.0	2
Texas	4,120.2	107.9	61.0	3,457.3	494.1	1
Utah	329.7	6.4	1.2	311.8	10.2	2
Vermont	85.4	1.6	3.4	69.8	10.6	6
Virginia	791.9	32.0	9.7	599.5	150.7	2
Washington	792.3	41.3	12.0	561.6	177.4	2
West Virginia	355.5	7.1	3.7	269.7	75.0	2
Wisconsin	954.3	32.3	16.1	812.4	93.4	2
Wyoming	24.1	0.4	.1	13.6	10.0	14

[1]This category represents the total machinery and equipment expenditures for establishments that did not provide a breakdown of their expenditures for the three specific categories.

[2]For a description of the standard error of estimate, see the section "Qualifications of the Data" in appendix B. Standard error of estimates are provided for State totals. Any total figure in parentheses has a relative standard error of 15 percent or more. Relative standard errors for detail items (columns B, C, D, and E) are not shown. The relative standard error for a detail item will exceed the relative standard error for the total item and will approximate the standard error for the total item multiplied by the square of the ratio of the total to detail items.

[3]Total figures may differ slightly from sum of the individual States due to the inclusion of a few establishments at the United States total level that could not be accurately coded to a State.

Manufacturers' Inventories

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EXPLANATORY TEXT

Data on beginning-of-year and end-of-year inventories held by manufacturing establishments were collected in the 1977 census. Separate inventory figures were requested for (1) finished products, (2) work in process, and (3) materials, supplies, fuel, and other inventories.

Respondents were asked to report their inventories at approximate current costs if feasible; otherwise, at book values. Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the value of inventories aggregate for all establishments in an industry is not precise. The figures on change in inventory between the beginning and the end of the year are of considerably greater significance.

In using inventory data by stage of fabrication for all industries and at the 2-digit industry level, the following should be noted: An item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and all manufacturing which are merely aggregates of figures reported by establishments in specified industries. Further, the total finished-goods inventory for "all manufacturing" includes items that are not finished manufactured products.

For a few industries in the food group, there are special problems in the handling of inventories by stage of fabrication. These are industries in which the products are usually stored and aged under controlled conditions. Such types of products include stemmed and dried tobacco, cheese, and whiskey. It is not clear whether such products should be treated as finished goods, work in process, or material and supplies inventories while in storage. In the cheese and whiskey industries, substantial finished-goods inventories have been reported; while in the tobacco industries, the bulk of the inventories have been classified as materials and supplies. These data have been summarized in the inventory tables in a consistent manner for the years included in this report.

Data in this publication have been previously published in the separate reports comprising the 1977 Census of Manufactures Industry and Area Series (see Introduction). Slight differences may exist between the data in this report and the previously published data due to corrections made for minor errors identified after the industry and area reports were issued. This report reflects these corrections and specifically notes revisions of 3 percent or more.

In addition, differences will exist between end-of-year inventory data published in the 1976 Annual Survey of Manufactures reports and information in this report for 1976 end-of-year inventories. The main reason for these differences is the effect of industry shifts, discussed in the Introduction, along with the effects of sampling and processing errors and revisions to establishment data reported by the respondents.

Table 1. Value of Inventories for Manufacturing and Distribution Sectors: 1977 and Earlier Years

(Millions of dollars)

Sector	Value of inventories at end of--				
	1977	1972	1967	1963	1958
Specified sector	(NA)	213,905	150,581	(NA)	(NA)
Operating manufacturing establishments[1]	188,436	108,936	84,406	59,913	49,354
Manufacturers' central administrative offices[2]	(NA)	3,483	2,234	(NA)	(NA)
Manufacturers' sales branches[3]	14,564	7,963	5,138	4,110	2,839
Petroleum bulk stations[3]	2,204	884	878	777	833
Other sales branches[3]	12,360	7,079	4,260	3,333	2,036
Merchant wholesalers, including independent petroleum bulk stations and assemblers of farm products[3]	67,036	36,780	22,412	15,784	11,892
Agents and brokers[3]	688	991	559	256	180
Retail trade[4]	88,148	55,752	35,832	27,034	22,098

(NA) Not available.

[1]Source: Census of Manufactures for 1977 and earlier census years.
[2]Source: Enterprise Statistics.
[3]Source: Census of Wholesale Trade for 1977 and earlier census years.
[4]Source: Annual Survey of Retail Trade for 1977 and earlier census years.

Table 2. Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
	ALL INDUSTRIES	188 436.4	59 429.9	60 732.6	68 273.9	174 865.0	55 205.5	55 600.2	64 059.3
20	FOOD AND KINDRED PRODUCTS	16 984.9	9 046.7	1 584.5	6 353.6	16 416.3	8 578.3	1 587.0	6 250.9
21	TOBACCO PRODUCTS	3 711.9	208.2	60.6	3 443.1	3 615.2	215.0	47.4	3 352.8
22	TEXTILE MILL PRODUCTS	5 509.9	1 966.1	1 694.0	1 849.9	5 103.5	1 839.1	1 513.8	1 750.6
23	APPAREL, OTHER TEXTILE PRODUCTS	5,535.8	2 309.0	1 208.9	2 017.9	5 125.3	2 144.2	1 081.7	1 899.5
24	LUMBER AND WOOD PRODUCTS	4 663.8	1 774.4	989.8	1 899.6	4 258.1	1 653.3	888.9	1 715.9
25	FURNITURE AND FIXTURES	2 750.3	788.6	688.7	1 273.0	2 504.7	741.6	604.6	1 158.5
26	PAPER AND ALLIED PRODUCTS	5 641.5	1 964.3	648.8	3 028.3	5 281.0	1 811.1	568.6	2 901.3
27	PRINTING AND PUBLISHING	4 200.6	1 349.8	944.0	1 906.8	3 943.0	1 367.1	868.7	1 707.2
28	CHEMICALS AND ALLIED PRODUCTS	14 791.3	6 993.5	2 239.2	5 558.6	13 447.5	6 338.7	2 033.4	5 075.4
29	PETROLEUM AND COAL PRODUCTS	5 656.3	2 796.2	1 403.2	1 457.0	4 912.9	2 426.4	1 192.7	1 293.8
30	RUBBER, MISCELLANEOUS PLASTICS PRODUCTS	4 952.7	2 244.8	833.0	1 874.9	4 441.4	1 931.3	741.6	1 768.5
31	LEATHER AND LEATHER PRODUCTS	1 098.9	457.0	255.9	386.0	I 033.0	428.1	240.9	364.1
32	STONE, CLAY, GLASS PRODUCTS	4 279.3	1 987.7	594.1	1 697.5	3 995.3	1 923.2	560.8	1 511.3
33	PRIMARY METAL INDUSTRIES	18 458.3	4 675.5	6 340.5	7 442.3	17 884.5	4 401.0	6 054.8	7 428.8
34	FABRICATED METAL PRODUCTS	15 306.2	3 688.9	5 461.9	6 155.4	14 111.8	3 400.0	4 877.8	5 834.0
35	MACHINERY, EXCEPT ELECTRICAL	27 170.9	7 506.7	12 088.0	7 576.2	25 153.3	7 030.1	10 998.2	7 125.1
36	ELECTRIC, ELECTRONIC EQUIPMENT	16 058.7	3 962.5	7 290.5	4 805.7	14 273.0	3 645.7	6 305.3	4 322.1
37	TRANSPORTATION EQUIPMENT	22 240.5	2 817.0	13 002.5	6 421.0	20 745.1	2 662.2	12 375.6	5 707.3
38	INSTRUMENTS, RELATED PRODUCTS	5 810.6	1 495.9	2 490.7	1 824.1	5 311.1	1 369.9	2 248.6	1 692.6
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	3 614.2	1 397.2	913.8	1 303.1	3 309.0	1 299.3	810.0	1 199.6
20	FOOD AND KINDRED PRODUCTS	16 984.9	9 046.7	1 584.5	6 353.6	16 416.3	8 578.3	1 587.0	6 250.9
201	MEAT PRODUCTS	1 379.7	927.2	136.5	315.9	1 273.1	868.4	119.7	285.1
2011	MEATPACKING PLANTS	700.1	516.6	67.0	116.5	651.2	484.0	58.6	108.6
2013	SAUSAGES AND OTHER PREPARED MEATS	406.4	233.7	47.2	125.5	375.1	221.0	41.1	112.9
2016	POULTRY DRESSING PLANTS	206.8	132.3	19.4	55.2	188.3	123.1	17.7	47.4
2017	POULTRY AND EGG PROCESSING	66.3	44.7	2.8	18.8	58.6	40.3	2.2	16.1
202	DAIRY PRODUCTS	1 180.2	591.3	69.8	519.1	1 096.9	545.7	71.1	480.1
2021	CREAMERY BUTTER	24.2	16.7	1.3	6.2	25.4	19.7	1.3	4.5
2022	CHEESE, NATURAL AND PROCESSED	550.4	267.9	40.5	242.0	528.3	239.5	45.7	243.0
2023	CONDENSED AND EVAPORATED MILK	175.0	95.6	14.8	64.6	164.4	99.7	11.8	52.9
2024	ICE CREAM AND FROZEN DESSERTS	126.6	58.4	1.5	66.7	116.9	54.5	1.8	60.6
2026	FLUID MILK	304.0	152.6	11.7	139.7	261.8	132.3	10.5	119.0
203	PRESERVED FRUITS AND VEGETABLES	4 537.7	3 222.4	258.0	1 057.3	4 193.5	2 959.8	240.6	993.1
2032	CANNED SPECIALTIES	527.8	326.2	8.6	193.0	508.4	318.4	7.5	182.5
2033	CANNED FRUITS AND VEGETABLES	2 233.5	1 827.6	88.2	317.7	2 062.1	1 709.7	73.3	279.1
2034	DEHYDRATED FRUITS, VEGETABLES, SOUPS	281.9	134.6	56.7	90.6	267.0	116.4	46.9	103.6
2035	PICKLES, SAUCES, SALAD DRESSINGS	447.8	247.0	38.1	162.7	426.7	231.1	44.3	151.2
2037	FROZEN FRUITS AND VEGETABLES	724.4	535.4	59.5	129.5	640.3	451.9	62.4	126.0
2038	FROZEN SPECIALTIES	322.2	151.5	6.9	163.8	288.9	132.2	6.1	150.6
204	GRAIN MILL PRODUCTS	1 714.5	559.3	86.9	1 068.3	1 674.5	533.3	83.5	1 057.7
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	263.2	54.2	17.6	191.3	297.8	61.2	15.2	221.4
2043	CEREAL BREAKFAST FOODS	152.1	71.5	9.5	71.2	150.3	64.2	6.1	80.1
2044	RICE MILLING	411.4	77.8	17.2	316.4	329.4	57.4	11.4	260.7
2045	BLENDED AND PREPARED FLOUR	80.6	43.5	1.7	35.4	72.3	40.4	1.4	30.4
2046	WET CORN MILLING	158.4	56.2	10.2	91.9	169.8	62.4	14.2	93.1
2047	DOG, CAT, AND OTHER PET FOOD	200.7	86.1	2.6	112.0	193.8	81.2	4.2	108.5
2048	PREPARED FEEDS, N.E.C.	448.2	170.1	28.1	250.0	461.0	166.6	31.0	263.5
205	BAKERY PRODUCTS	407.1	98.7	6.7	301.7	382.5	96.7	3.3	282.4
2051	BREAD, CAKE, AND RELATED PRODUCTS	235.1	25.0	3.7	206.4	220.6	22.0	2.1	196.4
2052	COOKIES AND CRACKERS	172.0	73.7	3.0	95.3	161.9	74.7	1.2	86.0
206	SUGAR, CONFECTIONERY PRODUCTS	1 661.8	826.2	127.8	707.8	1 551.8	781.3	122.2	648.3
2061	RAW CANE SUGAR	107.9	76.7	.1	31.1	97.3	62.2	2.8	32.3
2062	CANE SUGAR REFINING	345.1	92.0	52.5	200.7	275.9	79.8	43.4	152.8
2063	BEET SUGAR	467.1	362.0	20.9	84.2	469.2	357.6	25.2	86.4
2065	CONFECTIONERY PRODUCTS	450.2	223.0	26.3	200.9	442.6	218.7	22.8	201.1
2066	CHOCOLATE AND COCOA PRODUCTS	175.1	46.0	25.0	104.2	139.2	38.0	25.2	76.0
2067	CHEWING GUM	116.4	26.6	3.1	86.7	127.6	25.0	2.8	99.8
207	FATS AND OILS	1 484.2	458.2	315.5	710.4	1 972.7	594.3	386.0	992.4
2074	COTTONSEED OIL MILLS	195.4	46.2	29.6	119.6	249.6	49.9	16.9	182.9
2075	SOYBEAN OIL MILLS	804.9	229.3	127.8	447.8	1 205.9	373.8	176.7	655.3
2076	VEGETABLE OIL MILLS, N.E.C.	89.3	35.3	11.1	42.9	83.1	35.2	8.9	39.0
2077	ANIMAL AND MARINE FATS AND OILS	70.2	58.1	1.2	10.9	54.0	43.1	.7	10.2
2079	SHORTENING AND COOKING OILS	324.3	89.3	145.8	89.2	380.1	92.2	182.8	105.1
208	BEVERAGES	2 940.0	1 531.5	484.1	924.4	2 759.8	1 473.1	460.1	826.6
2082	MALT BEVERAGES	444.6	36.3	98.1	310.1	406.5	32.2	107.5	266.7
2083	MALT	134.2	45.1	6.1	83.0	183.0	63.0	8.3	111.7
2084	WINES, BRANDY, AND BRANDY SPIRITS	559.5	196.9	313.0	49.7	513.5	174.4	293.8	45.3
2085	DISTILLED LIQUOR, EXCEPT BRANDY	1 027.9	915.2	42.2	70.6	996.6	911.9	25.5	59.2
2086	BOTTLED AND CANNED SOFT DRINKS	551.7	247.7	18.7	285.3	467.2	212.9	17.7	236.7
2087	FLAVORING EXTRACTS, SIRUPS, N.E.C.	222.1	90.2	6.1	125.8	193.1	78.7	7.3	107.1
209	MISCELLANEOUS FOODS, KINDRED PRODUCTS	1 679.9	831.9	99.2	748.8	1 511.5	725.7	100.7	685.1
2091	CANNED AND CURED SEAFOODS	311.1	224.7	8.4	78.0	256.6	181.6	7.6	67.5
2092	FRESH OR FROZEN PACKAGED FISH	376.7	244.0	23.1	109.6	313.3	195.7	24.3	93.3
2095	ROASTED COFFEE	405.3	112.5	36.6	256.1	383.9	95.4	38.8	249.7
2097	MANUFACTURED ICE	4.4	1.2	.2	3.0	3.3	.9	.3	2.1
2098	MACARONI AND SPAGHETTI	48.4	26.3	2.4	19.7	45.1	24.3	2.2	18.6
2099	FOOD PREPARATIONS, N.E.C.	534.1	223.1	28.5	282.5	509.4	227.8	27.6	254.0
21	TOBACCO PRODUCTS	3 711.9	208.2	60.6	3 443.1	3 615.2	215.0	47.4	3 352.8
2111	CIGARETTES	2 652.2	50.1	22.2	2 579.9	2 564.7	60.2	23.0	2 481.5
2121	CIGARS	57.8	16.3	4.0	37.4	54.9	14.3	3.3	37.3
2131	CHEWING AND SMOKING TOBACCO	99.8	28.7	10.3	60.8	94.7	28.0	9.2	57.5

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
2141	TOBACCO STEMMING AND REDRYING	902.2	113.1	24.1	764.9	900.9	112.5	11.8	776.5
22	TEXTILE MILL PRODUCTS	5 509.9	1 966.1	1 694.0	1 849.9	5 103.5	1 839.1	1 513.8	1 750.6
2211	WEAVING MILLS, COTTON	657.8	230.7	210.2	216.9	553.9	191.4	156.4	206.1
2221	WEAVING MILLS, MANMADE FIBER, SILK	871.0	265.4	365.6	240.0	834.8	259.3	332.3	243.2
2231	WEAVING AND FINISHING MILLS, WOOL	111.0	34.7	46.0	30.3	96.2	30.8	36.6	28.8
2241	NARROW FABRIC MILLS	109.3	34.1	33.5	41.7	106.1	33.3	32.6	40.2
225	KNITTING MILLS	1 315.4	460.8	395.8	458.7	1 218.8	440.9	362.1	415.8
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	122.9	41.4	50.4	31.0	119.8	38.4	52.1	29.3
2252	HOSIERY, N.E.C.	127.3	46.2	50.9	30.2	118.8	42.8	48.9	27.1
2253	KNIT OUTERWEAR MILLS	393.4	160.8	92.6	140.0	342.5	142.9	79.9	119.8
2254	KNIT UNDERWEAR MILLS	131.3	64.5	29.2	37.7	116.8	56.9	26.9	33.1
2257	CIRCULAR KNIT FABRIC MILLS	316.2	90.1	94.8	131.3	307.2	92.6	87.0	127.5
2258	WARP KNIT FABRIC MILLS	209.0	52.7	75.2	81.2	198.8	61.9	64.8	72.1
2259	KNITTING MILLS, N.E.C.	15.2	5.2	2.7	7.3	14.8	5.4	2.5	7.0
226	TEXTILE FINISHING, EXCEPT WOOL	434.6	123.3	159.8	151.4	396.7	108.6	156.8	131.2
2261	FINISHING PLANTS, COTTON	80.1	18.0	24.8	37.3	68.2	15.4	20.8	32.0
2262	FINISHING PLANTS, MANMADE FIBER, SILK	266.5	81.6	117.0	68.0	258.4	73.0	118.9	66.6
2269	FINISHING PLANTS, N.E.C.	88.0	23.7	18.1	46.2	70.1	20.3	17.2	32.6
227	FLOOR COVERING MILLS	753.5	352.9	173.1	227.5	694.2	339.6	150.8	203.8
2271	WOVEN CARPETS AND RUGS	26.9	8.8	11.2	6.8	23.9	7.0	10.8	6.1
2272	TUFTED CARPETS AND RUGS	696.8	331.9	153.6	211.3	644.1	322.3	132.6	189.3
2279	CARPETS AND RUGS, N.E.C.	29.9	12.2	8.3	9.4	26.2	10.3	7.4	8.4
228	YARN AND THREAD MILLS	616.0	196.8	181.5	237.6	592.1	190.5	170.1	231.5
2281	YARN MILLS, EXCEPT WOOL	363.6	98.7	110.6	154.3	362.2	105.0	106.4	150.8
2282	THROWING AND WINDING MILLS	132.3	49.1	35.8	47.4	r122.1	41.7	32.0	48.3
2283	WOOL YARN MILLS	17.4	4.9	5.9	6.7	18.7	5.3	6.1	7.3
2284	THREAD MILLS	102.7	44.2	29.3	29.3	89.2	38.5	25.6	25.1
229	MISCELLANEOUS TEXTILE GOODS	641.3	267.3	128.3	245.7	610.5	244.7	116.0	249.9
2291	FELT GOODS, EXCEPT WOVEN FELT AND HATS	36.3	16.4	6.5	13.4	33.0	14.8	6.2	12.0
2292	LACE GOODS	12.6	5.1	3.2	4.3	11.7	5.0	3.0	3.7
2293	PADDINGS AND UPHOLSTERY FILLING	19.6	6.6	.6	12.4	19.1	5.8	.5	12.9
2294	PROCESSED TEXTILE WASTE	27.5	12.3	4.5	10.6	26.2	8.9	7.7	9.6
2295	COATED FABRICS, NOT RUBBERIZED	190.0	70.3	37.5	82.2	188.4	68.1	35.1	85.2
2296	TIRE CORD AND FABRIC	126.7	56.5	29.6	40.5	130.0	54.3	23.3	52.4
2297	NONWOVEN FABRICS	121.5	50.7	24.2	46.6	104.0	43.8	19.7	40.5
2298	CORDAGE AND TWINE	79.4	40.3	13.6	25.5	73.4	36.3	13.2	24.0
2299	TEXTILE GOODS, N.E.C.	27.8	9.0	8.5	10.3	24.7	7.8	7.4	9.5
23	APPAREL, OTHER TEXTILE PRODUCTS	5 535.8	2 309.0	1 208.9	2 017.9	5 125.3	2 144.2	1 081.7	1 899.5
2311	MEN'S AND BOYS' SUITS AND COATS	r470.5	185.0	138.2	147.3	416.8	165.1	118.8	132.9
232	MEN'S AND BOYS' FURNISHINGS	1 547.6	735.4	312.0	500.1	1 409.0	674.8	264.5	469.7
2321	MEN'S, BOYS' SHIRTS, NIGHTWEAR	501.4	241.6	111.2	148.6	442.6	212.0	90.1	140.5
2322	MEN'S AND BOYS' UNDERWEAR	55.1	32.7	10.3	12.1	50.8	30.2	9.3	11.2
2323	MEN'S AND BOYS' NECKWEAR	29.6	15.1	3.5	11.0	26.3	13.0	2.9	10.4
2327	MEN'S AND BOYS' SEPARATE TROUSERS	281.9	141.5	52.2	88.2	279.8	143.5	43.9	92.3
2328	MEN'S AND BOYS' WORK CLOTHING	477.7	210.3	97.9	169.5	427.4	186.8	84.7	156.0
2329	MEN'S AND BOYS' CLOTHING, N.E.C.	201.9	94.2	36.9	70.8	182.2	89.3	33.6	59.3
233	WOMEN'S AND MISSES' OUTERWEAR	1 338.2	567.2	287.1	483.9	1 259.4	537.2	260.2	462.0
2331	WOMEN'S, MISSES' BLOUSES, WAISTS	222.5	99.9	49.6	72.9	197.3	81.6	44.2	71.5
2335	WOMEN'S AND MISSES' DRESSES	386.1	126.1	90.9	169.1	363.0	119.5	79.8	163.7
2337	WOMEN'S, MISSES' SUITS AND COATS	297.0	117.9	66.2	112.9	291.1	127.0	58.9	105.1
2339	WOMEN'S, MISSES' OUTERWEAR, N.E.C.	432.6	223.3	80.4	129.0	408.0	209.1	77.2	121.7
234	WOMEN'S, CHILDREN'S, UNDERGARMENTS	397.7	175.1	95.9	126.7	373.1	168.1	87.7	117.4
2341	WOMEN'S AND CHILDREN'S UNDERWEAR	275.9	123.2	64.7	88.0	256.5	116.9	58.2	81.4
2342	BRASSIERES AND ALLIED GARMENTS	121.9	52.0	31.2	38.7	116.7	51.2	29.4	36.1
235	HATS, CAPS, AND MILLINERY	57.5	24.5	8.4	24.5	53.4	21.9	6.1	25.4
2351	MILLINERY	5.8	3.6	.5	1.7	5.7	3.4	.5	1.8
2352	HATS AND CAPS, EXCEPT MILLINERY	51.7	20.9	8.0	22.9	47.6	18.5	5.5	23.6
236	CHILDREN'S OUTERWEAR	245.7	83.7	71.3	90.7	239.5	87.1	66.8	85.6
2361	CHILDREN'S DRESSES AND BLOUSES	106.5	35.1	34.3	37.2	94.9	30.8	29.9	34.3
2363	CHILDREN'S COATS AND SUITS	20.7	7.2	6.1	7.5	17.1	5.7	5.0	6.4
2369	CHILDREN'S OUTERWEAR, N.E.C.	118.5	41.5	30.9	46.1	127.5	50.7	31.9	44.9
2371	FUR GOODS	46.5	22.2	3.7	20.6	41.3	20.1	3.1	18.0
238	MISCELLANEOUS APPAREL AND ACCESSORIES	274.7	124.8	45.9	104.0	242.9	110.6	41.2	91.1
2381	FABRIC DRESS AND WORK GLOVES	42.1	16.9	9.6	15.6	39.1	16.3	8.5	14.3
2384	ROBES AND DRESSING GOWNS	44.1	15.6	10.7	17.8	38.0	13.4	9.1	15.6
2385	WATERPROOF OUTERGARMENTS	59.6	29.8	10.2	19.6	52.6	27.5	9.5	15.6
2386	LEATHER AND SHEEP LINED CLOTHING	32.3	14.3	4.4	13.6	25.8	11.7	4.1	10.1
2387	APPAREL BELTS	50.9	22.2	6.3	22.4	43.9	18.4	5.4	20.1
2389	APPAREL AND ACCESSORIES, N.E.C.	45.7	26.1	4.7	14.9	43.4	23.3	4.7	15.4
239	MISCELLANEOUS FABRICATED TEXTILE PRODUCTS	1 157.4	390.9	246.4	520.0	1 090.0	359.3	233.4	497.4
2391	CURTAINS AND DRAPERIES	151.2	46.5	35.5	69.3	140.5	49.2	32.9	58.4
2392	HOUSEFURNISHINGS, N.E.C.	393.0	185.2	62.0	145.8	345.7	162.6	54.4	128.8
2393	TEXTILE BAGS	59.4	15.1	5.7	38.6	57.6	14.4	5.5	37.7
2394	CANVAS AND RELATED PRODUCTS	101.0	33.9	11.3	55.8	91.5	29.8	10.7	51.1
2395	PLEATING AND STITCHING	82.9	32.7	11.3	38.9	75.5	31.7	9.2	34.5
2396	AUTOMOTIVE AND APPAREL TRIMMINGS	194.3	22.9	82.7	88.7	214.7	24.3	84.6	105.9
2397	SCHIFFLI MACHINE EMBROIDERIES	10.1	3.5	2.3	4.3	8.9	3.7	1.5	3.8
2399	FABRICATED TEXTILE PRODUCTS, N.E.C.	165.4	51.1	35.7	78.6	155.6	43.7	34.6	77.3

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of --							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
24	LUMBER AND WOOD PRODUCTS	4 663.8	1 774.4	989.8	1 899.6	4 258.1	1 653.3	888.9	1 715.9
2411	LOGGING CAMPS, LOG CONTRACTORS	555.8	409.0	54.8	92.0	520.6	398.8	49.8	72.0
242	SAWMILLS AND PLANING MILLS	1 598.8	653.7	432.7	512.4	1 493.2	602.0	399.1	492.1
2421	SAWMILLS, PLANING MILLS, GENERAL	1 420.6	603.3	400.1	417.1	1 333.7	549.6	368.5	415.6
2426	HARDWOOD DIMENSION AND FLOORING	147.4	33.4	30.7	83.4	125.3	29.4	28.7	67.2
2429	SPECIAL PRODUCT SAWMILLS, N.E.C.	30.8	17.0	1.9	11.9	34.2	22.9	1.9	9.4
243	MILLWORK, PLYWOOD, STRUCTURAL MEMBERS	1 344.9	362.7	302.6	679.5	1 208.3	331.4	270.1	606.8
2431	MILLWORK	605.0	147.6	167.3	290.0	545.3	131.7	153.2	260.5
2434	WOOD KITCHEN CABINETS	212.3	52.7	52.5	107.0	187.2	52.9	43.8	90.4
2435	HARDWOOD VENEER AND PLYWOOD	197.7	71.9	22.3	103.5	176.1	66.7	19.0	90.4
2436	SOFTWOOD VENEER AND PLYWOOD	242.6	70.2	51.0	121.4	229.2	66.1	45.2	118.0
2439	STRUCTURAL WOOD MEMBERS, N.E.C.	87.3	20.2	9.5	57.7	70.5	14.0	9.0	47.5
244	WOOD CONTAINERS	139.9	36.8	23.0	80.1	134.4	35.1	22.9	76.4
2441	NAILED WOOD BOXES AND SHOOK	31.2	10.7	4.3	16.2	30.2	9.6	5.0	15.6
2448	WOOD PALLETS AND SKIDS	58.1	10.0	12.0	36.0	52.4	9.9	9.9	32.6
2449	WOOD CONTAINERS, N.E.C.	50.5	16.1	6.6	27.9	51.8	15.6	8.0	28.2
245	WOOD BUILDINGS AND MOBILE HOMES	422.4	73.7	54.5	294.2	350.0	62.7	42.0	245.3
2451	MOBILE HOMES	193.3	41.6	20.6	131.2	165.5	37.9	17.8	109.8
2452	PREFABRICATED WOOD BUILDINGS	229.1	32.1	34.0	163.0	184.5	24.8	24.2	135.5
249	MISCELLANEOUS WOOD PRODUCTS	602.1	238.5	122.2	241.3	551.6	223.5	104.9	223.2
2491	WOOD PRESERVING	212.5	87.0	62.5	63.0	184.5	78.4	49.1	57.0
2492	PARTICLEBOARD	21.1	9.3	2.6	9.2	21.7	9.5	2.8	9.4
2499	WOOD PRODUCTS, N.E.C.	368.5	142.2	57.1	169.2	345.4	135.6	53.0	156.8
25	FURNITURE AND FIXTURES	2 750.3	788.6	688.7	1 273.0	2 504.7	741.6	604.6	1 158.5
251	HOUSEHOLD FURNITURE	1 637.3	523.2	353.7	760.4	1 515.4	491.4	319.6	704.5
2511	WOOD HOUSEHOLD FURNITURE	821.5	325.6	194.6	301.2	771.6	318.6	175.9	277.1
2512	UPHOLSTERED HOUSEHOLD FURNITURE	378.6	74.6	76.9	227.1	341.2	65.4	69.3	206.5
2514	METAL HOUSEHOLD FURNITURE	217.0	63.9	45.2	107.9	197.9	53.9	41.0	103.1
2515	MATTRESSES AND BEDSPRINGS	155.6	47.6	15.7	92.3	142.7	41.6	15.0	86.1
2517	WOOD TV AND RADIO CABINETS	30.5	6.0	9.7	14.9	31.6	5.8	9.2	16.6
2519	HOUSEHOLD FURNITURE, N.E.C.	34.1	5.5	11.6	17.0	30.5	6.2	9.3	15.1
252	OFFICE FURNITURE	344.4	65.9	111.6	166.9	299.6	64.3	94.2	141.0
2521	WOOD OFFICE FURNITURE	107.1	20.0	33.8	53.3	88.4	17.8	27.6	43.0
2522	METAL OFFICE FURNITURE	237.2	46.0	77.7	113.5	211.1	46.5	66.6	98.1
2531	PUBLIC BUILDINGS, RELATED FURNITURE	138.3	29.4	45.8	63.1	122.0	25.3	40.6	56.2
254	PARTITIONS AND FIXTURES	394.7	109.8	111.3	173.6	351.2	98.1	94.5	158.7
2541	WOOD PARTITIONS AND FIXTURES	158.2	41.4	49.8	67.0	141.8	35.5	43.9	62.3
2542	METAL PARTITIONS AND FIXTURES	236.5	68.4	61.5	106.5	209.4	62.5	50.5	96.3
259	MISCELLANEOUS FURNITURE AND FIXTURES	235.7	60.3	66.4	109.0	216.5	62.5	55.8	98.2
2591	DRAPERY HARDWARE, BLINDS, SHADES	115.6	34.3	29.4	52.0	106.4	38.0	24.1	44.3
2599	FURNITURE AND FIXTURES, N.E.C.	120.1	26.0	37.0	57.1	110.1	24.5	31.7	53.9
26	PAPER AND ALLIED PRODUCTS	5 641.5	1 964.3	648.8	3 028.3	5 281.0	1 811.1	568.6	2 901.3
2611	PULPMILLS	257.0	95.7	27.1	134.2	223.6	83.6	12.3	127.7
2621	PAPERMILLS, EXCEPT BUILDING PAPER	1 259.5	346.5	130.7	782.3	1 209.8	350.2	112.1	747.5
2631	PAPERBOARD MILLS	537.5	130.4	17.3	389.8	509.1	125.2	16.3	367.6
264	MISCELLANEOUS CONVERTED PAPER PRODUCTS	1 943.0	832.4	266.6	844.0	1 746.3	733.7	229.0	783.6
2641	PAPER COATING AND GLAZING	451.2	172.5	90.7	188.0	420.5	163.6	76.2	180.6
2642	ENVELOPES	122.2	47.2	13.8	61.2	109.9	42.5	12.3	55.1
2643	BAGS, EXCEPT TEXTILE BAGS	424.9	149.1	46.6	229.2	410.8	146.8	41.1	222.8
2645	DIE-CUT PAPER AND BOARD	114.3	44.1	14.7	55.5	94.0	33.4	12.6	48.0
2646	PRESSED AND MOLDED PULP GOODS	24.5	12.5	.5	11.5	22.0	9.0	.5	12.5
2647	SANITARY PAPER PRODUCTS	409.9	226.5	23.0	160.3	333.8	172.6	22.2	139.0
2648	STATIONARY PRODUCTS	118.2	57.0	25.4	35.8	114.4	54.6	24.1	35.6
2649	CONVERTED PAPER PRODUCTS, N.E.C.	277.7	123.5	51.8	102.4	241.0	111.2	40.0	89.9
265	PAPERBOARD CONTAINERS AND BOXES	1 599.4	541.9	203.5	854.0	1 549.0	499.9	195.3	853.9
2651	FOLDING PAPERBOARD BOXES	421.8	200.3	106.6	114.9	402.2	188.1	100.7	113.4
2652	SETUP PAPERBOARD BOXES	48.2	19.7	8.3	20.3	46.4	19.2	7.8	19.5
2653	CORRUGATED AND SOLID FIBER BOXES	664.8	125.5	46.1	493.2	668.4	113.3	44.6	510.5
2654	SANITARY FOOD CONTAINERS	345.5	175.1	26.2	144.2	320.9	159.1	27.1	134.7
2655	FIBER CANS, DRUMS, SIMILAR PRODUCTS	119.2	21.3	16.4	81.4	111.1	20.2	15.0	75.9
2661	BUILDING PAPER AND BOARD MILLS	45.0	17.4	3.6	24.0	43.1	18.5	3.7	21.0
27	PRINTING AND PUBLISHING	4 200.6	1 349.8	944.0	1 906.8	3 943.0	1 367.1	868.7	1 707.2
2711	NEWSPAPERS	382.1	7.3	4.8	370.0	371.8	5.6	4.0	362.1
2721	PERIODICALS	349.6	118.6	53.2	177.8	314.7	113.7	62.5	138.4
273	BOOKS	1 186.0	724.2	252.7	209.1	1 153.7	729.5	235.4	188.9
2731	BOOK PUBLISHING	992.0	701.5	172.9	117.6	963.4	703.5	158.8	101.1
2732	BOOK PRINTING	194.0	22.7	79.8	91.5	190.3	26.0	76.6	87.8
2741	MISCELLANEOUS PUBLISHING	139.1	55.1	40.2	43.8	121.7	50.6	34.9	36.1
275	COMMERCIAL PRINTING	1 359.8	227.0	387.2	745.6	I 200.1	210.0	348.5	641.5
2751	COMMERCIAL PRINTING, LETTERPRESS	372.7	77.3	95.4	200.0	345.8	72.9	91.1	181.8
2752	COMMERCIAL PRINTING, LITHOGRAPHIC	861.9	134.4	254.5	473.0	747.1	125.3	223.3	398.5
2753	ENGRAVING AND PLATE PRINTING	23.5	1.6	9.8	12.1	20.6	1.0	9.4	10.2
2754	COMMERCIAL PRINTING, GRAVURE	101.7	13.6	27.5	60.5	86.7	10.8	24.7	51.1
2761	MANIFOLD BUSINESS FORMS	336.7	96.6	46.0	194.1	313.7	87.5	39.2	187.0

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
2771	GREETING CARD PUBLISHING	160.6	45.5	64.4	50.6	207.8	98.4	62.8	46.6
278	BLANKBOOKS AND BOOKBINDING	175.9	55.0	46.5	74.4	155.1	49.5	36.6	69.0
2782	BLANKBOOKS AND LOOSELEAF BINDERS	130.2	41.4	33.3	55.5	112.0	36.4	24.2	51.4
2789	BOOKBINDING AND RELATED WORK	45.7	13.7	13.2	18.9	43.1	13.1	12.4	17.6
279	PRINTING TRADE SERVICES	110.8	20.5	48.9	41.4	104.5	22.2	44.7	37.6
2791	TYPESETTING	42.5	2.3	29.8	10.3	38.5	2.3	26.5	9.7
2793	PHOTOENGRAVING	13.2	2.8	3.0	7.4	11.6	2.6	2.5	6.4
2794	ELECTROTYPING AND STEREOTYPING	.5	(Z)	.1	.4	.5	(Z)	.1	.4
2795	LITHOGRAPHIC PLATEMAKING SERVICES	54.5	15.4	16.0	23.2	53.8	17.2	15.6	21.1
28	CHEMICALS AND ALLIED PRODUCTS	14 791.3	6 993.5	2 239.2	5 558.6	13 447.5	6 338.7	2 033.4	5 075.4
281	INDUSTRIAL INORGANIC CHEMICALS	1 305.7	476.7	203.6	625.5	1 161.2	429.7	178.0	553.4
2812	ALKALIES AND CHLORINE	141.8	50.5	1.4	89.8	132.4	56.2	1.3	74.9
2813	INDUSTRIAL GASES	45.6	32.5	4.1	8.9	27.8	20.7	1.9	5.2
2816	INORGANIC PIGMENTS	251.5	113.5	24.1	113.9	240.7	111.1	22.5	107.1
2819	INDUSTRIAL INORGANIC CHEMICALS, N.E.C	866.9	280.1	173.9	412.8	760.3	241.7	152.3	366.3
282	PLASTICS MATERIALS, SYNTHETICS	2 021.0	1 114.2	263.8	643.0	1 854.3	1 000.6	229.8	623.9
2821	PLASTICS MATERIALS AND RESINS	1 093.6	618.7	125.7	349.2	982.3	545.4	101.9	335.0
2822	SYNTHETIC RUBBER	154.3	92.6	15.9	45.8	148.9	93.9	14.5	40.6
2823	CELLULOSIC MANMADE FIBERS	111.3	51.0	13.0	47.3	108.1	43.7	12.8	51.7
2824	ORGANIC FIBERS, NONCELLULOSIC	661.8	351.9	109.3	200.7	614.9	317.7	100.6	196.6
283	DRUGS	2 446.5	908.6	716.9	821.0	2 231.6	835.5	614.0	782.1
2831	BIOLOGICAL PRODUCTS	246.9	59.0	119.6	68.3	222.3	57.1	106.0	59.1
2833	MEDICINALS AND BOTANICALS	307.0	109.3	104.0	93.7	297.9	110.6	91.5	95.8
2834	PHARMACEUTICAL PREPARATIONS	1 892.6	740.4	493.2	659.0	1 711.5	667.8	416.5	627.2
284	SOAPS, CLEANERS, TOILET GOODS	1 794.9	850.1	153.4	791.4	1 699.8	807.0	142.2	750.5
2841	SOAP AND OTHER DETERGENTS	643.4	319.4	75.0	249.0	616.7	310.4	70.0	236.3
2842	POLISHES AND SANITATION GOODS	274.9	145.3	10.5	119.1	264.3	133.5	15.2	115.6
2843	SURFACE ACTIVE AGENTS	116.3	62.9	5.7	47.7	106.9	58.5	6.0	42.4
2844	TOILET PREPARATIONS	760.3	322.5	62.1	375.7	712.0	304.6	51.1	356.2
2851	PAINTS AND ALLIED PRODUCTS	937.6	513.8	49.6	374.1	864.2	474.8	48.0	341.3
286	INDUSTRIAL ORGANIC CHEMICALS	3 852.8	1 851.8	651.5	1 349.5	3 439.3	1 638.8	642.7	1 157.8
2861	GUM AND WOOD CHEMICALS	65.7	40.4	1.6	23.8	63.6	40.6	2.3	20.7
2865	CYCLIC CRUDES AND INTERMEDIATES	844.4	391.7	155.8	296.9	784.2	350.9	165.7	267.7
2869	INDUSTRIAL ORGANIC CHEMICALS, N.E.C	2 942.7	1 419.7	494.1	1 028.9	2 591.5	1 247.3	474.7	869.4
287	AGRICULTURAL CHEMICALS	1 564.7	885.5	115.5	563.7	1 394.3	784.4	104.1	505.8
2873	NITROGENOUS FERTILIZERS	378.0	218.5	13.3	146.2	296.9	170.9	12.2	113.8
2874	PHOSPHATIC FERTILIZERS	419.7	252.5	19.4	147.8	353.9	200.4	18.0	135.5
2875	FERTILIZERS, MIXING ONLY	306.5	186.3	20.4	99.8	303.3	189.8	21.6	92.0
2879	AGRICULTURAL CHEMICALS, N.E.C	460.6	228.3	62.5	169.9	440.2	223.4	52.3	164.6
289	MISCELLANEOUS CHEMICAL PRODUCTS	868.1	392.8	84.9	390.4	802.8	367.8	74.5	360.5
2891	ADHESIVES AND SEALANTS	202.5	86.8	16.6	99.1	187.3	79.7	16.6	91.0
2892	EXPLOSIVES	59.8	20.2	12.0	27.6	54.8	19.7	9.8	25.3
2893	PRINTING INK	116.7	43.4	5.4	67.9	101.7	38.5	3.8	59.3
2895	CARBON BLACK	32.7	18.9	-	13.8	27.3	13.3	-	14.1
2899	CHEMICAL PREPARATIONS, N.E.C	456.5	223.5	51.0	182.0	431.7	216.7	44.3	170.7
29	PETROLEUM AND COAL PRODUCTS	5 656.3	2 796.2	1 403.2	1 457.0	4 912.9	2 426.4	1 192.7	1 293.8
2911	PETROLEUM REFINING	5 196.2	2 600.1	1 382.1	1 213.9	4 471.6	2 232.1	1 160.5	1 079.0
295	PAVING AND ROOFING MATERIALS	220.0	104.6	9.4	106.0	196.1	93.5	11.5	91.0
2951	PAVING MIXTURES AND BLOCKS	62.8	23.3	2.0	37.4	53.5	21.7	2.0	29.9
2952	ASPHALT, FELTS AND COATINGS	157.2	81.3	7.4	68.5	142.6	71.8	9.6	61.2
299	MISCELLANEOUS PETROLEUM, COAL PRODUCTS	240.1	91.4	11.6	137.1	245.2	100.7	20.6	123.8
2992	LUBRICATING OILS AND GREASES	180.8	80.3	11.3	89.1	192.9	90.2	20.4	82.4
2999	PETROLEUM AND COAL PRODUCTS, N.E.C	59.3	11.1	.3	47.9	52.3	10.6	.3	41.5
30	RUBBER, MISCELLANEOUS PLASTICS PRODUCTS	4 952.7	2 244.8	833.0	1 874.9	4 441.4	1 931.3	741.6	1 768.5
3011	TIRES AND INNER TUBES	1 172.1	673.3	147.8	350.9	1 015.0	498.9	142.9	373.2
3021	RUBBER AND PLASTICS FOOTWEAR	140.7	98.6	15.1	27.0	129.0	85.8	16.3	26.8
3031	RECLAIMED RUBBER	3.7	1.7	.1	2.0	3.7	1.7	.1	1.9
3041	RUBBER, PLASTICS HOSE, AND BELTING	275.4	143.2	48.9	83.2	267.6	134.3	49.9	83.4
3069	FABRICATED RUBBER PRODUCTS, N.E.C	510.5	173.2	118.4	218.9	476.6	170.5	103.1	203.0
3079	MISCELLANEOUS PLASTICS PRODUCTS	2 850.3	1 154.7	502.7	1 192.9	2 549.6	1 040.1	429.3	1 080.2
31	LEATHER AND LEATHER PRODUCTS	1 098.9	457.0	255.9	386.0	I 033.0	428.1	240.9	364.1
3111	LEATHER TANNING AND FINISHING	187.6	45.2	88.5	53.9	176.1	43.8	83.5	48.9
3131	BOOT, SHOE CUT STOCK, AND FINDINGS	31.2	9.2	5.0	16.9	33.0	11.5	4.9	16.6
314	FOOTWEAR, EXCEPT RUBBER	558.0	250.0	107.1	200.9	518.8	230.8	99.4	188.6
3142	HOUSE SLIPPERS	29.7	13.8	3.7	12.2	28.9	14.1	3.1	11.7
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC	272.2	117.4	46.1	108.7	245.6	103.9	42.2	99.5
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC	147.4	59.4	39.9	48.1	148.3	59.9	38.3	50.0
3149	FOOTWEAR, EXCEPT RUBBER, N.E.C	108.7	59.4	17.5	31.9	96.0	52.9	15.8	27.3
3151	LEATHER GLOVES AND MITTENS	33.7	14.9	7.2	11.6	30.9	14.1	6.4	10.4
3161	LUGGAGE	113.5	56.3	16.3	40.8	114.8	52.1	19.1	43.5

See footnotes at end of table.

Table 2. Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976 – Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
317	WOMEN'S HANDBAGS AND PURSES	124.5	58.9	22.3	43.3	116.2	58.0	19.9	38.4
3171	WOMEN'S HANDBAGS AND PURSES	61.9	26.9	13.6	21.4	56.1	25.3	12.1	18.7
3172	PERSONAL LEATHER GOODS, N.E.C.	62.5	31.9	8.7	21.9	60.2	32.7	7.7	19.7
3199	LEATHER GOODS, N.E.C.	50.6	22.6	9.4	18.6	43.2	17.8	7.7	17.7
32	STONE, CLAY, GLASS PRODUCTS	4 279.3	1 987.7	594.1	1 697.5	3 995.3	1 923.2	560.8	1 511.3
3211	FLAT GLASS	211.4	75.6	55.9	79.9	191.9	71.4	49.7	70.8
322	GLASS, PRESSED OR BLOWN	759.4	498.9	56.6	203.9	760.9	520.3	57.2	183.3
3221	GLASS CONTAINERS	408.7	292.4	2.3	114.0	429.6	322.6	2.2	104.9
3229	PRESSED AND BLOWN GLASS, N.E.C	350.7	206.5	54.3	89.9	331.2	197.7	55.0	78.5
3231	PRODUCTS OF PURCHASED GLASS	285.6	115.8	62.7	107.2	261.5	103.9	60.3	97.3
3241	CEMENT, HYDRAULIC	484.8	124.4	74.3	286.1	463.2	137.4	89.1	236.7
325	STRUCTURAL CLAY PRODUCTS	299.0	171.1	19.5	108.3	304.5	183.1	16.1	105.3
3251	BRICK AND STRUCTURAL CLAY TILE	93.2	61.6	5.1	26.5	98.3	72.3	4.4	21.5
3253	CERAMIC WALL AND FLOOR TILE	42.1	28.4	3.5	10.1	40.3	27.1	3.3	10.0
3255	CLAY REFRACTORIES	126.4	56.2	7.3	62.9	131.4	59.9	5.6	65.9
3259	STRUCTURAL CLAY PRODUCTS, N.E.C.	37.2	24.9	3.7	8.7	34.5	23.8	2.8	7.9
326	POTTERY AND RELATED PRODUCTS	182.0	79.1	48.6	54.3	169.0	71.2	47.0	50.7
3261	VITREOUS PLUMBING FIXTURES	48.9	23.3	10.1	15.6	49.1	25.0	9.5	14.6
3262	VITREOUS CHINA FOOD UTENSILS	30.0	13.5	10.4	6.1	26.2	11.6	9.0	5.6
3263	FINE EARTHWARE FOOD UTENSILS	17.2	10.4	3.1	3.8	14.9	8.7	3.1	3.1
3264	PORCELAIN ELECTRICAL SUPPLIES	59.3	18.2	21.7	19.3	54.3	13.8	22.3	18.2
3269	POTTERY PRODUCTS, N.E.C.	26.7	13.8	3.4	9.5	24.6	12.2	3.1	9.3
327	CONCRETE, GYPSUM, PLASTER PRODUCTS	864.8	414.4	59.2	391.3	774.7	386.1	52.5	336.1
3271	CONCRETE BLOCK AND BRICK	124.0	100.1	2.2	21.7	118.4	96.0	2.0	20.4
3272	CONCRETE PRODUCTS, N.E.C.	389.7	224.9	43.0	121.8	357.0	204.4	36.4	116.2
3273	READY-MIXED CONCRETE	231.5	67.8	5.9	157.8	193.7	59.3	4.8	129.6
3274	LIME	47.2	6.9	3.1	37.3	39.0	7.4	3.8	27.8
3275	GYPSUM PRODUCTS	72.4	14.6	5.1	52.7	66.6	19.0	5.5	42.1
3281	CUT STONE AND STONE PRODUCTS	53.8	21.6	12.7	19.6	50.0	20.2	11.4	18.4
329	MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS	1 138.5	486.8	204.7	447.0	1 019.8	429.7	177.4	412.7
3291	ABRASIVE PRODUCTS	317.7	149.5	80.7	87.5	247.8	109.5	64.4	73.8
3292	ASBESTOS PRODUCTS	168.0	94.3	19.4	54.2	161.3	87.8	20.0	53.4
3293	GASKETS, PACKING, SEALING DEVICES	208.6	81.4	54.3	72.9	195.5	81.5	48.1	65.9
3295	MINERALS, GROUND OR TREATED	116.3	35.8	11.4	69.1	116.4	31.2	13.3	72.0
3296	MINERAL WOOL	121.5	48.7	7.8	65.0	116.5	49.1	5.6	61.7
3297	NONCLAY REFRACTORIES	159.5	55.3	21.1	83.1	141.8	50.4	17.7	73.7
3299	NONMETALLIC MINERAL PRODUCTS, N.E.C.	46.9	21.9	9.9	15.2	40.5	20.1	8.2	12.1
33	PRIMARY METAL INDUSTRIES	18 458.3	4 675.5	6 340.5	7 442.3	17 884.5	4 401.0	6 054.8	7 428.8
331	BLAST FURNACE, BASIC STEEL PRODUCTS	10 306.4	2 562.5	2 865.4	4 878.5	10 327.8	2 378.3	2 901.3	5 048.2
3312	BLAST FURNACES AND STEEL MILLS	8 471.6	1 974.1	2 423.8	4 073.8	8 620.6	1 832.9	2 516.3	4 271.4
3313	ELECTROMETALLURGICAL PRODUCTS	403.8	193.1	36.3	174.4	367.3	172.9	25.6	168.8
3315	STEEL WIRE AND RELATED PRODUCTS	422.8	157.2	79.7	185.8	409.7	153.4	76.6	179.6
3316	COLD FINISHING OF STEEL SHAPES	436.6	87.0	157.1	192.5	383.3	76.8	144.1	162.5
3317	STEEL PIPE AND TUBES	571.6	151.1	168.4	252.0	546.9	142.3	138.8	265.8
332	IRON AND STEEL FOUNDRIES	1 104.8	329.2	386.3	389.3	1 027.1	310.1	350.7	366.4
3321	GRAY IRON FOUNDRIES	654.4	232.5	170.4	251.5	596.2	222.9	142.5	230.8
3322	MALLEABLE IRON FOUNDRIES	43.6	3.1	27.9	12.6	41.1	4.0	24.2	12.9
3324	STEEL INVESTMENT FOUNDRIES	65.6	2.9	39.4	23.3	57.0	3.5	34.1	19.4
3325	STEEL FOUNDRIES, N.E.C	341.3	90.8	148.7	101.8	332.8	79.7	149.8	103.3
333	PRIMARY NONFERROUS METALS	1 952.0	622.8	766.2	563.0	1 819.4	549.5	737.7	532.2
3331	PRIMARY COPPER	r756.6	294.9	391.2	70.5	700.0	200.0	437.4	62.5
3332	PRIMARY LEAD	186.0	29.5	124.1	32.4	162.3	41.6	97.2	23.5
3333	PRIMARY ZINC	154.1	62.1	31.8	60.3	176.6	78.9	23.0	74.6
3334	PRIMARY ALUMINUM	646.8	141.8	161.1	343.9	590.1	144.6	130.8	314.6
3339	PRIMARY NONFERROUS METALS, N.E.C	208.5	94.5	58.0	55.9	190.5	84.3	49.2	56.9
3341	SECONDARY NONFERROUS METALS	485.2	159.2	111.1	214.9	459.5	170.9	96.0	192.6
335	NONFERROUS ROLLING AND DRAWING	4 042.3	884.1	2 033.0	1 125.3	3 749.4	884.6	1 802.5	1 062.3
3351	COPPER ROLLING AND DRAWING	472.1	90.1	203.5	178.5	496.1	112.5	201.3	182.4
3353	ALUMINUM SHEET, PLATE, AND FOIL	1 625.2	282.3	1 051.8	291.1	1 325.2	251.7	812.0	261.4
3354	ALUMINUM EXTRUDED PRODUCTS	337.2	59.8	118.3	159.1	312.8	49.2	114.2	149.4
3355	ALUMINUM ROLLING AND DRAWING, N.E.C.	169.5	25.8	104.9	38.9	183.6	21.5	132.4	29.7
3356	NONFERROUS ROLLING AND DRAWING, N.E.C.	477.5	125.7	205.2	146.6	483.7	141.3	216.6	125.8
3357	NONFERROUS WIREDRAWING, INSULATING	960.7	300.4	349.3	311.0	948.0	308.5	326.0	313.5
336	NONFERROUS FOUNDRIES	349.2	67.9	125.1	156.3	316.9	62.3	113.4	141.3
3361	ALUMINUM FOUNDRIES	205.4	36.9	75.3	93.1	174.7	31.4	63.7	79.7
3362	BRASS, BRONZE, COPPER FOUNDRIES	59.2	14.8	18.7	25.7	55.6	13.1	16.6	25.9
3369	NONFERROUS FOUNDRIES, N.E.C.	84.7	16.2	31.0	37.5	86.6	17.8	33.1	35.7
339	MISCELLANEOUS PRIMARY METAL PRODUCTS	218.2	49.7	53.4	115.1	184.4	45.2	53.3	85.9
3398	METAL HEAT TREATING	69.0	11.2	5.9	52.0	48.5	8.4	4.9	35.2
3399	PRIMARY METAL PRODUCTS, N.E.C.	149.2	38.6	47.5	63.1	135.9	36.8	48.4	50.7
34	FABRICATED METAL PRODUCTS	15 306.2	3 688.9	5 461.9	6 155.4	14 111.8	3 400.0	4 877.8	5 834.0
341	METAL CANS, SHIPPING CONTAINERS	1 168.0	397.8	208.3	561.8	1 020.9	331.8	190.5	498.6
3411	METAL CANS	1 032.9	381.9	190.8	460.3	889.0	315.5	177.0	396.5
3412	METAL BARRELS, DRUMS, AND PAILS	135.0	15.9	17.6	101.5	132.0	16.3	13.5	102.1

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
342	CUTLERY, HANDTOOLS AND HARDWARE	1 544.7	437.0	617.4	490.3	1 385.2	408.7	531.2	445.3
3421	CUTLERY	132.1	45.9	41.9	44.4	129.0	46.7	41.4	40.9
3423	HAND AND EDGE TOOLS, N.E.C.	487.4	158.6	206.5	122.3	437.3	147.0	177.1	113.1
3425	HANDSAWS AND SAW BLADES	75.5	19.8	27.3	28.4	68.3	19.4	22.8	26.1
3429	HARDWARE, N.E.C.	849.7	212.7	341.8	295.2	750.6	195.6	289.8	265.2
343	PLUMBING, HEATING, EXCEPT ELECTRIC.	567.9	173.6	171.6	222.7	525.8	167.5	149.8	208.4
3431	METAL SANITARY WARE	65.5	20.9	16.5	28.0	72.1	24.6	18.1	29.4
3432	PLUMBING FITTINGS AND BRASS GOODS	239.8	85.9	84.4	69.5	219.6	84.7	71.1	63.8
3433	HEATING EQUIPMENT, EXCEPT ELECTRIC.	262.6	66.8	70.7	125.2	234.0	58.3	60.6	115.2
344	FABRICATED STRUCTURAL METAL PRODUCTS.	4 832.4	782.9	2 009.6	2 039.9	4 576.9	729.4	1 852.8	1 994.7
3441	FABRICATED STRUCTURAL METAL	1 220.9	103.6	643.4	473.9	1 132.6	97.0	577.5	458.2
3442	METAL DOORS, SASH, AND TRIM	519.0	132.5	89.1	297.4	438.8	111.3	76.0	251.5
3443	FABRICATED PLATEWORK, BOILER SHOP	1 566.9	118.2	925.7	523.0	1 576.3	112.7	893.1	570.5
3444	SHEET METALWORK	841.9	239.6	203.3	398.9	771.5	222.9	179.5	369.1
3446	ARCHITECTURAL METALWORK	167.3	40.7	59.7	66.9	156.7	37.8	53.4	65.6
3448	PREFABRICATED METAL BUILDINGS	304.6	72.0	68.8	163.8	296.1	72.7	52.3	171.1
3449	MISCELLANEOUS METALWORK	211.8	76.4	19.5	115.9	204.8	75.1	21.1	108.6
345	SCREW MACHINE PRODUCTS, BOLTS, ETC.	944.9	357.4	240.2	347.2	881.3	342.8	209.6	328.8
3451	SCREW MACHINE PRODUCTS	230.6	55.3	76.9	98.3	207.9	48.1	69.8	90.0
3452	BOLTS, NUTS, RIVETS, AND WASHERS.	714.3	302.1	163.3	248.9	673.3	294.8	139.8	238.8
346	METAL FORGINGS AND STAMPINGS.	2 361.4	346.7	822.2	1 192.5	2 160.0	299.0	748.4	1 112.6
3462	IRON AND STEEL FORGINGS	452.7	33.2	167.7	251.8	429.8	33.8	156.0	240.0
3463	NONFERROUS FORGINGS	123.8	12.3	78.8	32.6	101.1	10.2	62.0	28.9
3465	AUTOMOTIVE STAMPINGS.	948.3	59.0	377.7	511.6	872.8	51.0	339.6	482.2
3466	CROWNS AND CLOSURES	121.0	47.2	20.1	53.7	99.2	35.5	20.0	43.7
3469	METAL STAMPINGS, N.E.C.	715.7	195.0	178.0	342.7	657.2	168.6	170.7	317.9
347	METAL SERVICES, N.E.C.	287.2	46.5	52.9	187.8	251.6	43.3	43.6	164.7
3471	PLATING AND POLISHING	128.3	21.4	22.8	84.0	112.5	16.9	20.0	75.5
3479	METAL COATING AND ALLIED SERVICES	159.0	25.1	30.1	103.8	139.2	26.4	23.6	89.1
348	ORDNANCE AND ACCESSORIES, N.E.C.	518.8	114.3	312.0	92.5	462.9	119.7	246.5	96.7
3482	SMALL ARMS AMMUNITION	117.6	54.1	27.1	36.3	121.9	61.0	26.0	34.9
3483	AMMUNITION, EXCEPT SMALL ARMS, N.E.C.	58.3	6.1	35.5	16.7	63.5	4.4	42.4	16.7
3484	SMALL ARMS.	166.7	48.8	92.7	25.3	153.5	49.5	78.6	25.4
3489	ORDNANCE AND ACCESSORIES, N.E.C.	176.2	5.3	156.7	14.2	123.9	4.7	99.5	19.7
349	MISCELLANEOUS FABRICATED METAL PRODUCTS	3 080.9	1 032.5	1 027.6	1 020.8	2 847.1	957.7	905.4	984.0
3493	STEEL SPRINGS, EXCEPT WIRE.	81.6	27.2	17.8	36.6	73.7	20.8	15.5	37.3
3494	VALVES AND PIPE FITTINGS.	1 508.2	509.3	610.6	388.3	1 374.8	482.5	531.2	361.1
3495	WIRE SPRINGS.	104.5	24.8	24.6	55.0	105.9	24.9	25.9	55.1
3496	MISCELLANEOUS FABRICATED WIRE PRODUCTS.	252.8	95.9	56.1	100.7	233.6	85.6	51.5	96.5
3497	METAL FOIL AND LEAF	141.1	56.7	20.8	63.7	124.6	48.6	18.8	57.2
3498	FABRICATED PIPE AND FITTINGS.	418.4	134.6	133.8	150.0	395.3	128.6	110.0	156.7
3499	FABRICATED METAL PRODUCTS, N.E.C.	574.3	184.0	163.9	226.5	539.2	166.7	152.4	220.1
35	MACHINERY, EXCEPT ELECTRICAL.	27 170.9	7 506.7	12 088.0	7 576.2	25 153.3	7 030.1	10 998.2	7 125.1
351	ENGINES AND TURBINES.	2 169.6	555.7	1 236.3	377.6	1 909.0	433.7	1 121.8	353.5
3511	TURBINES, TURBINE GENERATOR SETS.	827.6	142.3	533.8	151.5	775.5	103.0	506.4	166.2
3519	INTERNAL COMBUSTION ENGINES, N.E.C.	1 342.0	413.4	702.5	226.1	1 133.5	330.7	615.5	187.3
352	FARM AND GARDEN MACHINERY	2 464.1	856.4	851.3	756.4	2 441.7	844.4	819.4	778.0
3523	FARM MACHINERY AND EQUIPMENT.	2 083.4	693.4	762.7	627.4	2 088.8	683.5	730.0	675.3
3524	LAWN AND GARDEN EQUIPMENT	380.7	163.1	88.6	129.1	352.9	160.9	89.4	102.7
353	CONSTRUCTION, RELATED MACHINERY	6 156.5	1 971.9	2 278.8	1 905.8	6 095.7	1 966.9	2 254.6	1 874.1
3531	CONSTRUCTION MACHINERY.	3 142.3	858.6	1 312.1	971.5	3 171.8	924.7	1 307.9	939.2
3532	MINING MACHINERY.	646.1	303.3	165.8	177.0	603.7	258.5	166.6	178.7
3533	OILFIELD MACHINERY.	1 212.5	542.1	344.5	325.9	1 216.0	516.6	351.3	348.0
3534	ELEVATORS AND MOVING STAIRWAYS.	119.1	27.2	45.0	46.9	123.0	29.6	42.0	51.4
3535	CONVEYORS AND CONVEYING EQUIPMENT	363.8	77.6	139.9	146.3	329.9	69.3	128.0	132.7
3536	HOIST, CRANES, AND MONORAILS.	203.6	41.4	89.5	72.6	196.6	42.1	84.6	69.9
3537	INDUSTRIAL TRUCKS AND TRACTORS.	469.1	121.7	182.0	165.4	454.7	126.1	174.3	154.2
354	METALWORKING MACHINERY.	2 848.1	690.2	1 505.1	652.8	2 510.1	636.7	1 307.0	566.4
3541	MACHINE TOOLS, METAL-CUTTING.	878.4	184.2	537.5	156.7	741.5	171.2	449.0	121.2
3542	MACHINE TOOLS, METAL-FORMING.	359.6	80.5	180.1	99.1	317.2	70.5	154.8	92.0
3544	SPECIAL DIES, TOOLS, JIGS, ETC.	449.9	65.7	274.7	109.5	378.6	58.5	225.5	94.5
3545	MACHINE TOOL ACCESSORIES.	468.5	156.3	193.0	119.2	413.3	149.8	165.1	98.3
3546	POWER DRIVEN HANDTOOLS.	326.0	137.0	108.9	80.1	311.4	127.3	106.7	77.3
3547	ROLLING MILL MACHINERY.	131.8	18.8	88.9	24.0	154.5	11.6	118.5	24.4
3549	METALWORKING MACHINERY, N.E.C.	233.8	47.7	121.9	64.2	193.7	47.7	87.4	58.6
355	SPECIAL INDUSTRY MACHINERY.	2 309.2	601.7	1 034.8	672.7	2 172.4	574.1	961.9	636.5
3551	FOOD PRODUCTS MACHINERY	499.4	160.0	196.1	143.3	453.4	139.0	182.3	132.2
3552	TEXTILE MACHINERY	233.5	71.4	96.9	65.2	256.7	89.6	100.4	66.7
3553	WOODWORKING MACHINERY	111.6	36.8	42.2	32.6	100.6	34.4	36.4	29.8
3554	PAPER INDUSTRIES MACHINERY.	220.2	35.5	120.4	64.3	225.0	41.0	119.0	64.9
3555	PRINTING TRADES MACHINERY	355.4	77.6	151.1	126.6	316.7	72.5	140.4	103.8
3559	SPECIAL INDUSTRY MACHINERY, N.E.C.	889.2	220.5	427.9	240.8	820.0	197.6	383.4	239.0
356	GENERAL INDUSTRIAL MACHINERY.	4 013.9	1 198.3	1 803.3	1 012.3	3 698.0	1 071.9	1 669.9	956.3
3561	PUMPS AND PUMPING EQUIPMENT	1 024.0	296.2	494.8	233.0	925.1	258.3	443.7	223.2
3562	BALL AND ROLLER BEARINGS.	621.7	182.3	290.8	148.6	569.0	157.2	270.6	141.2
3563	AIR AND GAS COMPRESSORS	610.9	237.4	283.5	90.0	589.0	216.1	281.5	91.3
3564	BLOWERS AND FANS.	242.9	38.7	99.1	105.1	232.6	31.6	97.6	103.4
3565	INDUSTRIAL PATTERNS	25.2	3.7	15.8	5.7	20.6	2.8	12.8	5.0
3566	SPEED CHANGERS, DRIVES, AND GEARS	297.8	101.5	135.5	60.8	283.6	97.6	129.0	57.0
3567	INDUSTRIAL FURNACES AND OVENS	151.4	27.9	70.4	53.1	118.1	17.5	52.4	48.2
3568	POWER TRANSMISSION EQUIPMENT, N.E.C.	418.8	170.2	156.4	92.2	381.8	152.3	141.0	88.5
3569	GENERAL INDUSTRIAL MACHINERY, N.E.C.	621.2	140.2	257.1	223.8	578.2	138.6	241.2	198.4

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
357	OFFICE AND COMPUTING MACHINES	3 887.3	694.2	2 167.2	1 025.8	3 331.9	622.2	1 792.0	917.8
3573	ELECTRONIC COMPUTING EQUIPMENT	3 007.9	537.4	1 646.5	824.1	2 526.0	466.8	1 315.9	743.3
3574	CALCULATING, ACCOUNTING MACHINES	218.2	31.2	124.7	62.3	222.0	30.4	133.7	57.9
3576	SCALES, BALANCES, EXCLUDING LABORATORY	85.7	17.4	47.5	20.8	79.6	15.0	44.3	20.3
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	575.3	108.1	348.5	118.7	504.2	109.9	298.0	96.2
358	REFRIGERATION AND SERVICE MACHINES	2 259.5	736.6	681.8	841.2	2 054.1	696.7	612.6	744.8
3581	AUTOMATIC MERCHANDISING MACHINES	109.6	24.1	40.6	44.9	83.2	22.0	26.7	34.5
3582	COMMERCIAL LAUNDRY EQUIPMENT	53.5	8.6	15.6	29.3	49.1	9.0	13.3	26.9
3585	REFRIGERATION, HEATING EQUIPMENT	1 632.7	600.7	448.7	583.3	1 507.9	568.3	414.3	525.3
3586	MEASURING AND DISPENSING PUMPS	97.9	23.4	45.1	29.3	89.5	23.7	44.4	21.4
3589	SERVICE INDUSTRY MACHINERY, N.E.C.	365.9	79.8	131.7	154.3	324.4	73.8	113.8	136.7
359	MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL	1 062.6	201.7	529.3	331.6	940.4	183.6	459.0	297.8
3592	CARBURETORS, PISTONS, RINGS, ETC	240.0	62.3	127.3	50.4	202.7	54.2	107.4	41.1
3599	MACHINERY, EXCEPT ELECTRICAL, N.E.C.	822.7	139.4	402.0	281.3	737.6	129.4	351.6	256.6
36	ELECTRIC, ELECTRONIC EQUIPMENT	16 058.7	3 962.5	7 290.5	4 805.7	14 273.0	3 645.7	6 305.3	4 322.1
361	ELECTRIC DISTRIBUTING EQUIPMENT.	1 039.6	252.2	429.5	357.9	944.2	222.9	395.6	325.7
3612	TRANSFORMERS	385.8	97.4	146.3	142.1	344.1	80.7	140.4	123.0
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	653.8	154.8	283.2	215.8	600.1	142.2	255.2	202.7
362	ELECTRICAL INDUSTRIAL APPARATUS.	2 002.1	483.6	845.8	672.8	1 791.4	426.8	735.5	629.2
3621	MOTORS AND GENERATORS.	771.4	185.1	321.8	264.4	678.0	154.8	287.2	236.0
3622	INDUSTRIAL CONTROLS.	616.1	147.4	261.6	207.1	563.9	135.2	220.8	207.8
3623	WELDING APPARATUS, ELECTRIC.	258.8	87.4	72.1	99.4	226.2	76.0	57.5	92.7
3624	CARBON AND GRAPHITE PRODUCTS	215.9	38.7	134.1	43.2	200.0	37.2	124.9	37.9
3629	ELECTRICAL INDUSTRIAL APPARATUS, N.E.C	140.0	25.0	56.3	58.7	123.3	23.5	45.1	54.7
363	HOUSEHOLD APPLIANCES	1 674.7	808.5	358.1	508.1	1 524.3	736.7	334.4	453.2
3631	HOUSEHOLD COOKING EQUIPMENT.	303.8	151.0	46.8	105.9	283.7	132.0	45.0	106.7
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	399.1	254.1	80.6	64.4	352.1	229.9	67.7	54.5
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	170.6	83.2	35.5	51.9	162.1	80.2	33.5	48.5
3634	ELECTRIC HOUSEWARES AND FANS	429.5	173.4	88.9	167.2	409.2	166.5	91.4	151.3
3635	HOUSEHOLD VACUUM CLEANERS.	85.2	37.9	29.5	17.8	81.0	38.7	24.9	17.4
3636	SEWING MACHINES.	122.3	54.9	50.2	17.1	103.6	42.5	49.7	11.4
3639	HOUSEHOLD APPLIANCES, N.E.C.	164.2	53.9	26.5	83.8	132.6	46.9	22.2	63.6
364	ELECTRICAL LIGHTING, WIRING EQUIPMENT.	1 414.7	488.0	392.7	533.9	1 267.1	448.4	336.2	482.5
3641	ELECTRIC LAMPS	121.4	73.1	8.7	39.6	104.3	61.2	7.9	35.2
3643	CURRENT-CARRYING WIRING DEVICES.	341.5	100.6	137.3	103.6	284.7	86.5	107.8	90.5
3644	NONCURRENT-CARRYING WIRING DEVICES	350.5	139.5	77.3	133.7	335.3	137.5	74.2	123.7
3645	RESIDENTIAL LIGHTING FIXTURES.	193.2	68.3	38.7	86.2	183.1	66.4	37.4	79.3
3646	COMMERICAL LIGHTING FIXTURES	182.3	57.0	43.3	82.0	162.5	51.3	38.4	72.7
3647	VEHICULAR LIGHTING EQUIPMENT	97.1	19.3	49.4	28.4	78.2	15.8	36.6	25.8
3648	LIGHTING EQUIPMENT, N.E.C.	128.6	30.3	37.9	60.4	118.8	29.8	33.8	55.3
365	RADIO, TV RECEIVING EQUIPMENT.	956.2	368.1	271.9	316.2	903.6	347.5	272.4	283.7
3651	RADIO AND TV RECEIVING SETS.	835.0	305.4	261.3	268.3	794.8	289.1	264.5	241.2
3652	PHONOGRAPH RECORDS, PRERECORDED TAPE	121.3	62.7	10.6	47.9	108.8	58.4	7.9	42.6
366	COMMUNICATION EQUIPMENT.	4 662.0	568.2	2 973.5	1 120.3	4 110.5	547.7	2 571.7	991.1
3661	TELEPHONE AND TELEGRAPH APPARATUS.	1 503.3	125.0	907.9	470.5	1 220.2	113.0	727.6	379.6
3662	RADIO AND TV COMMUNICATION EQUIPMENT	3 158.7	443.2	2 065.6	649.9	2 890.3	434.7	1 844.0	611.5
367	ELECTRONIC COMPONENTS, ACCESSORIES	2 773.3	538.7	1 434.7	800.0	2 445.6	511.9	1 201.0	732.8
3671	ELECTRON TUBES, RECEIVING TYPE	254.7	72.0	103.6	79.2	231.1	69.9	94.0	67.2
3674	SEMICONDUCTORS, RELATED DEVICES.	909.5	179.1	527.4	202.9	819.3	167.1	441.3	210.9
3675	ELECTRONIC CAPACITORS.	152.4	27.5	70.9	54.0	135.8	26.2	62.2	47.4
3676	ELECTRONIC RESISTORS	104.2	29.3	37.0	37.8	93.7	26.3	31.2	36.2
3677	ELECTRONIC COILS AND TRANSFORMERS.	74.5	8.5	26.9	39.1	73.2	9.2	22.6	41.4
3678	ELECTRONIC CONNECTORS.	234.5	57.3	123.0	54.2	204.5	52.0	107.0	45.5
3679	ELECTRONIC COMPONENTS, N.E.C	1 043.4	164.9	545.9	332.6	888.0	161.1	442.7	284.2
369	MISCELLANEOUS ELECTRICAL EQUIPMENT, SUPPLIES	1 536.1	455.2	584.3	496.5	1 286.3	403.8	458.6	423.9
3691	STORAGE BATTERIES.	292.9	103.2	124.2	65.5	239.4	85.3	93.3	60.8
3692	PRIMARY BATTERIES, DRY AND WET	100.1	11.1	38.2	50.8	90.2	11.8	31.1	47.3
3693	X-RAY APPARATUS AND TUBES.	542.3	158.4	181.2	202.7	412.6	131.7	133.9	146.9
3694	ENGINE ELECTRICAL EQUIPMENT.	488.3	150.6	214.2	123.5	442.1	146.4	177.0	118.7
3699	ELECTRICAL EQUIPMENT, SUPPLIES, N.E.C.	112.4	31.8	26.5	54.0	102.1	28.7	23.4	50.1
37	TRANSPORTATION EQUIPMENT	22 240.5	2 817.0	13 002.5	6 421.0	20 745.1	2 662.2	12 375.6	5 707.3
371	MOTOR VEHICLES AND EQUIPMENT	9 062.6	1 462.4	3 542.4	4 057.9	7 826.8	1 320.6	3 032.2	3 474.0
3711	MOTOR VEHICLES AND CAR BODIES.	4 010.8	373.8	1 482.9	2 154.1	3 325.8	312.3	1 206.8	1 806.6
3713	TRUCK AND BUS BODIES	352.1	56.0	120.0	176.2	306.0	48.5	108.2	149.3
3714	MOTOR VEHICLE PARTS, ACCESSORIES	4 124.1	889.7	1 845.9	1 388.4	3 699.6	846.1	1 626.9	1 226.5
3715	TRUCK TRAILERS	355.0	55.7	65.1	234.2	283.0	44.3	55.4	183.4
3716	MOTOR HOMES.	220.6	87.1	28.5	105.1	212.5	69.4	34.9	108.2
372	AIRCRAFT AND PARTS	9 301.8	864.2	6 980.9	1 456.7	9 166.0	900.3	6 828.1	1 437.6
3721	AIRCRAFT	6 618.5	301.4	5 230.4	1 086.7	6 550.7	330.7	5 158.5	1 061.5
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	1 440.2	441.7	819.6	179.0	1 360.2	443.4	729.2	187.6
3728	AIRCRAFT EQUIPMENT, N.E.C.	1 243.1	121.2	931.0	191.0	1 255.2	126.2	940.4	188.5
373	SHIP, BOAT BUILDING, REPAIRING	1 410.6	159.3	867.1	384.2	1 404.9	127.8	925.0	352.1
3731	SHIP BUILDING AND REPAIRING.	1 072.5	55.7	785.9	231.0	1 098.5	35.2	851.3	212.1
3732	BOAT BUILDING AND REPAIRING.	338.0	103.6	81.2	153.3	306.3	92.7	73.7	139.9
3743	RAILROAD EQUIPMENT	850.6	123.6	518.8	208.2	822.8	110.2	541.5	171.1
3751	MOTORCYCLES, BICYCLES, AND PARTS	226.5	81.6	72.2	72.7	182.1	67.2	64.4	50.5
376	GUIDED MISSLES, SPACE VEHICLES	797.6	3.7	698.2	95.6	850.1	3.7	758.0	88.4

See footnotes at end of table.

Table 2. **Value of Manufacturers' Inventories for Industry Groups and Industries: End of 1977 and 1976**—Con.

(Millions of dollars)

SIC code	Industry group and industry	Value of inventories at end of--							
		1977				1976			
		Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
3761	GUIDED MISSILES, SPACE VEHICLES	600.2	.8	519.6	79.9	653.0	.5	578.1	74.4
3764	SPACE PROPULSION UNITS AND PARTS	167.5	1.0	154.9	11.6	175.0	1.0	163.5	10.5
3769	SPACE VEHICLE EQUIPMENT, N.E.C.	29.8	2.0	23.7	4.2	22.1	2.2	16.4	3.5
379	MISCELLANEOUS TRANSPORTATION EQUIPMENT	590.8	122.2	322.9	145.7	492.4	132.3	226.4	133.7
3792	TRAVEL TRAILERS AND CAMPERS	193.6	83.9	23.1	86.6	196.0	90.3	20.5	85.3
3795	TANKS AND TANK COMPONENTS	287.8	1.2	273.0	13.6	187.9	.7	180.1	7.2
3799	TRANSPORTATION EQUIPMENT, N.E.C.	109.4	37.1	26.9	45.4	108.5	41.4	25.9	41.2
38	INSTRUMENTS, RELATED PRODUCTS	5 810.6	1 495.9	2 490.7	1 824.1	5 311.1	1 369.9	2 248.6	1 692.6
3811	ENGINEERING, SCIENTIFIC INSTRUMENTS	470.1	98.0	222.5	149.6	421.4	83.3	195.3	142.7
382	MEASURING, CONTROLLING DEVICES	1 979.4	419.0	997.0	563.4	1 752.3	378.6	854.9	518.8
3822	ENVIRONMENTAL CONTROLS	285.9	56.5	179.2	50.2	250.7	51.3	154.1	45.3
3823	PROCESS CONTROL INSTRUMENTS	555.9	113.1	259.4	183.4	507.8	101.5	236.5	169.8
3824	FLUID METERS AND COUNTING DEVICES	148.8	31.4	81.5	35.9	136.7	28.4	74.5	33.8
3825	INSTRUMENTS TO MEASURE ELECTRICITY	668.9	134.6	336.0	198.3	580.1	123.2	273.8	183.0
3829	MEASURING, CONTROLLING DEVICES, N.E.C.	320.0	83.3	141.0	95.6	277.0	74.2	115.9	87.0
3832	OPTICAL INSTRUMENTS AND LENSES	302.9	76.2	148.2	78.5	271.8	71.0	131.2	69.6
384	MEDICAL INSTRUMENTS, SUPPLIES	1 038.6	398.9	305.0	334.7	941.6	347.5	283.3	310.8
3841	SURGICAL AND MEDICAL INSTRUMENTS	360.7	130.9	103.4	126.4	322.5	108.0	101.8	112.8
3842	SURGICAL APPLIANCES AND SUPPLIES	503.7	204.9	135.2	163.6	454.7	179.1	124.1	151.5
3843	DENTAL EQUIPMENT AND SUPPLIES	174.1	63.0	66.3	44.8	164.3	60.3	57.5	46.5
3851	OPHTHALMIC GOODS	244.9	125.3	71.2	48.3	224.6	100.4	80.6	43.6
3861	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES	1 503.0	277.0	640.6	585.3	1 428.2	302.1	584.8	541.4
3873	WATCHES, CLOCKS, AND WATCHCASES	271.7	101.5	106.1	64.1	271.2	87.0	118.5	65.7
39	MISCELLANEOUS MANUFACTURING INDUSTRIES	3 614.2	1 397.2	913.8	1 303.1	3 309.0	1 299.3	810.0	1 199.6
391	JEWELRY, SILVER AND PLATED WARE	752.5	349.1	177.0	226.4	670.8	316.8	158.6	195.4
3911	JEWELRY, PRECIOUS METAL	489.8	217.0	109.8	162.9	437.4	199.9	99.3	138.3
3914	SILVERWARE AND PLATED WARE	142.8	68.3	36.7	37.9	136.8	65.3	36.1	35.4
3915	JEWELERS' MATERIALS, LAPIDARY WORK	119.9	63.8	30.5	25.6	96.5	51.7	23.1	21.7
3931	MUSICAL INSTRUMENTS	243.2	68.3	93.7	81.3	245.4	84.2	85.6	75.6
394	TOYS AND SPORTING GOODS	1 079.2	478.4	235.9	365.0	976.0	436.1	204.1	335.7
3942	DOLLS	62.5	28.4	14.8	19.3	46.6	20.6	9.5	16.4
3944	GAMES, TOYS, CHILDREN'S VEHICLES	437.7	190.3	80.6	166.8	383.3	173.0	67.3	142.9
3949	SPORTING AND ATHLETIC GOODS, N.E.C.	579.1	259.7	140.6	178.8	546.1	242.5	127.3	176.4
395	PENS, OFFICE AND ART GOODS	276.1	99.5	70.5	106.1	248.4	96.0	57.6	94.8
3951	PENS AND MECHNICAL PENCILS	123.1	37.9	37.6	47.6	108.6	39.4	28.8	40.5
3952	LEAD PENCILS AND ART GOODS	70.9	30.9	14.3	25.7	64.2	28.2	13.4	22.7
3953	MARKING DEVICES	34.3	13.5	8.3	12.5	30.8	12.8	7.4	10.6
3955	CARBON PAPER AND INKED RIBBONS	47.8	17.1	10.4	20.3	44.7	15.6	8.1	21.0
396	COSTUME JEWELRY AND NOTIONS	274.6	103.4	84.5	86.7	261.1	96.6	80.8	83.7
3961	COSTUME JEWELRY	119.6	51.5	29.2	38.9	110.6	45.7	27.7	37.2
3962	ARTIFICIAL FLOWERS	r29.5	13.8	3.7	12.0	r27.2	12.4	3.9	10.8
3963	BUTTONS	13.9	6.3	3.5	4.1	17.6	6.7	5.2	5.7
3964	NEEDLES, PINS, AND FASTENERS	111.6	31.7	48.1	31.7	105.8	31.8	44.1	29.9
399	MISCELLANEOUS MANUFACTURES	988.6	298.6	252.3	437.7	907.3	269.6	223.2	414.5
3991	BROOMS AND BRUSHES	129.9	54.1	22.4	53.4	119.9	48.7	20.6	50.7
3993	SIGNS AND ADVERTISING DISPLAYS	210.8	39.2	72.2	99.4	190.0	36.2	63.8	90.0
3995	BURIAL CASKETS	81.8	24.9	20.2	36.7	78.2	23.8	18.9	35.6
3996	HARD SURFACE FLOOR COVERINGS	84.9	49.4	12.1	23.3	76.2	43.9	11.6	20.7
3999	MANUFACTURING INDUSTRIES, N.E.C.	481.1	131.0	125.2	224.8	442.9	117.0	108.4	217.5

Note: Detailed figures may not add to totals because of independent rounding.

- Represents zero. N.E.C. Not elsewhere classified. rRevised by 3 percent or more from data published in the 1977 Census of Manufactures final industry reports (see Explanatory Text). (Z) Less than $50 thousand or less than half the unit of measure specified.

Table 3. Value of Manufacturers' Inventories for States: End of 1977 and 1976

(Millions of dollars)

State	Value of inventories at end of--							
	1977				1976			
	Total	Finished products	Work in process	Materials, supplies, fuels, etc.	Total	Finished products	Work in process	Materials, supplies, fuels, etc.
United States	188,436.4	59,429.9	60,732.6	68,273.9	174,865.0	55,205.5	55,600.2	64,059.3
Alabama	3,003.6	1,025.6	761.2	1,216.8	2,731.6	883.9	691.8	1,156.0
Alaska	159.7	80.4	30.7	48.5	117.6	51.0	20.1	46.6
Arizona	1,145.6	346.8	507.4	291.3	1,026.0	277.4	491.9	256.7
Arkansas	1,816.2	561.4	379.5	875.4	1,585.5	458.1	314.8	812.5
California	19,210.1	5,972.1	7,669.9	5,568.1	17,829.2	5,494.9	7,142.0	5,192.3
Colorado	1,293.7	376.7	448.0	469.1	1,192.0	398.4	379.2	414.3
Connecticut	3,662.7	1,308.6	1,407.3	946.8	3,469.2	1,260.3	1,280.4	928.5
Delaware	563.4	178.5	158.5	226.4	488.8	194.6	119.2	175.1
District of Columbia	79.4	19.6	18.4	41.4	61.8	16.5	18.0	27.3
Florida	2,957.8	1,015.8	856.7	1,085.4	2,643.9	887.8	779.4	976.7
Georgia	3,903.4	1,311.2	987.5	1,604.8	3,674.7	1,233.8	1,005.5	1,435.4
Hawaii	189.1	78.7	25.9	84.5	205.2	81.2	31.0	93.0
Idaho	590.7	249.8	122.2	218.7	601.7	233.9	130.4	237.4
Illinois	13,028.2	4,469.3	4,022.4	4,536.5	12,257.8	4,334.7	3,616.7	4,306.4
Indiana	7,568.4	2,326.2	2,555.2	2,687.0	7,048.5	2,172.1	2,344.1	2,532.3
Iowa	2,872.1	906.6	963.0	1,002.5	2,764.8	865.6	889.0	1,010.2
Kansas	1,894.2	602.5	617.3	674.4	1,760.1	580.8	506.3	673.0
Kentucky	3,273.2	1,227.7	878.0	1,167.5	2,998.5	1,140.4	730.1	1,128.0
Louisiana	2,506.3	940.7	596.5	969.1	2,233.8	781.1	568.4	884.3
Maine	633.8	207.7	146.3	279.8	555.2	180.4	125.5	249.3
Maryland	2,185.6	718.3	546.6	920.6	2,058.6	642.9	517.2	898.5
Massachusetts	4,972.7	1,565.5	1,683.2	1,724.0	4,493.4	1,462.8	1,502.6	1,528.1
Michigan	9,409.9	2,065.2	3,587.8	3,756.8	8,477.2	1,888.4	3,175.8	3,413.1
Minnesota	3,037.5	1,029.5	928.0	1,080.0	2,791.8	957.2	811.1	1,023.6
Mississippi	1,494.0	587.5	348.0	558.6	1,355.3	493.2	320.7	541.4
Missouri	4,409.9	993.1	1,633.2	1,783.6	4,271.6	989.6	1,647.9	1,634.2
Montana	402.1	147.0	155.2	99.9	352.3	121.2	143.9	87.2
Nebraska	896.3	359.9	187.0	349.4	863.7	353.7	174.8	335.2
Nevada	161.7	45.3	51.6	64.8	136.1	34.6	48.1	53.4
New Hampshire	635.6	190.5	208.2	237.0	575.8	165.5	195.3	215.0
New Jersey	6,965.5	2,489.8	1,914.2	2,561.5	6,561.2	2,347.2	1,846.5	2,367.5
New Mexico	214.8	61.9	72.0	80.9	192.9	56.8	63.3	72.8
New York	13,113.4	3,977.6	4,822.4	4,313.4	12,365.5	3,759.4	4,537.4	4,068.8
North Carolina	6,088.5	1,570.6	1,474.9	3,042.9	5,767.0	1,501.4	1,236.6	3,029.0
North Dakota	193.4	69.8	33.2	90.4	175.7	70.1	29.8	75.8
Ohio	13,037.2	4,009.0	4,232.0	4,796.2	12,139.4	3,735.9	3,954.1	4,449.4
Oklahoma	1,600.8	565.2	478.6	557.0	1,424.6	510.8	387.6	526.3
Oregon	1,913.4	772.3	446.0	695.1	1,767.1	687.2	424.2	655.7
Pennsylvania	12,857.3	3,783.8	4,433.7	4,639.8	12,136.5	3,522.6	4,133.0	4,480.9
Rhode Island	899.8	332.6	239.4	327.8	819.1	305.0	221.1	293.0
South Carolina	2,613.5	900.6	783.7	929.2	2,352.8	836.3	683.5	832.9
South Dakota	149.0	47.9	33.6	67.5	136.2	50.2	27.7	58.3
Tennessee	4,197.5	1,491.0	1,292.2	1,414.3	3,874.3	1,381.6	1,143.5	1,349.2
Texas	10,813.0	3,896.4	3,261.6	3,654.9	9,804.4	3,562.1	2,835.4	3,406.8
Utah	701.7	228.8	230.0	243.0	627.5	178.1	227.7	221.6
Vermont	319.3	65.2	166.0	88.1	276.0	67.2	127.2	81.6
Virginia	4,483.8	904.0	879.1	2,700.7	4,182.2	831.8	801.5	2,548.9
Washington	3,544.9	1,059.2	1,478.1	1,007.7	3,347.7	1,020.7	1,416.2	910.8
West Virginia	1,389.4	522.7	402.6	464.0	1,325.1	486.2	378.3	460.6
Wisconsin	5,238.5	1,705.3	1,542.1	1,991.1	4,842.3	1,600.1	1,371.3	1,871.0
Wyoming	142.8	67.8	36.1	38.9	124.5	58.5	33.0	33.0

Note: Detailed figures may not add to totals because of independent rounding.

Type of Organization

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Explanatory Text 2

TABLES

1. Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization: 1977, 1972, 1967, 1963, 1958, 1954, and 1947. 3
2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977. 5

EXPLANATORY TEXT

Information concerning whether a plant is either independent or part of a multi-establishment company contributes importantly to our knowledge of the structure of manufactures in the United States. However, this classification is significantly affected by the way in which the census of manufactures is taken. In 1947, it was not taken in conjunction with the census of business or mineral industries and the multiunit classification depended on whether or not the company operated more than one manufacturing plant. In 1954 and since, the census of manufactures has been conducted in conjunction with the censuses of business and mineral industries, and so the multiunit classification now depends on whether or not the company operates at more than one location within the temporal spans of those censuses. Thus, in 1954 and subsequent census years, a company with one manufacturing plant and a nonmanufacturing location or separate administrative office was classified as multiunit.

While the importance of multiunit establishments, in terms of employment and value added, has increased since 1947 (see table 1), part of this increase is undoubtedly due to the change in collection procedures that took place between 1947 and 1954. However, during those years, this increase in employment and value added was accompanied by a decline in the percentage of establishments accounted for by multiunit companies. Part of this was due to the inclusion in the 1954 Census of Manufactures of industries characterized by a large number of small firms (e.g., milk distribution and logging) which account for a very small amount of the total manufacturing employment and value added. This shifting in the determination of single and multiunit establishments did not occur after the 1954 census, and the 1958 and subsequent data are completely comparable.

In 1963, each establishment was asked to report the form of organization of the company which operated it. In 1967, a separate category of establishments was created to account for single-unit manufacturing firms with less than 10 employees which were excused from filing reports. Information for most single-unit establishments with less than 10 employees in 1967 is contained in the "administrative record" classification. Thus, the relative importance of the single-unit classification can be determined by the combination of the categories, "single-unit companies," and "administrative records."

In 1972, the method for classifying multiunit and single-unit companies was the same as in 1967. However, "legal form of organization" data was not requested on the 1972 census report forms. They were, instead, compiled from administrative-record information obtained from other government agencies.

For 1977, data on legal form of organization was requested from those establishments that were sent a census report form. For small single-unit establishments which did not receive a form, the legal form of organization information was obtained from administrative records of other government agencies (see Introduction—Manufacturing Universe and Census Report Forms).

Data at the 4-digit SIC level (total line only) have been previously published in the separate reports comprising the 1977 Census of Manufactures Industry Series.

Table 1. Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization: 1977, 1972, 1967, 1963, 1958, 1954, and 1947

(For explanation of terms see appendix A)

Item[1] and year	Establishments (number)	All employees		Production workers		Value added by manufacture (million dollars)	Capital expenditures, new[2] (million dollars)
		Total (1,000)	Payroll (million dollars)	Total (1,000)	Wages (million dollars)		
All establishments 1977	359,928	19,590	264,013	13,691	157,164	585,166	47,459
1972	320,710	19,029	174,206	13,528	105,502	353,994	24,078
1967	305,680	18,498	123,481	13,955	81,394	261,984	21,503
1963	306,617	16,235	93,289	12,232	62,394	192,103	11,371
1958	298,182	15,381	73,773	11,367	48,471	143,159	9,531
1954	286,814	15,645	62,963	12,372	44,591	117,032	8,201
1947	240,807	14,294	39,696	11,918	30,244	74,290	5,998
Type of operation:[3]							
Multiunit companies 1977	81,241	14,957	214,227	10,097	124,854	485,018	40,975
1972	70,198	14,264	138,758	9,792	81,941	286,126	20,040
1967	51,706	13,310	93,687	9,790	60,875	206,437	18,596
1963	45,862	11,015	68,202	8,110	44,721	146,605	8,934
1958	41,871	10,064	51,785	7,174	33,469	105,306	7,525
1954	31,769	9,480	40,623	7,402	28,987	79,604	6,485
1947	35,202	8,007	22,788	6,686	17,787	43,947	(NA)
Corporate ownership or control 1977	80,102	14,850	213,006	10,018	124,040	481,685	40,377
1972	69,177	14,210	138,374	9,753	81,693	285,198	19,978
1967	50,168	13,206	93,053	9,718	60,499	204,986	18,463
1963	43,568	10,890	67,602	8,017	44,325	145,269	8,832
1958	39,048	9,964	51,407	7,197	33,103	104,475	7,465
1954	29,820	9,387	40,309	7,327	28,858	78,977	6,435
1947	29,557	7,830	22,400	6,535	17,593	43,208	(NA)
Noncorporate ownership 1977	1,139	107	1,221	79	814	3,333	598
1972	1,021	54	385	39	248	928	63
1967	1,538	104	634	71	376	1,451	133
1963	2,294	125	599	93	396	1,336	102
1958	2,823	100	378	77	266	831	60
1954	1,949	93	314	75	229	627	50
1947	5,645	177	388	151	294	739	(NA)
Single-unit companies 1977	278,687	4,633	49,786	3,594	32,310	100,147	6,484
1972	250,512	4,765	35,447	3,736	23,561	67,868	4,037
1967	135,352	4,917	28,482	3,904	19,563	52,460	2,762
1963	260,755	5,220	25,087	4,122	17,373	45,497	2,437
1958	256,311	5,317	21,887	4,193	15,102	37,853	2,006
1954	255,045	6,165	22,340	4,970	15,604	37,428	1,716
1947	205,605	6,287	16,907	5,232	12,457	30,343	(NA)
Corporate ownership or control 1977	204,094	4,264	46,300	3,285	29,851	92,428	5,872
1972	164,036	4,337	32,788	3,366	21,572	61,888	3,647
1967	103,723	4,491	26,408	3,542	17,931	48,275	2,525
1963	132,622	4,355	21,754	3,409	14,739	38,831	1,959
1958	123,701	4,252	18,478	3,301	12,352	31,169	1,461
1954	118,641	4,886	18,742	3,879	12,722	30,692	1,317
1947	88,545	5,026	14,180	4,114	10,144	25,086	(NA)
Noncorporate ownership 1977	74,593	369	3,486	310	2,459	7,719	612
1972	86,476	428	2,659	369	1,990	5,980	390
1967	31,629	425	2,075	361	1,632	4,185	237
1963	128,133	865	3,333	713	2,634	6,666	478
1958	132,610	1,065	3,409	892	2,750	6,684	545
1954	136,404	1,279	3,598	1,091	2,882	6,736	399
1947	117,060	1,261	2,727	1,118	2,313	5,257	(NA)
Administrative records[4 5 6] 1967	118,622	271	1,313	263	957	3,086	145
Legal form of organization:							
Corporate 1977	284,196	19,114	259,306	13,302	153,891	574,113	46,249
1972	233,213	18,547	171,162	13,120	103,264	347,086	23,625
1967	153,892	17,697	119,530	113,260	78,429	253,261	20,988
1963	176,190	15,245	89,356	11,426	59,064	184,100	10,791
1958	162,749	14,215	69,885	10,398	45,455	135,644	8,926
1954	148,461	14,273	59,051	11,206	41,480	109,669	7,752
1947	118,102	12,856	36,580	10,649	27,637	68,294	(NA)
Noncorporate 1977	75,732	476	4,707	389	3,273	11,052	1,210
1972	87,497	482	3,043	408	2,237	6,908	453
1967	33,165	530	2,709	433	2,008	5,636	370
1963	130,427	990	3,932	806	3,030	8,002	580
1958	135,433	1,165	3,787	969	3,016	7,515	605
1954	138,353	1,372	3,912	1,166	3,111	7,363	449
1947	122,705	1,438	3,115	1,269	2,607	5,996	(NA)
Individual 1977	52,322	202	1,840	174	1,322	3,961	300
1972	42,507	213	1,303	183	963	2,885	186
1967	24,897	243	1,187	210	933	2,361	141
1963	99,174	536	2,033	440	1,595	3,916	315
1958	91,276	542	1,637	461	1,349	3,115	317
1954	88,224	593	1,527	507	1,237	2,735	176
1947	69,498	586	1,184	522	1,001	2,162	(NA)

See footnotes at end of table.

Table 1. Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization: 1977, 1972, 1967, 1963, 1958, 1954, and 1947—Con.

(For explanation of terms, see appendix A)

Item[1] and year	Establishments (number)	All employees		Production workers		Value added by manufacture (million dollars)	Capital expenditures, new[2] (million dollars)
		Total (1,000)	Payroll (million dollars)	Total (1,000)	Wages (million dollars)		
Legal form of organization--Con.							
Noncorporate--Con.							
Partnership....1977..	18,315	123	1,213	100	829	2,681	206
1972..	17,666	167	1,067	139	792	2,413	150
1967..	6,731	193	971	157	730	1,895	114
1963..	27,677	334	1,034	277	1,062	2,726	141
1958..	41,958	543	1,836	452	1,458	3,663	223
1954..	47,885	703	2,108	602	1,684	4,054	216
1947..	50,771	757	1,687	673	1,432	3,347	(NA)
Other and unknown....1977..	5,095	151	1,654	114	1,122	4,410	703
1972..	27,324	102	673	86	483	1,611	117
1967..	1,539	94	550	66	345	1,380	115
Administrative records[4] [5] [6]....1967..	118,622	271	1,313	263	957	3,086	145

(NA) Not available.

[1]The 1958 and 1963 figures include establishments classified in Industry 3273, Ready-Mixed Concrete, and establishments classified in Industry 3599, Miscellaneous Machinery, that were engaged exclusively or almost exclusively in machine shop repair work. The data for such establishments are excluded from the 1954 and 1947 figures. The 1963, 1958, and 1954 figures include data for establishments engaged in the processing and distribution of fluid milk, Industry Group 202, Dairies. These establishments were not included in the 1947 figures. In addition, the 1963 and 1954 census figures include data for logging camps and contractors, industry 2411, which were not included within the scope of the 1947 census. Data for Alaska and Hawaii, which are included for 1963, are not available on a type-of-operation and legal-form-of-organization basis for 1958 and earlier years.

[2]The figures for 1954, 1958, 1963, 1967, 1972, and 1977 include expenditures for plants under construction and not yet in operation. This information was not collected for 1947.

[3]All data are based on reports for individual manufacturing establishments, and not on a company basis. Each establishment of multiestablishment companies is classified by its primary industrial activity. For this reason, the statistics presented in this table cannot be compared directly with tabulations in which the whole corporation or company is the reporting unit and the entire company is classified in one industry--for example, "Statistics of Income, Corporation Income Tax Returns," compiled by the Bureau of Internal Revenue, U.S. Treasury Department. Since 1958, establishments were classified as part of a multiunit company when the company operated two establishments or more, of which at least one was a manufacturing establishment. In 1947, establishments were considered part of a multiunit only if the company operated two manufacturing establishments or more.

[4]For 1963 and earlier years, the difference between the sum of individual and partnership forms of organization and the total for noncorporate is represented by other noncorporate forms including cooperatives, establishments operated by estate administrators, trusteeships, receiverships, public and quasi-public organizations, and, in addition, the misassignment of small establishments that were not corrected since they were not statistically significant. For 1977, 1972, and 1967, this category is shown for each industry and for all manufacturing total.

[5]In 1967, administrative records were not identified by legal form of ownership or as single-unit or multiunit companies. However, the administrative records are all for single-unit establishments.

[6]In the 1967 census, no legal form of ownership information was available for classifying administrative records. In the 1972 and 1977 censuses, legal form of ownership data were supplied by the Internal Revenue Service, and administrative records were tabulated based on this data. For comparison purposes, the following are total 1972 and 1977 census data for administrative records:

Year	Establishments number	All employees		Production workers		Value added (million dollars)	Capital expenditures, new (million dollars)
		Total (1,000)	Payroll (million dollars)	Total (1,000)	Wages (million dollars)		
1977..	144,662	460.7	5,177.7	378.4	3,348.2	11,110.9	713.5
1972..	122,164	382.0	2,626.0	328.0	1,795.0	5,957.0	376.0

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
	All industries	**359 928**	**118 699**	**19 590.1**	**264 013.1**	**13 691.0**	**26 686.7**	**157 163.7**	**585 165.6**	**782 417.7**	**1 358 526.4**	**47 459.0**	**174 865.0**	**188 436.4**
	Type of organization:													
	Multiunit companies, total	81 241	59 362	14 957.1	214 227.0	10 097.0	19 930.6	124 853.9	485 018.2	675 130.1	1 152 443.3	40 975.3	151 594.3	162 800.8
	Corp. ownership or control	80 102	58 620	14 850.0	213 006.3	10 017.9	19 775.3	124 039.8	481 685.1	661 729.2	1 135 827.2	40 377.0	149 399.2	160 426.2
	Noncorporate ownership	1 139	742	107.1	1 220.7	79.1	155.3	814.0	3 333.1	13 400.9	16 616.1	598.3	2 195.1	2 374.6
	Single unit companies, total	278 687	59 337	4 633.0	49 786.1	3 594.0	6 756.1	32 309.8	100 147.4	107 287.6	206 083.1	6 483.7	23 270.7	25 635.6
	Corp. ownership or control	204 094	55 917	4 263.9	46 300.0	3 284.5	6 223.2	29 851.0	92 428.2	98 006.1	189 143.6	5 872.2	21 399.8	23 629.7
	Noncorporate ownership	74 593	3 420	369.1	3 486.1	309.5	532.9	2 458.8	7 719.2	9 281.5	16 939.6	611.5	1 870.9	2 005.9
	Legal form of organization:													
	Corporate	284 196	114 537	19 113.9	259 306.3	13 302.4	25 998.5	153 890.8	574 113.2	759 735.3	1 324 970.7	46 249.2	170 799.0	184 056.0
	Noncorporate, total	75 732	4 162	476.2	4 706.8	388.6	688.2	3 272.9	11 052.4	22 682.4	33 555.7	1 209.8	4 066.0	4 380.5
	Individual	52 322	1 617	202.1	1 840.3	174.0	289.6	1 322.0	3 960.7	3 868.4	7 804.8	300.2	781.1	830.4
	Partnership	18 315	1 316	123.3	1 212.9	100.4	178.3	829.3	2 681.4	3 088.3	5 762.5	206.4	618.6	656.4
	Other and unknown	5 095	1 229	150.8	1 653.5	114.1	220.4	1 121.6	4 410.3	15 725.7	19 988.5	703.2	2 666.3	2 893.7
20	**FOOD AND KINDRED PRODUCTS**	**26 656**	**11 038**	**1 520.0**	**18 543.6**	**1 072.0**	**2 112.4**	**11 730.7**	**56 062.2**	**136 963.7**	**192 911.6**	**4 214.9**	**16 416.3**	**16 984.9**
	Type of organization:													
	Multiunit companies, total	9 043	6 822	1 183.5	14 908.9	838.9	1 665.8	9 643.8	47 278.0	114 074.4	161 367.0	3 499.7	14 318.6	14 610.7
	Corp. ownership or control	8 344	6 336	1 121.2	14 201.6	791.2	1 569.7	9 137.2	45 257.5	104 136.1	149 384.6	3 304.6	12 814.8	13 054.3
	Noncorporate ownership	699	486	62.4	707.3	47.7	96.1	506.6	2 020.5	9 938.3	11 982.4	195.1	1 503.8	1 556.5
	Single unit companies, total	17 613	4 216	336.5	3 634.7	233.2	446.6	2 087.0	8 784.2	22 889.4	31 544.5	715.2	2 097.6	2 374.1
	Corp. ownership or control	12 443	3 754	291.0	3 201.3	198.2	383.0	1 801.9	7 589.7	19 361.4	26 860.2	592.4	1 609.1	1 823.4
	Noncorporate ownership	5 170	462	45.5	433.4	35.0	63.6	285.1	1 194.5	3 528.0	4 684.4	122.8	488.6	550.8
	Legal form of organization:													
	Corporate	20 787	10 090	1 412.2	17 402.9	989.4	1 952.7	10 939.1	52 847.2	123 497.5	176 244.8	3 897.0	14 423.9	14 877.7
	Noncorporate, total	5 869	948	107.8	1 140.7	82.7	159.7	791.7	3 215.0	13 466.2	16 666.8	317.9	1 992.3	2 107.2
	Individual	3 320	187	18.0	157.6	14.2	24.2	102.2	385.3	995.8	1 378.4	22.9	108.7	117.7
	Partnership	1 414	130	11.9	121.4	8.1	15.1	72.6	321.5	760.4	1 074.2	39.4	65.9	76.4
	Other and unknown	1 135	631	77.9	861.6	60.3	120.4	616.9	2 508.2	11 710.0	14 214.2	255.6	1 817.7	1 913.1
2011	**Meat Packing Plants**	**2 590**	**737**	**146.2**	**2 110.6**	**116.5**	**237.2**	**1 625.9**	**4 010.1**	**27 239.1**	**31 208.2**	**236.7**	**651.2**	**700.1**
	Type of organization:													
	Multiunit companies, total	436	337	111.3	1 670.1	88.4	179.7	1 298.5	3 072.3	21 570.6	24 623.4	180.3	530.0	554.2
	Corp. ownership or control	421	326	108.6	1 632.1	86.1	174.7	1 267.3	2 977.0	20 873.0	23 835.3	175.6	518.4	537.5
	Noncorporate ownership	15	11	2.7	37.9	2.3	4.9	31.2	95.3	697.6	788.1	4.8	11.5	16.7
	Single unit companies, total	2 154	400	34.9	440.5	28.1	57.6	327.4	937.8	5 668.5	6 584.8	56.3	121.2	146.0
	Corp. ownership or control	1 397	375	31.7	404.9	25.3	52.3	299.3	860.2	5 289.8	6 129.3	51.7	111.8	135.7
	Noncorporate ownership	757	25	3.3	35.6	2.8	5.2	28.1	77.6	378.6	455.5	4.7	9.4	10.2
	Legal form of organization:													
	Corporate	1 818	701	140.3	2 037.0	111.4	227.1	1 566.6	3 837.2	26 162.8	29 964.6	227.2	630.2	673.2
	Noncorporate, total	772	36	6.0	73.5	5.1	10.2	59.3	172.9	1 076.3	1 243.6	9.4	20.9	26.9
	Individual	524	11	1.8	19.2	1.5	2.8	15.3	43.0	164.3	206.8	1.3	4.0	4.5
	Partnership	207	12	1.2	13.9	1.1	2.0	11.1	29.8	190.5	219.9	3.1	4.5	4.8
	Other and unknown	41	13	3.0	40.4	2.5	5.3	33.0	100.1	721.5	816.8	5.0	12.4	17.5
2013	**Sausages and Other Prepared Meats**	**1 345**	**570**	**65.0**	**891.9**	**50.1**	**100.4**	**626.6**	**2 039.0**	**6 445.2**	**8 465.4**	**151.6**	**375.1**	**406.4**
	Type of organization:													
	Multiunit companies, total	329	263	42.0	602.1	32.6	66.2	434.8	1 444.3	4 748.0	6 178.9	104.3	279.2	303.0
	Corp. ownership or control	328	262	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 016	307	23.0	289.7	17.5	34.1	191.9	594.7	1 697.1	2 286.6	47.2	95.9	103.4
	Corp. ownership or control	787	299	22.1	279.3	16.7	32.8	184.3	572.6	1 629.6	2 196.7	46.0	92.0	99.6
	Noncorporate ownership	229	8	1.0	10.5	0.8	1.3	7.5	22.2	67.5	89.8	1.2	3.9	3.7
	Legal form of organization:													
	Corporate	1 115	561	63.9	879.7	49.2	98.8	617.6	2 013.3	6 353.0	8 347.6	150.3	371.1	402.1
	Noncorporate, total	230	9	1.1	12.2	0.9	1.6	9.1	25.7	92.2	117.8	1.3	4.0	4.3
	Individual	150	2	0.5	5.0	0.4	0.6	3.4	10.7	28.7	39.4	0.5	1.8	1.8
	Partnership	63	4	0.3	3.9	0.3	0.5	2.9	8.6	30.2	38.9	0.6	1.5	1.4
	Other and unknown	17	3	0.3	3.3	0.3	0.5	2.8	6.4	33.3	39.5	0.2	0.6	1.1
2016	**Poultry Dressing Plants**	**446**	**313**	**86.8**	**612.3**	**77.7**	**143.6**	**496.3**	**1 236.9**	**4 520.1**	**5 746.1**	**126.1**	**188.3**	**206.8**
	Type of organization:													
	Multiunit companies, total	250	226	73.9	523.7	66.2	123.6	425.2	1 070.7	3 895.8	4 957.2	103.8	159.1	172.9
	Corp. ownership or control	223	203	66.9	473.1	59.8	111.4	383.6	978.1	3 522.9	4 494.6	95.5	150.9	159.1
	Noncorporate ownership	27	23	7.0	50.6	6.4	12.2	41.7	92.6	372.8	462.6	8.2	8.2	13.8
	Single unit companies, total	196	87	12.9	88.6	11.5	20.1	71.0	166.2	624.3	788.8	22.3	29.1	34.0
	Corp. ownership or control	137	69	9.6	66.6	8.6	15.2	52.9	120.6	472.3	591.2	8.6	19.5	23.7
	Noncorporate ownership	59	18	3.3	22.0	2.9	4.8	18.2	45.6	152.1	197.6	13.7	9.7	10.3
	Legal form of organization:													
	Corporate	360	272	76.5	539.7	68.4	126.6	436.4	1 098.7	3 995.2	5 085.8	104.1	170.4	182.8
	Noncorporate, total	86	41	10.3	72.5	9.3	17.0	59.8	138.1	524.9	660.3	22.0	17.9	24.0
	Individual	28	4	0.4	2.3	0.4	0.6	1.9	3.6	15.4	19.0	(D)	0.5	0.6
	Partnership	15	4	0.5	3.8	0.4	0.8	3.2	7.0	32.3	39.6	(D)	1.2	0.9
	Other and unknown	43	33	9.3	66.4	8.5	15.6	54.7	127.5	477.2	601.7	20.2	16.2	22.5
2017	**Poultry and Egg Processing**	**153**	**95**	**11.1**	**86.8**	**9.8**	**18.6**	**68.1**	**192.0**	**669.6**	**856.6**	**18.3**	**58.6**	**66.3**
	Type of organization:													
	Multiunit companies, total	75	51	6.4	49.7	5.7	10.7	40.2	113.0	381.8	491.7	10.3	39.9	45.4
	Corp. ownership or control	66	44	5.5	41.8	5.0	9.2	34.3	100.1	302.2	396.8	9.2	31.6	39.4
	Noncorporate ownership	9	7	0.9	7.8	0.7	1.5	6.0	12.9	79.7	94.9	1.1	8.3	6.0
	Single unit companies, total	78	44	4.7	37.2	4.1	7.9	27.9	79.0	287.8	364.9	8.0	18.8	20.9
	Corp. ownership or control	68	41	4.4	35.7	3.8	7.5	26.8	76.0	276.2	350.6	7.9	18.2	20.0
	Noncorporate ownership	10	3	0.3	1.4	0.3	0.4	1.1	3.1	11.6	14.3	0.1	0.6	0.9

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS—Con.**													
2017	**Poultry and Egg Processing—Con.**													
	Legal form of organization:													
	Corporate	134	85	9.8	77.6	8.8	16.7	61.1	176.0	578.3	747.3	17.1	49.8	59.5
	Noncorporate, total	19	10	1.3	9.2	1.0	1.8	7.1	16.0	91.3	109.3	1.2	8.9	6.8
	Individual	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	11	8	1.0	8.1	0.8	1.5	6.2	13.9	82.6	98.7	1.1	8.3	6.2
2021	**Creamery Butter**	**138**	**39**	**2.3**	**26.3**	**1.7**	**3.6**	**18.1**	**74.6**	**822.9**	**900.5**	**8.3**	**25.4**	**24.2**
	Type of organization:													
	Multiunit companies, total	35	29	1.5	17.3	1.1	2.4	12.6	49.7	606.6	659.5	5.8	19.3	17.6
	Corp. ownership or control	20	15	0.6	5.9	0.5	0.9	4.3	19.9	199.8	220.1	3.2	8.0	7.6
	Noncorporate ownership	15	14	0.9	11.4	0.7	1.5	8.3	29.8	406.8	439.5	2.5	11.3	9.9
	Single unit companies, total	103	10	0.8	9.0	0.6	1.1	5.5	25.0	216.3	240.9	2.5	6.2	6.6
	Corp. ownership or control	66	8	0.5	6.2	0.3	0.7	3.5	21.0	172.8	193.3	2.0	4.6	5.2
	Noncorporate ownership	37	2	0.3	2.8	0.2	0.4	2.0	4.0	43.1	47.6	0.5	1.6	1.4
	Legal form of organization:													
	Corporate	86	23	1.1	12.1	0.8	1.6	7.8	40.8	372.6	413.4	5.2	12.6	12.8
	Noncorporate, total	52	16	1.2	14.2	0.9	1.9	10.3	33.8	450.2	487.1	3.0	12.8	11.3
	Individual	16	1	0.1	1.4	0.1	0.2	1.0	1.3	13.3	14.6	(D)	0.4	0.3
	Partnership	4	–	(Z)	0.2	(Z)	(Z)	0.1	0.6	3.4	4.0	(D)	0.2	0.1
	Other and unknown	32	15	1.0	12.6	0.8	1.7	9.1	31.9	433.6	468.5	3.0	12.3	10.9
2022	**Cheese, Natural and Processed**	**791**	**293**	**26.7**	**287.0**	**22.2**	**44.0**	**223.4**	**948.8**	**5 200.4**	**6 126.0**	**57.2**	**528.3**	**550.4**
	Type of organization:													
	Multiunit companies, total	222	163	18.4	208.1	15.3	31.0	165.2	737.1	3 961.6	4 690.8	34.9	432.4	433.8
	Corp. ownership or control	174	124	14.5	162.5	12.0	23.9	127.9	625.9	2 837.2	3 459.7	26.6	343.6	351.2
	Noncorporate ownership	48	39	3.9	45.7	3.2	7.1	37.3	111.2	1 124.4	1 231.2	8.3	88.8	82.7
	Single unit companies, total	569	130	8.3	78.9	6.9	13.0	58.2	211.7	1 238.8	1 435.2	22.3	95.9	116.6
	Corp. ownership or control	363	103	6.0	56.8	4.8	9.1	39.9	144.8	843.2	981.3	15.5	55.5	66.8
	Noncorporate ownership	206	27	2.4	22.1	2.1	3.9	18.3	66.9	395.6	453.9	6.8	40.4	49.8
	Legal form of organization:													
	Corporate	537	227	20.4	219.3	16.8	33.0	167.8	770.7	3 680.4	4 440.9	42.1	399.1	418.0
	Noncorporate, total	254	66	6.3	67.8	5.4	11.0	55.7	178.2	1 520.0	1 685.1	15.1	129.2	132.5
	Individual	109	6	0.6	4.5	0.5	0.8	3.5	10.6	72.9	82.9	0.6	4.1	5.3
	Partnership	42	2	0.2	1.8	0.2	0.3	1.5	4.9	32.5	37.3	0.4	2.9	3.0
	Other and unknown	103	58	5.5	61.4	4.7	9.9	50.7	162.6	1 414.5	1 564.9	14.1	122.1	124.2
2023	**Condensed and Evaporated Milk**	**266**	**148**	**12.3**	**163.2**	**9.0**	**18.9**	**110.7**	**805.2**	**2 382.3**	**3 188.5**	**56.2**	**164.4**	**175.0**
	Type of organization:													
	Multiunit companies, total	166	122	10.6	141.0	7.7	16.3	96.5	739.9	2 088.4	2 827.9	51.7	144.9	156.2
	Corp. ownership or control	118	83	8.4	113.9	6.0	12.5	75.2	678.7	1 253.7	1 923.7	36.8	105.7	120.6
	Noncorporate ownership	48	39	2.2	27.1	1.7	3.8	21.3	61.2	834.7	904.2	14.9	39.1	35.6
	Single unit companies, total	100	26	1.7	22.2	1.3	2.6	14.1	65.3	293.8	360.6	4.5	19.6	18.9
	Corp. ownership or control	82	19	1.4	17.9	1.0	2.1	10.9	48.8	202.5	251.6	3.8	14.2	14.5
	Noncorporate ownership	18	7	0.4	4.2	0.3	0.5	3.2	16.5	91.4	109.0	0.7	5.3	4.4
	Legal form of organization:													
	Corporate	200	102	9.7	131.8	7.0	14.6	86.1	727.5	1 456.2	2 175.3	40.6	120.0	135.1
	Noncorporate, total	66	46	2.6	31.3	2.0	4.3	24.5	77.7	926.1	1 013.2	15.7	44.5	40.0
	Individual	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.3	0.7	1.0	(D)	0.1	0.1
	Partnership	5	–	(Z)	0.2	(Z)	(Z)	0.2	1.1	3.1	4.1	(D)	0.2	0.2
	Other and unknown	57	46	2.5	31.1	2.0	4.3	24.3	76.4	922.3	1 008.1	15.6	44.2	39.7
2024	**Ice Cream and Frozen Desserts**	**612**	**229**	**19.1**	**247.0**	**11.4**	**22.7**	**130.1**	**643.7**	**1 368.5**	**2 008.6**	**56.8**	**116.9**	**126.6**
	Type of organization:													
	Multiunit companies, total	238	167	15.1	203.9	9.2	18.7	109.4	554.0	1 187.4	1 738.3	50.5	98.8	107.2
	Corp. ownership or control	219	154	14.2	191.7	8.6	17.6	102.6	520.3	1 118.6	1 636.0	47.2	92.1	100.0
	Noncorporate ownership	19	13	0.9	12.3	0.6	1.1	6.9	33.7	68.8	102.3	3.3	6.7	7.2
	Single unit companies, total	374	62	3.9	43.1	2.2	4.0	20.6	89.7	181.1	270.3	6.3	18.1	19.3
	Corp. ownership or control	268	60	3.6	40.2	2.0	3.7	19.0	82.9	166.3	248.6	5.9	16.7	17.9
	Noncorporate ownership	106	2	0.4	2.9	0.2	0.3	1.6	6.8	14.8	21.7	0.4	1.4	1.4
	Legal form of organization:													
	Corporate	487	214	17.8	231.9	10.6	21.3	121.6	603.2	1 284.9	1 884.6	53.1	108.8	118.0
	Noncorporate, total	125	15	1.3	15.2	0.8	1.5	8.5	40.5	83.6	124.0	3.6	8.2	8.6
	Individual	70	–	0.2	1.4	0.1	0.2	0.8	2.9	6.3	9.2	0.2	0.5	0.5
	Partnership	29	2	0.2	1.3	0.1	0.2	0.7	3.5	5.6	9.1	0.1	0.6	0.6
	Other and unknown	26	13	0.9	12.5	0.6	1.2	7.0	34.2	71.7	105.8	3.4	7.0	7.4
2026	**Fluid Milk**	**1 924**	**908**	**93.5**	**1 215.4**	**40.8**	**86.3**	**505.4**	**3 175.9**	**10 631.9**	**13 786.2**	**210.5**	**261.8**	**304.0**
	Type of organization:													
	Multiunit companies, total	743	612	71.4	945.2	31.4	67.3	403.2	2 605.3	8 882.6	11 470.6	157.7	216.6	250.7
	Corp. ownership or control	608	503	59.9	798.4	26.5	56.2	341.7	2 248.1	7 163.3	9 392.5	132.9	176.0	208.9
	Noncorporate ownership	135	109	11.5	146.7	4.9	11.2	61.5	357.2	1 719.3	2 078.1	24.8	40.6	41.8
	Single unit companies, total	1 181	296	22.0	270.2	9.4	19.0	102.2	570.6	1 749.2	2 315.6	52.8	45.2	53.3
	Corp. ownership or control	834	260	18.9	234.1	7.9	16.0	86.8	486.8	1 460.4	1 943.4	48.7	37.7	44.7
	Noncorporate ownership	347	36	3.1	36.1	1.4	3.0	15.4	83.8	288.8	372.2	4.0	7.4	8.6
	Legal form of organization:													
	Corporate	1 442	763	78.8	1 032.5	34.4	72.2	428.4	2 734.9	8 623.7	11 335.9	181.7	213.7	253.6
	Noncorporate, total	482	145	14.6	182.9	6.3	14.1	76.9	441.0	2 008.2	2 450.3	28.9	48.0	50.4
	Individual	188	11	1.0	11.3	0.5	0.9	4.5	22.7	80.9	103.5	1.5	2.1	2.2
	Partnership	107	12	1.3	15.0	0.6	1.2	6.4	41.6	91.2	132.5	0.8	2.4	3.2
	Other and unknown	187	122	12.3	156.5	5.3	12.0	66.0	376.7	1 836.1	2 214.2	26.6	43.6	45.1

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS—Con.**													
2032	**Canned Specialties**	**203**	**88**	**26.4**	**296.5**	**21.5**	**42.4**	**224.3**	**[3]1 142.6**	**1 687.7**	**[3]2 829.2**	**46.7**	**508.4**	**527.8**
	Type of organization:													
	Multiunit companies, total	70	62	24.7	281.2	20.2	40.0	214.4	[3]1 100.0	1 618.3	[3]2 717.1	43.4	488.9	505.3
	Corp. ownership or control	68	60	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	133	26	1.7	15.3	1.3	2.4	9.9	[3]42.7	69.4	[3]112.1	3.3	19.5	22.4
	Corp. ownership or control	95	24	1.5	14.2	1.2	2.2	9.1	[3]39.3	65.2	[3]104.6	3.2	18.3	21.3
	Noncorporate ownership	38	2	0.2	1.1	0.1	0.2	0.8	[3]3.4	4.2	[3]7.6	0.1	1.1	1.2
	Legal form of organization:													
	Corporate	163	84	25.9	291.4	21.2	41.7	221.6	[3]1 119.1	1 653.0	[3]2 770.8	46.6	497.0	516.0
	Noncorporate, total	40	4	0.5	5.0	0.3	0.7	2.8	[3]23.6	34.8	[3]58.4	0.1	11.4	11.8
	Individual	24	1	0.1	0.7	0.1	0.1	0.4	[3]1.7	2.1	[3]3.8	0.1	0.6	0.6
	Partnership	13	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2033	**Canned Fruits and Vegetables**	**900**	**519**	**82.6**	**789.8**	**72.6**	**135.0**	**636.6**	**[3]2 542.4**	**4 135.3**	**[3]6 662.8**	**147.1**	**2 062.1**	**2 233.5**
	Type of organization:													
	Multiunit companies, total	420	365	69.8	679.6	61.5	115.8	556.7	[3]2 253.9	3 561.6	[3]5 803.1	118.7	1 825.2	1 964.6
	Corp. ownership or control	371	318	57.3	546.8	50.1	94.8	438.4	[3]1 859.2	2 930.3	[3]4 774.0	100.2	1 428.8	1 488.5
	Noncorporate ownership	49	47	12.5	132.8	11.5	21.0	118.3	[3]394.6	631.3	[3]1 029.2	18.5	396.4	476.1
	Single unit companies, total	480	154	12.8	110.1	11.0	19.2	79.9	[3]288.5	573.6	[3]859.6	28.4	236.9	268.8
	Corp. ownership or control	388	135	10.7	91.5	9.1	15.9	64.9	[3]242.5	459.0	[3]700.9	18.4	187.7	210.6
	Noncorporate ownership	92	19	2.2	18.6	2.0	3.3	15.0	[3]46.0	114.7	[3]158.8	10.1	49.2	58.3
	Legal form of organization:													
	Corporate	759	453	67.9	638.3	59.1	110.7	503.3	[3]2 101.7	3 389.3	[3]5 474.9	118.6	1 616.4	1 699.1
	Noncorporate, total	141	66	14.7	151.5	13.5	24.3	133.2	[3]440.7	745.9	[3]1 187.9	28.6	445.7	534.3
	Individual	39	2	0.2	1.6	0.2	0.2	1.2	[3]4.1	6.1	[3]10.2	0.2	3.4	3.6
	Partnership	26	2	0.2	1.5	0.2	0.3	1.4	[3]5.0	8.9	[3]13.8	0.1	3.7	3.9
	Other and unknown	76	62	14.4	148.4	13.1	23.8	130.6	[3]431.6	731.0	[3]1 163.9	28.2	438.6	526.8
2034	**Dehydrated Fruits, Vegetables, and Soups**	**184**	**87**	**14.4**	**153.9**	**11.7**	**22.1**	**111.5**	**472.6**	**685.3**	**1 142.4**	**52.5**	**267.0**	**281.9**
	Type of organization:													
	Multiunit companies, total	81	55	11.7	128.2	9.4	18.1	93.1	401.4	559.3	946.1	47.5	225.4	238.7
	Corp. ownership or control	61	51	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	20	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	103	32	2.7	25.7	2.3	4.0	18.4	71.2	126.0	196.3	5.1	41.6	43.2
	Corp. ownership or control	78	29	2.3	21.9	2.0	3.4	15.5	62.8	108.0	170.5	4.3	34.7	35.5
	Noncorporate ownership	25	3	0.4	3.8	0.3	0.6	2.9	8.4	18.0	25.8	0.8	7.0	7.7
	Legal form of organization:													
	Corporate	139	80	13.2	141.4	10.5	19.8	100.0	410.5	625.9	1 027.3	44.5	248.1	241.9
	Noncorporate, total	45	7	1.2	12.5	1.2	2.3	11.5	62.1	59.4	115.1	8.1	18.9	40.0
	Individual	12	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	24	5	1.0	9.6	0.9	1.9	9.3	56.0	48.1	97.7	(D)	15.1	36.1
2035	**Pickles, Sauces, and Salad Dressings**	**438**	**168**	**23.5**	**250.2**	**18.9**	**35.7**	**184.9**	**[3]986.5**	**2 003.8**	**[3]2 996.5**	**52.3**	**426.7**	**447.8**
	Type of organization:													
	Multiunit companies, total	133	99	18.4	198.3	15.0	28.3	153.7	[3]819.5	1 784.1	[3]2 608.3	41.6	359.9	381.7
	Corp. ownership or control	128	96	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	305	69	5.2	51.8	3.9	7.4	31.2	[3]167.1	219.7	[3]388.2	10.7	66.7	66.1
	Corp. ownership or control	252	65	4.8	48.8	3.6	6.8	28.8	[3]159.4	206.3	[3]366.4	9.8	60.9	61.4
	Noncorporate ownership	53	4	0.3	3.0	0.3	0.6	2.4	[3]7.7	13.4	[3]21.8	0.9	5.8	4.8
	Legal form of organization:													
	Corporate	380	161	22.8	242.8	18.2	34.5	178.9	[3]964.0	1 954.3	[3]2 924.0	51.4	417.0	439.0
	Noncorporate, total	58	7	0.7	7.3	0.7	1.2	6.0	[3]22.5	49.4	[3]72.5	0.9	9.6	8.9
	Individual	36	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	13	2	0.1	1.0	0.1	0.2	0.7	[3]3.2	6.4	[3]9.6	0.2	1.3	1.4
	Other and unknown	9	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2037	**Frozen Fruits and Vegetables**	**260**	**193**	**46.8**	**425.9**	**41.5**	**78.5**	**344.7**	**[3]1 322.5**	**1 972.0**	**[3]3 297.5**	**87.7**	**640.3**	**724.4**
	Type of organization:													
	Multiunit companies, total	152	129	39.4	361.7	35.1	66.4	294.7	[3]1 139.4	1 609.9	[3]2 752.5	74.3	550.0	604.2
	Corp. ownership or control	141	120	36.5	335.4	32.5	61.8	272.4	[3]1 068.5	1 478.5	[3]2 557.4	71.2	482.9	524.7
	Noncorporate ownership	11	9	2.8	26.3	2.5	4.7	22.4	[3]70.9	131.4	[3]195.1	3.1	67.1	79.5
	Single unit companies, total	108	64	7.4	64.2	6.5	12.1	49.9	[3]183.1	362.0	[3]545.0	13.4	90.3	120.2
	Corp. ownership or control	90	51	5.5	47.2	4.8	8.8	36.5	[3]118.1	203.3	[3]321.3	7.1	50.4	64.2
	Noncorporate ownership	18	13	1.9	17.0	1.6	3.3	13.4	[3]65.0	158.7	[3]223.7	6.3	39.9	56.0
	Legal form of organization:													
	Corporate	231	171	42.1	382.6	37.4	70.6	308.9	[3]1 186.6	1 681.8	[3]2 878.6	78.3	533.3	588.9
	Noncorporate, total	29	22	4.7	43.3	4.2	8.0	35.8	[3]136.0	290.2	[3]418.8	9.4	107.0	135.5
	Individual	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	22	19	4.5	41.9	4.0	7.7	34.7	[3]129.0	277.0	[3]398.7	8.7	103.5	131.9
2038	**Frozen Specialties**	**394**	**208**	**41.0**	**419.8**	**32.5**	**63.4**	**290.9**	**[3]1 217.7**	**2 187.5**	**[3]3 404.4**	**84.1**	**288.9**	**322.2**
	Type of organization:													
	Multiunit companies, total	154	146	35.3	363.6	28.0	54.4	255.3	[3]1 080.1	1 957.0	[3]3 036.3	75.2	254.6	286.9
	Corp. ownership or control	151	143	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	240	62	5.7	56.1	4.5	9.0	35.5	[3]137.6	230.5	[3]368.1	8.9	34.4	35.4
	Corp. ownership or control	187	60	5.5	53.5	4.3	8.6	33.7	[3]131.2	218.2	[3]349.4	8.1	33.1	33.9
	Noncorporate ownership	53	2	0.3	2.6	0.2	0.4	1.8	[3]6.4	12.3	[3]18.7	0.8	1.2	1.5

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS**—Con.													
2038	**Frozen Specialties**—Con.													
	Legal form of organization:													
	Corporate	338	203	40.4	414.0	32.0	62.5	286.9	[3]1 206.5	2 149.5	[3]3 355.1	82.9	283.2	316.6
	Noncorporate, total	56	5	0.6	5.8	0.5	1.0	4.0	[3]11.3	38.0	[3]49.3	1.2	5.7	5.7
	Individual	34	1	0.2	1.9	0.2	0.3	1.3	[3]4.5	8.6	[3]13.0	0.3	0.7	1.0
	Partnership	11	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	11	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2041	**Flour and Other Grain Mill Products**	**407**	**173**	**15.6**	**222.3**	**11.3**	**24.6**	**153.4**	**824.5**	**2 854.2**	**3 683.3**	**52.4**	**297.8**	**263.2**
	Type of organization:													
	Multiunit companies, total	186	145	13.2	193.6	9.8	21.3	136.5	751.1	2 565.5	3 324.5	46.9	268.7	230.2
	Corp. ownership or control	183	143	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	221	28	2.3	28.6	1.6	3.3	16.9	73.4	288.7	358.8	5.5	29.1	32.9
	Corp. ownership or control	143	24	1.9	23.5	1.3	2.7	13.7	51.2	215.6	266.3	4.8	20.3	22.4
	Noncorporate ownership	78	4	0.4	5.2	0.3	0.6	3.3	22.3	73.1	92.6	0.7	8.9	10.5
	Legal form of organization:													
	Corporate	326	167	14.9	213.9	10.9	23.7	148.3	798.9	2 760.5	3 566.8	50.6	287.6	251.2
	Noncorporate, total	81	6	0.6	8.3	0.4	0.9	5.1	25.7	93.7	116.5	1.8	10.2	12.0
	Individual	46	–	0.1	1.1	0.1	0.1	0.8	3.3	14.5	17.8	0.1	1.3	1.3
	Partnership	30	2	0.1	1.7	0.1	0.2	1.1	4.5	19.7	24.3	0.2	1.6	2.1
	Other and unknown	5	4	0.4	5.5	0.3	0.6	3.3	17.8	59.5	74.4	1.5	7.2	8.6
2043	**Cereal Breakfast Foods**	**48**	**35**	**16.4**	**287.4**	**13.8**	**28.8**	**230.0**	**1 447.0**	**1 061.2**	**2 497.5**	**79.8**	**150.3**	**152.1**
	Type of organization:													
	Multiunit companies, total	31	30	16.1	283.6	13.6	28.4	227.4	1 437.4	1 051.5	2 478.1	79.2	148.6	150.5
	Corp. ownership or control	31	30	16.1	283.6	13.6	28.4	227.4	1 437.4	1 051.5	2 478.1	79.2	148.6	150.5
	Single unit companies, total	17	5	0.3	3.7	0.2	0.5	2.5	9.6	9.7	19.5	0.6	1.7	1.6
	Corp. ownership or control	15	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	46	35	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2044	**Rice Milling**	**59**	**39**	**4.8**	**61.4**	**4.0**	**8.4**	**40.7**	**341.0**	**948.6**	**1 263.4**	**40.0**	**329.4**	**411.4**
	Type of organization:													
	Multiunit companies, total	28	24	3.6	46.6	2.9	6.1	31.1	254.6	698.1	935.3	34.5	245.5	306.6
	Corp. ownership or control	17	16	2.1	30.2	1.6	3.3	17.0	173.7	361.5	522.6	(D)	80.0	102.2
	Noncorporate ownership	11	8	1.4	16.4	1.3	2.8	14.1	81.0	336.6	412.7	(D)	165.5	204.4
	Single unit companies, total	31	15	1.3	14.7	1.1	2.4	9.6	86.3	250.5	328.0	5.6	83.9	104.8
	Corp. ownership or control	26	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	43	28	2.9	37.2	2.2	4.6	21.6	202.9	471.3	656.0	(D)	93.4	129.8
	Noncorporate, total	16	11	2.0	24.2	1.8	3.9	19.1	138.1	477.2	607.3	(D)	236.1	281.6
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	13	10	1.9	23.7	1.8	3.8	18.8	137.0	474.8	603.8	(D)	235.7	281.3
2045	**Blended and Prepared Flour**	**137**	**60**	**8.4**	**104.5**	**5.8**	**12.1**	**68.0**	**408.7**	**606.3**	**1 011.7**	**17.6**	**72.3**	**80.6**
	Type of organization:													
	Multiunit companies, total	61	46	6.2	83.3	4.1	8.6	53.7	341.9	503.0	842.2	15.0	61.3	68.8
	Corp. ownership or control	61	46	6.2	83.3	4.1	8.6	53.7	341.9	503.0	842.2	15.0	61.3	68.8
	Single unit companies, total	76	14	2.1	21.2	1.7	3.5	14.2	66.8	103.3	169.5	2.6	11.0	11.7
	Corp. ownership or control	61	14	2.1	20.8	1.6	3.5	14.0	65.5	101.4	166.4	2.5	10.8	11.5
	Noncorporate ownership	15	–	(Z)	0.4	(Z)	0.1	0.3	1.2	1.9	3.1	0.1	0.2	0.2
	Legal form of organization:													
	Corporate	122	60	8.3	104.1	5.7	12.0	67.7	407.4	604.4	1 008.6	17.5	72.1	80.4
	Noncorporate, total	15	–	(Z)	0.4	(Z)	0.1	0.3	1.2	1.9	3.1	0.1	0.2	0.2
	Individual	9	–	(Z)	0.3	(Z)	(Z)	0.2	0.9	1.4	2.3	(Z)	0.2	0.2
	Partnership	5	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.5	0.8	(Z)	(Z)	(Z)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2046	**Wet Corn Milling**	**39**	**27**	**10.9**	**191.1**	**7.8**	**15.7**	**132.2**	**666.7**	**1 338.0**	**2 014.8**	**232.2**	**169.8**	**158.4**
	Type of organization:													
	Multiunit companies, total	31	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	31	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	8	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	37	26	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS—Con.**													
2047	**Dog, Cat, and Other Pet Food**	**290**	**132**	**17.7**	**245.5**	**13.4**	**27.7**	**170.3**	**1 392.9**	**1 697.2**	**3 086.7**	**67.2**	**193.8**	**200.7**
	Type of organization:													
	Multiunit companies, total	135	89	14.8	215.6	11.3	23.5	151.8	1 301.4	1 498.6	2 797.0	56.7	178.9	183.4
	Corp. ownership or control	124	83	14.4	211.5	11.0	23.0	148.9	1 285.1	1 441.5	2 723.6	55.4	175.6	177.0
	Noncorporate ownership	11	6	0.4	4.1	0.3	0.6	2.9	16.3	57.0	73.4	1.3	3.3	6.4
	Single unit companies, total	155	43	2.9	30.0	2.1	4.2	18.6	91.5	198.6	289.7	10.5	14.9	17.3
	Corp. ownership or control	129	43	2.7	28.7	2.0	4.0	17.7	86.0	189.7	275.2	10.0	14.1	16.4
	Noncorporate ownership	26	-	0.1	1.2	0.1	0.2	0.8	5.6	8.9	14.5	0.5	0.9	0.9
	Legal form of organization:													
	Corporate	253	126	17.1	240.2	13.0	27.0	166.6	1 371.1	1 631.2	2 998.8	65.4	189.6	193.4
	Noncorporate, total	37	6	0.5	5.3	0.4	0.7	3.7	21.8	66.0	87.9	1.8	4.2	7.3
	Individual	13	-	(Z)	0.4	(Z)	0.1	0.3	1.3	2.9	4.3	0.2	0.3	0.3
	Partnership	12	-	0.1	0.8	0.1	0.1	0.5	4.1	5.6	9.6	0.3	0.6	0.6
	Other and unknown	12	6	0.4	4.2	0.3	0.6	2.9	16.5	57.4	74.0	1.3	3.3	6.4
2048	**Prepared Feeds, N.E.C.**	**2 063**	**610**	**39.1**	**463.4**	**23.2**	**48.2**	**239.6**	**1 544.7**	**7 242.7**	**8 786.8**	**130.9**	**461.0**	**448.2**
	Type of organization:													
	Multiunit companies, total	988	451	27.9	341.3	16.6	35.0	181.6	1 232.8	5 913.9	7 145.6	108.3	371.6	359.2
	Corp. ownership or control	817	367	23.4	291.8	13.3	28.5	147.1	1 059.6	4 762.3	5 822.7	80.6	312.8	303.8
	Noncorporate ownership	171	84	4.4	49.5	3.3	6.6	34.5	173.3	1 151.6	1 322.9	27.6	58.7	55.4
	Single unit companies, total	1 075	159	11.2	122.1	6.7	13.1	58.1	311.9	1 328.8	1 641.2	22.6	89.5	88.9
	Corp. ownership or control	820	143	9.8	107.8	5.7	11.4	50.6	265.7	1 166.0	1 431.8	20.6	75.5	76.0
	Noncorporate ownership	255	16	1.4	14.3	0.9	1.7	7.4	46.2	162.8	209.4	2.0	13.9	12.9
	Legal form of organization:													
	Corporate	1 637	510	33.2	399.6	19.1	39.9	197.7	1 325.3	5 928.3	7 254.5	101.2	388.4	379.8
	Noncorporate, total	426	100	5.8	63.8	4.2	8.3	41.9	219.5	1 314.4	1 532.3	29.7	72.6	68.3
	Individual	137	1	0.4	3.9	0.3	0.5	2.0	11.2	44.6	55.7	0.5	3.3	3.4
	Partnership	82	7	0.5	4.9	0.3	0.6	2.7	17.9	56.0	73.9	0.6	4.3	4.0
	Other and unknown	207	92	4.9	55.0	3.6	7.2	37.3	190.4	1 213.8	1 402.7	28.6	65.1	60.9
2051	**Bread, Cake, and Related Products**	**3 062**	**1 117**	**178.0**	**2 335.8**	**97.4**	**191.7**	**1 152.8**	**5 377.2**	**3 902.2**	**9 274.9**	**279.9**	**220.6**	**235.1**
	Type of organization:													
	Multiunit companies, total	808	729	140.6	1 898.9	74.6	147.5	926.1	4 495.6	3 248.8	7 740.7	212.6	185.1	194.5
	Corp. ownership or control	806	727	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 254	388	37.4	437.0	22.8	44.2	226.7	881.6	653.4	1 534.1	67.3	35.5	40.6
	Corp. ownership or control	1 355	357	33.6	394.2	20.4	39.9	204.3	797.4	588.3	1 384.8	61.0	31.7	36.8
	Noncorporate ownership	899	31	3.8	42.8	2.4	4.4	22.5	84.2	65.1	149.3	6.3	3.8	3.9
	Legal form of organization:													
	Corporate	2 161	1 084	173.9	2 289.6	94.8	187.1	1 128.4	5 287.2	3 832.7	9 115.3	273.4	216.4	230.9
	Noncorporate, total	901	33	4.0	46.2	2.6	4.7	24.4	90.0	69.5	159.5	6.5	4.2	4.3
	Individual	618	12	2.0	22.8	1.3	2.2	11.9	45.2	35.2	80.4	2.8	2.1	2.1
	Partnership	259	17	1.7	18.6	1.0	2.0	9.8	36.0	27.6	63.6	3.1	1.6	1.6
	Other and unknown	24	4	0.4	4.8	0.3	0.4	2.7	8.8	6.7	15.5	0.7	0.6	0.6
2052	**Cookies and Crackers**	**324**	**172**	**43.8**	**530.2**	**34.0**	**67.0**	**372.2**	**1 695.9**	**1 265.3**	**2 960.5**	**85.6**	**161.9**	**172.0**
	Type of organization:													
	Multiunit companies, total	118	102	36.7	456.8	28.5	56.7	329.0	1 531.3	1 087.9	2 618.9	75.0	142.2	150.3
	Corp. ownership or control	118	102	36.7	456.8	28.5	56.7	329.0	1 531.3	1 087.9	2 618.9	75.0	142.2	150.3
	Single unit companies, total	206	70	7.1	73.4	5.5	10.3	43.1	164.6	177.4	341.6	10.6	19.7	21.7
	Corp. ownership or control	162	64	6.6	69.2	5.1	9.7	40.5	154.2	168.1	321.9	10.1	18.8	20.6
	Noncorporate ownership	44	6	0.5	4.3	0.4	0.6	2.6	10.4	9.4	19.7	0.5	0.9	1.1
	Legal form of organization:													
	Corporate	280	166	43.2	526.0	33.6	66.4	369.5	1 685.6	1 255.9	2 940.8	85.1	161.0	170.9
	Noncorporate, total	44	6	0.5	4.3	0.4	0.6	2.6	10.4	9.4	19.7	0.5	0.9	1.1
	Individual	32	4	0.3	2.3	0.3	0.4	1.4	5.5	5.6	11.0	0.3	0.4	0.6
	Partnership	12	2	0.2	2.0	0.1	0.3	1.3	4.9	3.8	8.7	0.2	0.5	0.5
2061	**Raw Cane Sugar**	**65**	**55**	**8.0**	**95.8**	**6.3**	**13.6**	**70.8**	**275.7**	**440.1**	**704.0**	**43.4**	**97.3**	**107.9**
	Type of organization:													
	Multiunit companies, total	37	33	5.0	62.1	3.9	8.6	46.3	202.6	293.4	498.8	35.8	57.2	54.8
	Corp. ownership or control	37	33	5.0	62.1	3.9	8.6	46.3	202.6	293.4	498.8	35.8	57.2	54.8
	Single unit companies, total	28	22	3.0	33.7	2.4	5.0	24.5	73.2	146.7	205.2	7.5	40.0	53.1
	Corp. ownership or control	8	3	0.2	1.5	0.2	0.4	1.3	3.5	6.6	9.8	0.4	1.5	1.6
	Noncorporate ownership	20	19	2.8	32.2	2.2	4.6	23.2	69.7	140.1	195.4	7.1	38.5	51.5
	Legal form of organization:													
	Corporate	45	36	5.2	63.6	4.0	8.9	47.6	206.0	300.1	508.6	36.2	58.8	56.4
	Noncorporate, total	20	19	2.8	32.2	2.2	4.6	23.2	69.7	140.1	195.4	7.1	38.5	51.5
	Partnership	4	3	0.2	1.8	0.2	0.3	1.4	5.6	11.5	13.8	(D)	4.8	8.0
	Other and unknown	16	16	2.7	30.4	2.1	4.3	21.8	64.2	128.6	181.6	(D)	33.7	43.5
2062	**Cane Sugar Refining**	**40**	**27**	**10.2**	**168.9**	**7.2**	**15.4**	**116.4**	**526.2**	**1 755.1**	**2 260.0**	**53.4**	**275.9**	**345.1**
	Type of organization:													
	Multiunit companies, total	30	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	28	23	8.0	128.3	5.5	11.8	86.5	411.5	1 397.5	1 794.0	43.0	222.9	277.5
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	38	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Noncorporate, total	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS**—Con.													
2063	**Beet Sugar**	**57**	**52**	**11.4**	**143.3**	**9.9**	**21.3**	**119.0**	**344.9**	**836.9**	**1 181.7**	**43.5**	**469.2**	**467.1**
	Type of organization:													
	Multiunit companies, total	55	51	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	47	43	9.5	113.6	8.2	17.3	93.8	266.6	660.7	936.3	28.5	416.7	395.5
	Noncorporate ownership	8	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	49	44	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Noncorporate, total	8	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2065	**Confectionery Products**	**962**	**343**	**58.0**	**584.2**	**47.0**	**89.1**	**415.5**	**2 028.0**	**2 478.1**	**4 498.4**	**115.5**	**442.6**	**450.2**
	Type of organization:													
	Multiunit companies, total	240	181	41.9	436.9	34.1	65.0	318.5	1 657.9	1 920.0	3 579.8	89.9	353.0	344.2
	Corp. ownership or control	235	180	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	722	162	16.0	147.3	12.9	24.1	97.0	370.1	558.1	918.6	25.6	89.6	106.0
	Corp. ownership or control	522	157	15.1	138.7	12.1	22.6	90.1	348.9	530.6	869.3	24.7	84.6	101.3
	Noncorporate ownership	200	5	0.9	8.6	0.9	1.5	6.9	21.3	27.5	49.3	0.9	5.1	4.7
	Legal form of organization:													
	Corporate	757	337	56.6	573.0	45.9	87.0	406.3	1 986.1	2 434.1	4 412.0	114.6	435.8	443.6
	Noncorporate, total	205	6	1.3	11.2	1.2	2.1	9.2	41.9	44.0	86.4	0.9	6.8	6.6
	Individual	140	1	0.5	5.3	0.5	0.9	4.4	7.6	14.1	22.0	0.5	2.7	2.4
	Partnership	57	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2066	**Chocolate and Cocoa Products**	**56**	**27**	**10.0**	**130.2**	**7.2**	**13.9**	**84.0**	**640.6**	**996.3**	**1 629.2**	**35.0**	**139.2**	**175.1**
	Type of organization:													
	Multiunit companies, total	31	25	9.8	126.4	7.0	13.6	81.5	629.1	953.9	1 574.4	34.4	132.4	167.6
	Corp. ownership or control	31	25	9.8	126.4	7.0	13.6	81.5	629.1	953.9	1 574.4	34.4	132.4	167.6
	Single unit companies, total	25	2	0.2	3.9	0.2	0.3	2.5	11.5	42.4	54.8	0.6	6.8	7.5
	Corp. ownership or control	19	2	0.2	3.8	0.2	0.3	2.5	11.4	42.2	54.5	0.6	6.8	7.5
	Noncorporate ownership	6	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.2	0.3	(Z)	(Z)	(Z)
	Legal form of organization:													
	Corporate	50	27	10.0	130.2	7.2	13.9	83.9	640.5	996.1	1 628.9	35.0	139.2	175.1
	Noncorporate, total	6	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.2	0.3	(Z)	(Z)	(Z)
	Individual	5	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.2	0.3	(Z)	(Z)	(Z)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2067	**Chewing Gum**	**18**	**14**	**7.7**	**83.9**	**6.0**	**11.6**	**62.7**	**335.5**	**233.0**	**566.5**	**22.1**	**127.6**	**116.4**
	Type of organization:													
	Multiunit companies, total	11	11	6.8	76.4	5.3	10.2	57.9	321.5	227.2	547.0	21.8	125.5	113.8
	Corp. ownership or control	11	11	6.8	76.4	5.3	10.2	57.9	321.5	227.2	547.0	21.8	125.5	113.8
	Single unit companies, total	7	3	0.9	7.5	0.7	1.4	4.8	13.9	5.8	19.5	0.3	2.1	2.6
	Corp. ownership or control	6	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	17	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2074	**Cottonseed Oil Mills**	**97**	**71**	**5.2**	**51.5**	**4.1**	**9.3**	**35.9**	**197.4**	**670.8**	**859.2**	**13.0**	**249.6**	**195.4**
	Type of organization:													
	Multiunit companies, total	55	49	3.8	38.7	3.0	6.7	26.9	133.5	514.9	651.1	10.7	192.9	149.0
	Corp. ownership or control	51	45	3.1	29.8	2.4	5.3	19.9	91.0	409.3	500.8	8.2	182.9	139.7
	Noncorporate ownership	4	4	0.7	8.9	0.6	1.4	6.9	42.5	105.5	150.3	2.5	9.9	9.3
	Single unit companies, total	42	22	1.4	12.7	1.2	2.6	9.0	63.9	155.9	208.1	2.3	56.8	46.5
	Corp. ownership or control	27	9	0.6	5.8	0.5	1.1	4.1	28.6	75.3	95.9	0.9	30.5	27.2
	Noncorporate ownership	15	13	0.8	6.9	0.7	1.5	5.0	35.3	80.6	112.2	1.4	26.3	19.3
	Legal form of organization:													
	Corporate	78	54	3.7	35.6	2.9	6.4	24.0	119.6	484.7	596.6	9.1	213.4	166.9
	Noncorporate, total	19	17	1.5	15.8	1.3	2.9	11.9	77.8	186.2	262.6	3.9	36.2	28.6
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	16	16	1.4	15.2	1.2	2.8	11.4	75.3	179.6	254.5	3.8	34.1	25.5
2075	**Soybean Oil Mills**	**121**	**87**	**9.4**	**130.7**	**6.6**	**14.7**	**87.8**	**373.8**	**7 012.8**	**7 580.0**	**72.3**	**1 205.9**	**804.9**
	Type of organization:													
	Multiunit companies, total	90	81	8.8	122.4	6.3	13.8	83.2	341.0	6 710.0	7 239.5	63.2	1 180.3	783.5
	Corp. ownership or control	77	69	7.4	104.9	5.3	11.7	71.6	299.6	5 457.5	5 896.6	52.9	836.8	544.2
	Noncorporate ownership	13	12	1.3	17.5	0.9	2.1	11.6	41.4	1 252.4	1 342.9	10.4	343.5	239.4
	Single unit companies, total	31	6	0.6	8.3	0.4	0.9	4.5	32.8	302.8	340.5	9.1	25.6	21.4
	Corp. ownership or control	20	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	11	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	97	72	7.6	107.8	5.5	12.0	73.3	305.4	5 499.7	5 944.8	54.5	843.4	550.7
	Noncorporate, total	24	15	1.7	22.9	1.2	2.7	14.5	68.4	1 513.1	1 635.2	17.8	362.4	254.2
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	18	15	1.7	22.6	1.2	2.6	14.4	67.2	1 510.7	1 631.6	17.8	362.0	253.8

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS**—Con.													
2076	**Vegetable Oil Mills, N.E.C.**	**42**	**19**	**1.5**	**17.6**	**1.1**	**2.5**	**12.2**	**58.4**	**304.7**	**360.8**	**7.4**	**83.1**	**89.3**
	Type of organization:													
	Multiunit companies, total	26	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	23	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	16	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	37	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2077	**Animal and Marine Fats and Oils**	**500**	**201**	**12.4**	**171.2**	**8.7**	**19.2**	**103.8**	**583.8**	**1 086.7**	**1 655.0**	**53.3**	**54.0**	**70.2**
	Type of organization:													
	Multiunit companies, total	199	128	8.0	112.4	5.7	12.6	69.7	409.3	779.4	1 176.8	37.2	39.9	52.2
	Corp. ownership or control	190	124	7.8	110.8	5.6	12.2	68.3	402.7	766.6	1 157.6	(D)	39.7	51.7
	Noncorporate ownership	9	4	0.2	1.6	0.1	0.3	1.3	6.6	12.7	19.1	(D)	0.2	0.5
	Single unit companies, total	301	73	4.4	58.8	3.0	6.6	34.1	174.5	307.3	478.3	16.1	14.1	17.9
	Corp. ownership or control	248	70	4.1	55.1	2.8	6.1	31.5	163.1	280.3	440.4	14.8	13.2	16.5
	Noncorporate ownership	53	3	0.3	3.7	0.2	0.5	2.7	11.3	27.0	37.8	1.3	0.9	1.4
	Legal form of organization:													
	Corporate	438	194	11.9	166.0	8.3	18.3	99.8	565.8	1 047.0	1 598.1	51.6	52.9	68.3
	Noncorporate, total	62	7	0.5	5.3	0.4	0.8	4.0	18.0	39.7	56.9	1.7	1.1	1.9
	Individual	23	–	0.1	0.7	(Z)	0.1	0.4	2.1	3.8	5.8	(D)	0.2	0.2
	Partnership	27	3	0.2	2.9	0.2	0.4	2.2	8.9	22.8	31.2	1.1	0.6	1.0
	Other and unknown	12	4	0.2	1.7	0.2	0.4	1.4	7.0	13.2	19.9	(D)	0.4	0.7
2079	**Shortening and Cooking Oils**	**109**	**80**	**12.7**	**190.5**	**9.0**	**18.7**	**125.8**	**691.8**	**3 293.3**	**4 025.0**	**62.1**	**380.1**	**324.3**
	Type of organization:													
	Multiunit companies, total	82	72	12.1	181.2	8.6	17.9	120.8	662.7	3 184.9	3 889.1	59.9	368.3	310.9
	Corp. ownership or control	74	69	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	8	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	27	8	0.7	9.3	0.4	0.9	5.0	29.1	108.4	136.0	2.3	11.8	13.4
	Corp. ownership or control	23	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	97	76	12.5	187.8	8.9	18.4	124.4	684.9	3 224.0	3 951.2	(D)	360.3	317.9
	Noncorporate, total	12	4	0.2	2.7	0.1	0.3	1.4	6.9	69.3	73.8	(D)	19.8	6.4
	Individual	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2082	**Malt Beverages**	**131**	**91**	**44.0**	**857.5**	**31.1**	**61.1**	**589.1**	**2 602.3**	**4 045.1**	**6 652.6**	**410.3**	**406.5**	**444.6**
	Type of organization:													
	Multiunit companies, total	78	72	42.3	836.8	29.9	58.9	576.1	2 557.2	3 986.2	6 548.2	407.4	397.0	434.8
	Corp. ownership or control	78	72	42.3	836.8	29.9	58.9	576.1	2 557.2	3 986.2	6 548.2	407.4	397.0	434.8
	Single unit companies, total	53	19	1.7	20.7	1.2	2.2	13.0	45.1	59.0	104.5	2.9	9.5	9.7
	Corp. ownership or control	51	19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	129	91	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2083	**Malt**	**40**	**27**	**1.6**	**27.4**	**1.2**	**2.5**	**20.0**	**101.4**	**377.7**	**499.3**	**39.6**	**183.0**	**134.2**
	Type of organization:													
	Multiunit companies, total	29	23	1.4	24.3	1.1	2.2	17.7	95.8	350.5	466.5	38.8	174.4	125.4
	Corp. ownership or control	25	20	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	11	4	0.2	3.1	0.2	0.3	2.3	5.6	27.2	32.8	0.8	8.6	8.8
	Corp. ownership or control	11	4	0.2	3.1	0.2	0.3	2.3	5.6	27.2	32.8	0.8	8.6	8.8
	Corporate	36	24	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Noncorporate, total	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2084	**Wines, Brandy, and Brandy Spirits**	**269**	**76**	**9.2**	**134.1**	**5.4**	**10.5**	**69.6**	**510.4**	**893.8**	**1 362.5**	**51.1**	**513.5**	**559.5**
	Type of organization:													
	Multiunit companies, total	88	57	7.5	110.2	4.4	8.6	57.7	415.8	783.0	1 162.8	45.6	441.9	479.8
	Corp. ownership or control	78	54	7.0	102.6	4.2	8.1	53.6	382.0	728.7	1 081.6	(D)	409.9	441.1
	Noncorporate ownership	10	3	0.5	7.6	0.3	0.6	4.2	33.8	54.3	81.2	(D)	31.9	38.6
	Single unit companies, total	181	19	1.7	23.9	1.0	1.8	11.9	94.7	110.8	199.7	5.5	71.6	79.8
	Corp. ownership or control	129	17	1.5	21.2	0.9	1.6	10.3	78.3	96.2	171.4	4.6	57.5	63.0
	Noncorporate ownership	52	2	0.2	2.7	0.1	0.2	1.6	16.3	14.6	28.3	0.9	14.1	16.8
	Legal form of organization:													
	Corporate	207	71	8.5	123.8	5.0	9.7	63.8	460.3	825.0	1 253.0	49.2	467.5	504.1
	Noncorporate, total	62	5	0.7	10.3	0.4	0.8	5.8	50.2	68.8	109.5	2.0	46.0	55.4
	Individual	16	–	(Z)	0.4	(Z)	(Z)	0.2	1.4	2.0	3.4	0.1	1.5	1.5
	Partnership	29	–	0.1	1.1	0.1	0.1	0.6	4.6	6.0	10.3	0.7	4.3	4.7
	Other and unknown	17	5	0.6	8.8	0.3	0.7	5.0	44.1	60.8	95.9	1.2	40.2	49.3

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS**—Con.													
2085	**Distilled Liquor, Except Brandy**	**104**	**77**	**15.7**	**232.1**	**12.0**	**23.8**	**168.1**	**[3]1 149.7**	**1 163.0**	**[3]2 296.1**	**36.3**	**996.6**	**1 027.9**
	Type of organization:													
	Multiunit companies, total	66	62	14.5	217.5	11.2	22.3	159.5	[3]1 090.2	1 056.3	[3]2 130.1	35.1	957.0	989.0
	Corp. ownership or control	66	62	14.5	217.5	11.2	22.3	159.5	[3]1 090.2	1 056.3	[3]2 130.1	35.1	957.0	989.0
	Single unit companies, total	38	15	1.2	14.5	0.8	1.6	8.6	[3]59.5	106.8	[3]166.0	1.2	39.6	38.9
	Corp. ownership or control	35	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	101	77	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2086	**Bottled and Canned Soft Drinks**	**2 192**	**1 286**	**114.1**	**1 448.8**	**43.4**	**89.3**	**444.8**	**4 084.5**	**5 958.6**	**10 007.2**	**423.6**	**467.2**	**551.7**
	Type of organization:													
	Multiunit companies, total	778	674	77.4	1 018.8	29.1	60.8	317.8	2 993.0	4 188.0	7 155.1	314.7	331.2	393.2
	Corp. ownership or control	768	666	76.8	1 011.9	28.8	60.3	315.5	2 980.0	4 117.9	7 072.3	313.4	327.3	388.3
	Noncorporate ownership	10	8	0.6	6.9	0.2	0.5	2.3	12.9	70.1	82.8	1.3	3.8	5.0
	Single unit companies, total	1 414	612	36.7	430.0	14.4	28.6	127.0	1 091.6	1 770.6	2 852.0	108.9	136.1	158.5
	Corp. ownership or control	1 220	577	34.0	399.9	13.1	26.1	115.8	1 007.8	1 543.8	2 545.6	103.4	119.3	135.7
	Noncorporate ownership	194	35	2.7	30.1	1.2	2.5	11.2	83.7	226.8	306.5	5.5	16.8	22.8
	Legal form of organization:													
	Corporate	1 988	1 243	110.8	1 411.8	42.0	86.3	431.3	3 987.9	5 661.6	9 617.9	416.7	446.6	524.0
	Noncorporate, total	204	43	3.3	37.0	1.5	3.0	13.6	96.7	296.9	389.3	6.8	20.6	27.8
	Individual	96	5	0.5	5.5	0.2	0.4	1.6	14.4	22.5	35.6	1.2	5.3	7.4
	Partnership	81	22	1.7	18.1	0.7	1.4	6.1	50.0	77.3	126.4	3.2	6.0	7.1
	Other and unknown	27	16	1.1	13.4	0.6	1.2	5.9	32.3	197.1	227.4	2.4	9.3	13.3
2087	**Flavoring Extracts and Sirups, N.E.C.**	**368**	**132**	**10.5**	**149.1**	**6.3**	**12.9**	**77.1**	**1 452.6**	**1 069.0**	**2 511.3**	**33.1**	**193.1**	**222.1**
	Type of organization:													
	Multiunit companies, total	118	75	6.8	100.6	4.1	8.4	56.0	1 282.4	876.1	2 149.7	27.0	161.4	186.0
	Corp. ownership or control	118	75	6.8	100.6	4.1	8.4	56.0	1 282.4	876.1	2 149.7	27.0	161.4	186.0
	Single unit companies, total	250	57	3.8	48.5	2.2	4.5	21.1	170.2	192.9	361.7	6.0	31.7	36.1
	Corp. ownership or control	227	57	3.7	48.0	2.2	4.4	20.9	167.3	190.0	355.8	6.0	30.6	35.0
	Noncorporate ownership	23	–	(Z)	0.4	(Z)	(Z)	0.2	2.9	2.9	5.9	0.1	1.2	1.1
	Legal form of organization:													
	Corporate	345	132	10.5	148.6	6.3	12.8	76.9	1 449.7	1 066.1	2 505.5	33.0	191.9	221.0
	Noncorporate, total	23	–	(Z)	0.4	(Z)	(Z)	0.2	2.9	2.9	5.9	0.1	1.2	1.1
	Individual	15	–	(Z)	0.2	(Z)	(Z)	0.1	1.7	1.4	3.2	(Z)	0.2	0.2
	Partnership	7	–	(Z)	0.2	(Z)	(Z)	0.1	1.1	1.5	2.7	(Z)	0.9	0.8
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2091	**Canned and Cured Seafoods**	**255**	**118**	**16.0**	**147.0**	**13.8**	**25.0**	**113.4**	**[3]441.0**	**1 000.4**	**[3]1 440.6**	**28.1**	**256.6**	**311.1**
	Type of organization:													
	Multiunit companies, total	96	75	13.2	123.8	11.5	21.0	96.4	[3]383.2	868.5	[3]1 250.9	24.0	221.4	269.5
	Corp. ownership or control	96	75	13.2	123.8	11.5	21.0	96.4	[3]383.2	868.5	[3]1 250.9	24.0	221.4	269.5
	Single unit companies, total	159	43	2.8	23.2	2.4	3.9	16.9	[3]57.8	131.9	[3]189.6	4.2	35.2	41.6
	Corp. ownership or control	113	38	2.4	20.8	2.0	3.4	15.0	[3]49.9	114.0	[3]163.8	3.7	31.0	36.5
	Noncorporate ownership	46	5	0.4	2.4	0.4	0.5	1.9	[3]8.0	17.9	[3]25.8	0.4	4.2	5.1
	Legal form of organization:													
	Corporate	209	113	15.6	144.6	13.5	24.5	111.5	[3]433.1	982.5	[3]1 414.8	27.7	252.4	306.0
	Noncorporate, total	46	5	0.4	2.4	0.4	0.5	1.9	[3]8.0	17.9	[3]25.8	0.4	4.2	5.1
	Individual	32	2	0.2	1.4	0.2	0.3	1.1	[3]5.6	9.2	[3]14.7	0.2	2.3	2.3
	Partnership	11	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2092	**Fresh or Frozen Packaged Fish**	**990**	**406**	**34.3**	**260.8**	**29.6**	**49.7**	**188.9**	**[3]705.5**	**1 958.2**	**[3]2 664.9**	**56.8**	**313.3**	**376.7**
	Type of organization:													
	Multiunit companies, total	200	149	17.2	135.8	14.8	25.1	100.5	[3]400.3	1 076.5	[3]1 478.1	35.4	181.0	229.3
	Corp. ownership or control	198	148	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	790	257	17.1	125.0	14.7	24.7	88.4	[3]305.3	881.7	[3]1 186.8	21.5	132.2	147.3
	Corp. ownership or control	310	143	10.1	74.6	8.7	14.1	52.0	[3]167.8	500.1	[3]667.5	12.3	69.0	79.5
	Noncorporate ownership	480	114	7.0	50.3	6.0	10.6	36.3	[3]137.5	381.7	[3]519.3	9.2	63.2	67.9
	Legal form of organization:													
	Corporate	508	291	27.2	210.1	23.5	39.1	152.4	[3]567.4	1 575.9	[3]2 144.4	47.6	250.0	308.7
	Noncorporate, total	482	115	7.0	50.6	6.0	10.6	36.5	[3]138.1	382.3	[3]520.5	9.2	63.3	67.9
	Individual	435	105	6.4	46.3	5.5	9.7	33.3	[3]131.3	368.1	[3]499.5	8.8	61.3	65.4
	Partnership	33	6	0.4	2.8	0.3	0.6	2.1	[3]3.4	8.1	[3]11.4	0.2	1.1	1.2
	Other and unknown	14	4	0.2	1.5	0.2	0.3	1.1	[3]3.5	6.1	[3]9.6	0.2	0.9	1.4
2095	**Roasted Coffee**	**167**	**89**	**10.9**	**164.8**	**7.2**	**15.0**	**103.2**	**988.0**	**4 643.4**	**5 616.4**	**41.9**	**383.9**	**405.3**
	Type of organization:													
	Multiunit companies, total	75	61	9.0	138.5	6.3	13.1	94.6	902.2	4 325.8	5 213.7	36.3	348.0	367.7
	Corp. ownership or control	75	61	9.0	138.5	6.3	13.1	94.6	902.2	4 325.8	5 213.7	36.3	348.0	367.7
	Single unit companies, total	92	28	1.9	26.3	0.9	1.9	8.6	85.8	317.6	402.7	5.6	35.8	37.6
	Corp. ownership or control	83	28	1.9	26.0	0.9	1.9	8.5	84.2	313.9	397.4	5.6	35.4	37.2
	Noncorporate ownership	9	–	(Z)	0.2	(Z)	(Z)	0.1	1.6	3.7	5.3	(Z)	0.4	0.4

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
20	**FOOD AND KINDRED PRODUCTS**—Con.													
2095	**Roasted Coffee**—Con.													
	Legal form of organization:													
	Corporate	158	89	10.9	164.6	7.2	15.0	103.1	986.4	4 639.7	5 611.1	41.8	383.5	404.9
	Noncorporate, total	9	–	(Z)	0.2	(Z)	(Z)	0.1	1.6	3.7	5.3	(Z)	0.4	0.4
	Individual	4	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.6	0.8	(Z)	0.1	0.1
	Partnership	5	–	(Z)	0.2	(Z)	(Z)	0.1	1.4	3.2	4.5	(Z)	0.3	0.3
2097	**Manufactured Ice**	**678**	**63**	**5.3**	**47.8**	**3.5**	**6.7**	**25.5**	**106.1**	**43.6**	**149.4**	**16.9**	**3.3**	**4.4**
	Type of organization:													
	Multiunit companies, total	208	41	2.7	26.0	1.8	3.5	13.8	56.5	23.0	79.4	7.2	1.9	1.9
	Corp. ownership or control	207	41	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	470	22	2.6	21.8	1.7	3.2	11.8	49.6	20.6	70.0	9.7	1.4	2.4
	Corp. ownership or control	325	17	2.0	17.4	1.3	2.6	9.4	38.5	16.4	54.9	6.8	1.1	2.1
	Noncorporate ownership	145	5	0.6	4.4	0.4	0.7	2.4	11.1	4.1	15.2	2.9	0.3	0.3
	Legal form of organization:													
	Corporate	532	58	4.7	43.3	3.1	6.0	23.1	94.9	39.4	134.1	14.0	3.0	4.0
	Noncorporate, total	146	5	0.6	4.5	0.4	0.7	2.4	11.2	4.2	15.3	2.9	0.3	0.3
	Individual	93	–	0.2	1.9	0.2	0.3	1.0	5.6	2.2	7.7	0.9	0.1	0.2
	Partnership	46	4	0.3	2.2	0.2	0.3	1.2	4.8	1.7	6.5	1.8	0.1	0.2
	Other and unknown	7	1	(Z)	0.4	(Z)	0.1	0.2	0.8	0.3	1.1	0.2	(Z)	(Z)
2098	**Macaroni and Spaghetti**	**205**	**68**	**8.2**	**96.0**	**5.7**	**12.3**	**56.5**	**327.0**	**337.1**	**662.0**	**12.6**	**45.1**	**48.4**
	Type of organization:													
	Multiunit companies, total	37	31	4.5	58.0	3.1	6.6	33.9	210.1	210.9	420.7	8.1	30.8	32.0
	Corp. ownership or control	37	31	4.5	58.0	3.1	6.6	33.9	210.1	210.9	420.7	8.1	30.8	32.0
	Single unit companies, total	168	37	3.7	38.0	2.7	5.7	22.6	116.9	126.2	241.3	4.5	14.3	16.4
	Corp. ownership or control	119	34	3.4	34.7	2.5	5.3	20.8	104.3	116.0	218.4	4.0	12.9	15.0
	Noncorporate ownership	49	3	0.3	3.3	0.2	0.4	1.8	12.7	10.2	22.9	0.5	1.4	1.4
	Legal form of organization:													
	Corporate	156	65	7.9	92.7	5.5	11.9	54.7	314.3	326.9	639.1	12.1	43.7	47.0
	Noncorporate, total	49	3	0.3	3.3	0.2	0.4	1.8	12.7	10.2	22.9	0.5	1.4	1.4
	Individual	30	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	17	2	0.2	2.1	0.1	0.3	1.2	8.6	5.7	14.3	0.2	0.8	0.9
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2099	**Food Preparations, N.E.C.**	**2 117**	**669**	**71.5**	**792.6**	**50.9**	**97.7**	**484.1**	**3 028.1**	**3 499.2**	**6 531.0**	**166.2**	**509.4**	**534.1**
	Type of organization:													
	Multiunit companies, total	524	362	49.0	573.0	34.6	68.5	362.8	2 459.7	2 731.7	5 198.9	123.4	419.4	434.7
	Corp. ownership or control	509	353	48.3	566.7	34.1	67.5	358.3	2 420.7	2 689.3	5 115.9	122.5	410.4	426.7
	Noncorporate ownership	15	9	0.7	6.3	0.6	1.0	4.4	39.0	42.5	83.0	0.9	9.0	8.0
	Single unit companies, total	1 593	307	22.5	219.6	16.3	29.2	121.3	568.4	767.4	1 332.1	42.8	90.0	99.4
	Corp. ownership or control	1 112	285	20.0	199.0	14.4	26.3	107.9	509.6	695.8	1 202.1	39.4	79.2	87.7
	Noncorporate ownership	481	22	2.5	20.5	1.9	2.9	13.4	58.9	71.6	130.0	3.3	10.8	11.7
	Legal form of organization:													
	Corporate	1 621	638	68.3	765.8	48.4	93.9	466.2	2 930.3	3 385.0	6 318.0	161.9	489.5	514.4
	Noncorporate, total	496	31	3.2	26.8	2.5	3.9	17.8	97.8	114.1	213.0	4.2	19.8	19.7
	Individual	319	13	1.5	11.5	1.2	1.7	7.3	31.0	37.1	67.9	1.6	4.8	5.2
	Partnership	135	8	0.9	7.8	0.7	1.0	5.2	21.9	27.4	49.0	1.5	4.0	4.5
	Other and unknown	42	10	0.9	7.6	0.7	1.2	5.3	44.9	49.6	96.1	1.2	11.1	10.0
21	**TOBACCO PRODUCTS**	**228**	**123**	**60.6**	**750.7**	**50.4**	**92.6**	**570.7**	**[3]4 334.1**	**4 729.8**	**[3]9 050.6**	**181.5**	**3 615.2**	**3 711.9**
	Type of organization:													
	Multiunit companies, total	118	103	58.0	733.0	48.1	88.4	557.4	[3]4 285.8	4 676.3	[3]8 950.0	176.3	3 598.5	3 688.1
	Corp. ownership or control	118	103	58.0	733.0	48.1	88.4	557.4	[3]4 285.8	4 676.3	[3]8 950.0	176.3	3 598.5	3 688.1
	Single unit companies, total	110	20	2.6	17.8	2.3	4.2	13.3	[3]48.3	53.5	[3]100.6	5.2	16.7	23.8
	Corp. ownership or control	76	19	2.5	17.0	2.2	4.0	12.7	[3]46.1	51.9	[3]96.8	(D)	15.9	22.9
	Noncorporate ownership	34	1	0.1	0.8	0.1	0.2	0.6	[3]2.3	1.6	[3]3.8	(D)	0.8	1.0
	Legal form of organization:													
	Corporate	194	122	60.5	749.9	50.3	92.4	570.0	[3]4 331.8	4 728.2	[3]9 046.8	181.3	3 614.4	3 711.0
	Noncorporate, total	34	1	0.1	0.8	0.1	0.2	0.6	[3]2.3	1.6	[3]3.8	0.2	0.8	1.0
	Individual	27	–	0.1	0.5	0.1	0.1	0.4	[3]1.1	1.0	[3]2.1	(D)	0.4	0.4
	Partnership	5	1	0.1	0.4	0.1	0.1	0.3	[3]1.2	0.6	[3]1.8	(D)	0.4	0.5
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
2111	**Cigarettes**	**14**	**13**	**39.0**	**567.7**	**32.5**	**58.9**	**442.0**	**[3]3 803.1**	**2 573.5**	**[3]6 377.4**	**118.0**	**2 564.7**	**2 652.2**
	Type of organization:													
	Multiunit companies, total	12	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	12	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	14	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
2121	**Cigars**	**101**	**34**	**7.7**	**54.9**	**7.0**	**12.7**	**44.0**	**[3]125.6**	**117.8**	**[3]242.7**	**3.3**	**54.9**	**57.8**
	Type of organization:													
	Multiunit companies, total	22	21	6.2	44.6	5.6	10.1	36.4	[3]106.3	97.6	[3]203.3	3.0	46.3	48.5
	Corp. ownership or control	22	21	6.2	44.6	5.6	10.1	36.4	[3]106.3	97.6	[3]203.3	3.0	46.3	48.5
	Single unit companies, total	79	13	1.6	10.3	1.4	2.5	7.7	[3]19.2	20.2	[3]39.4	0.3	8.6	9.2
	Corp. ownership or control	48	12	1.5	9.5	1.3	2.3	7.1	[3]17.1	18.8	[3]35.9	0.1	7.9	8.4
	Noncorporate ownership	31	1	0.1	0.8	0.1	0.2	0.6	[3]2.1	1.4	[3]3.5	0.2	0.7	0.9

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
21	**TOBACCO PRODUCTS**—Con.													
2121	**Cigars**—Con.													
	Legal form of organization:													
	Corporate	70	33	7.6	54.1	6.9	12.5	43.4	[3]123.5	116.4	[3]239.2	3.2	54.2	56.9
	Noncorporate, total	31	1	0.1	0.8	0.1	0.2	0.6	[3]2.1	1.4	[3]3.5	0.2	0.7	0.9
	Individual	25	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
2131	**Chewing and Smoking Tobacco**	**35**	**19**	**3.2**	**32.1**	**2.5**	**4.4**	**22.0**	**[3]188.9**	**166.4**	**[3]354.3**	**7.3**	**94.7**	**99.8**
	Type of organization:													
	Multiunit companies, total	18	17	2.7	29.1	2.1	3.8	19.8	[3]175.7	155.7	[3]330.7	(D)	91.0	91.5
	Corp. ownership or control	18	17	2.7	29.1	2.1	3.8	19.8	[3]175.7	155.7	[3]330.7	(D)	91.0	91.5
	Single unit companies, total	17	2	0.4	3.0	0.4	0.6	2.3	[3]13.3	10.7	[3]23.6	(D)	3.7	8.2
	Corp. ownership or control	14	2	0.4	3.0	0.4	0.6	2.2	[3]13.1	10.6	[3]23.3	(D)	3.7	8.2
	Noncorporate ownership	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	[3]0.2	0.1	[3]0.3	(D)	0.1	0.1
	Legal form of organization:													
	Corporate	32	19	3.2	32.0	2.5	4.4	22.0	[3]188.8	166.3	[3]354.0	(D)	94.6	99.7
	Noncorporate, total	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	[3]0.2	0.1	[3]0.3	(D)	0.1	0.1
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2141	**Tobacco Stemming and Redrying**	**78**	**57**	**10.7**	**96.1**	**8.4**	**16.6**	**62.6**	**[3]216.5**	**1 872.1**	**[3]2 076.2**	**52.8**	**900.9**	**902.2**
	Type of organization:													
	Multiunit companies, total	66	53	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	66	53	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	12	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	12	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	78	57	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
22	**TEXTILE MILL PRODUCTS**	**7 202**	**4 131**	**875.7**	**7 881.4**	**764.6**	**1 523.1**	**6 202.8**	**16 104.5**	**24 753.2**	**40 550.5**	**1 223.5**	**5 103.5**	**5 509.9**
	Type of organization:													
	Multiunit companies, total	2 422	2 161	693.2	6 333.3	605.3	1 214.4	5 024.4	13 234.2	21 086.5	34 044.3	1 020.8	4 369.0	4 726.2
	Corp. ownership or control	2 414	2 155	690.7	6 311.9	603.2	1 210.3	5 009.0	13 203.5	21 039.7	33 968.7	(D)	4 357.9	4 712.5
	Noncorporate ownership	8	6	2.5	21.4	2.1	4.1	15.4	30.7	46.8	75.6	(D)	11.1	13.7
	Single unit companies, total	4 780	1 970	182.5	1 548.1	159.3	308.6	1 178.4	2 870.4	3 666.7	6 506.2	202.6	734.5	783.7
	Corp. ownership or control	4 048	1 890	174.8	1 489.3	152.5	296.2	1 133.3	2 748.6	3 543.1	6 263.0	(D)	704.3	750.7
	Noncorporate ownership	732	80	7.7	58.8	6.8	12.4	45.1	121.8	123.5	243.2	(D)	30.2	33.0
	Legal form of organization:													
	Corporate	6 462	4 045	865.5	7 801.2	755.7	1 506.5	6 142.3	15 952.0	24 582.8	40 231.7	1 209.2	5 062.2	5 463.2
	Noncorporate, total	740	86	10.2	80.1	8.9	16.5	60.5	152.5	170.4	318.8	14.3	41.3	46.7
	Individual	427	35	3.7	27.0	3.2	5.9	21.0	50.0	47.6	96.9	(D)	10.1	11.8
	Partnership	220	38	3.5	27.9	3.1	5.7	20.9	63.6	66.8	127.7	(D)	15.8	18.9
	Other and unknown	93	13	3.0	25.3	2.6	5.0	18.5	38.9	56.0	94.1	6.6	15.4	16.0
2211	**Weaving Mills, Cotton**	**314**	**192**	**117.2**	**1 046.8**	**107.2**	**214.3**	**902.0**	**1 944.5**	**2 579.8**	**4 431.2**	**187.2**	**553.9**	**657.8**
	Type of organization:													
	Multiunit companies, total	180	167	111.4	998.8	101.9	203.9	862.2	1 854.8	2 467.7	4 236.6	177.5	528.9	625.6
	Corp. ownership or control	178	165	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	134	25	5.7	48.0	5.2	10.4	39.8	89.7	112.2	194.6	9.6	25.0	32.2
	Corp. ownership or control	96	24	5.6	46.8	5.1	10.2	38.8	87.1	109.1	188.9	9.5	24.1	31.3
	Noncorporate ownership	38	1	0.1	1.2	0.1	0.3	1.0	2.6	3.1	5.7	0.1	0.9	0.9
	Legal form of organization:													
	Corporate	274	189	115.9	1 036.0	106.0	212.1	892.8	1 932.6	2 553.3	4 393.8	(D)	549.7	652.4
	Noncorporate, total	40	3	1.2	10.8	1.2	2.2	9.2	11.9	26.5	37.4	(D)	4.2	5.4
	Individual	21	–	0.1	0.6	0.1	0.1	0.6	1.3	1.5	2.8	0.1	0.4	0.4
	Partnership	17	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221	**Weaving Mills, Manmade Fiber and Silk**	**449**	**351**	**151.0**	**1 428.7**	**134.6**	**275.4**	**1 168.7**	**2 790.9**	**3 574.5**	**6 325.9**	**260.2**	**834.8**	**871.0**
	Type of organization:													
	Multiunit companies, total	297	286	142.5	1 351.8	127.2	259.9	1 106.6	2 643.1	3 403.8	6 008.8	251.9	794.3	829.2
	Corp. ownership or control	297	286	142.5	1 351.8	127.2	259.9	1 106.6	2 643.1	3 403.8	6 008.8	251.9	794.3	829.2
	Single unit companies, total	152	65	8.5	76.9	7.5	15.4	62.1	147.7	170.6	317.1	8.4	40.6	41.8
	Corp. ownership or control	124	61	8.2	74.4	7.2	14.9	60.1	137.1	163.7	300.0	7.6	39.5	40.2
	Noncorporate ownership	28	4	0.3	2.5	0.2	0.5	2.1	10.7	7.0	17.2	0.8	1.1	1.6
	Legal form of organization:													
	Corporate	421	347	150.7	1 426.2	134.4	274.8	1 166.6	2 780.2	3 567.5	6 308.8	259.4	833.8	869.4
	Noncorporate, total	28	4	0.3	2.5	0.2	0.5	2.1	10.7	7.0	17.2	0.8	1.1	1.6
	Individual	19	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	7	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
2231	**Weaving and Finishing Mills, Wool**	**165**	**84**	**14.6**	**136.6**	**12.6**	**25.9**	**105.8**	**312.9**	**283.7**	**583.3**	**14.9**	**96.2**	**111.0**

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
22	**TEXTILE MILL PRODUCTS**—Con.													
2231	**Weaving and Finishing Mills, Wool**—Con.													
	Type of organization:													
	Multiunit companies, total	46	40	8.4	79.0	7.1	14.3	60.1	190.6	183.0	361.4	8.1	66.1	78.7
	Corp. ownership or control	46	40	8.4	79.0	7.1	14.3	60.1	190.6	183.0	361.4	8.1	66.1	78.7
	Single unit companies, total	119	44	6.2	57.6	5.6	11.7	45.7	122.3	100.7	221.9	6.8	30.1	32.4
	Corp. ownership or control	96	43	5.8	54.3	5.2	10.8	42.9	116.8	93.5	209.5	6.8	29.3	31.3
	Noncorporate ownership	23	1	0.4	3.3	0.4	0.8	2.8	5.5	7.2	12.4	0.1	0.8	1.0
	Legal form of organization:													
	Corporate	142	83	14.2	133.3	12.2	25.1	103.0	307.4	276.5	570.9	14.9	95.4	110.0
	Noncorporate, total	23	1	0.4	3.3	0.4	0.8	2.8	5.5	7.2	12.4	0.1	0.8	1.0
	Individual	11	–	(Z)	0.4	(Z)	0.1	0.3	0.9	0.9	1.8	(Z)	0.2	0.2
	Partnership	8	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2241	**Narrow Fabric Mills**	**335**	**182**	**20.8**	**171.6**	**18.1**	**35.7**	**130.9**	**350.8**	**333.9**	**682.9**	**16.2**	**106.1**	**109.3**
	Type of organization:													
	Multiunit companies, total	116	97	14.1	115.4	12.2	24.1	88.0	244.5	236.1	479.9	10.2	77.2	78.2
	Corp. ownership or control	116	97	14.1	115.4	12.2	24.1	88.0	244.5	236.1	479.9	10.2	77.2	78.2
	Single unit companies, total	219	85	6.7	56.2	5.9	11.5	42.8	106.3	97.8	203.0	5.9	29.0	31.2
	Corp. ownership or control	195	82	6.3	52.5	5.5	10.8	40.2	99.9	92.9	192.1	(D)	27.0	28.6
	Noncorporate ownership	24	3	0.4	3.6	0.4	0.7	2.6	6.4	4.9	11.0	(D)	2.0	2.5
	Legal form of organization:													
	Corporate	311	179	20.4	168.0	17.7	34.9	128.3	344.4	329.0	672.0	(D)	104.2	106.8
	Noncorporate, total	24	3	0.4	3.6	0.4	0.7	2.6	6.4	4.9	11.0	(D)	2.0	2.5
	Individual	12	–	(Z)	0.3	(Z)	0.1	0.2	0.5	0.6	1.1	(Z)	0.2	0.2
	Partnership	11	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2251	**Women's Hosiery, Except Socks**	**200**	**119**	**26.6**	**191.3**	**23.8**	**44.1**	**156.6**	**457.0**	**415.5**	**871.2**	**16.6**	**119.8**	**122.9**
	Type of organization:													
	Multiunit companies, total	60	52	19.4	144.0	17.3	32.8	118.1	385.7	330.8	715.4	12.3	98.8	100.7
	Corp. ownership or control	60	52	19.4	144.0	17.3	32.8	118.1	385.7	330.8	715.4	12.3	98.8	100.7
	Single unit companies, total	140	67	7.2	47.3	6.5	11.3	38.5	71.3	84.7	155.8	4.2	21.0	22.1
	Corp. ownership or control	118	66	7.0	45.9	6.3	11.1	37.4	69.2	82.5	151.5	4.1	20.2	21.4
	Noncorporate ownership	22	1	0.2	1.4	0.2	0.2	1.2	2.1	2.3	4.3	0.1	0.7	0.7
	Legal form of organization:													
	Corporate	178	118	26.4	189.9	23.7	43.9	155.5	455.0	413.2	866.9	16.4	119.0	122.1
	Noncorporate, total	22	1	0.2	1.4	0.2	0.2	1.2	2.1	2.3	4.3	0.1	0.7	0.7
	Individual	18	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2252	**Hosiery, N.E.C.**	**415**	**257**	**32.2**	**218.7**	**29.0**	**52.6**	**179.4**	**401.5**	**525.1**	**921.3**	**14.8**	**118.8**	**127.3**
	Type of organization:													
	Multiunit companies, total	74	71	15.7	112.1	14.3	27.0	94.0	225.7	273.9	496.3	8.3	70.0	74.7
	Corp. ownership or control	74	71	15.7	112.1	14.3	27.0	94.0	225.7	273.9	496.3	8.3	70.0	74.7
	Single unit companies, total	341	186	16.5	106.5	14.7	25.6	85.4	175.9	251.2	425.0	6.6	48.8	52.6
	Corp. ownership or control	260	173	15.3	99.0	13.8	23.9	79.6	160.0	233.1	391.2	6.1	45.3	48.7
	Noncorporate ownership	81	13	1.1	7.5	1.0	1.7	5.8	15.9	18.1	33.7	0.5	3.5	3.9
	Legal form of organization:													
	Corporate	334	244	31.1	211.2	28.0	50.9	173.7	385.6	507.0	887.5	14.3	115.3	123.5
	Noncorporate, total	81	13	1.1	7.5	1.0	1.7	5.8	15.9	18.1	33.7	0.5	3.5	3.9
	Individual	59	10	0.9	5.9	0.8	1.4	4.8	12.8	14.5	27.1	0.4	2.6	3.0
	Partnership	17	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2253	**Knit Outerwear Mills**	**953**	**551**	**73.0**	**582.0**	**62.7**	**114.0**	**422.0**	**1 159.5**	**1 207.1**	**2 335.9**	**49.9**	**342.5**	**393.4**
	Type of organization:													
	Multiunit companies, total	145	119	37.9	308.6	31.7	58.2	213.6	680.3	782.2	1 439.9	25.0	243.9	282.4
	Corp. ownership or control	144	118	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	808	432	35.1	273.4	31.0	55.8	208.4	479.2	424.9	896.0	24.9	98.6	111.0
	Corp. ownership or control	704	404	33.1	260.9	29.3	53.1	198.7	458.0	408.9	859.0	24.2	93.8	105.9
	Noncorporate ownership	104	28	1.9	12.5	1.7	2.7	9.7	21.3	16.0	37.0	0.8	4.8	5.2
	Legal form of organization:													
	Corporate	848	522	69.9	559.4	60.1	109.4	406.2	1 118.7	1 173.3	2 262.5	48.6	331.0	379.8
	Noncorporate, total	105	29	3.1	22.6	2.6	4.5	15.8	40.8	33.7	73.4	1.4	11.5	13.6
	Individual	55	14	1.0	6.2	0.9	1.4	4.8	10.6	6.4	16.7	0.5	1.6	2.2
	Partnership	31	9	0.6	4.1	0.6	0.8	3.2	7.5	7.1	14.5	0.1	2.1	2.2
	Other and unknown	19	6	1.5	12.3	1.2	2.3	7.8	22.8	20.3	42.2	0.7	7.8	9.2
2254	**Knit Underwear Mills**	**92**	**74**	**25.2**	**175.2**	**23.4**	**42.7**	**151.8**	**305.7**	**353.1**	**648.9**	**14.5**	**116.8**	**131.3**
	Type of organization:													
	Multiunit companies, total	53	50	23.3	162.5	21.6	39.4	141.7	282.9	336.3	609.8	13.9	109.9	123.8
	Corp. ownership or control	52	49	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	39	24	2.0	12.7	1.8	3.3	10.1	22.8	16.9	39.1	0.6	6.9	7.6
	Corp. ownership or control	31	22	1.9	12.2	1.7	3.2	9.7	22.2	16.4	38.1	(D)	6.6	7.3
	Noncorporate ownership	8	2	0.1	0.5	0.1	0.1	0.4	0.5	0.5	1.0	(D)	0.3	0.2

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
22	**TEXTILE MILL PRODUCTS**—Con.													
2254	**Knit Underwear Mills**—Con.													
	Legal form of organization:													
	Corporate	83	71	25.0	174.1	23.2	42.3	150.8	305.1	350.9	646.0	14.4	116.1	130.8
	Noncorporate, total	9	3	0.2	1.2	0.2	0.3	1.0	0.5	2.2	2.9	(Z)	0.8	0.6
	Individual	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	0.1	0.3	0.1	0.1	0.3	0.5	0.4	0.9	(D)	0.2	0.2
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2257	**Circular Knit Fabric Mills**	**530**	**310**	**51.8**	**493.0**	**44.0**	**88.2**	**371.2**	**1 033.5**	**2 141.1**	**3 169.4**	**91.6**	**307.2**	**316.2**
	Type of organization:													
	Multiunit companies, total	188	157	36.4	350.2	30.8	61.4	262.4	757.6	1 729.3	2 484.5	62.5	249.5	254.8
	Corp. ownership or control	186	156	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	342	153	15.3	142.8	13.2	26.8	108.8	275.9	411.8	684.9	29.1	57.8	61.4
	Corp. ownership or control	313	147	14.7	137.2	12.6	25.8	104.6	263.6	403.2	664.0	28.5	56.5	60.1
	Noncorporate ownership	29	6	0.6	5.6	0.5	1.0	4.2	12.3	8.6	20.9	0.6	1.3	1.4
	Legal form of organization:													
	Corporate	499	303	51.1	487.0	43.4	87.1	366.8	1 020.6	2 131.6	3 147.0	90.9	305.8	314.8
	Noncorporate, total	31	7	0.6	6.0	0.6	1.1	4.4	13.0	9.4	22.4	0.7	1.5	1.5
	Individual	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	7	4	0.1	1.6	0.1	0.2	0.9	2.6	2.2	4.9	(Z)	0.3	0.3
	Other and unknown	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2258	**Warp Knit Fabric Mills**	**235**	**153**	**23.7**	**226.7**	**20.0**	**41.9**	**169.8**	**464.8**	**963.9**	**1 427.6**	**56.3**	**198.8**	**209.0**
	Type of organization:													
	Multiunit companies, total	90	78	18.5	177.5	15.6	33.2	133.4	375.0	839.0	1 213.8	48.6	174.8	183.5
	Corp. ownership or control	89	77	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	145	75	5.1	49.2	4.4	8.7	36.4	89.8	124.9	213.7	7.7	24.0	25.5
	Corp. ownership or control	130	73	5.0	48.5	4.3	8.6	35.9	89.1	123.0	211.1	7.6	23.8	25.3
	Noncorporate ownership	15	2	0.1	0.7	0.1	0.1	0.5	0.7	1.9	2.6	0.1	0.2	0.1
	Legal form of organization:													
	Corporate	219	150	23.5	225.5	19.9	41.7	169.0	462.9	958.9	1 420.7	56.2	198.3	208.5
	Noncorporate, total	16	3	0.2	1.3	0.1	0.2	0.8	1.9	5.0	6.9	0.1	0.5	0.5
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	2	0.1	0.7	0.1	0.1	0.4	0.6	1.9	2.5	(D)	0.1	0.1
	Other and unknown	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2259	**Knitting Mills, N.E.C.**	**192**	**47**	**3.4**	**24.1**	**3.1**	**6.0**	**19.0**	**40.9**	**54.8**	**95.7**	**1.5**	**14.8**	**15.2**
	Type of organization:													
	Multiunit companies, total	10	6	0.5	3.4	0.5	0.9	2.9	7.9	9.5	17.6	0.1	2.6	2.5
	Corp. ownership or control	10	6	0.5	3.4	0.5	0.9	2.9	7.9	9.5	17.6	0.1	2.6	2.5
	Single unit companies, total	182	41	2.9	20.7	2.6	5.1	16.1	33.0	45.3	78.1	1.4	12.2	12.7
	Corp. ownership or control	157	40	2.8	20.0	2.5	4.9	15.6	32.0	43.8	75.6	1.4	11.8	12.3
	Noncorporate ownership	25	1	0.1	0.7	0.1	0.2	0.6	1.0	1.5	2.5	(Z)	0.4	0.4
	Legal form of organization:													
	Corporate	167	46	3.3	23.4	3.0	5.8	18.5	39.9	53.3	93.2	1.5	14.4	14.8
	Noncorporate, total	25	1	0.1	0.7	0.1	0.2	0.6	1.0	1.5	2.5	(Z)	0.4	0.4
	Individual	16	1	0.1	0.5	0.1	0.2	0.4	0.6	1.0	1.7	(Z)	0.3	0.3
	Partnership	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2261	**Finishing Plants, Cotton**	**210**	**94**	**20.8**	**211.4**	**17.3**	**35.7**	**162.2**	**350.7**	**415.4**	**759.5**	**24.8**	**68.2**	**80.1**
	Type of organization:													
	Multiunit companies, total	58	45	16.7	168.3	13.9	28.8	129.7	275.6	336.2	605.3	19.6	52.1	62.8
	Corp. ownership or control	58	45	16.7	168.3	13.9	28.8	129.7	275.6	336.2	605.3	19.6	52.1	62.8
	Single unit companies, total	152	49	4.1	43.1	3.4	7.0	32.5	75.1	79.2	154.1	5.1	16.1	17.3
	Corp. ownership or control	121	48	3.9	41.1	3.2	6.6	30.8	72.9	77.7	150.5	5.0	15.9	17.0
	Noncorporate ownership	31	1	0.2	2.0	0.2	0.3	1.7	2.2	1.5	3.7	0.1	0.2	0.2
	Legal form of organization:													
	Corporate	179	93	20.6	209.3	17.1	35.4	160.4	348.6	413.9	755.8	24.7	67.9	79.8
	Noncorporate, total	31	1	0.2	2.0	0.2	0.3	1.7	2.2	1.5	3.7	0.1	0.2	0.2
	Individual	19	1	0.2	1.8	0.2	0.3	1.5	1.7	1.1	2.8	0.1	0.1	0.2
	Partnership	9	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2262	**Finishing Plants, Synthetics**	**285**	**189**	**37.2**	**396.2**	**30.4**	**63.7**	**293.4**	**792.0**	**1 619.0**	**2 404.3**	**75.9**	**258.4**	**266.5**
	Type of organization:													
	Multiunit companies, total	107	96	28.8	298.4	23.4	49.0	219.8	627.9	1 474.7	2 093.3	62.8	237.1	246.8
	Corp. ownership or control	107	96	28.8	298.4	23.4	49.0	219.8	627.9	1 474.7	2 093.3	62.8	237.1	246.8
	Single unit companies, total	178	93	8.4	97.8	7.0	14.7	73.6	164.1	144.3	311.0	13.1	21.3	19.7
	Corp. ownership or control	158	91	8.3	96.4	6.9	14.5	72.4	161.8	142.9	307.3	13.0	21.1	19.5
	Noncorporate ownership	20	2	0.1	1.5	0.1	0.2	1.2	2.3	1.4	3.6	0.1	0.2	0.3
	Legal form of organization:													
	Corporate	265	187	37.1	394.8	30.3	63.5	292.1	789.7	1 617.6	2 400.6	75.8	258.2	266.3
	Noncorporate, total	20	2	0.1	1.5	0.1	0.2	1.2	2.3	1.4	3.6	0.1	0.2	0.3
	Individual	12	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	7	1	0.1	0.9	0.1	0.1	0.7	1.4	0.9	2.3	(Z)	0.1	0.1
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
22	**TEXTILE MILL PRODUCTS—Con.**													
2269	**Finishing Plants, N.E.C.**	**183**	**112**	**14.1**	**132.3**	**12.1**	**24.1**	**98.4**	**274.0**	**560.9**	**830.6**	**24.6**	**70.1**	**88.0**
	Type of organization:													
	Multiunit companies, total	67	55	10.0	94.3	8.6	17.0	70.2	204.8	446.7	647.4	19.6	58.3	75.8
	Corp. ownership or control	66	55	10.0	94.3	8.6	17.0	70.2	204.8	446.7	647.4	19.6	58.3	75.8
	Noncorporate ownership	1	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
	Single unit companies, total	116	57	4.1	38.0	3.5	7.1	28.2	69.2	114.2	183.2	5.0	11.8	12.2
	Corp. ownership or control	106	56	4.0	37.5	3.5	7.0	27.9	68.1	113.0	181.0	4.9	11.6	12.1
	Noncorporate ownership	10	1	0.1	0.5	0.1	0.1	0.4	1.1	1.2	2.3	0.1	0.1	0.1
	Legal form of organization:													
	Corporate	172	111	14.0	131.8	12.0	24.0	98.1	272.9	559.8	828.3	24.6	69.9	87.8
	Noncorporate, total	11	1	0.1	0.5	0.1	0.1	0.4	1.1	1.2	2.3	0.1	0.1	0.1
	Individual	5	–	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.3	0.5	(Z)	0.1	0.1
	Partnership	5	1	(Z)	0.4	(Z)	0.1	0.3	0.9	0.9	1.7	(Z)	0.1	0.1
	Other and unknown	1	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
2271	**Woven Carpets and Rugs**	**71**	**16**	**2.8**	**24.8**	**2.5**	**4.7**	**20.0**	**47.1**	**93.8**	**138.7**	**1.1**	**23.9**	**26.9**
	Type of organization:													
	Multiunit companies, total	9	7	2.0	19.2	1.7	3.4	15.7	36.1	75.1	109.7	0.5	19.9	21.8
	Corp. ownership or control	9	7	2.0	19.2	1.7	3.4	15.7	36.1	75.1	109.7	0.5	19.9	21.8
	Single unit companies, total	62	9	0.8	5.6	0.7	1.3	4.3	11.0	18.8	29.0	0.6	4.0	5.1
	Corp. ownership or control	44	9	0.8	5.3	0.7	1.2	4.1	10.5	17.8	27.5	0.6	3.7	4.8
	Noncorporate ownership	18	–	(Z)	0.3	(Z)	0.1	0.2	0.5	1.0	1.5	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	53	16	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	18	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	13	–	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.9	1.4	(Z)	0.3	0.3
	Partnership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2272	**Tufted Carpets and Rugs**	**449**	**251**	**50.2**	**506.5**	**39.4**	**82.2**	**341.1**	**1 438.2**	**3 113.1**	**4 520.7**	**78.7**	**644.1**	**696.8**
	Type of organization:													
	Multiunit companies, total	136	123	39.4	403.8	30.9	64.8	277.4	1 163.0	2 571.2	3 706.4	58.4	531.6	580.0
	Corp. ownership or control	136	123	39.4	403.8	30.9	64.8	277.4	1 163.0	2 571.2	3 706.4	58.4	531.6	580.0
	Single unit companies, total	313	128	10.8	102.7	8.5	17.4	63.6	275.1	541.9	814.3	20.3	112.5	116.8
	Corp. ownership or control	273	125	10.3	98.1	8.1	16.5	60.7	258.7	520.5	775.9	18.5	107.1	112.1
	Noncorporate ownership	40	3	0.5	4.6	0.4	0.9	2.9	16.4	21.4	38.4	1.8	5.4	4.7
	Legal form of organization:													
	Corporate	409	248	49.7	501.9	39.0	81.3	338.1	1 421.7	3 091.7	4 482.3	76.9	638.7	692.1
	Noncorporate, total	40	3	0.5	4.6	0.4	0.9	2.9	16.4	21.4	38.4	1.8	5.4	4.7
	Individual	22	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	14	2	0.3	2.9	0.2	0.6	2.0	12.7	16.1	28.6	(D)	2.9	3.2
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2279	**Carpets and Rugs, N.E.C.**	**72**	**18**	**2.8**	**25.3**	**2.4**	**4.5**	**18.6**	**44.8**	**73.1**	**115.2**	**2.6**	**26.2**	**29.9**
	Type of organization:													
	Multiunit companies, total	9	8	2.0	19.5	1.7	3.4	14.6	32.4	59.8	89.8	1.7	22.3	25.4
	Corp. ownership or control	9	8	2.0	19.5	1.7	3.4	14.6	32.4	59.8	89.8	1.7	22.3	25.4
	Single unit companies, total	63	10	0.8	5.9	0.7	1.2	4.0	12.4	13.2	25.3	0.9	3.8	4.5
	Corp. ownership or control	45	9	0.7	5.3	0.6	1.0	3.7	11.2	11.8	22.8	0.9	3.4	4.1
	Noncorporate ownership	18	1	0.1	0.5	0.1	0.1	0.4	1.2	1.4	2.6	(Z)	0.4	0.4
	Legal form of organization:													
	Corporate	54	17	2.8	24.8	2.3	4.4	18.3	43.6	71.7	112.6	2.6	25.8	29.5
	Noncorporate, total	18	1	0.1	0.5	0.1	0.1	0.4	1.2	1.4	2.6	(Z)	0.4	0.4
	Individual	11	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	(Z)	0.2	(Z)	0.1	0.2	0.4	0.3	0.7	(D)	0.1	0.1
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2281	**Yarn Mills, Except Wool**	**456**	**370**	**93.0**	**782.7**	**85.6**	**175.2**	**675.5**	**1 480.3**	**2 382.5**	**3 864.9**	**114.4**	**362.2**	**363.6**
	Type of organization:													
	Multiunit companies, total	300	290	79.3	672.4	72.8	149.4	579.8	1 293.9	2 081.7	3 373.8	98.5	310.1	317.0
	Corp. ownership or control	300	290	79.3	672.4	72.8	149.4	579.8	1 293.9	2 081.7	3 373.8	98.5	310.1	317.0
	Single unit companies, total	156	80	13.7	110.4	12.8	25.8	95.7	186.5	300.8	491.1	15.9	52.1	46.5
	Corp. ownership or control	140	80	13.7	110.0	12.7	25.7	95.4	186.1	299.6	489.3	15.8	51.5	46.3
	Noncorporate ownership	16	–	(Z)	0.4	(Z)	0.1	0.3	0.4	1.1	1.8	(Z)	0.6	0.2
	Legal form of organization:													
	Corporate	440	370	93.0	782.4	85.5	175.2	675.2	1 480.0	2 381.3	3 863.1	114.4	361.5	363.4
	Noncorporate, total	16	–	(Z)	0.4	(Z)	0.1	0.3	0.4	1.1	1.8	(Z)	0.6	0.2
	Individual	6	–	(Z)	0.2	(Z)	(Z)	0.2	0.3	0.6	0.9	(D)	0.1	0.1
	Partnership	5	–	(Z)	0.2	(Z)	(Z)	0.2	0.3	0.6	0.9	(D)	0.1	0.1
	Other and unknown	5	–	–	–	–	–	–	-0.3	–	–	–	0.5	–
2282	**Throwing and Winding Mills**	**196**	**148**	**30.5**	**262.3**	**27.1**	**54.5**	**210.4**	**490.4**	**1 030.9**	**1 510.1**	**51.1**	**122.1**	**132.3**
	Type of organization:													
	Multiunit companies, total	91	86	23.0	199.8	20.5	41.5	162.0	387.5	862.6	1 240.9	42.0	104.4	111.1
	Corp. ownership or control	91	86	23.0	199.8	20.5	41.5	162.0	387.5	862.6	1 240.9	42.0	104.4	111.1
	Single unit companies, total	105	62	7.5	62.5	6.6	13.0	48.4	102.9	168.2	269.3	9.1	17.7	21.2
	Corp. ownership or control	100	61	7.5	62.1	6.5	13.0	48.0	102.4	167.4	267.8	9.1	17.6	21.1
	Noncorporate ownership	5	1	0.1	0.4	0.1	0.1	0.3	0.6	0.9	1.4	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	191	147	30.5	261.9	27.0	54.4	210.0	489.9	1 030.0	1 508.7	51.1	122.0	132.2
	Noncorporate, total	5	1	0.1	0.4	0.1	0.1	0.3	0.6	0.9	1.4	(Z)	0.1	0.1
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
22	**TEXTILE MILL PRODUCTS**—Con.													
2283	**Wool Yarn Mills**	**76**	**43**	**4.1**	**33.1**	**3.7**	**7.3**	**27.3**	**81.8**	**112.4**	**194.9**	**2.7**	**18.7**	**17.4**
	Type of organization:													
	Multiunit companies, total	20	19	2.4	19.5	2.2	4.3	16.5	59.0	75.2	135.4	1.7	12.7	10.7
	Corp. ownership or control	20	19	2.4	19.5	2.2	4.3	16.5	59.0	75.2	135.4	1.7	12.7	10.7
	Single unit companies, total	56	24	1.7	13.5	1.5	3.0	10.8	22.9	37.2	59.5	0.9	6.0	6.7
	Corp. ownership or control	50	24	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	70	43	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	6	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	-	-	-	-	-	-	-0.1	-	-	-	0.1	-
2284	**Thread Mills**	**70**	**47**	**12.8**	**106.3**	**10.9**	**21.1**	**81.1**	**201.9**	**351.9**	**544.4**	**11.8**	**89.2**	**102.7**
	Type of organization:													
	Multiunit companies, total	35	34	11.1	92.5	9.5	18.3	71.2	177.1	323.5	491.5	10.9	81.8	94.5
	Corp. ownership or control	35	34	11.1	92.5	9.5	18.3	71.2	177.1	323.5	491.5	10.9	81.8	94.5
	Single unit companies, total	35	13	1.7	13.8	1.4	2.8	9.9	24.8	28.4	52.9	0.9	7.4	8.3
	Corp. ownership or control	30	13	1.6	13.3	1.4	2.7	9.6	24.2	27.5	51.3	0.8	7.1	8.0
	Noncorporate ownership	5	-	0.1	0.5	(Z)	0.1	0.3	0.6	0.9	1.5	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	65	47	12.8	105.9	10.9	21.0	80.8	201.3	351.0	542.9	11.8	88.9	102.4
	Noncorporate, total	5	-	0.1	0.5	(Z)	0.1	0.3	0.6	0.9	1.5	(Z)	0.3	0.3
	Individual	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2291	**Felt Goods, Except Woven Felts and Hats**	**46**	**27**	**4.3**	**50.7**	**3.3**	**6.7**	**33.1**	**103.0**	**96.8**	**197.7**	**5.7**	**33.0**	**36.3**
	Type of organization:													
	Multiunit companies, total	24	21	3.9	46.7	2.9	6.0	30.2	98.9	86.9	183.8	5.2	31.0	34.2
	Corp. ownership or control	24	21	3.9	46.7	2.9	6.0	30.2	98.9	86.9	183.8	5.2	31.0	34.2
	Single unit companies, total	22	6	0.4	4.0	0.3	0.7	2.9	4.0	9.9	13.9	0.6	1.9	2.1
	Corp. ownership or control	20	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	44	27	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2292	**Lace Goods**	**71**	**24**	**2.2**	**17.9**	**1.9**	**3.6**	**14.0**	**27.7**	**18.5**	**45.9**	**1.0**	**11.7**	**12.6**
	Type of organization:													
	Multiunit companies, total	13	10	1.4	11.6	1.2	2.2	8.9	17.8	12.3	29.9	0.4	8.3	9.0
	Corp. ownership or control	13	10	1.4	11.6	1.2	2.2	8.9	17.8	12.3	29.9	0.4	8.3	9.0
	Single unit companies, total	58	14	0.8	6.4	0.7	1.3	5.1	9.8	6.3	16.0	0.6	3.4	3.5
	Corp. ownership or control	45	13	0.8	6.0	0.7	1.3	4.7	9.2	5.6	14.7	0.6	3.1	3.3
	Noncorporate ownership	13	1	0.1	0.4	0.1	0.1	0.3	0.6	0.7	1.3	0.1	0.3	0.3
	Legal form of organization:													
	Corporate	58	23	2.1	17.6	1.8	3.5	13.6	27.0	17.9	44.6	1.0	11.5	12.3
	Noncorporate, total	13	1	0.1	0.4	0.1	0.1	0.3	0.6	0.7	1.3	0.1	0.3	0.3
	Individual	10	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	-	-	-	-	-	-	-	-	-	-	-
2293	**Paddings and Upholstery Filling**	**120**	**56**	**5.2**	**52.9**	**4.1**	**8.4**	**36.4**	**124.5**	**128.3**	**251.8**	**5.8**	**19.1**	**19.6**
	Type of organization:													
	Multiunit companies, total	33	28	3.3	33.8	2.6	5.3	24.1	84.9	84.2	168.2	3.9	11.1	11.6
	Corp. ownership or control	33	28	3.3	33.8	2.6	5.3	24.1	84.9	84.2	168.2	3.9	11.1	11.6
	Single unit companies, total	87	28	1.9	19.0	1.5	3.1	12.3	39.7	44.1	83.6	1.9	8.0	8.1
	Corp. ownership or control	72	27	1.8	18.1	1.4	2.9	11.6	37.8	42.2	79.8	(D)	7.8	7.8
	Noncorporate ownership	15	1	0.1	1.0	0.1	0.2	0.6	1.9	1.9	3.8	(D)	0.2	0.2
	Legal form of organization:													
	Corporate	105	55	5.1	51.9	4.0	8.2	35.7	122.6	126.3	248.0	(D)	18.9	19.4
	Noncorporate, total	15	1	0.1	1.0	0.1	0.2	0.6	1.9	1.9	3.8	(D)	0.2	0.2
	Individual	10	1	0.1	0.7	0.1	0.1	0.4	1.4	1.2	2.5	(D)	0.1	0.1
	Partnership	5	-	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.8	1.3	(Z)	0.1	0.1
2294	**Processed Textile Waste**	**99**	**39**	**3.7**	**31.2**	**3.1**	**6.3**	**23.1**	**61.7**	**117.1**	**178.4**	**5.8**	**26.2**	**27.5**
	Type of organization:													
	Multiunit companies, total	25	19	2.1	18.3	1.7	3.5	13.7	37.6	84.9	124.2	4.3	17.7	16.2
	Corp. ownership or control	25	19	2.1	18.3	1.7	3.5	13.7	37.6	84.9	124.2	4.3	17.7	16.2
	Single unit companies, total	74	20	1.6	12.8	1.4	2.8	9.5	24.1	32.1	54.3	1.5	8.6	11.3
	Corp. ownership or control	58	16	1.2	9.6	1.1	2.0	6.9	16.9	22.7	39.1	1.4	4.8	5.5
	Noncorporate ownership	16	4	0.4	3.3	0.4	0.8	2.5	7.2	9.4	15.1	0.1	3.8	5.8
	Legal form of organization:													
	Corporate	83	35	3.3	27.9	2.8	5.5	20.6	54.4	107.6	163.3	5.7	22.5	21.7
	Noncorporate, total	16	4	0.4	3.3	0.4	0.8	2.5	7.2	9.4	15.1	0.1	3.8	5.8
	Individual	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
22	**TEXTILE MILL PRODUCTS**—Con.													
2295	**Coated Fabrics, Not Rubberized**	**191**	**109**	**13.6**	**182.3**	**9.9**	**20.9**	**117.1**	**413.1**	**650.5**	**1 059.0**	**26.0**	**188.4**	**190.0**
	Type of organization:													
	Multiunit companies, total	77	65	11.2	154.4	8.0	17.2	99.5	362.5	563.4	921.9	21.4	165.6	166.9
	Corp. ownership or control	77	65	11.2	154.4	8.0	17.2	99.5	362.5	563.4	921.9	21.4	165.6	166.9
	Single unit companies, total	114	44	2.5	27.9	1.9	3.8	17.6	50.6	87.1	137.0	4.7	22.8	23.1
	Corp. ownership or control	107	44	2.4	27.6	1.9	3.7	17.4	49.8	85.7	134.8	4.7	22.4	22.8
	Noncorporate ownership	7	–	(Z)	0.4	(Z)	(Z)	0.3	0.8	1.3	2.2	(Z)	0.3	0.4
	Legal form of organization:													
	Corporate	184	109	13.6	181.9	9.9	20.9	116.8	412.2	649.1	1 056.8	26.0	188.0	189.6
	Noncorporate, total	7	–	(Z)	0.4	(Z)	(Z)	0.3	0.8	1.3	2.2	(Z)	0.3	0.4
	Individual	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2296	**Tire Cord and Fabric**	**20**	**20**	**9.6**	**94.7**	**8.5**	**16.2**	**78.1**	**242.1**	**779.7**	**1 013.2**	**7.0**	**130.0**	**126.7**
	Type of organization:													
	Multiunit companies, total	20	20	9.6	94.7	8.5	16.2	78.1	242.1	779.7	1 013.2	7.0	130.0	126.7
	Corp. ownership or control	20	20	9.6	94.7	8.5	16.2	78.1	242.1	779.7	1 013.2	7.0	130.0	126.7
	Corporate	20	20	9.6	94.7	8.5	16.2	78.1	242.1	779.7	1 013.2	7.0	130.0	126.7
	Legal form of organization:													
2297	**Nonwoven Fabrics**	**100**	**74**	**13.0**	**139.8**	**10.4**	**21.1**	**100.2**	**386.0**	**489.8**	**864.4**	**41.1**	**104.0**	**121.5**
	Type of organization:													
	Multiunit companies, total	59	52	10.7	116.2	8.5	17.3	84.2	334.3	421.2	744.4	38.2	92.7	109.2
	Corp. ownership or control	59	52	10.7	116.2	8.5	17.3	84.2	334.3	421.2	744.4	38.2	92.7	109.2
	Single unit companies, total	41	22	2.2	23.7	1.9	3.8	16.0	51.8	68.6	120.0	2.9	11.3	12.4
	Corp. ownership or control	40	22	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	99	74	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2298	**Cordage and Twine**	**171**	**84**	**9.5**	**79.5**	**7.9**	**14.2**	**53.7**	**173.8**	**162.9**	**332.2**	**6.5**	**73.4**	**79.4**
	Type of organization:													
	Multiunit companies, total	50	43	6.8	56.0	5.6	9.8	38.2	125.4	116.9	238.6	4.1	57.7	62.2
	Corp. ownership or control	50	43	6.8	56.0	5.6	9.8	38.2	125.4	116.9	238.6	4.1	57.7	62.2
	Single unit companies, total	121	41	2.8	23.5	2.3	4.4	15.5	48.4	46.1	93.7	2.4	15.7	17.2
	Corp. ownership or control	101	39	2.6	22.0	2.1	4.0	14.3	45.8	42.7	87.7	2.3	14.9	16.4
	Noncorporate ownership	20	2	0.2	1.4	0.2	0.4	1.2	2.5	3.4	5.9	0.1	0.8	0.8
	Legal form of organization:													
	Corporate	151	82	9.3	78.1	7.7	13.8	52.5	171.3	159.6	326.3	6.4	72.6	78.6
	Noncorporate, total	20	2	0.2	1.4	0.2	0.4	1.2	2.5	3.4	5.9	0.1	0.8	0.8
	Individual	13	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.4	0.8	(Z)	0.2	0.2
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2299	**Textile Goods, N.E.C.**	**436**	**90**	**6.7**	**56.6**	**5.7**	**11.8**	**41.8**	**109.2**	**124.2**	**231.1**	**13.0**	**24.7**	**27.8**
	Type of organization:													
	Multiunit companies, total	30	17	1.2	10.5	0.9	1.9	7.6	25.2	39.0	62.7	2.0	8.5	10.4
	Corp. ownership or control	30	17	1.2	10.5	0.9	1.9	7.6	25.2	39.0	62.7	2.0	8.5	10.4
	Single unit companies, total	406	73	5.5	46.1	4.8	9.9	34.2	84.1	85.2	168.5	10.9	16.2	17.3
	Corp. ownership or control	314	72	5.3	44.2	4.6	9.5	32.8	79.8	80.7	159.7	10.5	15.3	16.4
	Noncorporate ownership	92	1	0.2	1.9	0.2	0.4	1.4	4.3	4.5	8.8	0.4	0.9	0.9
	Legal form of organization:													
	Corporate	344	89	6.5	54.7	5.5	11.3	40.4	104.9	119.7	222.3	12.6	23.8	26.9
	Noncorporate, total	92	1	0.2	1.9	0.2	0.4	1.4	4.3	4.5	8.8	0.4	0.9	0.9
	Individual	56	–	0.1	1.1	0.1	0.3	0.8	2.7	2.1	4.9	0.3	0.4	0.4
	Partnership	28	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
23	**APPAREL AND OTHER TEXTILE PRODUCTS**	**26 505**	**11 932**	**1 334.3**	**9 658.6**	**1 156.6**	**2 037.6**	**7 252.8**	**19 671.3**	**20 865.5**	**40 245.1**	**456.7**	**5 125.3**	**5 535.8**
	Type of organization:													
	Multiunit companies, total	4 371	3 758	723.9	5 345.3	623.4	1 122.5	4 046.7	11 697.3	13 179.3	24 681.1	272.4	3 450.6	3 722.8
	Corp. ownership or control	4 338	3 729	714.2	5 284.9	615.1	1 109.0	3 997.9	11 597.5	13 088.3	24 484.9	271.0	3 398.4	3 682.9
	Noncorporate ownership	33	29	9.8	60.3	8.3	13.4	48.5	99.8	91.0	196.3	1.5	52.2	39.3
	Single unit companies, total	22 134	8 174	610.4	4 313.3	533.2	915.2	3 206.1	7 974.0	7 686.2	15 564.0	184.2	1 674.7	1 813.6
	Corp. ownership or control	15 980	7 242	544.7	3 908.6	473.3	817.1	2 879.7	7 261.2	7 176.6	14 336.5	170.4	1 537.0	1 675.3
	Noncorporate ownership	6 154	932	65.7	404.7	59.9	98.1	326.4	712.7	509.6	1 227.5	13.8	137.7	138.3
	Legal form of organization:													
	Corporate	20 318	10 971	1 258.8	9 193.5	1 088.4	1 926.1	6 877.8	18 858.8	20 264.8	38 821.3	441.4	4 935.4	5 358.8
	Noncorporate, total	6 187	961	75.5	465.1	68.3	111.5	375.0	812.5	600.7	1 423.8	15.3	189.9	177.6
	Individual	4 027	519	36.9	220.1	34.1	54.9	179.9	364.3	220.8	583.7	7.3	57.6	60.2
	Partnership	1 610	321	22.7	144.5	20.6	33.9	117.1	268.7	220.5	496.0	4.4	61.2	58.5
	Other and unknown	550	121	15.9	100.5	13.6	22.7	78.0	179.6	159.4	344.1	3.6	71.1	58.9
2311	**Men's and Boys' Suits and Coats**	**737**	**467**	**98.7**	**822.2**	**86.2**	**152.9**	**645.5**	**1 574.4**	**1 232.4**	**2 767.5**	**25.8**	**416.8**	**470.5**
	Type of organization:													
	Multiunit companies, total	247	216	64.5	549.8	55.9	100.0	432.2	1 121.6	864.4	1 960.3	16.7	304.5	341.4
	Corp. ownership or control	246	215	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	490	251	34.2	272.4	30.3	52.9	213.2	452.8	368.0	807.2	9.1	112.3	129.1
	Corp. ownership or control	406	236	32.9	263.7	29.1	50.9	206.1	438.4	360.0	785.0	8.9	108.9	125.5
	Noncorporate ownership	84	15	1.3	8.7	1.2	2.0	7.1	14.4	8.0	22.3	0.2	3.4	3.6

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS**—Con.													
2311	**Men's and Boys' Suits and Coats**—Con.													
	Legal form of organization:													
	Corporate	652	451	96.3	804.3	84.0	149.1	630.4	1 543.4	1 217.1	2 721.4	25.6	410.0	463.4
	Noncorporate, total	85	16	2.4	17.9	2.2	3.8	15.1	31.0	15.3	46.1	0.2	6.8	7.1
	Individual	40	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	33	10	0.9	6.1	0.8	1.4	4.9	9.8	5.7	15.4	0.1	2.4	2.6
	Other and unknown	12	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2321	**Men's and Boys' Shirts and Nightwear**	**928**	**679**	**114.7**	**711.3**	**103.0**	**184.1**	**569.9**	**1 445.7**	**1 539.5**	**2 934.6**	**25.9**	**442.6**	**501.4**
	Type of organization:													
	Multiunit companies, total	427	393	85.5	530.1	77.1	138.3	431.7	1 112.1	1 178.2	2 237.5	19.2	348.7	412.6
	Corp. ownership or control	416	383	83.8	521.1	75.6	135.8	424.1	1 089.8	1 159.8	2 196.8	18.8	343.3	407.4
	Noncorporate ownership	11	10	1.8	9.0	1.5	2.5	7.6	22.4	18.4	40.6	0.4	5.4	5.1
	Single unit companies, total	501	286	29.2	181.2	25.9	45.8	138.2	333.6	361.3	697.1	6.7	93.8	88.9
	Corp. ownership or control	394	250	26.2	163.9	23.1	41.1	123.3	304.7	345.4	652.6	6.1	89.4	84.0
	Noncorporate ownership	107	36	3.0	17.3	2.8	4.7	14.9	28.9	16.0	44.6	0.7	4.5	4.8
	Legal form of organization:													
	Corporate	810	633	109.9	685.0	98.7	176.9	547.4	1 394.5	1 505.1	2 849.4	24.9	432.7	491.5
	Noncorporate, total	118	46	4.8	26.4	4.3	7.2	22.5	51.3	34.4	85.2	1.1	9.9	10.0
	Individual	58	19	1.1	6.3	1.0	1.7	5.5	12.3	5.0	17.1	0.4	1.6	1.8
	Partnership	32	14	1.5	9.5	1.4	2.5	8.0	13.9	7.6	21.3	0.2	2.1	2.3
	Other and unknown	28	13	2.1	10.6	1.9	3.0	9.0	25.1	21.8	46.8	0.5	6.2	5.9
2322	**Men's and Boys' Underwear**	**76**	**59**	**15.1**	**92.2**	**13.7**	**23.8**	**79.0**	**218.2**	**205.1**	**419.8**	**2.6**	**50.8**	**55.1**
	Type of organization:													
	Multiunit companies, total	46	44	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	44	42	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	30	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	27	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	71	57	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2323	**Men's and Boys' Neckwear**	**207**	**81**	**6.3**	**57.5**	**5.1**	**8.7**	**33.4**	**117.5**	**108.9**	**223.8**	**2.6**	**26.3**	**29.6**
	Type of organization:													
	Multiunit companies, total	26	18	2.4	25.0	1.8	3.2	12.0	50.1	50.2	100.2	1.2	13.9	13.4
	Corp. ownership or control	26	18	2.4	25.0	1.8	3.2	12.0	50.1	50.2	100.2	1.2	13.9	13.4
	Single unit companies, total	181	63	3.9	32.5	3.3	5.5	21.3	67.4	58.7	123.6	1.4	12.4	16.2
	Corp. ownership or control	141	60	3.7	30.6	3.1	5.1	19.8	62.3	54.4	114.2	1.4	11.5	15.2
	Noncorporate ownership	40	3	0.3	2.0	0.2	0.4	1.5	5.1	4.3	9.4	(Z)	0.9	1.0
	Legal form of organization:													
	Corporate	167	78	6.1	55.5	4.9	8.3	31.9	112.5	104.6	214.4	2.6	25.4	28.6
	Noncorporate, total	40	3	0.3	2.0	0.2	0.4	1.5	5.1	4.3	9.4	(Z)	0.9	1.0
	Individual	27	2	0.2	1.4	0.1	0.2	1.1	3.5	2.8	6.4	(D)	0.6	0.6
	Partnership	10	1	0.1	0.6	0.1	0.1	0.5	1.6	1.5	3.0	(D)	0.2	0.3
	Other and unknown	3	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
2327	**Men's and Boys' Separate Trousers**	**514**	**335**	**70.9**	**474.0**	**61.9**	**107.6**	**372.0**	**845.6**	**878.6**	**1 718.0**	**22.8**	**279.8**	**281.9**
	Type of organization:													
	Multiunit companies, total	204	179	50.9	344.2	44.0	77.1	272.6	599.4	591.8	1 204.5	14.5	232.6	208.1
	Corp. ownership or control	201	176	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	310	156	20.0	129.8	17.8	30.5	99.4	246.2	286.8	513.5	8.3	47.1	73.8
	Corp. ownership or control	264	145	19.2	125.2	17.1	29.4	95.5	239.0	283.8	503.4	8.1	46.2	72.9
	Noncorporate ownership	46	11	0.8	4.6	0.7	1.1	3.9	7.2	3.0	10.1	0.2	0.9	0.9
	Legal form of organization:													
	Corporate	465	321	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	49	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	29	6	0.4	2.5	0.4	0.6	2.1	3.8	2.0	5.8	0.1	0.6	0.5
	Partnership	12	4	0.3	1.4	0.3	0.3	1.3	2.3	0.8	3.0	(Z)	0.3	0.3
	Other and unknown	8	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2328	**Men's and Boys' Work Clothing**	**656**	**575**	**113.7**	**719.4**	**101.6**	**183.7**	**589.9**	**1 765.4**	**1 913.2**	**3 641.9**	**44.1**	**427.4**	**477.7**
	Type of organization:													
	Multiunit companies, total	425	414	94.9	604.4	84.6	153.5	495.2	1 582.3	1 743.0	3 291.8	39.1	387.1	433.2
	Corp. ownership or control	425	414	94.9	604.4	84.6	153.5	495.2	1 582.3	1 743.0	3 291.8	39.1	387.1	433.2
	Single unit companies, total	231	161	18.8	115.0	17.0	30.2	94.7	183.1	170.3	350.1	5.0	40.3	44.5
	Corp. ownership or control	192	143	17.0	104.9	15.4	27.2	86.3	163.7	152.0	312.8	4.5	35.3	38.5
	Noncorporate ownership	39	18	1.8	10.1	1.6	3.0	8.4	19.4	18.3	37.3	0.5	5.1	6.0
	Legal form of organization:													
	Corporate	617	557	111.9	709.3	100.0	180.7	581.5	1 746.0	1 894.9	3 604.6	43.6	422.4	471.7
	Noncorporate, total	39	18	1.8	10.1	1.6	3.0	8.4	19.4	18.3	37.3	0.5	5.1	6.0
	Individual	18	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	16	10	0.9	5.5	0.8	1.4	4.6	12.0	14.0	25.6	0.4	3.8	4.6
	Other and unknown	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS—Con.**													
2329	**Men's and Boys' Clothing, N.E.C.**	**632**	**400**	**43.8**	**285.8**	**38.1**	**67.4**	**219.3**	**542.8**	**530.6**	**1 065.1**	**20.2**	**182.2**	**201.9**
	Type of organization:													
	Multiunit companies, total	193	162	24.1	157.0	20.6	36.4	118.7	325.0	370.8	693.3	9.5	120.5	131.9
	Corp. ownership or control	193	162	24.1	157.0	20.6	36.4	118.7	325.0	370.8	693.3	9.5	120.5	131.9
	Single unit companies, total	439	238	19.7	128.8	17.5	31.0	100.5	217.8	159.8	371.8	10.7	61.6	70.0
	Corp. ownership or control	352	209	17.8	117.5	15.8	27.9	91.4	196.8	145.9	337.6	10.0	58.1	65.6
	Noncorporate ownership	87	29	1.9	11.4	1.7	3.1	9.1	21.0	13.8	34.2	0.7	3.5	4.5
	Legal form of organization:													
	Corporate	545	371	41.9	274.4	36.4	64.3	210.1	521.8	516.8	1 030.9	19.6	178.7	197.4
	Noncorporate, total	87	29	1.9	11.4	1.7	3.1	9.1	21.0	13.8	34.2	0.7	3.5	4.5
	Individual	55	16	1.1	6.2	1.0	1.9	5.2	10.2	5.2	14.9	0.4	1.3	2.0
	Partnership	18	7	0.5	2.9	0.5	0.8	2.4	4.6	1.9	6.4	0.1	0.7	0.7
	Other and unknown	14	6	0.3	2.3	0.2	0.4	1.5	6.3	6.8	12.9	0.1	1.5	1.7
2331	**Women's and Misses' Blouses and Waists**	**1 415**	**952**	**83.3**	**569.0**	**73.8**	**125.0**	**424.3**	**1 192.5**	**1 164.8**	**2 333.6**	**24.0**	**197.3**	**222.5**
	Type of organization:													
	Multiunit companies, total	250	214	31.8	225.4	27.5	48.0	161.9	551.4	602.6	1 136.7	10.6	122.0	138.6
	Corp. ownership or control	249	213	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 165	738	51.5	343.6	46.3	77.0	262.3	641.1	562.2	1 196.9	13.4	75.3	83.8
	Corp. ownership or control	889	607	43.9	301.1	39.0	66.0	224.6	574.3	539.9	1 107.7	12.3	71.2	79.8
	Noncorporate ownership	276	131	7.6	42.5	7.3	11.1	37.7	66.8	22.3	89.2	1.1	4.1	4.0
	Legal form of organization:													
	Corporate	1 138	820	75.7	526.2	66.4	113.9	386.2	1 125.2	1 142.6	2 243.9	22.9	193.2	218.4
	Noncorporate, total	277	132	7.7	42.8	7.3	11.2	38.0	67.3	22.3	89.7	1.1	4.1	4.0
	Individual	180	80	4.3	22.9	4.1	6.1	20.2	34.9	10.6	45.6	0.6	2.0	2.0
	Partnership	84	47	3.1	18.0	3.0	4.6	16.4	28.3	8.3	36.5	0.4	1.3	1.4
	Other and unknown	13	5	0.3	1.9	0.3	0.5	1.4	4.1	3.4	7.6	0.1	0.7	0.6
2335	**Women's and Misses' Dresses**	**6 953**	**2 473**	**175.3**	**1 197.1**	**153.0**	**261.0**	**882.5**	**2 233.7**	**1 972.6**	**4 188.6**	**45.2**	**363.0**	**386.1**
	Type of organization:													
	Multiunit companies, total	390	325	41.8	311.1	34.7	61.5	209.9	621.5	727.3	1 341.6	10.6	138.4	142.1
	Corp. ownership or control	390	325	41.8	311.1	34.7	61.5	209.9	621.5	727.3	1 341.6	10.6	138.4	142.1
	Single unit companies, total	6 563	2 148	133.5	886.0	118.3	199.5	672.6	1 612.2	1 245.3	2 847.0	34.7	224.5	243.9
	Corp. ownership or control	4 418	1 836	112.4	761.0	98.8	167.3	569.7	1 401.5	1 139.6	2 531.0	30.9	196.5	215.1
	Noncorporate ownership	2 145	312	21.1	125.0	19.5	32.2	103.0	210.7	105.7	316.0	3.8	28.1	28.9
	Legal form of organization:													
	Corporate	4 808	2 161	154.2	1 072.1	133.5	228.8	779.5	2 023.0	1 866.9	3 872.6	41.4	334.9	357.2
	Noncorporate, total	2 145	312	21.1	125.0	19.5	32.2	103.0	210.7	105.7	316.0	3.8	28.1	28.9
	Individual	1 286	192	13.3	77.2	12.4	20.5	65.1	124.8	54.8	179.5	2.2	14.7	15.0
	Partnership	613	92	6.1	37.1	5.5	9.0	29.6	67.7	40.5	108.1	0.9	10.7	10.9
	Other and unknown	246	28	1.8	10.7	1.6	2.7	8.3	18.2	10.3	28.4	0.7	2.6	3.0
2337	**Women's and Misses' Suits and Coats**	**1 672**	**1 067**	**84.7**	**654.0**	**72.7**	**123.3**	**468.5**	**1 429.6**	**1 481.4**	**2 912.9**	**22.0**	**291.1**	**297.0**
	Type of organization:													
	Multiunit companies, total	245	202	28.0	216.8	23.3	40.1	148.6	587.3	631.0	1 218.5	10.2	139.8	140.7
	Corp. ownership or control	245	202	28.0	216.8	23.3	40.1	148.6	587.3	631.0	1 218.5	10.2	139.8	140.7
	Single unit companies, total	1 427	865	56.8	437.3	49.4	83.2	319.9	842.3	850.4	1 694.4	11.7	151.3	156.4
	Corp. ownership or control	1 206	791	52.1	405.7	45.2	76.7	294.7	786.4	807.7	1 587.3	11.1	134.8	146.0
	Noncorporate ownership	221	74	4.6	31.6	4.2	6.6	25.2	55.9	42.7	107.1	0.6	16.4	10.4
	Legal form of organization:													
	Corporate	1 451	993	80.1	622.4	68.5	116.8	443.3	1 373.7	1 438.7	2 805.8	21.4	274.7	286.6
	Noncorporate, total	221	74	4.6	31.6	4.2	6.6	25.2	55.9	42.7	107.1	0.6	16.4	10.4
	Individual	134	37	2.3	14.0	2.1	3.3	12.0	21.0	5.7	26.6	0.3	1.6	1.7
	Partnership	53	25	1.8	13.1	1.6	2.4	10.3	21.9	29.3	60.0	0.2	13.1	6.7
	Other and unknown	34	12	0.6	4.5	0.5	0.8	2.9	12.9	7.8	20.6	0.1	1.8	1.9
2339	**Women's and Misses' Outerwear, N.E.C.**	**1 794**	**1 064**	**104.1**	**732.7**	**87.9**	**151.5**	**528.9**	**1 574.0**	**1 728.5**	**3 285.1**	**42.4**	**408.0**	**432.6**
	Type of organization:													
	Multiunit companies, total	327	281	47.2	345.1	38.7	68.1	240.6	822.7	1 034.0	1 848.6	24.7	259.3	269.3
	Corp. ownership or control	325	279	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 467	783	56.9	387.6	49.3	83.4	288.3	751.3	694.5	1 436.4	17.6	148.7	163.3
	Corp. ownership or control	1 176	692	51.9	357.6	44.8	76.3	263.8	697.2	654.9	1 343.2	16.5	139.2	153.2
	Noncorporate ownership	291	91	5.0	30.1	4.5	7.1	24.5	54.1	39.6	93.3	1.2	9.4	10.1
	Legal form of organization:													
	Corporate	1 501	971	99.0	701.9	83.4	144.2	503.7	1 517.2	1 688.4	3 188.8	41.1	398.5	422.4
	Noncorporate, total	293	93	5.1	30.8	4.6	7.3	25.2	56.8	40.0	96.3	1.2	9.4	10.3
	Individual	178	50	3.1	18.2	2.8	4.5	15.1	27.6	12.7	40.3	0.5	3.8	3.9
	Partnership	76	31	1.4	8.5	1.2	1.9	6.9	18.7	19.8	38.1	0.4	4.1	4.7
	Other and unknown	39	12	0.6	4.1	0.5	0.9	3.1	10.5	7.5	17.9	0.3	1.5	1.6
2341	**Women's and Children's Underwear**	**698**	**479**	**72.9**	**472.1**	**63.4**	**112.6**	**359.8**	**915.3**	**878.2**	**1 780.8**	**18.7**	**256.5**	**275.9**
	Type of organization:													
	Multiunit companies, total	257	227	50.8	330.1	44.2	79.4	254.1	638.4	627.6	1 256.1	14.0	192.2	205.8
	Corp. ownership or control	252	223	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	441	252	22.1	142.0	19.2	33.2	105.6	276.9	250.6	524.6	4.7	64.3	70.1
	Corp. ownership or control	362	227	20.4	132.4	17.7	30.6	97.6	259.7	237.4	494.6	4.4	59.5	64.9
	Noncorporate ownership	79	25	1.6	9.6	1.5	2.6	8.0	17.2	13.2	30.1	0.4	4.8	5.1

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS—Con.**													
2341	**Women's and Children's Underwear—Con.**													
	Legal form of organization:													
	Corporate	614	450	70.4	457.1	61.1	108.6	348.0	887.7	855.9	1 732.3	18.2	248.5	266.3
	Noncorporate, total	84	29	2.5	15.0	2.2	4.0	11.8	27.6	22.3	48.4	0.5	8.0	9.5
	Individual	53	13	0.7	4.1	0.7	1.2	3.5	6.5	3.4	9.8	(D)	1.2	1.3
	Partnership	20	9	0.8	4.5	0.7	1.2	3.8	8.7	8.0	16.5	0.2	3.0	3.2
	Other and unknown	11	7	1.0	6.4	0.9	1.6	4.5	12.4	10.9	22.1	(D)	3.8	5.0
2342	**Brassieres and Allied Garments**	**180**	**116**	**18.9**	**141.1**	**15.2**	**27.0**	**89.1**	**334.4**	**318.2**	**650.0**	**4.2**	**116.7**	**121.9**
	Type of organization:													
	Multiunit companies, total	59	54	13.7	103.7	11.0	19.4	64.5	262.2	252.8	512.6	3.3	91.7	96.7
	Corp. ownership or control	59	54	13.7	103.7	11.0	19.4	64.5	262.2	252.8	512.6	3.3	91.7	96.7
	Single unit companies, total	121	62	5.1	37.4	4.2	7.6	24.7	72.2	65.4	137.5	0.9	25.0	25.2
	Corp. ownership or control	107	58	4.9	35.9	4.0	7.2	23.6	69.0	63.0	131.9	0.9	24.1	24.3
	Noncorporate ownership	14	4	0.2	1.5	0.2	0.3	1.0	3.2	2.4	5.6	(Z)	0.9	0.9
	Legal form of organization:													
	Corporate	166	112	18.7	139.6	15.0	26.7	88.1	331.2	315.8	644.5	4.2	115.8	121.0
	Noncorporate, total	14	4	0.2	1.5	0.2	0.3	1.0	3.2	2.4	5.6	(Z)	0.9	0.9
	Individual	8	2	0.1	0.4	0.1	0.1	0.3	0.6	0.4	1.0	(Z)	0.2	0.2
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2351	**Millinery**	**151**	**47**	**2.7**	**20.2**	**2.2**	**3.7**	**13.7**	**32.8**	**42.5**	**75.1**	**0.2**	**5.7**	**5.8**
	Type of organization:													
	Multiunit companies, total	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	148	44	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	115	39	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	33	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	118	42	2.4	18.2	1.9	3.3	12.4	29.3	38.4	67.5	0.2	4.4	4.4
	Noncorporate, total	33	5	0.3	2.0	0.2	0.4	1.3	3.5	4.1	7.6	(Z)	1.4	1.4
	Individual	21	2	0.1	0.6	0.1	0.1	0.4	1.1	1.3	2.4	(D)	0.1	0.1
	Partnership	8	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2352	**Hats and Caps, Except Millinery**	**258**	**122**	**12.4**	**85.1**	**11.1**	**20.1**	**65.3**	**152.7**	**136.8**	**284.8**	**3.9**	**47.6**	**51.7**
	Type of organization:													
	Multiunit companies, total	49	44	6.3	42.0	5.6	10.3	32.6	74.3	73.0	143.4	1.5	28.2	30.3
	Corp. ownership or control	49	44	6.3	42.0	5.6	10.3	32.6	74.3	73.0	143.4	1.5	28.2	30.3
	Single unit companies, total	209	78	6.1	43.0	5.5	9.7	32.7	78.5	63.8	141.3	2.5	19.4	21.4
	Corp. ownership or control	161	72	5.7	40.4	5.1	9.0	30.3	73.9	59.7	132.6	2.3	18.5	20.5
	Noncorporate ownership	48	6	0.4	2.6	0.4	0.7	2.3	4.6	4.1	8.7	0.2	0.9	0.9
	Legal form of organization:													
	Corporate	210	116	12.0	82.4	10.7	19.3	63.0	148.1	132.7	276.1	3.8	46.7	50.8
	Noncorporate, total	48	6	0.4	2.6	0.4	0.7	2.3	4.6	4.1	8.7	0.2	0.9	0.9
	Individual	33	1	0.2	1.3	0.2	0.4	1.2	2.2	2.0	4.2	(D)	0.5	0.5
	Partnership	12	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2361	**Children's Dresses and Blouses**	**519**	**374**	**35.2**	**228.4**	**30.4**	**52.5**	**169.7**	**444.6**	**388.8**	**824.7**	**6.4**	**94.9**	**106.5**
	Type of organization:													
	Multiunit companies, total	128	116	18.4	119.4	15.9	27.9	88.4	251.9	227.7	472.8	3.2	55.6	64.0
	Corp. ownership or control	128	116	18.4	119.4	15.9	27.9	88.4	251.9	227.7	472.8	3.2	55.6	64.0
	Single unit companies, total	391	258	16.8	109.0	14.5	24.6	81.3	192.7	161.1	351.8	3.2	39.3	42.6
	Corp. ownership or control	308	220	14.7	97.7	12.7	21.6	72.2	176.0	149.9	323.8	2.9	36.5	39.7
	Noncorporate ownership	83	38	2.1	11.3	1.9	3.0	9.1	16.7	11.2	28.0	0.3	2.8	2.9
	Legal form of organization:													
	Corporate	436	336	33.2	217.1	28.6	49.5	160.6	427.9	377.6	796.6	6.1	92.1	103.7
	Noncorporate, total	83	38	2.1	11.3	1.9	3.0	9.1	16.7	11.2	28.0	0.3	2.8	2.9
	Individual	52	24	1.3	6.9	1.2	1.9	5.7	9.5	2.8	12.4	0.2	1.0	1.1
	Partnership	25	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2363	**Children's Coats and Suits**	**120**	**70**	**6.7**	**45.8**	**5.7**	**9.7**	**35.1**	**90.2**	**86.2**	**173.8**	**1.3**	**17.1**	**20.7**
	Type of organization:													
	Multiunit companies, total	30	27	3.5	23.6	2.9	5.0	17.6	50.7	51.6	100.3	0.4	10.5	13.1
	Corp. ownership or control	30	27	3.5	23.6	2.9	5.0	17.6	50.7	51.6	100.3	0.4	10.5	13.1
	Single unit companies, total	90	43	3.2	22.2	2.8	4.7	17.5	39.5	34.6	73.5	0.9	6.6	7.6
	Corp. ownership or control	73	35	2.8	19.4	2.4	4.0	15.2	34.8	30.5	64.7	0.8	5.7	6.7
	Noncorporate ownership	17	8	0.4	2.8	0.4	0.7	2.3	4.7	4.1	8.8	0.1	0.8	0.9
	Legal form of organization:													
	Corporate	103	62	6.3	43.0	5.3	9.1	32.8	85.5	82.1	165.1	1.2	16.3	19.8
	Noncorporate, total	17	8	0.4	2.8	0.4	0.7	2.3	4.7	4.1	8.8	0.1	0.8	0.9
	Individual	6	2	0.1	0.7	0.1	0.2	0.6	1.1	0.8	1.8	(Z)	0.2	0.2
	Partnership	6	4	0.2	1.3	0.2	0.3	1.1	2.5	2.5	4.9	0.1	0.4	0.5
	Other and unknown	5	2	0.1	0.7	0.1	0.2	0.5	1.1	0.8	2.0	0.1	0.2	0.2

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS**—Con.													
2369	**Children's Outerwear, N.E.C.**	**363**	**242**	**29.3**	**184.9**	**25.1**	**45.4**	**144.1**	**344.4**	**364.2**	**718.8**	**6.7**	**127.5**	**118.5**
	Type of organization:													
	Multiunit companies, total	111	98	18.0	112.0	15.5	28.1	89.3	218.5	247.4	474.3	4.5	92.2	84.9
	Corp. ownership or control	110	97	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	252	144	11.3	72.9	9.6	17.3	54.8	125.9	116.9	244.5	2.2	35.3	33.6
	Corp. ownership or control	218	131	10.5	68.5	8.9	16.1	51.2	118.0	110.4	230.1	2.1	32.9	31.3
	Noncorporate ownership	34	13	0.8	4.4	0.7	1.2	3.6	7.9	6.4	14.4	0.1	2.3	2.3
	Legal form of organization:													
	Corporate	328	228	28.0	177.7	23.9	43.3	138.2	333.0	352.6	696.0	6.5	123.7	113.9
	Noncorporate, total	35	14	1.3	7.1	1.2	2.1	5.9	11.4	11.6	22.8	0.2	3.8	4.5
	Individual	17	4	0.2	1.2	0.2	0.4	1.1	2.2	0.7	3.0	(Z)	0.4	0.4
	Partnership	11	5	0.3	1.4	0.2	0.4	1.2	2.3	1.7	4.0	(Z)	0.5	0.5
	Other and unknown	7	5	0.8	4.5	0.7	1.3	3.7	6.8	9.1	15.8	0.2	2.9	3.6
2371	**Fur Goods**	**620**	**48**	**4.0**	**51.5**	**3.2**	**5.1**	**36.2**	**112.8**	**273.3**	**383.4**	**0.5**	**41.3**	**46.5**
	Type of organization:													
	Multiunit companies, total	9	5	0.3	3.0	0.3	0.4	2.3	5.7	10.4	16.0	(Z)	2.7	2.9
	Corp. ownership or control	9	5	0.3	3.0	0.3	0.4	2.3	5.7	10.4	16.0	(Z)	2.7	2.9
	Single unit companies, total	611	43	3.7	48.5	2.9	4.7	33.9	107.1	262.8	367.4	0.4	38.6	43.6
	Corp. ownership or control	457	41	3.5	45.4	2.7	4.4	31.7	98.6	247.3	343.3	0.4	35.9	41.0
	Noncorporate ownership	154	2	0.3	3.1	0.2	0.3	2.2	8.5	15.6	24.1	(Z)	2.7	2.6
	Legal form of organization:													
	Corporate	466	46	3.8	48.4	2.9	4.8	34.0	104.4	257.7	359.3	0.5	38.6	43.9
	Noncorporate, total	154	2	0.3	3.1	0.2	0.3	2.2	8.5	15.6	24.1	(Z)	2.7	2.6
	Individual	108	1	0.1	1.7	0.1	0.2	1.2	3.2	9.6	12.9	(D)	1.4	1.4
	Partnership	42	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2381	**Fabric Dress and Work Gloves**	**132**	**92**	**10.9**	**69.0**	**9.9**	**18.0**	**56.3**	**160.9**	**153.2**	**312.4**	**3.5**	**39.1**	**42.1**
	Type of organization:													
	Multiunit companies, total	61	55	8.1	52.5	7.4	13.5	43.0	132.0	122.4	253.3	2.8	30.7	33.2
	Corp. ownership or control	61	55	8.1	52.5	7.4	13.5	43.0	132.0	122.4	253.3	2.8	30.7	33.2
	Single unit companies, total	71	37	2.8	16.4	2.5	4.5	13.3	28.9	30.8	59.1	0.7	8.4	9.0
	Corp. ownership or control	59	33	2.5	14.9	2.2	3.8	12.0	26.6	28.0	54.0	0.7	8.0	8.5
	Noncorporate ownership	12	4	0.3	1.5	0.3	0.7	1.3	2.3	2.9	5.2	(Z)	0.4	0.5
	Legal form of organization:													
	Corporate	120	88	10.6	67.5	9.6	17.3	55.0	158.6	150.4	307.3	3.5	38.7	41.7
	Noncorporate, total	12	4	0.3	1.5	0.3	0.7	1.3	2.3	2.9	5.2	(Z)	0.4	0.5
	Individual	10	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2384	**Robes and Dressing Gowns**	**151**	**98**	**9.5**	**64.3**	**8.2**	**14.7**	**47.8**	**139.5**	**152.7**	**288.3**	**3.3**	**38.0**	**44.1**
	Type of organization:													
	Multiunit companies, total	36	32	4.7	32.1	4.2	7.6	25.1	73.0	78.8	149.7	1.8	18.6	21.3
	Corp. ownership or control	36	32	4.7	32.1	4.2	7.6	25.1	73.0	78.8	149.7	1.8	18.6	21.3
	Single unit companies, total	115	66	4.7	32.3	4.1	7.2	22.7	66.5	73.9	138.6	1.5	19.5	22.8
	Corp. ownership or control	99	62	4.5	30.8	3.8	6.8	21.5	63.7	72.2	134.1	1.3	19.1	22.4
	Noncorporate ownership	16	4	0.3	1.4	0.2	0.4	1.2	2.8	1.7	4.5	0.2	0.4	0.4
	Legal form of organization:													
	Corporate	135	94	9.2	62.9	8.0	14.3	46.6	136.6	151.0	283.8	3.1	37.6	43.7
	Noncorporate, total	16	4	0.3	1.4	0.2	0.4	1.2	2.8	1.7	4.5	0.2	0.4	0.4
	Individual	11	1	0.1	0.5	0.1	0.1	0.4	1.0	0.4	1.3	(D)	0.1	0.1
	Partnership	5	3	0.2	0.9	0.1	0.2	0.8	1.9	1.3	3.2	(D)	0.3	0.3
2385	**Waterproof Outer Garments**	**167**	**105**	**12.0**	**89.4**	**10.1**	**17.9**	**61.6**	**194.4**	**157.4**	**348.8**	**5.6**	**52.6**	**59.6**
	Type of organization:													
	Multiunit companies, total	42	36	7.1	54.9	5.9	10.8	37.0	125.8	97.9	222.4	3.3	38.1	43.3
	Corp. ownership or control	42	36	7.1	54.9	5.9	10.8	37.0	125.8	97.9	222.4	3.3	38.1	43.3
	Single unit companies, total	125	69	4.9	34.4	4.2	7.1	24.6	68.6	59.4	126.4	2.3	14.5	16.3
	Corp. ownership or control	108	64	4.4	31.4	3.8	6.6	22.7	63.0	55.8	117.2	2.3	13.8	15.5
	Noncorporate ownership	17	5	0.5	3.0	0.4	0.6	1.9	5.6	3.6	9.2	(Z)	0.7	0.8
	Legal form of organization:													
	Corporate	150	100	11.5	86.3	9.7	17.4	59.7	188.8	153.8	339.6	5.6	51.9	58.9
	Noncorporate, total	17	5	0.5	3.0	0.4	0.6	1.9	5.6	3.6	9.2	(Z)	0.7	0.8
	Individual	9	2	0.2	1.4	0.2	0.3	1.0	1.6	1.9	3.5	(D)	0.4	0.5
	Partnership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2386	**Leather and Sheep Lined Clothing**	**239**	**80**	**6.7**	**54.7**	**5.9**	**10.4**	**41.1**	**94.8**	**122.2**	**214.1**	**1.6**	**25.8**	**32.3**
	Type of organization:													
	Multiunit companies, total	13	11	1.1	8.1	0.9	1.6	6.0	13.9	11.7	24.6	(D)	3.8	6.3
	Corp. ownership or control	13	11	1.1	8.1	0.9	1.6	6.0	13.9	11.7	24.6	(D)	3.8	6.3
	Single unit companies, total	226	69	5.6	46.6	5.0	8.8	35.1	81.0	110.5	189.4	(D)	22.1	26.0
	Corp. ownership or control	177	63	5.2	43.8	4.6	8.2	32.7	75.7	104.6	178.5	1.0	20.8	24.3
	Noncorporate ownership	49	6	0.4	2.8	0.3	0.6	2.3	5.3	5.9	10.9	(D)	1.3	1.7
	Legal form of organization:													
	Corporate	190	74	6.3	51.9	5.6	9.8	38.7	89.6	116.3	203.2	1.5	24.5	30.6
	Noncorporate, total	49	6	0.4	2.8	0.3	0.6	2.3	5.3	5.9	10.9	0.1	1.3	1.7
	Individual	29	2	0.1	0.7	0.1	0.2	0.6	1.5	0.8	2.3	(Z)	0.3	0.3
	Partnership	13	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS—Con.**													
2387	**Apparel Belts**	**284**	**119**	**9.4**	**76.1**	**7.3**	**12.6**	**44.6**	**150.3**	**141.2**	**286.9**	**2.5**	**43.9**	**50.9**
	Type of organization:													
	Multiunit companies, total	26	24	3.3	27.8	2.3	4.2	14.1	62.4	58.7	118.3	0.9	23.5	27.4
	Corp. ownership or control	26	24	3.3	27.8	2.3	4.2	14.1	62.4	58.7	118.3	0.9	23.5	27.4
	Single unit companies, total	258	95	6.1	48.4	5.0	8.4	30.5	87.9	82.5	168.6	1.6	20.4	23.4
	Corp. ownership or control	213	89	5.7	45.6	4.7	7.9	28.7	82.0	78.8	159.0	1.5	19.4	22.4
	Noncorporate ownership	45	6	0.4	2.8	0.3	0.5	1.8	5.9	3.7	9.6	0.1	1.0	1.0
	Legal form of organization:													
	Corporate	239	113	9.0	73.3	7.0	12.0	42.8	144.4	137.5	277.3	2.4	42.9	49.8
	Noncorporate, total	45	6	0.4	2.8	0.3	0.5	1.8	5.9	3.7	9.6	0.1	1.0	1.0
	Individual	32	3	0.2	1.4	0.2	0.2	0.8	3.3	2.3	5.5	0.1	0.9	0.9
	Partnership	10	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2389	**Apparel and Accessories, N.E.C.**	**311**	**99**	**7.8**	**54.0**	**6.5**	**11.2**	**36.9**	**105.4**	**96.4**	**r199.0**	**4.2**	**43.4**	**45.7**
	Type of organization:													
	Multiunit companies, total	32	24	3.4	23.6	2.8	5.0	15.9	54.6	54.1	r107.2	1.8	24.4	24.9
	Corp. ownership or control	32	24	3.4	23.6	2.8	5.0	15.9	54.6	54.1	r107.2	1.8	24.4	24.9
	Single unit companies, total	279	75	4.4	30.4	3.7	6.2	20.9	50.8	42.3	r91.8	2.3	19.0	20.7
	Corp. ownership or control	182	59	3.6	25.6	3.0	5.1	17.5	43.4	35.5	r77.9	2.2	15.4	16.9
	Noncorporate ownership	97	16	0.9	4.8	0.8	1.1	3.4	7.4	6.8	r13.9	0.1	3.6	3.9
	Legal form of organization:													
	Corporate	214	83	6.9	49.2	5.8	10.2	33.5	98.1	89.6	r185.0	4.0	39.8	41.8
	Noncorporate, total	97	16	0.9	4.8	0.8	1.1	3.4	7.4	6.8	r13.9	0.1	3.6	3.9
	Individual	67	8	0.5	2.4	0.4	0.5	1.7	3.5	3.5	r7.0	0.1	1.6	1.6
	Partnership	25	7	0.3	2.1	0.3	0.5	1.5	3.6	3.0	r6.3	0.1	1.9	2.1
	Other and unknown	5	1	0.1	0.3	0.1	0.1	0.2	0.3	0.3	r0.6	(Z)	0.2	0.2
2391	**Curtains and Draperies**	**1 712**	**324**	**31.7**	**224.7**	**27.2**	**47.9**	**163.6**	**407.3**	**605.5**	**1 013.1**	**7.2**	**140.5**	**151.2**
	Type of organization:													
	Multiunit companies, total	144	113	15.0	105.8	12.9	23.3	81.6	205.9	356.5	565.2	3.8	84.8	88.9
	Corp. ownership or control	144	113	15.0	105.8	12.9	23.3	81.6	205.9	356.5	565.2	3.8	84.8	88.9
	Single unit companies, total	1 568	211	16.7	118.9	14.3	24.6	82.0	201.5	249.0	447.9	3.5	55.7	62.3
	Corp. ownership or control	743	186	12.9	95.0	10.9	19.1	64.6	158.0	197.2	353.1	2.7	44.3	49.9
	Noncorporate ownership	825	25	3.8	23.8	3.4	5.4	17.4	43.5	51.8	94.8	0.8	11.4	12.4
	Legal form of organization:													
	Corporate	887	299	27.9	200.8	23.8	42.4	146.2	363.8	553.7	918.3	6.4	129.1	138.8
	Noncorporate, total	825	25	3.8	23.8	3.4	5.4	17.4	43.5	51.8	94.8	0.8	11.4	12.4
	Individual	634	18	2.6	16.7	2.4	3.7	12.1	29.2	33.1	62.0	0.4	7.5	7.9
	Partnership	165	4	0.9	5.5	0.8	1.3	4.1	10.6	13.1	23.5	(D)	2.7	3.0
	Other and unknown	26	3	0.3	1.6	0.2	0.4	1.2	3.7	5.6	9.2	(D)	1.3	1.4
2392	**House Furnishings, N.E.C.**	**1 051**	**403**	**47.5**	**366.4**	**39.8**	**75.4**	**260.0**	**782.9**	**1 541.4**	**2 294.0**	**26.9**	**345.7**	**393.0**
	Type of organization:													
	Multiunit companies, total	194	162	29.0	228.1	24.4	46.7	165.5	496.8	1 132.9	1 604.2	18.3	248.6	282.8
	Corp. ownership or control	192	161	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	857	241	18.5	138.4	15.4	28.7	94.5	286.1	408.5	689.8	8.6	97.1	110.2
	Corp. ownership or control	622	232	17.3	129.9	14.4	27.0	88.5	270.6	381.4	646.9	8.0	90.0	102.8
	Noncorporate ownership	235	9	1.2	8.4	1.0	1.7	6.0	15.4	27.1	42.9	0.6	7.1	7.4
	Legal form of organization:													
	Corporate	814	393	46.2	357.3	38.7	73.6	253.5	765.9	1 511.4	2 246.6	26.3	337.9	384.9
	Noncorporate, total	237	10	1.3	9.2	1.1	1.9	6.5	17.0	30.0	47.4	0.7	7.8	8.2
	Individual	176	1	0.5	3.6	0.5	0.8	2.5	6.5	10.6	16.9	0.3	2.5	2.6
	Partnership	54	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2393	**Textile Bags**	**228**	**90**	**8.2**	**66.7**	**6.8**	**12.9**	**46.8**	**122.2**	**200.5**	**321.8**	**5.8**	**57.6**	**59.4**
	Type of organization:													
	Multiunit companies, total	59	50	4.9	40.1	4.1	8.1	28.8	80.0	120.0	198.7	2.4	32.6	35.1
	Corp. ownership or control	57	48	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	169	40	3.3	26.7	2.7	4.9	18.0	42.2	80.5	123.1	3.4	25.0	24.2
	Corp. ownership or control	130	39	3.2	25.7	2.5	4.7	17.3	40.6	78.4	119.4	3.3	24.5	23.7
	Noncorporate ownership	39	1	0.1	1.0	0.1	0.2	0.7	1.6	2.1	3.8	0.1	0.5	0.6
	Legal form of organization:													
	Corporate	187	87	7.9	64.5	6.5	12.4	45.2	117.7	195.3	311.9	5.7	56.1	58.0
	Noncorporate, total	41	3	0.3	2.3	0.3	0.5	1.6	4.5	5.1	9.9	0.1	1.5	1.4
	Individual	30	–	0.1	0.7	0.1	0.2	0.5	1.1	1.7	2.8	(Z)	0.4	0.4
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2394	**Canvas and Related Products**	**1 003**	**148**	**13.9**	**121.6**	**11.0**	**19.3**	**75.1**	**237.4**	**254.2**	**486.8**	**8.4**	**91.5**	**101.0**
	Type of organization:													
	Multiunit companies, total	71	41	5.0	44.2	3.8	6.9	27.0	97.2	112.1	205.4	3.2	43.0	50.2
	Corp. ownership or control	69	39	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	932	107	8.9	77.4	7.2	12.4	48.1	140.2	142.1	281.4	5.2	48.6	50.8
	Corp. ownership or control	599	102	7.9	68.8	6.3	11.0	42.7	122.3	125.7	247.3	4.6	42.7	44.8
	Noncorporate ownership	333	5	1.1	8.6	1.0	1.4	5.4	17.9	16.3	34.1	0.6	5.9	6.0
	Legal form of organization:													
	Corporate	668	141	12.6	111.2	9.9	17.5	68.5	216.2	234.1	445.6	7.6	84.0	93.4
	Noncorporate, total	335	7	1.3	10.4	1.1	1.7	6.6	21.2	20.1	41.2	0.8	7.5	7.6
	Individual	243	1	0.7	5.3	0.6	0.9	3.4	10.8	10.5	21.3	0.4	3.6	3.6
	Partnership	79	2	0.3	2.3	0.3	0.4	1.4	5.3	3.8	9.1	0.1	1.5	1.5
	Other and unknown	13	4	0.3	2.8	0.3	0.5	1.8	5.1	5.7	10.8	0.3	2.4	2.4

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
23	**APPAREL AND OTHER TEXTILE PRODUCTS**—Con.													
2395	**Pleating and Stitching**	**778**	**206**	**16.1**	**130.9**	**13.2**	**22.9**	**89.0**	**281.8**	**341.5**	**620.2**	**9.3**	**75.5**	**82.9**
	Type of organization:													
	Multiunit companies, total	55	42	5.6	47.9	4.4	8.1	31.2	117.8	191.2	307.6	5.7	40.3	46.2
	Corp. ownership or control	54	42	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	723	164	10.5	83.0	8.8	14.8	57.8	164.0	150.3	312.6	3.6	35.2	36.7
	Corp. ownership or control	490	152	9.2	73.9	7.7	13.0	51.1	145.3	132.1	275.7	3.2	30.8	32.3
	Noncorporate ownership	233	12	1.3	9.1	1.1	1.8	6.6	18.7	18.2	36.9	0.4	4.4	4.4
	Legal form of organization:													
	Corporate	544	194	14.8	121.8	12.1	21.1	82.3	263.1	323.3	583.3	8.9	71.1	78.5
	Noncorporate, total	234	12	1.3	9.1	1.1	1.8	6.6	18.7	18.2	36.9	0.4	4.4	4.4
	Individual	183	9	1.0	7.0	0.9	1.4	5.1	14.0	12.1	26.1	0.3	3.0	3.1
	Partnership	39	2	0.2	1.4	0.2	0.3	1.0	3.4	3.9	7.4	0.1	1.0	0.8
	Other and unknown	12	1	0.1	0.7	0.1	0.1	0.6	1.2	2.1	3.4	(Z)	0.4	0.4
2396	**Automotive and Apparel Trimmings**	**715**	**188**	**30.9**	**476.4**	**26.3**	**51.7**	**374.0**	**1 000.2**	**1 163.0**	**2 166.3**	**36.1**	**214.7**	**194.3**
	Type of organization:													
	Multiunit companies, total	80	58	22.2	383.6	18.7	38.0	306.2	828.3	979.6	1 811.8	30.3	178.0	155.8
	Corp. ownership or control	80	58	22.2	383.6	18.7	38.0	306.2	828.3	979.6	1 811.8	30.3	178.0	155.8
	Single unit companies, total	635	130	8.7	92.8	7.5	13.8	67.7	171.8	183.4	354.6	5.8	36.7	38.5
	Corp. ownership or control	484	123	8.0	86.8	6.9	12.7	62.9	158.6	168.4	326.3	5.5	33.2	34.9
	Noncorporate ownership	151	7	0.7	6.0	0.6	1.1	4.9	13.2	15.0	28.2	0.2	3.6	3.6
	Legal form of organization:													
	Corporate	564	181	30.2	470.4	25.6	50.7	369.1	987.0	1 147.9	2 138.1	35.8	211.2	190.7
	Noncorporate, total	151	7	0.7	6.0	0.6	1.1	4.9	13.2	15.0	28.2	0.2	3.6	3.6
	Individual	90	3	0.3	2.5	0.2	0.4	1.9	4.7	5.1	9.8	0.1	1.0	1.1
	Partnership	49	4	0.4	3.3	0.4	0.6	2.8	8.0	9.3	17.3	0.1	2.4	2.4
	Other and unknown	12	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	0.6	1.1	(Z)	0.1	0.1
2397	**Schiffli Machine Embroideries**	**363**	**58**	**6.0**	**56.3**	**5.3**	**10.4**	**42.5**	**96.7**	**62.0**	**158.0**	**3.3**	**8.9**	**10.1**
	Type of organization:													
	Multiunit companies, total	19	11	2.1	17.7	1.8	3.7	13.2	30.8	15.0	45.8	1.0	3.3	3.9
	Corp. ownership or control	19	11	2.1	17.7	1.8	3.7	13.2	30.8	15.0	45.8	1.0	3.3	3.9
	Single unit companies, total	344	47	3.9	38.6	3.4	6.7	29.3	65.8	47.0	112.3	2.3	5.6	6.2
	Corp. ownership or control	235	45	3.4	33.9	3.0	5.8	25.6	56.9	41.0	97.2	2.0	4.7	5.4
	Noncorporate ownership	109	2	0.5	4.7	0.4	0.9	3.7	9.0	6.1	15.1	0.3	0.9	0.8
	Legal form of organization:													
	Corporate	254	56	5.5	51.6	4.8	9.5	38.8	87.7	56.0	142.9	3.0	8.0	9.3
	Noncorporate, total	109	2	0.5	4.7	0.4	0.9	3.7	9.0	6.1	15.1	0.3	0.9	0.8
	Individual	68	–	0.2	2.3	0.2	0.4	1.8	4.5	3.3	7.8	0.2	0.6	0.5
	Partnership	39	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2399	**Fabricated Textile Products, N.E.C.**	**878**	**272**	**31.1**	**263.8**	**26.0**	**47.1**	**187.4**	**531.0**	**630.4**	**1 152.9**	**19.4**	**155.6**	**165.4**
	Type of organization:													
	Multiunit companies, total	112	76	15.5	142.7	12.7	24.1	101.1	294.7	371.8	659.7	11.1	92.9	100.5
	Corp. ownership or control	112	76	15.5	142.7	12.7	24.1	101.1	294.7	371.8	659.7	11.1	92.9	100.5
	Single unit companies, total	766	196	15.6	121.1	13.2	23.0	86.4	236.3	258.6	493.3	8.3	62.7	64.9
	Corp. ownership or control	574	187	14.7	114.8	12.4	21.8	81.8	222.3	245.2	465.9	7.9	59.1	61.3
	Noncorporate ownership	192	9	0.9	6.3	0.8	1.3	4.6	14.0	13.4	27.4	0.4	3.6	3.6
	Legal form of organization:													
	Corporate	686	263	30.2	257.6	25.2	45.8	182.8	517.0	617.1	1 125.6	19.0	152.0	161.8
	Noncorporate, total	192	9	0.9	6.3	0.8	1.3	4.6	14.0	13.4	27.4	0.4	3.6	3.6
	Individual	139	6	0.6	4.1	0.5	0.8	3.0	8.6	8.6	17.2	0.2	2.3	2.4
	Partnership	43	1	0.2	1.6	0.2	0.3	1.1	4.2	3.5	7.8	0.1	0.9	0.9
	Other and unknown	10	2	0.1	0.6	0.1	0.1	0.4	1.2	1.2	2.4	(Z)	0.3	0.4
24	**LUMBER AND WOOD PRODUCTS**	**37 302**	**7 056**	**692.4**	**7 424.7**	**594.8**	**1 147.6**	**5 795.0**	**16 222.8**	**23 918.7**	**39 919.4**	**1 562.6**	**4 258.1**	**4 663.8**
	Type of organization:													
	Multiunit companies, total	3 845	2 858	363.2	4 232.5	309.0	624.3	3 340.7	9 599.7	15 783.8	25 246.2	884.4	2 747.3	3 004.2
	Corp. ownership or control	3 816	2 843	361.1	4 208.9	307.2	620.8	3 321.3	9 556.3	15 703.1	25 123.8	882.0	2 735.7	2 991.6
	Noncorporate ownership	29	15	2.1	23.6	1.8	3.5	19.3	43.1	80.7	122.4	2.4	11.7	12.7
	Single unit companies, total	33 457	4 198	329.2	3 192.2	285.8	523.3	2 454.4	6 623.3	8 134.8	14 673.2	678.2	1 510.8	1 659.6
	Corp. ownership or control	17 047	3 622	258.1	2 548.5	220.8	414.4	1 920.7	5 129.1	6 501.9	11 561.5	488.9	1 210.1	1 336.6
	Noncorporate ownership	16 410	576	71.1	643.7	65.0	108.9	533.7	1 494.3	1 632.9	3 111.7	189.3	300.7	323.0
	Legal form of organization:													
	Corporate	20 863	6 465	619.2	6 757.4	528.0	1 035.2	5 242.0	14 685.4	22 205.1	36 685.3	1 370.9	3 945.8	4 328.2
	Noncorporate, total	16 439	591	73.2	667.3	66.8	112.4	553.0	1 537.4	1 713.6	3 234.1	191.6	312.3	335.7
	Individual	11 775	305	43.7	384.7	40.0	65.0	317.2	881.0	925.5	1 799.4	117.3	156.7	168.4
	Partnership	3 837	232	21.6	190.0	19.6	33.6	156.2	463.9	525.3	986.9	54.6	104.4	108.2
	Other and unknown	827	54	7.9	92.6	7.2	13.8	79.6	192.5	262.8	447.8	19.8	51.2	59.1
2411	**Logging Camps and Logging Contractors**	**15 469**	**708**	**83.3**	**1 009.0**	**74.5**	**127.7**	**840.1**	**2 418.7**	**3 826.7**	**6 230.1**	**386.5**	**520.6**	**555.8**
	Type of organization:													
	Multiunit companies, total	265	145	22.6	340.5	18.7	35.7	269.8	831.5	2 227.7	3 061.1	148.0	294.6	309.4
	Corp. ownership or control	264	145	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	15 204	563	60.7	668.5	55.7	92.1	570.3	1 587.1	1 599.0	3 169.1	238.4	226.0	246.4
	Corp. ownership or control	6 069	397	32.5	379.9	29.4	51.3	321.8	879.0	857.8	1 724.2	132.8	117.6	132.6
	Noncorporate ownership	9 135	166	28.2	288.6	26.3	40.7	248.5	708.2	741.2	1 444.9	105.6	108.4	113.8

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
24	**LUMBER AND WOOD PRODUCTS—Con.**													
2411	**Logging Camps and Logging Contractors—Con.**													
	Legal form of organization:													
	Corporate	6 333	542	55.1	720.3	48.1	87.0	591.6	1 710.7	3 085.1	4 785.1	280.9	411.8	442.0
	Noncorporate, total	9 136	166	28.2	288.6	26.3	40.7	248.5	708.0	741.6	1 445.0	105.6	108.8	113.8
	Individual	6 854	101	19.9	202.3	18.6	28.5	173.3	471.2	496.3	964.9	70.4	71.9	75.0
	Partnership	1 786	56	6.6	68.0	6.2	9.6	59.4	184.3	181.3	364.1	25.7	28.0	29.8
	Other and unknown	496	9	1.7	18.4	1.6	2.6	15.7	52.5	64.0	116.0	9.5	8.9	9.1
2421	**Sawmills and Planing Mills, General**	**7 544**	**1 827**	**175.2**	**1 943.0**	**155.8**	**315.6**	**1 622.7**	**4 452.8**	**6 499.2**	**10 866.7**	**535.8**	**1 333.7**	**1 420.6**
	Type of organization:													
	Multiunit companies, total	1 035	788	98.7	1 262.9	87.5	184.8	1 076.0	2 922.1	4 539.4	7 391.9	335.4	935.4	1 005.1
	Corp. ownership or control	1 030	785	98.3	1 260.0	87.2	184.3	1 073.5	2 916.4	4 529.6	7 376.5	(D)	933.7	1 003.2
	Noncorporate ownership	5	3	0.3	2.9	0.3	0.6	2.5	5.8	9.8	15.4	(D)	1.8	2.0
	Single unit companies, total	6 509	1 039	76.6	680.1	68.3	130.8	546.7	1 530.7	1 959.8	3 474.8	200.5	398.2	415.4
	Corp. ownership or control	3 126	851	56.4	530.6	50.0	98.2	423.9	1 172.0	1 538.3	2 695.5	151.9	311.7	327.2
	Noncorporate ownership	3 383	188	20.1	149.5	18.3	32.6	122.8	358.6	421.6	779.3	48.5	86.5	88.2
	Legal form of organization:													
	Corporate	4 156	1 636	154.8	1 790.6	137.2	282.5	1 497.4	4 088.4	6 067.9	10 072.0	486.3	1 245.4	1 330.4
	Noncorporate, total	3 388	191	20.5	152.4	18.6	33.1	125.3	364.4	431.4	794.7	49.5	88.3	90.2
	Individual	2 227	91	11.4	80.5	10.3	17.9	65.7	200.1	213.6	411.7	27.3	40.6	43.2
	Partnership	1 042	87	7.4	57.6	6.8	12.1	47.9	137.3	183.3	321.9	16.7	39.9	38.8
	Other and unknown	119	13	1.7	14.4	1.5	3.2	11.7	27.0	34.5	61.1	5.5	7.8	8.3
2426	**Hardwood Dimension and Flooring**	**890**	**345**	**29.1**	**225.0**	**25.8**	**49.8**	**177.5**	**413.1**	**442.8**	**850.0**	**35.3**	**125.3**	**147.4**
	Type of organization:													
	Multiunit companies, total	162	117	13.7	110.2	12.2	24.2	88.2	207.8	219.9	425.2	17.2	68.0	83.1
	Corp. ownership or control	161	117	13.7	110.2	12.2	24.2	88.2	207.8	219.9	425.2	17.2	67.8	83.1
	Noncorporate ownership	1	–	–	–	–	–	–	–	–	–	–	0.2	–
	Single unit companies, total	728	228	15.3	114.7	13.7	25.6	89.3	205.3	223.0	424.9	18.1	57.3	64.3
	Corp. ownership or control	492	200	13.0	98.0	11.5	21.7	76.4	165.3	176.9	339.2	13.9	44.2	50.6
	Noncorporate ownership	236	28	2.3	16.7	2.1	3.9	12.9	40.0	46.1	85.7	4.2	13.1	13.7
	Legal form of organization:													
	Corporate	653	317	26.7	208.3	23.7	45.9	164.5	373.1	396.7	764.3	31.1	112.1	133.7
	Noncorporate, total	237	28	2.3	16.7	2.1	3.9	12.9	40.0	46.1	85.7	4.2	13.2	13.7
	Individual	157	10	1.0	6.8	1.0	1.7	5.6	12.6	12.7	25.2	1.0	3.0	3.3
	Partnership	65	16	1.2	9.2	1.1	2.1	6.8	26.3	32.4	58.3	3.1	9.6	10.1
	Other and unknown	15	2	0.1	0.7	0.1	0.1	0.5	1.1	1.0	2.1	0.1	0.7	0.3
2429	**Special Product Sawmills, N.E.C.**	**566**	**101**	**7.0**	**60.3**	**6.1**	**10.4**	**48.8**	**109.1**	**137.6**	**252.6**	**13.1**	**34.2**	**30.8**
	Type of organization:													
	Multiunit companies, total	69	25	1.5	13.0	1.3	2.4	10.3	12.5	34.3	54.5	3.5	15.6	9.4
	Corp. ownership or control	68	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	497	76	5.5	47.3	4.8	8.0	38.4	96.7	103.3	198.1	9.6	18.6	21.4
	Corp. ownership or control	249	54	3.7	33.3	3.2	5.3	26.9	65.8	73.2	137.6	5.9	12.3	14.5
	Noncorporate ownership	248	22	1.8	13.9	1.6	2.7	11.6	30.8	30.1	60.5	3.7	6.3	6.8
	Legal form of organization:													
	Corporate	317	79	5.2	46.1	4.6	7.6	37.1	78.1	106.9	191.3	9.3	27.8	23.9
	Noncorporate, total	249	22	1.8	14.2	1.6	2.8	11.7	31.0	30.6	61.3	3.8	6.4	6.9
	Individual	131	12	1.0	7.9	0.9	1.5	6.7	16.0	18.2	34.1	2.1	3.5	3.7
	Partnership	98	8	0.6	4.8	0.5	0.9	3.8	12.3	9.9	21.9	1.2	2.1	2.5
	Other and unknown	20	2	0.2	1.5	0.2	0.4	1.2	2.7	2.5	5.2	0.5	0.8	0.8
2431	**Millwork**	**2 333**	**692**	**68.6**	**742.2**	**56.6**	**108.4**	**542.0**	**1 497.9**	**2 460.4**	**3 928.1**	**81.0**	**545.3**	**605.0**
	Type of organization:													
	Multiunit companies, total	356	267	34.1	359.4	28.4	56.0	270.4	777.2	1 301.1	2 053.3	44.5	291.2	331.3
	Corp. ownership or control	352	266	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 977	425	34.5	382.8	28.2	52.4	271.6	720.7	1 159.2	1 874.8	36.5	254.1	273.7
	Corp. ownership or control	1 425	405	32.0	358.6	26.1	48.7	253.8	674.0	1 087.6	1 756.7	30.2	238.6	258.3
	Noncorporate ownership	552	20	2.5	24.3	2.1	3.8	17.8	46.7	71.6	118.1	6.3	15.6	15.4
	Legal form of organization:													
	Corporate	1 777	671	66.1	717.4	54.5	104.5	523.9	1 450.1	2 386.9	3 807.1	74.6	529.4	589.2
	Noncorporate, total	556	21	2.5	24.8	2.1	3.9	18.2	47.8	73.5	121.0	6.3	16.0	15.8
	Individual	390	9	1.4	13.4	1.3	2.2	9.8	24.0	39.6	63.5	4.2	7.8	8.1
	Partnership	133	9	0.9	8.8	0.7	1.3	6.4	19.6	26.6	45.6	1.9	5.4	5.9
	Other and unknown	33	3	0.2	2.6	0.2	0.4	2.0	4.2	7.3	12.0	0.3	2.7	1.8
2434	**Wood Kitchen Cabinets**	**2 583**	**510**	**46.2**	**481.1**	**38.7**	**72.3**	**352.3**	**868.6**	**730.8**	**1 590.8**	**36.7**	**187.2**	**212.3**
	Type of organization:													
	Multiunit companies, total	128	99	15.9	159.6	13.6	25.5	121.7	326.5	291.6	616.5	11.2	83.8	92.6
	Corp. ownership or control	128	99	15.9	159.6	13.6	25.5	121.7	326.5	291.6	616.5	11.2	83.8	92.6
	Single unit companies, total	2 455	411	30.2	321.5	25.1	46.8	230.6	542.1	439.2	974.4	25.5	103.4	119.7
	Corp. ownership or control	1 444	370	25.4	276.0	20.8	39.6	196.2	449.6	366.4	809.7	18.5	85.5	100.8
	Noncorporate ownership	1 011	41	4.8	45.5	4.2	7.2	34.4	92.6	72.7	164.6	7.0	17.9	18.9
	Legal form of organization:													
	Corporate	1 572	469	41.3	435.6	34.4	65.1	317.9	776.0	658.1	1 426.2	29.7	169.2	193.3
	Noncorporate, total	1 011	41	4.8	45.5	4.2	7.2	34.4	92.6	72.7	164.6	7.0	17.9	18.9
	Individual	752	24	3.3	31.3	2.9	5.0	23.6	67.3	50.6	117.5	5.9	12.1	13.0
	Partnership	225	15	1.4	12.5	1.1	2.0	9.5	22.3	19.7	41.7	1.0	4.6	5.2
	Other and unknown	34	2	0.2	1.7	0.2	0.3	1.3	2.9	2.4	5.5	0.1	1.1	0.7

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
24	**LUMBER AND WOOD PRODUCTS—Con.**													
2435	**Hardwood Veneer and Plywood**	**321**	**227**	**22.3**	**211.5**	**19.1**	**37.9**	**162.0**	**420.2**	**838.7**	**1 250.4**	**29.6**	**176.1**	**197.7**
	Type of organization:													
	Multiunit companies, total	122	109	13.3	133.1	11.2	22.3	102.2	280.1	674.1	947.1	22.4	141.8	158.7
	Corp. ownership or control	121	108	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	199	118	9.1	78.3	7.9	15.7	59.8	140.2	164.6	303.3	7.2	34.3	39.1
	Corp. ownership or control	180	115	8.8	76.0	7.6	15.2	58.0	135.2	159.8	293.6	7.1	33.6	38.3
	Noncorporate ownership	19	3	0.3	2.4	0.3	0.5	1.8	5.0	4.8	9.7	0.2	0.7	0.8
	Legal form of organization:													
	Corporate	301	223	21.7	204.5	18.6	36.9	155.9	407.5	821.3	1 221.6	29.3	173.5	193.9
	Noncorporate, total	20	4	0.6	7.0	0.6	1.0	6.1	12.7	17.4	28.8	0.3	2.6	3.8
	Individual	9	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	8	2	0.1	1.0	0.1	0.2	0.7	2.0	2.0	4.0	(Z)	0.4	0.4
	Other and unknown	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2436	**Softwood Veneer and Plywood**	**256**	**224**	**46.2**	**634.6**	**41.9**	**89.4**	**556.9**	**1 583.7**	**2 231.1**	**3 804.8**	**105.6**	**229.2**	**242.6**
	Type of organization:													
	Multiunit companies, total	193	181	40.3	547.4	36.5	78.0	479.2	1 406.1	1 936.3	3 340.6	92.9	178.6	184.0
	Corp. ownership or control	187	176	39.4	535.7	35.7	76.6	469.7	1 384.9	1 896.0	3 279.0	92.5	174.5	180.4
	Noncorporate ownership	6	5	0.9	11.7	0.8	1.4	9.6	21.2	40.3	61.6	0.3	4.0	3.7
	Single unit companies, total	63	43	5.9	87.2	5.5	11.4	77.7	177.6	294.8	464.2	12.8	50.7	58.6
	Corp. ownership or control	49	34	4.1	55.8	3.7	7.7	48.2	117.5	216.2	331.9	10.7	31.7	31.7
	Noncorporate ownership	14	9	1.8	31.4	1.7	3.7	29.5	60.1	78.6	132.2	2.1	19.0	26.9
	Legal form of organization:													
	Corporate	236	210	43.5	591.5	39.4	84.3	517.9	1 502.4	2 112.2	3 610.9	103.2	206.2	212.0
	Noncorporate, total	20	14	2.7	43.1	2.6	5.1	39.0	81.3	118.9	193.9	2.5	23.0	30.6
	Individual	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	14	13	2.7	42.0	2.5	5.0	38.0	79.5	116.3	189.7	2.4	23.0	30.3
2439	**Structural Wood Members, N.E.C.**	**656**	**225**	**13.8**	**147.0**	**11.0**	**20.8**	**101.6**	**330.0**	**484.4**	**807.7**	**19.7**	**70.5**	**87.3**
	Type of organization:													
	Multiunit companies, total	143	84	5.3	60.7	4.3	8.4	44.5	140.3	206.6	343.4	8.0	32.0	40.6
	Corp. ownership or control	142	84	5.3	60.7	4.3	8.4	44.5	140.3	206.6	343.4	8.0	31.8	40.6
	Noncorporate ownership	1	–	–	–	–	–	–	(Z)	–	–	–	0.2	–
	Single unit companies, total	513	141	8.4	86.3	6.7	12.4	57.2	189.7	277.7	464.3	11.7	38.5	46.7
	Corp. ownership or control	421	136	8.0	81.8	6.3	11.8	54.4	180.0	263.0	439.9	10.9	36.2	44.3
	Noncorporate ownership	92	5	0.5	4.4	0.4	0.6	2.8	9.7	14.8	24.4	0.8	2.2	2.3
	Legal form of organization:													
	Corporate	563	220	13.3	142.6	10.6	20.2	98.8	320.4	469.6	783.3	18.9	68.0	85.0
	Noncorporate, total	93	5	0.5	4.4	0.4	0.6	2.8	9.6	14.8	24.4	0.8	2.4	2.3
	Individual	48	2	0.2	2.5	0.2	0.3	1.5	5.5	7.5	13.0	0.4	1.1	1.2
	Partnership	35	3	0.2	1.8	0.2	0.3	1.2	3.8	6.9	10.6	(D)	1.0	1.1
	Other and unknown	10	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.4	0.8	(D)	0.3	0.1
2441	**Nailed Wood Boxes and Shook**	**396**	**110**	**8.6**	**68.6**	**7.5**	**13.7**	**53.6**	**116.2**	**147.4**	**263.3**	**5.4**	**30.2**	**31.2**
	Type of organization:													
	Multiunit companies, total	32	22	2.4	20.3	2.2	4.1	16.9	29.8	42.7	72.8	1.3	11.6	11.1
	Corp. ownership or control	32	22	2.4	20.3	2.2	4.1	16.9	29.8	42.7	72.8	1.3	11.6	11.1
	Single unit companies, total	364	88	6.1	48.3	5.3	9.6	36.7	86.4	104.8	190.4	4.0	18.6	20.1
	Corp. ownership or control	245	80	5.2	40.0	4.5	8.1	30.1	70.8	86.8	157.1	3.5	14.5	15.3
	Noncorporate ownership	119	8	1.0	8.3	0.9	1.5	6.7	15.7	18.0	33.4	0.5	4.1	4.8
	Legal form of organization:													
	Corporate	277	102	7.6	60.3	6.6	12.2	47.0	100.6	129.4	229.9	4.8	26.1	26.4
	Noncorporate, total	119	8	1.0	8.3	0.9	1.5	6.7	15.7	18.0	33.4	0.5	4.1	4.8
	Individual	79	4	0.5	3.4	0.4	0.7	2.7	6.0	6.0	11.9	0.2	1.0	1.1
	Partnership	35	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2448	**Wood Pallets and Skids**	**1 290**	**348**	**20.3**	**163.8**	**17.9**	**32.1**	**126.3**	**303.1**	**397.3**	**698.0**	**21.3**	**52.4**	**58.1**
	Type of organization:													
	Multiunit companies, total	107	68	4.1	36.0	3.6	6.5	27.7	66.9	102.6	169.3	4.8	16.5	15.7
	Corp. ownership or control	107	68	4.1	36.0	3.6	6.5	27.7	66.9	102.6	169.3	4.8	16.5	15.7
	Single unit companies, total	1 183	280	16.2	127.8	14.3	25.6	98.6	236.2	294.7	528.7	16.6	35.9	42.4
	Corp. ownership or control	755	234	13.1	106.7	11.5	21.1	81.6	191.7	245.0	435.5	13.1	29.3	32.9
	Noncorporate ownership	428	46	3.1	21.1	2.8	4.5	17.0	44.4	49.6	93.2	3.5	6.5	9.5
	Legal form of organization:													
	Corporate	862	302	17.3	142.7	15.1	27.6	109.3	258.6	347.6	604.8	17.9	45.9	48.6
	Noncorporate, total	428	46	3.1	21.1	2.8	4.5	17.0	44.4	49.6	93.2	3.5	6.5	9.5
	Individual	295	32	2.2	14.7	2.0	3.1	11.9	32.1	33.0	64.2	2.1	4.6	7.6
	Partnership	116	13	0.8	6.0	0.8	1.2	4.8	11.3	15.7	26.9	1.2	1.7	1.8
	Other and unknown	17	1	0.1	0.5	0.1	0.1	0.4	1.0	1.0	2.1	0.1	0.2	0.1
2449	**Wood Containers, N.E.C.**	**263**	**82**	**8.9**	**67.2**	**8.0**	**15.5**	**53.7**	**120.4**	**134.4**	**255.8**	**2.9**	**51.8**	**50.5**
	Type of organization:													
	Multiunit companies, total	62	46	5.6	43.6	5.0	9.6	35.1	79.1	94.2	174.7	1.8	40.2	38.5
	Corp. ownership or control	60	44	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	201	36	3.3	23.6	3.0	5.8	18.7	41.4	40.1	81.1	1.1	11.7	12.0
	Corp. ownership or control	134	34	2.8	20.3	2.6	4.9	15.8	35.6	35.0	69.9	0.9	9.7	10.5
	Noncorporate ownership	67	2	0.5	3.3	0.5	0.9	2.9	5.7	5.1	11.2	0.3	2.0	1.5

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
24	**LUMBER AND WOOD PRODUCTS**—Con.													
2449	**Wood Containers, N.E.C.**—Con.													
	Legal form of organization:													
	Corporate	194	78	8.2	62.6	7.3	14.1	49.8	112.7	125.1	238.4	2.6	48.9	47.9
	Noncorporate, total	69	4	0.7	4.6	0.7	1.3	3.9	7.7	9.3	17.3	0.3	2.9	2.7
	Individual	42	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	24	1	0.3	2.1	0.3	0.6	1.8	3.5	3.3	7.1	0.2	1.6	1.1
	Other and unknown	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2451	**Mobile Homes**	**597**	**465**	**50.5**	**527.6**	**41.8**	**80.5**	**371.8**	**1 030.5**	**2 175.3**	**3 199.3**	**69.8**	**165.5**	**193.3**
	Type of organization:													
	Multiunit companies, total	403	355	41.3	441.0	34.0	66.0	309.8	870.4	1 833.1	2 699.2	48.4	136.1	157.5
	Corp. ownership or control	401	353	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	194	110	9.2	86.6	7.8	14.5	62.0	160.1	342.1	500.1	21.4	29.4	35.8
	Corp. ownership or control	169	108	9.1	85.3	7.7	14.3	61.2	158.0	337.0	492.8	21.0	28.8	35.3
	Noncorporate ownership	25	2	0.1	1.3	0.1	0.2	0.9	2.1	5.1	7.3	0.4	0.6	0.5
	Legal form of organization:													
	Corporate	570	461	50.2	525.0	41.6	80.1	370.2	1 025.2	2 163.5	3 182.2	69.0	164.2	192.0
	Noncorporate, total	27	4	0.3	2.6	0.2	0.4	1.7	5.3	11.8	17.2	0.8	1.3	1.3
	Individual	9	1	0.1	0.7	0.1	0.1	0.5	1.2	3.1	4.2	0.2	0.3	0.4
	Partnership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	11	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2452	**Prefabricated Wood Buildings**	**568**	**287**	**29.0**	**330.6**	**21.2**	**40.6**	**204.4**	**758.6**	**1 207.1**	**1 948.6**	**40.2**	**184.5**	**229.1**
	Type of organization:													
	Multiunit companies, total	167	136	17.6	207.2	12.7	24.8	128.6	494.8	806.1	1 287.6	26.2	119.5	154.8
	Corp. ownership or control	164	135	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	401	151	11.4	123.3	8.5	15.8	75.8	263.8	401.1	661.0	14.0	65.0	74.4
	Corp. ownership or control	349	145	11.0	118.7	8.1	15.2	72.3	251.0	387.8	635.1	13.2	63.2	72.0
	Noncorporate ownership	52	6	0.4	4.7	0.3	0.6	3.4	12.8	13.2	25.9	0.9	1.7	2.4
	Legal form of organization:													
	Corporate	513	280	28.5	325.2	20.8	39.9	200.4	744.1	1 190.0	1 917.2	39.1	181.7	225.3
	Noncorporate, total	55	7	0.5	5.4	0.4	0.7	4.0	14.5	17.1	31.4	1.1	2.8	3.8
	Individual	31	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	15	5	0.3	3.5	0.2	0.5	2.7	10.5	9.9	20.4	0.8	1.2	1.7
	Other and unknown	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2491	**Wood Preserving**	**457**	**192**	**12.6**	**126.1**	**9.9**	**19.7**	**82.9**	**327.1**	**657.5**	**962.6**	**30.3**	**184.5**	**212.5**
	Type of organization:													
	Multiunit companies, total	158	116	7.7	79.5	6.0	12.1	52.7	228.0	444.8	655.7	17.8	142.1	164.1
	Corp. ownership or control	157	116	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	299	76	4.9	46.5	3.9	7.7	30.1	99.1	212.7	306.9	12.5	42.4	48.4
	Corp. ownership or control	236	68	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	63	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	393	184	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	64	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	38	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	24	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2492	**Particleboard**	**63**	**51**	**6.2**	**79.1**	**5.0**	**10.9**	**60.3**	**207.2**	**245.3**	**452.9**	**32.5**	**21.7**	**21.1**
	Type of organization:													
	Multiunit companies, total	53	46	5.8	74.0	4.7	10.2	56.7	196.4	233.5	430.2	30.2	20.2	19.5
	Corp. ownership or control	53	46	5.8	74.0	4.7	10.2	56.7	196.4	233.5	430.2	30.2	20.2	19.5
	Single unit companies, total	10	5	0.4	5.1	0.3	0.7	3.7	10.8	11.8	22.7	2.3	1.5	1.6
	Corp. ownership or control	9	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	62	51	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2499	**Wood Products, N.E.C.**	**3 050**	**662**	**64.6**	**608.1**	**53.9**	**102.3**	**438.0**	**1 265.5**	**1 302.8**	**2 557.6**	**116.9**	**345.4**	**368.5**
	Type of organization:													
	Multiunit companies, total	390	254	33.1	344.0	27.2	53.7	250.8	729.9	795.8	1 523.2	71.0	220.1	228.7
	Corp. ownership or control	389	254	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 660	408	31.4	264.1	26.7	48.5	187.2	535.6	507.0	1 034.4	45.8	125.2	139.8
	Corp. ownership or control	1 695	386	28.2	239.2	23.8	43.7	168.9	481.2	457.7	931.3	41.5	111.6	125.4
	Noncorporate ownership	965	22	3.2	24.9	2.9	4.8	18.3	54.4	49.3	103.1	4.4	13.7	14.4
	Legal form of organization:													
	Corporate	2 084	640	61.4	583.1	50.9	97.4	419.6	1 211.0	1 253.2	2 454.0	112.5	331.7	354.1
	Noncorporate, total	966	22	3.2	25.0	2.9	4.9	18.4	54.6	49.6	103.6	4.4	13.7	14.4
	Individual	708	12	2.0	15.6	1.8	2.9	11.5	33.6	30.9	64.4	2.7	8.5	8.8
	Partnership	222	8	1.0	7.8	0.9	1.7	5.7	17.8	15.7	33.1	1.5	4.3	4.8
	Other and unknown	36	2	0.2	1.6	0.2	0.3	1.2	3.2	2.9	6.1	0.3	0.8	0.8

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
25	**FURNITURE AND FIXTURES**	**10 235**	**3 588**	**463.8**	**4 448.3**	**383.6**	**736.4**	**3 191.8**	**8 921.7**	**8 187.4**	**16 978.0**	**388.7**	**2 504.7**	**2 750.3**
	Type of organization:													
	Multiunit companies, total	1 657	1 353	281.8	2 742.0	232.5	449.5	1 990.9	5 723.0	5 174.2	10 805.4	254.6	1 719.8	1 886.1
	Corp. ownership or control	1 641	1 340	279.2	2 720.3	230.0	445.0	1 973.8	5 688.8	5 132.7	10 730.1	254.4	1 705.7	1 870.0
	Noncorporate ownership	16	13	2.6	21.6	2.4	4.5	17.1	34.1	41.5	75.3	0.2	14.1	16.1
	Single unit companies, total	8 578	2 235	182.0	1 706.3	151.1	286.9	1 200.9	3 198.7	3 013.2	6 172.6	134.1	784.9	864.2
	Corp. ownership or control	6 274	2 142	171.1	1 609.2	141.6	270.1	1 130.9	3 007.1	2 839.3	5 807.8	125.7	736.5	813.3
	Noncorporate ownership	2 304	93	10.9	97.1	9.5	16.8	70.0	191.6	173.9	364.8	8.4	48.4	51.0
	Legal form of organization:													
	Corporate	7 915	3 482	450.3	4 329.5	371.6	715.1	3 104.7	8 695.9	7 972.0	16 537.9	380.1	2 442.2	2 683.3
	Noncorporate, total	2 320	106	13.5	118.8	12.0	21.2	87.1	225.8	215.4	440.2	8.5	62.5	67.1
	Individual	1 575	41	5.9	52.3	5.3	9.1	38.2	106.4	94.8	200.4	3.9	26.2	27.6
	Partnership	603	35	3.9	35.9	3.3	6.0	25.2	68.5	62.9	131.3	3.3	17.1	18.7
	Other and unknown	142	30	3.7	30.5	3.3	6.1	23.7	50.8	57.7	108.5	1.4	19.3	20.8
2511	**Wood Household Furniture**	**2 983**	**816**	**141.0**	**1 138.8**	**124.8**	**245.0**	**898.7**	**2 239.9**	**1 934.6**	**4 148.8**	**101.9**	**771.6**	**821.5**
	Type of organization:													
	Multiunit companies, total	378	323	93.9	768.1	83.0	164.0	610.9	1 537.1	1 314.8	2 835.4	60.4	562.6	598.3
	Corp. ownership or control	375	320	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 605	493	47.1	370.6	41.8	80.9	287.8	702.8	619.9	1 313.4	41.5	208.9	223.2
	Corp. ownership or control	1 715	461	43.5	344.2	38.4	74.9	266.7	650.1	573.2	1 214.8	37.6	192.7	205.7
	Noncorporate ownership	890	32	3.6	26.5	3.4	6.0	21.1	52.7	46.7	98.6	4.0	16.2	17.5
	Legal form of organization:													
	Corporate	2 090	781	136.6	1 106.6	120.7	237.6	873.6	2 179.4	1 877.8	4 032.6	97.9	749.0	797.0
	Noncorporate, total	893	35	4.4	32.2	4.1	7.3	25.1	60.5	56.8	116.2	4.0	22.6	24.5
	Individual	566	16	1.9	14.3	1.8	3.2	11.3	29.5	27.3	56.5	1.4	9.5	10.0
	Partnership	275	13	1.4	10.4	1.3	2.4	8.5	19.9	16.4	35.5	2.1	5.0	6.3
	Other and unknown	52	6	1.0	7.5	0.9	1.7	5.3	11.1	13.1	24.2	0.5	8.1	8.2
2512	**Upholstered Household Furniture**	**1 473**	**730**	**89.1**	**779.2**	**75.7**	**137.6**	**583.9**	**1 437.3**	**1 510.6**	**2 931.0**	**50.4**	**341.2**	**378.6**
	Type of organization:													
	Multiunit companies, total	243	212	46.8	418.8	39.6	72.0	313.5	788.0	817.3	1 592.6	28.0	198.2	220.2
	Corp. ownership or control	234	206	45.5	407.6	38.5	69.8	304.0	771.6	798.2	1 556.9	(D)	193.4	214.5
	Noncorporate ownership	9	6	1.3	11.1	1.2	2.2	9.5	16.5	19.1	35.7	(D)	4.8	5.7
	Single unit companies, total	1 230	518	42.2	360.4	36.1	65.6	270.3	649.2	693.3	1 338.4	22.4	142.9	158.4
	Corp. ownership or control	973	495	40.4	345.6	34.4	62.9	259.0	621.0	665.2	1 282.2	21.1	136.6	152.0
	Noncorporate ownership	257	23	1.9	14.8	1.7	2.7	11.4	28.2	28.1	56.3	1.3	6.3	6.4
	Legal form of organization:													
	Corporate	1 207	701	85.9	753.2	72.9	132.7	563.0	1 392.6	1 463.4	2 839.0	49.0	330.0	366.5
	Noncorporate, total	266	29	3.1	26.0	2.8	4.9	20.9	44.7	47.2	91.9	1.4	11.1	12.1
	Individual	163	13	1.1	8.5	1.0	1.5	6.5	17.1	16.6	33.6	0.9	3.5	3.6
	Partnership	78	5	0.5	3.8	0.4	0.7	2.9	6.8	6.9	13.6	0.3	1.7	1.7
	Other and unknown	25	11	1.6	13.7	1.4	2.7	11.5	20.9	23.7	44.7	0.3	6.0	6.9
2514	**Metal Household Furniture**	**448**	**213**	**33.2**	**302.7**	**27.4**	**51.6**	**208.6**	**637.4**	**684.0**	**1 307.1**	**22.8**	**197.9**	**217.0**
	Type of organization:													
	Multiunit companies, total	131	121	23.6	211.5	19.3	36.0	146.3	454.9	486.0	927.3	17.2	147.7	163.7
	Corp. ownership or control	130	120	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	317	92	9.6	91.2	8.1	15.6	62.3	182.6	198.0	379.8	5.6	50.2	53.4
	Corp. ownership or control	269	88	9.0	82.9	7.6	14.6	57.8	167.8	186.6	353.0	5.3	46.4	49.9
	Noncorporate ownership	48	4	0.6	8.3	0.5	1.0	4.6	14.7	11.4	26.8	0.3	3.8	3.5
	Legal form of organization:													
	Corporate	399	208	32.4	292.8	26.7	50.3	202.8	619.0	669.7	1 273.7	22.6	193.4	212.8
	Noncorporate, total	49	5	0.8	9.9	0.7	1.3	5.8	18.4	14.3	33.4	0.3	4.4	4.2
	Individual	41	2	0.2	1.6	0.2	0.3	1.1	2.9	3.1	6.1	0.1	0.9	0.9
	Partnership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2515	**Mattresses and Bedsprings**	**962**	**355**	**27.0**	**279.8**	**20.6**	**39.3**	**175.3**	**616.6**	**788.6**	**1 398.5**	**14.5**	**142.7**	**155.6**
	Type of organization:													
	Multiunit companies, total	221	149	14.2	150.5	10.8	20.8	97.4	354.2	436.6	786.4	7.1	84.2	92.2
	Corp. ownership or control	220	148	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	741	206	12.8	129.3	9.8	18.5	77.9	262.5	352.0	612.0	7.4	58.5	63.4
	Corp. ownership or control	532	197	11.9	120.7	9.0	17.1	72.4	244.1	326.3	568.0	7.1	54.1	58.8
	Noncorporate ownership	209	9	1.0	8.6	0.8	1.4	5.5	18.4	25.7	44.0	0.4	4.4	4.6
	Legal form of organization:													
	Corporate	752	345	26.0	270.6	19.7	37.8	169.2	597.1	760.1	1 350.7	14.1	138.1	150.7
	Noncorporate, total	210	10	1.1	9.2	0.9	1.6	6.1	19.5	28.4	47.8	0.4	4.7	4.9
	Individual	152	1	0.4	3.6	0.4	0.6	2.3	8.6	10.3	18.9	0.2	2.0	2.0
	Partnership	47	5	0.4	3.9	0.3	0.6	2.4	7.4	12.2	19.6	0.1	1.9	2.0
	Other and unknown	11	4	0.2	1.7	0.2	0.4	1.3	3.5	5.9	9.4	0.1	0.8	0.9
2517	**Wood TV and Radio Cabinets**	**94**	**51**	**10.7**	**89.0**	**9.3**	**17.6**	**70.5**	**150.4**	**155.0**	**304.8**	**11.1**	**31.6**	**30.5**
	Type of organization:													
	Multiunit companies, total	21	20	7.8	67.9	6.7	13.1	54.4	111.4	117.4	228.7	8.8	24.1	22.2
	Corp. ownership or control	21	20	7.8	67.9	6.7	13.1	54.4	111.4	117.4	228.7	8.8	24.1	22.2
	Single unit companies, total	73	31	2.9	21.2	2.6	4.5	16.1	39.0	37.6	76.1	2.3	7.5	8.3
	Corp. ownership or control	61	28	2.7	19.5	2.4	4.2	14.8	36.2	35.1	71.0	(D)	7.1	7.8
	Noncorporate ownership	12	3	0.2	1.6	0.2	0.3	1.3	2.7	2.4	5.1	(D)	0.4	0.4

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
25	**FURNITURE AND FIXTURES**—Con.													
2517	**Wood TV and Radio Cabinets**—Con.													
	Legal form of organization:													
	Corporate	82	48	10.5	87.4	9.1	17.2	69.3	147.7	152.6	299.6	(D)	31.2	30.1
	Noncorporate, total	12	3	0.2	1.6	0.2	0.3	1.3	2.7	2.4	5.1	(D)	0.4	0.4
	Individual	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2519	**Household Furniture, N.E.C.**	**201**	**59**	**8.7**	**79.7**	**7.5**	**14.3**	**61.7**	**131.0**	**172.6**	**301.9**	**10.4**	**30.5**	**34.1**
	Type of organization:													
	Multiunit companies, total	33	25	5.6	55.1	4.9	9.2	44.0	81.8	119.6	200.2	6.7	18.9	21.0
	Corp. ownership or control	33	25	5.6	55.1	4.9	9.2	44.0	81.8	119.6	200.2	6.7	18.9	21.0
	Single unit companies, total	168	34	3.0	24.6	2.6	5.1	17.6	49.2	53.0	101.8	3.6	11.6	13.1
	Corp. ownership or control	127	32	2.9	22.9	2.4	4.8	16.2	45.4	49.5	94.5	(D)	10.9	12.2
	Noncorporate ownership	41	2	0.2	1.8	0.2	0.4	1.4	3.8	3.5	7.3	(D)	0.8	0.9
	Legal form of organization:													
	Corporate	160	57	8.5	78.0	7.3	13.9	60.2	127.2	169.1	294.7	(D)	29.7	33.2
	Noncorporate, total	41	2	0.2	1.8	0.2	0.4	1.4	3.8	3.5	7.3	(D)	0.8	0.9
	Individual	26	–	0.1	0.4	0.1	0.1	0.3	1.0	1.2	2.2	0.1	0.3	0.3
	Partnership	13	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2521	**Wood office furniture**	**331**	**119**	**16.0**	**165.0**	**12.8**	**25.5**	**110.2**	**381.3**	**239.0**	**612.0**	**26.5**	**88.4**	**107.1**
	Type of organization:													
	Multiunit companies, total	58	48	8.8	95.1	6.8	13.8	61.2	251.7	145.1	390.2	20.7	51.4	66.7
	Corp. ownership or control	57	47	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	273	71	7.2	70.0	6.0	11.7	49.0	129.6	94.0	221.8	5.8	37.0	40.4
	Corp. ownership or control	207	69	6.9	67.1	5.7	11.2	46.9	124.8	88.9	211.7	5.7	34.8	38.1
	Noncorporate ownership	66	2	0.3	2.9	0.3	0.5	2.1	4.8	5.0	10.1	0.1	2.2	2.3
	Legal form of organization:													
	Corporate	264	116	15.5	161.0	12.4	24.8	107.4	374.1	231.7	597.3	26.4	85.7	104.2
	Noncorporate, total	67	3	0.4	4.0	0.4	0.7	2.8	7.2	7.3	14.7	0.1	2.8	3.0
	Individual	40	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	24	2	0.2	1.5	0.1	0.2	1.1	2.4	3.3	6.0	0.1	1.4	1.5
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2522	**Metal office furniture**	**192**	**114**	**29.0**	**377.6**	**22.3**	**43.6**	**265.7**	**854.8**	**553.2**	**1 397.4**	**41.1**	**211.1**	**237.2**
	Type of organization:													
	Multiunit companies, total	79	70	24.5	331.2	18.7	36.6	234.2	755.1	481.2	1 227.6	37.4	185.7	206.8
	Corp. ownership or control	79	70	24.5	331.2	18.7	36.6	234.2	755.1	481.2	1 227.6	37.4	185.7	206.8
	Single unit companies, total	113	44	4.5	46.4	3.6	7.0	31.5	99.7	72.0	169.8	3.7	25.5	30.4
	Corp. ownership or control	99	44	4.5	45.9	3.5	6.9	31.2	98.5	71.3	167.9	3.6	25.2	30.1
	Noncorporate ownership	14	–	(Z)	0.5	(Z)	0.1	0.3	1.2	0.7	1.9	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	178	114	29.0	377.1	22.2	43.5	265.4	853.6	552.5	1 395.5	41.0	210.9	236.9
	Noncorporate, total	14	–	(Z)	0.5	(Z)	0.1	0.3	1.2	0.7	1.9	(Z)	0.3	0.3
	Individual	13	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2531	**Public building and related furniture**	**420**	**185**	**20.0**	**214.3**	**15.0**	**29.2**	**132.9**	**414.9**	**381.8**	**787.4**	**22.3**	**122.0**	**138.3**
	Type of organization:													
	Multiunit companies, total	90	70	12.2	138.3	8.9	18.0	83.9	281.9	254.8	529.2	15.5	84.8	96.9
	Corp. ownership or control	90	70	12.2	138.3	8.9	18.0	83.9	281.9	254.8	529.2	15.5	84.8	96.9
	Single unit companies, total	330	115	7.8	76.0	6.0	11.1	49.0	133.1	127.1	258.3	6.9	37.2	41.4
	Corp. ownership or control	266	111	7.4	72.7	5.7	10.6	46.7	126.7	120.5	245.3	6.7	35.1	39.3
	Noncorporate ownership	64	4	0.4	3.3	0.3	0.5	2.3	6.4	6.6	13.0	0.2	2.1	2.1
	Legal form of organization:													
	Corporate	356	181	19.6	211.0	14.7	28.6	130.7	408.5	375.3	774.5	22.2	120.0	136.2
	Noncorporate, total	64	4	0.4	3.3	0.3	0.5	2.3	6.4	6.6	13.0	0.2	2.1	2.1
	Individual	47	2	0.2	2.1	0.2	0.3	1.4	3.8	3.9	7.7	0.1	1.2	1.2
	Partnership	13	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2541	**Wood partitions and fixtures**	**1 598**	**394**	**29.4**	**352.9**	**23.0**	**45.3**	**241.0**	**621.4**	**496.1**	**1 105.8**	**22.4**	**141.8**	**158.2**
	Type of organization:													
	Multiunit companies, total	135	96	8.6	95.0	6.7	13.4	67.5	174.1	170.6	340.2	9.9	59.5	65.6
	Corp. ownership or control	134	95	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 463	298	20.8	257.9	16.3	31.9	173.4	447.2	325.5	765.6	12.5	82.3	92.6
	Corp. ownership or control	1 037	293	19.3	240.2	15.0	29.5	161.0	412.3	300.7	706.2	11.6	76.9	86.6
	Noncorporate ownership	426	5	1.6	17.6	1.3	2.4	12.4	34.9	24.9	59.4	0.9	5.4	6.0
	Legal form of organization:													
	Corporate	1 171	388	27.7	333.8	21.5	42.6	227.4	583.8	466.9	1 039.3	21.4	134.8	150.4
	Noncorporate, total	427	6	1.7	19.1	1.5	2.7	13.5	37.6	29.3	66.5	0.9	7.0	7.8
	Individual	314	1	1.0	11.8	0.9	1.6	8.2	23.4	16.4	39.6	0.6	3.6	4.1
	Partnership	91	2	0.4	4.2	0.3	0.6	3.0	8.6	6.3	14.9	0.2	1.2	1.4
	Other and unknown	22	3	0.3	3.0	0.3	0.5	2.3	5.6	6.5	12.1	0.1	2.2	2.4

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
25	**FURNITURE AND FIXTURES**—Con.													
2542	**Metal partitions and fixtures**	**536**	**272**	**28.0**	**322.2**	**21.3**	**40.5**	**213.2**	**689.7**	**630.2**	**1 303.0**	**36.5**	**209.4**	**236.5**
	Type of organization:													
	Multiunit companies, total	129	112	16.9	198.9	12.9	24.6	135.6	444.8	401.7	834.0	22.9	146.0	164.7
	Corp. ownership or control	129	112	16.9	198.9	12.9	24.6	135.6	444.8	401.7	834.0	22.9	146.0	164.7
	Single unit companies, total	407	160	11.1	123.3	8.4	16.0	77.6	244.9	228.5	469.0	13.6	63.4	71.8
	Corp. ownership or control	341	155	10.7	119.2	8.1	15.5	74.7	236.9	221.8	454.4	13.3	61.4	69.6
	Noncorporate ownership	66	5	0.4	4.1	0.3	0.5	3.0	8.0	6.7	14.6	0.3	2.0	2.2
	Legal form of organization:													
	Corporate	470	267	27.6	318.1	21.0	40.0	210.3	681.6	623.5	1 288.4	36.2	207.4	234.3
	Noncorporate, total	66	5	0.4	4.1	0.3	0.5	3.0	8.0	6.7	14.6	0.3	2.0	2.2
	Individual	45	2	0.2	2.2	0.2	0.3	1.6	4.3	3.5	7.7	0.1	1.0	1.1
	Partnership	14	1	0.1	1.1	0.1	0.1	0.7	2.1	1.9	4.0	(D)	0.6	0.6
	Other and unknown	7	2	0.1	0.8	0.1	0.1	0.6	1.6	1.3	2.9	(D)	0.4	0.5
2591	**Drapery hardware and blinds and shades**	**456**	**85**	**13.6**	**145.6**	**10.3**	**20.0**	**99.1**	**345.0**	**331.6**	**675.1**	**16.7**	**106.4**	**115.6**
	Type of organization:													
	Multiunit companies, total	44	38	9.9	110.4	7.5	15.1	77.0	271.4	256.2	527.1	14.3	88.5	94.8
	Corp. ownership or control	44	38	9.9	110.4	7.5	15.1	77.0	271.4	256.2	527.1	14.3	88.5	94.8
	Single unit companies, total	412	47	3.7	35.1	2.8	4.9	22.1	73.6	75.4	148.0	2.5	17.8	20.9
	Corp. ownership or control	279	46	3.3	32.1	2.5	4.5	20.0	65.7	68.2	133.0	2.2	15.4	18.3
	Noncorporate ownership	133	1	0.4	3.1	0.3	0.5	2.1	7.9	7.2	15.0	0.3	2.4	2.6
	Legal form of organization:													
	Corporate	323	84	13.3	142.5	10.0	19.5	97.0	337.1	324.4	660.1	16.4	104.0	113.0
	Noncorporate, total	133	1	0.4	3.1	0.3	0.5	2.1	7.9	7.2	15.0	0.3	2.4	2.6
	Individual	106	–	0.2	2.0	0.2	0.3	1.4	5.2	4.6	9.8	0.2	1.5	1.6
	Partnership	22	–	0.1	0.7	0.1	0.1	0.4	1.7	1.6	3.3	0.1	0.6	0.6
	Other and unknown	5	1	(Z)	0.4	(Z)	0.1	0.3	1.0	1.0	2.0	0.1	0.3	0.3
2599	**Furniture and Fixtures, N.E.C.**	**541**	**195**	**18.1**	**201.4**	**13.7**	**27.0**	**131.0**	**401.9**	**310.1**	**705.2**	**12.0**	**110.1**	**120.1**
	Type of organization:													
	Multiunit companies, total	95	69	9.0	101.2	6.7	12.9	64.9	216.6	173.0	386.7	5.7	68.1	73.0
	Corp. ownership or control	95	69	9.0	101.2	6.7	12.9	64.9	216.6	173.0	386.7	5.7	68.1	73.0
	Single unit companies, total	446	126	9.1	100.2	7.0	14.0	66.1	185.3	137.1	318.5	6.2	42.0	47.1
	Corp. ownership or control	368	123	8.7	96.3	6.7	13.5	63.5	177.5	132.1	305.9	6.1	39.9	44.9
	Noncorporate ownership	78	3	0.4	3.9	0.3	0.5	2.6	7.8	5.0	12.7	0.2	2.1	2.2
	Legal form of organization:													
	Corporate	463	192	17.7	197.5	13.4	26.4	128.4	394.1	305.1	692.6	11.8	108.0	117.9
	Noncorporate, total	78	3	0.4	3.9	0.3	0.5	2.6	7.8	5.0	12.7	0.2	2.1	2.2
	Individual	52	2	0.3	2.7	0.2	0.4	1.9	5.1	3.8	8.7	0.1	1.4	1.5
	Partnership	20	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
26	**PAPER AND ALLIED PRODUCTS**	**6 545**	**3 999**	**628.7**	**8 942.9**	**486.3**	**985.9**	**6 323.1**	**22 170.9**	**30 148.2**	**52 085.7**	**3 295.0**	**5 281.0**	**5 641.5**
	Type of organization:													
	Multiunit companies, total	3 046	2 676	535.0	7 826.6	413.4	841.7	5 598.2	19 919.4	27 344.1	47 048.9	3 121.7	4 776.0	5 101.4
	Corp. ownership or control	3 032	2 662	532.7	7 803.6	411.5	837.7	5 580.3	19 880.3	27 278.4	46 944.6	3 118.5	4 763.7	5 087.4
	Noncorporate ownership	14	14	2.2	23.0	1.9	4.0	17.9	39.1	65.7	104.3	3.3	12.3	14.0
	Single unit companies, total	3 499	1 323	93.7	1 116.3	72.9	144.2	724.9	2 251.4	2 804.1	5 036.8	173.2	505.0	540.1
	Corp. ownership or control	3 149	1 286	90.8	1 085.5	70.6	139.7	704.0	2 184.7	2 719.3	4 885.6	167.6	490.0	524.0
	Noncorporate ownership	350	37	2.9	30.7	2.3	4.5	20.9	66.7	84.9	151.2	5.6	15.0	16.1
	Legal form of organization:													
	Corporate	6 181	3 948	623.5	8 889.2	482.1	977.4	6 284.3	22 065.1	29 997.7	51 830.1	3 286.1	5 253.6	5 611.3
	Noncorporate, total	364	51	5.2	53.7	4.2	8.5	38.8	105.8	150.5	255.5	8.9	27.3	30.1
	Individual	204	11	1.0	9.3	0.8	1.5	6.3	19.7	23.2	43.0	2.0	5.4	5.3
	Partnership	110	19	1.5	17.7	1.2	2.3	11.9	39.1	54.2	92.8	2.9	7.1	8.4
	Other and unknown	50	21	2.6	26.7	2.2	4.7	20.5	47.0	73.2	119.7	4.0	14.8	16.4
2611	**Pulp Mills**	**45**	**42**	**16.2**	**293.2**	**12.5**	**25.4**	**220.7**	**906.1**	**1 212.0**	**2 091.1**	**301.1**	**223.6**	**257.0**
	Type of organization:													
	Multiunit companies, total	43	41	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	43	41	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	45	42	16.2	293.2	12.5	25.4	220.7	906.1	1 212.0	2 091.1	301.1	223.6	257.0
	Legal form of organization:													
2621	**Paper Mills, Except Building Paper**	**339**	**287**	**127.0**	**2 167.0**	**100.4**	**210.4**	**1 631.7**	**5 406.6**	**7 221.6**	**12 613.3**	**1 115.2**	**1 209.8**	**1 259.5**
	Type of organization:													
	Multiunit companies, total	272	252	121.3	2 078.4	95.9	200.6	1 566.6	5 230.8	6 942.3	12 160.4	1 094.5	1 160.5	1 206.7
	Corp. ownership or control	272	252	121.3	2 078.4	95.9	200.6	1 566.6	5 230.8	6 942.3	12 160.4	1 094.5	1 160.5	1 206.7
	Single unit companies, total	67	35	5.7	88.6	4.4	9.8	65.1	175.7	279.3	452.9	20.7	49.3	52.8
	Corp. ownership or control	58	35	5.7	88.6	4.4	9.8	65.1	175.6	279.1	452.7	20.7	49.3	52.7
	Noncorporate ownership	9	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Legal form of organization:													
	Corporate	330	287	127.0	2 167.0	100.3	210.4	1 631.7	5 406.5	7 221.4	12 613.1	1 115.2	1 209.8	1 259.5
	Noncorporate, total	9	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Individual	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
26	**PAPER AND ALLIED PRODUCTS**—Con.													
2631	**Paperboard Mills**	**249**	**232**	**67.6**	**1 175.8**	**53.0**	**112.5**	**888.0**	**3 080.7**	**4 049.8**	**7 124.3**	**933.7**	**509.1**	**537.5**
	Type of organization:													
	Multiunit companies, total	221	213	65.8	1 148.8	51.5	109.4	867.5	3 020.8	3 976.7	6 991.4	928.0	501.7	529.8
	Corp. ownership or control	221	213	65.8	1 148.8	51.5	109.4	867.5	3 020.8	3 976.7	6 991.4	928.0	501.7	529.8
	Single unit companies, total	28	19	1.9	26.9	1.5	3.1	20.5	59.9	73.1	132.9	5.7	7.4	7.7
	Corp. ownership or control	23	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	244	230	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2641	**Paper Coating and Glazing**	**529**	**239**	**39.7**	**551.2**	**27.2**	**56.8**	**335.1**	**1 507.0**	**1 908.3**	**3 392.0**	**98.7**	**420.5**	**451.2**
	Type of organization:													
	Multiunit companies, total	194	151	33.3	467.0	22.6	47.2	284.2	1 329.5	1 655.0	2 962.9	85.0	375.1	401.4
	Corp. ownership or control	194	151	33.3	467.0	22.6	47.2	284.2	1 329.5	1 655.0	2 962.9	85.0	375.1	401.4
	Single unit companies, total	335	88	6.4	84.2	4.7	9.6	50.9	177.5	253.3	429.1	13.7	45.4	49.8
	Corp. ownership or control	300	85	6.0	77.9	4.3	8.9	47.0	163.0	232.1	393.5	13.2	42.8	46.4
	Noncorporate ownership	35	3	0.4	6.4	0.3	0.7	3.9	14.5	21.3	35.6	0.5	2.5	3.4
	Legal form of organization:													
	Corporate	494	236	39.2	544.8	26.9	56.1	331.2	1 492.5	1 887.1	3 356.4	98.2	417.9	447.8
	Noncorporate, total	35	3	0.4	6.4	0.3	0.7	3.9	14.5	21.3	35.6	0.5	2.5	3.4
	Individual	23	1	0.1	1.3	0.1	0.2	1.0	3.2	3.4	6.5	0.2	0.7	0.8
	Partnership	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2642	**Envelopes**	**265**	**184**	**22.6**	**270.0**	**17.6**	**34.6**	**182.4**	**503.4**	**493.4**	**990.5**	**22.9**	**109.9**	**122.2**
	Type of organization:													
	Multiunit companies, total	132	124	17.3	208.9	13.4	26.1	139.7	392.9	382.7	770.1	16.1	88.7	99.0
	Corp. ownership or control	132	124	17.3	208.9	13.4	26.1	139.7	392.9	382.7	770.1	16.1	88.7	99.0
	Single unit companies, total	133	60	5.3	61.1	4.2	8.4	42.6	110.5	110.7	220.3	6.8	21.2	23.2
	Corp. ownership or control	118	58	5.1	59.7	4.1	8.3	41.7	106.9	108.8	214.9	(D)	20.6	22.7
	Noncorporate ownership	15	2	0.1	1.4	0.1	0.2	0.9	3.6	1.9	5.4	(D)	0.6	0.6
	Legal form of organization:													
	Corporate	250	182	22.5	268.6	17.5	34.4	181.4	499.8	491.5	985.0	(D)	109.3	121.7
	Noncorporate, total	15	2	0.1	1.4	0.1	0.2	0.9	3.6	1.9	5.4	(D)	0.6	0.6
	Individual	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	7	-	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.5	1.0	(Z)	0.1	0.1
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2643	**Bags, Except Textile Bags**	**596**	**355**	**48.7**	**584.1**	**38.8**	**77.6**	**411.7**	**1 349.6**	**2 140.5**	**3 482.3**	**93.4**	**410.8**	**424.9**
	Type of organization:													
	Multiunit companies, total	259	227	40.4	490.1	32.4	65.1	351.5	1 120.4	1 796.1	2 910.8	72.4	357.3	366.9
	Corp. ownership or control	256	224	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	337	128	8.3	94.0	6.4	12.5	60.3	229.2	344.4	571.5	21.1	53.4	58.0
	Corp. ownership or control	307	123	8.1	90.8	6.2	12.1	58.2	222.1	333.0	553.1	20.4	52.0	56.4
	Noncorporate ownership	30	5	0.3	3.2	0.2	0.4	2.1	7.1	11.4	18.4	0.6	1.5	1.6
	Legal form of organization:													
	Corporate	563	347	48.2	578.1	38.4	76.7	407.4	1 336.6	2 114.5	3 443.5	91.5	407.9	421.6
	Noncorporate, total	33	8	0.5	6.0	0.4	0.9	4.3	13.0	26.0	38.8	1.9	2.9	3.3
	Individual	21	1	0.1	0.8	0.1	0.1	0.5	1.6	2.7	4.2	0.1	0.4	0.4
	Partnership	7	3	0.1	1.7	0.1	0.2	1.1	3.6	5.9	9.5	(D)	0.6	0.7
	Other and unknown	5	4	0.3	3.6	0.3	0.6	2.8	7.8	17.4	25.1	(D)	1.8	2.2
2645	**Die-cut Paper and Board**	**371**	**141**	**14.3**	**174.6**	**11.3**	**22.7**	**119.6**	**429.5**	**640.9**	**1 057.7**	**15.3**	**94.0**	**114.3**
	Type of organization:													
	Multiunit companies, total	115	81	9.7	120.2	7.6	15.4	83.3	322.3	514.4	824.4	9.9	73.0	92.6
	Corp. ownership or control	110	76	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	256	60	4.6	54.4	3.7	7.2	36.3	107.2	126.5	233.3	5.4	21.0	21.7
	Corp. ownership or control	223	59	4.4	52.0	3.5	6.8	34.6	102.6	119.5	221.6	5.1	19.5	20.3
	Noncorporate ownership	33	1	0.2	2.4	0.2	0.4	1.7	4.6	7.0	11.7	0.3	1.5	1.4
	Legal form of organization:													
	Corporate	333	135	12.8	159.1	9.9	19.7	106.9	409.0	618.5	1 014.9	14.1	88.1	108.0
	Noncorporate, total	38	6	1.6	15.5	1.4	3.0	12.7	20.5	22.4	42.7	1.1	5.9	6.3
	Individual	22	-	0.1	0.9	0.1	0.1	0.6	1.7	2.6	4.2	0.2	0.4	0.4
	Partnership	8	-	(Z)	0.4	(Z)	0.1	0.3	1.0	1.6	2.7	(D)	0.2	0.2
	Other and unknown	8	6	1.4	14.2	1.3	2.8	11.9	17.8	18.2	35.8	(D)	5.3	5.7
2646	**Pressed and Molded Pulp Goods**	**38**	**27**	**4.9**	**58.8**	**4.0**	**8.4**	**48.7**	**153.7**	**90.1**	**240.3**	**10.9**	**22.0**	**24.5**
	Type of organization:													
	Multiunit companies, total	26	23	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	26	23	4.6	56.4	3.8	8.0	46.9	150.0	87.9	234.5	10.8	21.6	24.0
	Single unit companies, total	12	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	11	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	37	27	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
26	**PAPER AND ALLIED PRODUCTS**—Con.													
2647	**Sanitary Paper Products** --	**120**	**89**	**34.5**	**509.1**	**27.4**	**54.5**	**381.8**	**2 194.5**	**2 781.5**	**4 921.2**	**199.1**	**333.8**	**409.9**
	Type of organization:													
	Multiunit companies, total	83	77	33.4	496.9	26.6	52.7	373.4	2 167.8	2 740.6	4 853.8	196.2	327.1	402.9
	Corp. ownership or control	83	77	33.4	496.9	26.6	52.7	373.4	2 167.8	2 740.6	4 853.8	196.2	327.1	402.9
	Single unit companies, total	37	12	1.1	12.2	0.8	1.7	8.4	26.7	40.9	67.5	2.9	6.7	7.0
	Corp. ownership or control	35	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	118	88	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2648	**Stationery Products**	**242**	**109**	**12.6**	**135.2**	**9.8**	**18.5**	**91.0**	**291.0**	**364.4**	**651.7**	**15.9**	**114.4**	**118.2**
	Type of organization:													
	Multiunit companies, total	64	54	8.8	96.3	6.9	13.1	66.7	206.7	276.1	479.1	11.9	90.6	94.2
	Corp. ownership or control	64	54	8.8	96.3	6.9	13.1	66.7	206.7	276.1	479.1	11.9	90.6	94.2
	Single unit companies, total	178	55	3.8	39.0	2.9	5.4	24.3	84.3	88.3	172.6	4.0	23.7	24.0
	Corp. ownership or control	148	52	3.5	35.0	2.6	4.8	21.4	75.2	78.1	153.5	(D)	21.4	21.6
	Noncorporate ownership	30	3	0.4	4.0	0.3	0.6	2.9	9.1	10.2	19.1	(D)	2.3	2.4
	Legal form of organization:													
	Corporate	212	106	12.3	131.2	9.5	17.8	88.1	281.9	354.2	632.6	(D)	112.0	115.8
	Noncorporate, total	30	3	0.4	4.0	0.3	0.6	2.9	9.1	10.2	19.1	(D)	2.3	2.4
	Individual	19	1	0.1	0.8	0.1	0.2	0.5	1.7	1.9	3.6	(Z)	0.8	0.8
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2649	**Converted Paper Products, N.E.C.**	**833**	**291**	**29.4**	**325.1**	**21.9**	**43.3**	**201.1**	**834.3**	**887.3**	**1 697.5**	**51.1**	**241.0**	**277.7**
	Type of organization:													
	Multiunit companies, total	185	143	18.5	208.7	13.4	26.5	126.0	563.5	601.7	1 146.3	29.2	173.0	199.6
	Corp. ownership or control	183	141	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	648	148	10.9	116.3	8.5	16.7	75.1	270.8	285.6	551.1	21.9	68.0	78.2
	Corp. ownership or control	570	139	10.4	112.7	8.0	15.9	72.4	263.2	278.6	536.5	21.3	65.9	76.0
	Noncorporate ownership	78	9	0.5	3.7	0.5	0.8	2.6	7.6	7.0	14.6	0.6	2.1	2.2
	Legal form of organization:													
	Corporate	753	280	28.7	318.8	21.3	42.2	197.3	819.9	875.4	1 671.0	50.4	236.7	273.1
	Noncorporate, total	80	11	0.8	6.3	0.6	1.1	3.8	14.4	11.9	26.4	0.7	4.2	4.6
	Individual	42	3	0.2	1.6	0.2	0.3	1.2	3.4	3.4	6.9	0.2	1.1	1.0
	Partnership	27	4	0.2	1.4	0.2	0.3	1.0	3.0	2.9	5.8	0.3	0.4	0.5
	Other and unknown	11	4	0.4	3.3	0.2	0.5	1.6	8.0	5.7	13.7	0.2	2.7	3.1
2651	**Folding Paperboard Boxes**	**574**	**374**	**44.7**	**577.8**	**35.8**	**71.8**	**409.8**	**1 136.8**	**1 460.2**	**2 579.0**	**89.8**	**402.2**	**421.8**
	Type of organization:													
	Multiunit companies, total	244	214	34.1	443.3	27.4	54.6	320.0	881.2	1 213.5	2 079.7	74.4	334.1	349.8
	Corp. ownership or control	244	214	34.1	443.3	27.4	54.6	320.0	881.2	1 213.5	2 079.7	74.4	334.1	349.8
	Single unit companies, total	330	160	10.5	134.4	8.4	17.1	89.8	255.6	246.7	499.3	15.4	68.1	72.0
	Corp. ownership or control	300	160	10.4	133.3	8.3	17.0	89.1	253.8	244.5	495.2	15.3	67.5	71.4
	Noncorporate ownership	30	–	0.1	1.1	0.1	0.1	0.8	1.9	2.3	4.1	0.1	0.6	0.6
	Legal form of organization:													
	Corporate	544	374	44.6	576.7	35.7	71.6	409.0	1 135.0	1 458.0	2 574.9	89.6	401.6	421.1
	Noncorporate, total	30	–	0.1	1.1	0.1	0.1	0.8	1.9	2.3	4.1	0.1	0.6	0.6
	Individual	19	–	0.1	0.6	0.1	0.1	0.4	1.3	1.5	2.7	0.1	0.4	0.4
	Partnership	8	–	(Z)	0.4	(Z)	0.1	0.3	0.6	0.8	1.4	0.1	0.2	0.2
	Other and unknown	3	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
2652	**Setup Paperboard Boxes**	**312**	**209**	**13.1**	**115.3**	**11.2**	**20.6**	**80.8**	**211.6**	**149.9**	**360.5**	**8.8**	**46.4**	**48.2**
	Type of organization:													
	Multiunit companies, total	85	69	5.0	44.5	4.3	8.1	32.4	91.6	64.5	155.1	4.3	21.9	23.2
	Corp. ownership or control	85	69	5.0	44.5	4.3	8.1	32.4	91.6	64.5	155.1	4.3	21.9	23.2
	Single unit companies, total	227	140	8.1	70.7	6.9	12.5	48.4	120.0	85.4	205.4	4.6	24.5	25.0
	Corp. ownership or control	208	134	7.8	68.8	6.7	12.1	47.0	116.6	83.2	199.8	4.4	23.7	24.2
	Noncorporate ownership	19	6	0.3	1.9	0.2	0.4	1.3	3.4	2.2	5.6	0.2	0.8	0.8
	Legal form of organization:													
	Corporate	293	203	12.8	113.4	10.9	20.2	79.4	208.2	147.6	354.8	8.7	45.6	47.4
	Noncorporate, total	19	6	0.3	1.9	0.2	0.4	1.3	3.4	2.2	5.6	0.2	0.8	0.8
	Individual	11	2	0.1	0.7	0.1	0.1	0.5	1.6	1.0	2.5	0.1	0.4	0.4
	Partnership	7	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2653	**Corrugated and Solid Fiber Boxes**	**1 472**	**1 034**	**101.5**	**1 374.8**	**73.5**	**146.5**	**867.0**	**2 704.1**	**4 660.7**	**7 351.1**	**243.3**	**668.4**	**664.8**
	Type of organization:													
	Multiunit companies, total	772	705	80.7	1 110.6	58.2	116.6	711.5	2 198.0	3 953.6	6 140.6	198.9	585.0	577.3
	Corp. ownership or control	769	702	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	700	329	20.8	264.3	15.2	29.8	155.5	506.0	707.1	1 210.5	44.3	83.3	87.5
	Corp. ownership or control	650	325	20.5	260.2	15.0	29.4	153.1	497.9	693.6	1 188.9	43.3	81.4	85.5
	Noncorporate ownership	50	4	0.3	4.0	0.2	0.5	2.4	8.2	13.5	21.6	1.0	1.9	2.0
	Legal form of organization:													
	Corporate	1 419	1 027	101.0	1 368.2	73.0	145.6	862.7	2 691.3	4 632.1	7 309.9	241.9	665.6	661.8
	Noncorporate, total	53	7	0.5	6.6	0.4	0.9	4.3	12.8	28.6	41.3	1.4	2.8	2.9
	Individual	24	1	0.1	1.3	0.1	0.1	0.8	2.4	4.1	6.4	0.2	0.6	0.6
	Partnership	20	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	9	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
26	**PAPER AND ALLIED PRODUCTS—Con.**													
2654	**Sanitary Food Containers**	**193**	**138**	**28.7**	**336.7**	**22.7**	**43.5**	**228.2**	**836.8**	**1 226.6**	**2 048.4**	**52.4**	**320.9**	**345.5**
	Type of organization:													
	Multiunit companies, total	113	106	26.1	306.3	20.5	39.2	208.3	775.5	1 130.8	1 891.6	49.0	299.5	324.4
	Corp. ownership or control	113	106	26.1	306.3	20.5	39.2	208.3	775.5	1 130.8	1 891.6	49.0	299.5	324.4
	Single unit companies, total	80	32	2.6	30.4	2.2	4.3	19.9	61.3	95.8	156.7	3.4	21.4	21.1
	Corp. ownership or control	77	31	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	190	137	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2655	**Fiber Cans, Drums, and Similar Products**	**309**	**195**	**16.1**	**197.3**	**13.4**	**26.7**	**147.6**	**406.9**	**606.7**	**1 011.1**	**26.7**	**111.1**	**119.2**
	Type of organization:													
	Multiunit companies, total	181	144	12.9	161.4	10.7	21.2	122.4	346.2	545.4	889.5	23.7	100.7	108.0
	Corp. ownership or control	180	143	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	128	51	3.2	35.9	2.7	5.4	25.2	60.7	61.2	121.6	3.0	10.4	11.1
	Corp. ownership or control	118	51	3.2	35.6	2.7	5.4	25.0	60.2	60.5	120.4	3.0	10.2	11.0
	Noncorporate ownership	10	–	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.7	1.2	(Z)	0.2	0.1
	Legal form of organization:													
	Corporate	298	194	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	11	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	9	–	(Z)	0.2	(Z)	(Z)	0.2	0.4	0.6	1.0	(Z)	0.1	0.1
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2661	**Building Paper and Board Mills**	**58**	**53**	**7.0**	**96.9**	**5.9**	**12.5**	**77.9**	**218.2**	**254.3**	**473.7**	**16.6**	**43.1**	**45.0**
	Type of organization:													
	Multiunit companies, total	57	52	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	57	52	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	58	53	7.0	96.9	5.9	12.5	77.9	218.2	254.3	473.7	16.6	43.1	45.0
	Legal form of organization:													
27	**PRINTING AND PUBLISHING**	**49 767**	**9 132**	**1 092.2**	**14 024.5**	**625.8**	**1 152.8**	**7 322.1**	**31 979.5**	**17 794.7**	**49 716.2**	**1 597.8**	**3 943.0**	**4 200.6**
	Type of organization:													
	Multiunit companies, total	5 401	3 492	641.6	8 610.1	331.0	623.9	4 192.9	21 337.8	11 807.4	33 150.9	987.0	2 807.7	2 939.9
	Corp. ownership or control	5 379	3 479	639.8	8 589.2	330.0	622.0	4 181.8	21 303.2	11 778.6	33 087.2	986.1	2 797.1	2 929.8
	Noncorporate ownership	22	13	1.8	20.9	1.0	1.9	11.1	34.6	28.8	63.7	1.0	10.6	10.1
	Single unit companies, total	44 366	5 640	450.5	5 414.5	294.8	529.0	3 129.2	10 641.7	5 987.3	16 565.3	610.7	1 135.3	1 260.7
	Corp. ownership or control	31 195	5 376	409.6	4 974.4	265.4	482.9	2 863.2	9 678.0	5 453.0	15 069.8	560.6	1 026.6	1 146.6
	Noncorporate ownership	13 171	264	40.9	440.0	29.4	46.1	265.9	963.7	534.3	1 495.4	50.1	108.7	114.0
	Legal form of organization:													
	Corporate	36 574	8 855	1 049.4	13 563.6	595.4	1 104.8	7 045.0	30 981.2	17 231.6	48 157.0	1 546.7	3 823.7	4 076.4
	Noncorporate, total	13 193	277	42.7	460.9	30.3	48.0	277.1	998.2	563.0	1 559.2	51.1	119.3	124.2
	Individual	9 550	98	24.0	251.8	18.1	27.5	156.4	567.3	316.1	882.1	31.7	62.9	65.7
	Partnership	3 046	104	12.1	134.7	8.6	14.1	81.3	293.2	156.2	448.2	12.8	29.3	31.9
	Other and unknown	597	75	6.6	74.3	3.7	6.4	39.4	137.7	90.7	228.9	6.6	27.1	26.5
2711	**Newspapers**	**8 867**	**2 147**	**349.9**	**4 306.0**	**147.2**	**252.5**	**1 805.3**	**9 519.1**	**3 539.2**	**13 055.9**	**478.1**	**371.8**	**382.1**
	Type of organization:													
	Multiunit companies, total	1 525	1 097	254.0	3 309.6	102.0	173.7	1 372.2	7 428.2	2 793.9	10 220.8	362.0	286.2	289.9
	Corp. ownership or control	1 523	1 095	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	7 342	1 050	96.0	996.5	45.3	78.7	433.0	2 090.9	745.2	2 835.0	116.1	85.6	92.2
	Corp. ownership or control	5 199	991	87.8	913.8	41.0	72.1	394.8	1 899.5	680.6	2 579.1	107.9	77.0	83.0
	Noncorporate ownership	2 143	59	8.2	82.6	4.3	6.7	38.2	191.3	64.7	255.9	8.2	8.5	9.3
	Legal form of organization:													
	Corporate	6 722	2 086	341.3	4 219.8	142.7	245.3	1 764.9	9 319.4	3 471.4	12 788.6	469.6	363.0	372.5
	Noncorporate, total	2 145	61	8.6	86.3	4.6	7.2	40.4	199.6	67.7	267.3	8.5	8.8	9.6
	Individual	1 534	20	4.1	41.3	2.3	3.4	18.8	99.1	35.7	134.8	4.3	5.0	5.2
	Partnership	510	28	3.2	33.5	1.6	2.7	15.7	75.8	24.0	99.7	3.0	2.6	2.9
	Other and unknown	101	13	1.3	11.5	0.7	1.1	5.9	24.7	8.1	32.8	1.1	1.3	1.5
2721	**Periodicals**	**2 994**	**525**	**69.9**	**1 019.8**	**10.6**	**20.5**	**115.7**	**3 762.7**	**2 289.2**	**6 056.5**	**78.9**	**314.7**	**349.6**
	Type of organization:													
	Multiunit companies, total	405	196	43.7	671.6	4.3	9.1	53.0	2 767.0	1 739.7	4 514.4	45.0	235.2	262.1
	Corp. ownership or control	405	196	43.7	671.6	4.3	9.1	53.0	2 767.0	1 739.7	4 514.4	45.0	235.2	262.1
	Single unit companies, total	2 589	329	26.2	348.2	6.4	11.4	62.6	995.8	549.5	1 542.1	33.9	79.5	87.5
	Corp. ownership or control	2 177	302	23.8	323.5	5.7	10.3	57.0	925.7	508.9	1 431.2	31.9	71.0	79.3
	Noncorporate ownership	412	27	2.4	24.7	0.6	1.1	5.6	70.0	40.6	110.9	2.0	8.5	8.2
	Legal form of organization:													
	Corporate	2 582	498	67.5	995.1	10.0	19.3	110.0	3 692.7	2 248.7	5 945.6	76.9	306.2	341.4
	Noncorporate, total	412	27	2.4	24.7	0.6	1.1	5.6	70.0	40.6	110.9	2.0	8.5	8.2
	Individual	256	8	1.2	8.1	0.3	0.5	1.7	21.5	11.9	33.4	0.4	3.6	3.8
	Partnership	105	7	0.5	8.6	0.2	0.3	1.9	25.5	15.2	40.8	0.5	1.4	1.4
	Other and unknown	51	12	0.7	8.0	0.2	0.4	2.1	23.0	13.4	36.7	1.1	3.5	3.0

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
27	**PRINTING AND PUBLISHING**—Con.													
2731	**Book Publishing**	**1 744**	**346**	**59.5**	**830.2**	**13.3**	**24.9**	**140.1**	**3 261.9**	**1 544.2**	**4 793.9**	**79.8**	**963.4**	**992.0**
	Type of organization:													
	Multiunit companies, total	289	170	44.5	648.5	8.8	17.2	100.6	2 707.8	1 242.3	3 951.9	62.1	777.4	791.1
	Corp. ownership or control	287	168	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 455	176	15.0	181.7	4.5	7.7	39.5	554.1	301.9	842.0	17.7	186.0	200.9
	Corp. ownership or control	1 245	159	13.6	165.1	4.0	6.9	34.9	509.8	274.1	770.5	16.4	169.3	183.6
	Noncorporate ownership	210	17	1.4	16.6	0.5	0.8	4.6	44.3	27.8	71.5	1.3	16.7	17.3
	Legal form of organization:													
	Corporate	1 532	327	57.5	807.8	12.8	24.1	135.5	3 210.3	1 509.2	4 707.8	78.5	939.5	967.7
	Noncorporate, total	212	19	2.0	22.5	0.5	0.8	4.6	51.6	35.0	86.2	1.3	23.9	24.3
	Individual	131	5	0.5	6.0	0.1	0.2	0.9	20.4	10.6	31.1	0.5	6.3	6.3
	Partnership	54	4	0.2	2.7	0.1	0.1	0.3	11.6	5.0	16.1	0.1	4.6	5.1
	Other and unknown	27	10	1.2	13.8	0.3	0.5	3.4	19.5	19.4	39.0	0.7	13.0	13.0
2732	**Book Printing**	**950**	**370**	**46.9**	**548.2**	**37.6**	**72.6**	**404.1**	**1 029.2**	**662.6**	**1 691.8**	**54.3**	**190.3**	**194.0**
	Type of organization:													
	Multiunit companies, total	156	127	29.4	336.6	23.9	46.2	253.7	653.7	403.4	1 060.0	27.5	133.3	130.4
	Corp. ownership or control	155	126	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	794	243	17.6	211.6	13.7	26.5	150.4	375.4	259.1	631.8	26.8	57.0	63.6
	Corp. ownership or control	675	232	16.5	200.6	12.9	25.0	142.2	354.7	242.5	594.7	25.5	53.6	59.9
	Noncorporate ownership	119	11	1.1	11.0	0.9	1.5	8.2	20.7	16.6	37.1	1.3	3.4	3.7
	Legal form of organization:													
	Corporate	830	358	45.7	536.4	36.6	71.0	395.4	1 006.8	645.4	1 652.3	52.7	186.5	190.2
	Noncorporate, total	120	12	1.2	11.8	0.9	1.6	8.7	22.4	17.2	39.6	1.7	3.8	3.8
	Individual	75	6	0.6	6.0	0.5	0.8	4.5	11.5	7.6	18.9	0.7	1.6	1.9
	Partnership	38	4	0.4	4.2	0.3	0.5	3.0	8.4	7.8	16.1	(D)	1.4	1.4
	Other and unknown	7	2	0.2	1.6	0.2	0.3	1.2	2.6	1.9	4.6	(D)	0.7	0.5
2741	**Miscellaneous Publishing**	**2 352**	**335**	**42.1**	**503.0**	**15.4**	**27.1**	**150.3**	**1 290.7**	**569.9**	**1 850.9**	**39.1**	**121.7**	**139.1**
	Type of organization:													
	Multiunit companies, total	271	123	26.2	322.4	8.7	16.3	96.6	881.4	350.9	1 225.2	25.6	82.7	94.9
	Corp. ownership or control	271	123	26.2	322.4	8.7	16.3	96.6	881.4	350.9	1 225.2	25.6	82.7	94.9
	Single unit companies, total	2 081	212	16.0	180.6	6.7	10.8	53.7	409.4	218.9	625.6	13.5	39.0	44.2
	Corp. ownership or control	1 641	196	14.2	161.0	5.9	9.7	47.5	361.9	196.5	555.8	12.1	34.7	39.7
	Noncorporate ownership	440	16	1.8	19.6	0.8	1.1	6.3	47.5	22.4	69.8	1.4	4.3	4.5
	Legal form of organization:													
	Corporate	1 912	319	40.4	483.4	14.6	26.0	144.0	1 243.2	547.5	1 781.1	37.7	117.4	134.7
	Noncorporate, total	440	16	1.8	19.6	0.8	1.1	6.3	47.5	22.4	69.8	1.4	4.3	4.5
	Individual	297	2	0.7	7.7	0.3	0.4	1.9	21.2	10.2	31.3	0.5	1.9	2.0
	Partnership	108	8	0.6	5.9	0.3	0.4	2.2	16.3	7.9	24.2	0.5	1.5	1.6
	Other and unknown	35	6	0.5	6.0	0.2	0.3	2.1	10.0	4.3	14.3	0.4	0.9	0.9
2751	**Commercial Printing, Letterpress**	**14 521**	**1 059**	**110.9**	**1 307.3**	**88.0**	**159.6**	**913.6**	**2 440.6**	**1 852.4**	**4 284.3**	**163.0**	**345.8**	**372.7**
	Type of organization:													
	Multiunit companies, total	543	268	37.8	502.1	29.8	58.0	374.0	941.1	805.1	1 744.5	67.5	160.4	170.9
	Corp. ownership or control	540	268	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	13 978	791	73.1	805.2	58.2	101.5	539.6	1 499.5	1 047.4	2 539.8	95.5	185.4	201.8
	Corp. ownership or control	8 406	755	62.5	693.4	48.8	86.7	461.2	1 259.8	876.3	2 129.7	80.0	155.8	171.0
	Noncorporate ownership	5 572	36	10.6	111.8	9.4	14.8	78.3	239.7	171.0	410.2	15.5	29.5	30.7
	Legal form of organization:													
	Corporate	8 946	1 023	100.2	1 195.3	78.6	144.7	835.1	2 200.5	1 681.2	3 873.6	147.5	316.2	341.9
	Noncorporate, total	5 575	36	10.6	112.0	9.4	14.8	78.5	240.0	171.3	410.7	15.5	29.6	30.8
	Individual	4 077	17	7.4	78.3	6.6	10.4	55.0	173.0	121.9	294.6	11.3	21.3	21.9
	Partnership	1 283	12	2.7	27.4	2.3	3.7	19.2	55.5	39.8	95.1	3.3	6.6	7.1
	Other and unknown	215	7	0.6	6.3	0.5	0.8	4.3	11.5	9.5	21.0	0.9	1.6	1.8
2752	**Commercial Printing, Lithographic**	**11 320**	**2 362**	**216.3**	**2 984.1**	**163.7**	**307.4**	**2 045.7**	**5 338.4**	**4 061.6**	**9 359.7**	**360.2**	**747.1**	**861.9**
	Type of organization:													
	Multiunit companies, total	1 079	658	89.7	1 298.3	67.4	131.7	912.7	2 381.4	1 986.6	4 351.1	157.8	423.5	488.2
	Corp. ownership or control	1 067	651	89.1	1 288.7	66.8	130.6	905.0	2 366.3	1 970.6	4 320.0	157.5	421.1	485.9
	Noncorporate ownership	12	7	0.7	9.6	0.5	1.1	7.7	15.1	16.0	31.1	0.2	2.4	2.3
	Single unit companies, total	10 241	1 704	126.6	1 685.8	96.4	175.6	1 133.0	2 957.1	2 075.0	5 008.6	202.4	323.5	373.8
	Corp. ownership or control	7 415	1 643	117.2	1 580.0	88.6	163.7	1 058.8	2 739.3	1 930.5	4 647.5	190.4	298.9	346.7
	Noncorporate ownership	2 826	61	9.4	105.8	7.8	11.9	74.2	217.7	144.5	361.1	12.1	24.6	27.0
	Legal form of organization:													
	Corporate	8 482	2 294	206.2	2 868.7	155.4	294.4	1 963.8	5 105.6	3 901.1	8 967.5	347.9	720.0	832.6
	Noncorporate, total	2 838	68	10.1	115.4	8.3	13.0	81.9	232.8	160.5	392.2	12.3	27.1	29.3
	Individual	2 132	27	6.1	68.4	5.1	7.6	47.8	145.6	93.8	238.6	8.1	16.0	17.6
	Partnership	594	23	2.5	29.0	2.1	3.4	20.5	56.1	39.4	95.2	2.9	6.7	7.5
	Other and unknown	112	18	1.4	17.9	1.1	2.0	13.6	31.1	27.3	58.4	1.3	4.4	4.2
2753	**Engraving and Plate Printing**	**550**	**118**	**9.8**	**118.9**	**7.6**	**13.5**	**84.5**	**230.8**	**85.1**	**314.9**	**17.8**	**20.6**	**23.5**
	Type of organization:													
	Multiunit companies, total	87	48	5.2	65.0	3.9	7.4	48.3	132.1	45.1	176.5	13.2	12.6	14.8
	Corp. ownership or control	87	48	5.2	65.0	3.9	7.4	48.3	132.1	45.1	176.5	13.2	12.6	14.8
	Single unit companies, total	463	70	4.6	53.9	3.6	6.1	36.3	98.7	40.0	138.5	4.6	8.0	8.7
	Corp. ownership or control	324	68	4.2	49.5	3.3	5.6	33.3	89.1	37.3	126.2	4.4	7.1	7.8
	Noncorporate ownership	139	2	0.4	4.4	0.4	0.5	3.0	9.6	2.8	12.3	0.2	0.9	0.9

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
27	**PRINTING AND PUBLISHING**—Con.													
2753	**Engraving and Plate Printing**—Con.													
	Legal form of organization:													
	Corporate	411	116	9.4	114.5	7.2	13.0	81.5	221.3	82.4	302.6	17.6	19.7	22.6
	Noncorporate, total	139	2	0.4	4.4	0.4	0.5	3.0	9.6	2.8	12.3	0.2	0.9	0.9
	Individual	112	2	0.3	3.5	0.3	0.4	2.3	7.6	2.2	9.8	0.2	0.7	0.7
	Partnership	22	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2754	**Commercial Printing, Gravure**	**424**	**98**	**19.0**	**291.6**	**15.8**	**30.8**	**231.5**	**541.4**	**521.1**	**1 056.8**	**98.5**	**86.7**	**101.7**
	Type of organization:													
	Multiunit companies, total	79	64	14.6	230.5	12.1	23.8	182.7	430.2	432.2	857.5	89.6	72.0	86.3
	Corp. ownership or control	79	64	14.6	230.5	12.1	23.8	182.7	430.2	432.2	857.5	89.6	72.0	86.3
	Single unit companies, total	345	34	4.4	61.0	3.8	7.0	48.9	111.2	88.9	199.3	8.9	14.7	15.3
	Corp. ownership or control	274	33	4.1	57.8	3.5	6.6	46.3	103.4	83.7	186.5	8.6	13.9	14.4
	Noncorporate ownership	71	1	0.3	3.2	0.3	0.5	2.5	7.8	5.2	12.8	0.4	0.7	1.0
	Legal form of organization:													
	Corporate	353	97	18.7	288.4	15.6	30.3	229.0	533.6	515.9	1 044.0	98.2	85.9	100.7
	Noncorporate, total	71	1	0.3	3.2	0.3	0.5	2.5	7.8	5.2	12.8	0.4	0.7	1.0
	Individual	53	–	0.2	2.1	0.2	0.3	1.7	5.3	3.4	8.6	0.3	0.5	0.8
	Partnership	17	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2761	**Manifold Business Forms**	**795**	**477**	**45.3**	**575.0**	**33.3**	**67.3**	**390.9**	**1 491.6**	**1 418.0**	**2 893.8**	**82.1**	**313.7**	**336.7**
	Type of organization:													
	Multiunit companies, total	331	284	34.9	444.9	25.7	52.1	307.3	1 249.5	1 190.5	2 425.7	67.2	269.3	288.6
	Corp. ownership or control	329	283	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	464	193	10.4	130.1	7.6	15.2	83.6	242.1	227.5	468.0	14.9	44.4	48.1
	Corp. ownership or control	413	188	10.1	126.3	7.4	14.7	80.9	233.1	221.0	452.5	14.5	42.3	46.3
	Noncorporate ownership	51	5	0.3	3.8	0.3	0.5	2.7	9.0	6.5	15.6	0.4	2.1	1.8
	Legal form of organization:													
	Corporate	742	471	44.9	570.5	33.0	66.7	387.7	1 480.8	1 409.8	2 874.6	81.6	311.2	334.5
	Noncorporate, total	53	6	0.4	4.5	0.3	0.6	3.2	10.8	8.3	19.1	0.5	2.5	2.2
	Individual	34	2	0.2	1.9	0.1	0.2	1.4	3.9	3.7	7.5	0.3	0.6	0.7
	Partnership	12	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2771	**Greeting Card Publishing**	**166**	**52**	**18.1**	**226.8**	**10.6**	**21.7**	**105.8**	**655.9**	**364.9**	**1 072.1**	**18.8**	**207.8**	**160.6**
	Type of organization:													
	Multiunit companies, total	37	30	16.1	205.3	9.1	18.9	93.6	606.9	333.6	992.2	17.8	197.4	149.5
	Corp. ownership or control	37	30	16.1	205.3	9.1	18.9	93.6	606.9	333.6	992.2	17.8	197.4	149.5
	Single unit companies, total	129	22	2.0	21.6	1.5	2.8	12.2	49.0	31.3	79.8	1.0	10.4	11.1
	Corp. ownership or control	100	22	1.9	20.5	1.4	2.6	11.6	46.0	28.8	74.4	1.0	9.6	10.3
	Noncorporate ownership	29	–	0.1	1.0	0.1	0.2	0.6	3.0	2.4	5.4	0.1	0.7	0.8
	Legal form of organization:													
	Corporate	137	52	18.0	225.8	10.5	21.4	105.2	652.9	362.5	1 066.6	18.7	207.1	159.8
	Noncorporate, total	29	–	0.1	1.0	0.1	0.2	0.6	3.0	2.4	5.4	0.1	0.7	0.8
	Individual	22	–	0.1	0.6	(Z)	(Z)	0.3	2.0	1.1	3.1	0.1	0.6	0.6
	Partnership	7	–	(Z)	0.4	(Z)	0.2	0.3	1.0	1.4	2.3	(Z)	0.1	0.2
2782	**Blankbooks and Looseleaf Binders**	**505**	**288**	**31.8**	**338.5**	**25.2**	**49.8**	**235.0**	**739.9**	**396.9**	**1 122.6**	**36.0**	**112.0**	**130.2**
	Type of organization:													
	Multiunit companies, total	204	178	23.6	260.7	18.6	37.2	183.8	592.2	284.9	864.5	27.5	82.6	97.9
	Corp. ownership or control	204	178	23.6	260.7	18.6	37.2	183.8	592.2	284.9	864.5	27.5	82.6	97.9
	Single unit companies, total	301	110	8.3	77.8	6.6	12.7	51.2	147.7	111.9	258.1	8.6	29.4	32.3
	Corp. ownership or control	253	107	7.8	73.7	6.1	12.0	48.0	140.0	107.2	245.8	8.4	27.8	30.5
	Noncorporate ownership	48	3	0.5	4.2	0.4	0.7	3.2	7.7	4.7	12.4	0.2	1.6	1.7
	Legal form of organization:													
	Corporate	457	285	31.4	334.3	24.8	49.1	231.8	732.2	392.1	1 110.2	35.9	110.4	128.4
	Noncorporate, total	48	3	0.5	4.2	0.4	0.7	3.2	7.7	4.7	12.4	0.2	1.6	1.7
	Individual	34	1	0.1	1.1	0.1	0.2	0.8	2.1	0.9	3.0	0.1	0.3	0.3
	Partnership	13	2	0.4	3.0	0.3	0.5	2.4	5.6	3.9	9.4	0.1	1.3	1.5
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2789	**Bookbinding and Related Work**	**987**	**288**	**24.1**	**240.6**	**20.9**	**38.8**	**183.6**	**408.8**	**126.0**	**533.6**	**19.3**	**43.1**	**45.7**
	Type of organization:													
	Multiunit companies, total	63	49	6.2	61.2	5.3	10.5	46.5	106.8	41.3	147.6	3.9	16.5	17.7
	Corp. ownership or control	63	49	6.2	61.2	5.3	10.5	46.5	106.8	41.3	147.6	3.9	16.5	17.7
	Single unit companies, total	924	239	17.9	179.4	15.6	28.3	137.1	302.0	84.7	385.9	15.4	26.6	28.1
	Corp. ownership or control	669	229	16.2	162.1	14.1	26.0	124.5	271.3	76.2	346.5	12.7	23.1	25.2
	Noncorporate ownership	255	10	1.7	17.3	1.5	2.3	12.6	30.7	8.5	39.5	2.7	3.5	2.9
	Legal form of organization:													
	Corporate	732	278	22.4	223.3	19.4	36.4	171.0	378.1	117.6	494.1	16.6	39.6	42.9
	Noncorporate, total	255	10	1.7	17.3	1.5	2.3	12.6	30.7	8.5	39.5	2.7	3.5	2.9
	Individual	168	3	1.0	9.4	0.9	1.3	6.2	16.4	5.4	22.1	2.1	2.5	1.8
	Partnership	78	6	0.5	6.0	0.5	0.8	4.9	11.0	1.4	12.3	0.5	0.7	0.7
	Other and unknown	9	1	0.1	1.9	0.1	0.2	1.5	3.3	1.7	5.1	0.1	0.3	0.3

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
27	**PRINTING AND PUBLISHING**—Con.													
2791	**Typesetting**	**2 406**	**389**	**27.2**	**364.7**	**21.7**	**38.8**	**271.6**	**623.4**	**110.5**	**730.6**	**36.7**	**38.5**	**42.5**
	Type of organization:													
	Multiunit companies, total	173	101	7.5	100.8	5.9	11.1	73.6	173.6	35.9	208.5	8.2	14.9	15.4
	Corp. ownership or control	173	101	7.5	100.8	5.9	11.1	73.6	173.6	35.9	208.5	8.2	14.9	15.4
	Single unit companies, total	2 233	288	19.6	263.8	15.8	27.7	197.9	449.8	74.7	522.1	28.5	23.6	27.0
	Corp. ownership or control	1 524	276	17.8	241.2	14.2	25.2	180.4	403.9	66.7	468.3	25.1	21.3	24.6
	Noncorporate ownership	709	12	1.8	22.6	1.6	2.5	17.5	45.9	7.9	53.8	3.4	2.3	2.4
	Legal form of organization:													
	Corporate	1 697	377	25.3	342.1	20.1	36.3	254.1	577.5	102.6	676.8	33.3	36.2	40.0
	Noncorporate, total	709	12	1.8	22.6	1.6	2.5	17.5	45.9	7.9	53.8	3.4	2.3	2.4
	Individual	520	4	1.1	13.3	1.0	1.5	10.2	29.2	5.1	34.2	2.4	1.4	1.5
	Partnership	166	6	0.6	7.2	0.5	0.8	5.7	13.3	2.2	15.5	0.7	0.7	0.8
	Other and unknown	23	2	0.2	2.1	0.1	0.2	1.6	3.4	0.6	4.1	0.3	0.2	0.2
2793	**Photoengraving**	**449**	**56**	**5.7**	**89.3**	**3.8**	**5.8**	**58.4**	**168.2**	**50.4**	**218.0**	**7.5**	**11.6**	**13.2**
	Type of organization:													
	Multiunit companies, total	48	26	2.3	39.6	1.5	2.8	24.5	79.6	27.5	106.4	3.8	7.1	8.4
	Corp. ownership or control	48	26	2.3	39.6	1.5	2.8	24.5	79.6	27.5	106.4	3.8	7.1	8.4
	Single unit companies, total	401	30	3.3	49.6	2.3	4.0	33.9	88.6	22.9	111.6	3.7	4.5	4.8
	Corp. ownership or control	309	29	2.9	44.0	2.1	3.6	29.9	78.9	20.7	99.7	3.5	4.2	4.3
	Noncorporate ownership	92	1	0.4	5.7	0.3	0.4	4.0	9.7	2.2	11.9	0.2	0.3	0.5
	Legal form of organization:													
	Corporate	357	55	5.3	83.6	3.6	6.4	54.3	158.5	48.2	206.1	7.3	11.3	12.7
	Noncorporate, total	92	1	0.4	5.7	0.3	0.4	4.0	9.7	2.2	11.9	0.2	0.3	0.5
	Individual	69	–	0.1	1.9	0.1	0.2	1.4	4.3	1.1	5.4	0.1	0.2	0.2
	Partnership	22	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2794	**Electrotyping and Stereotyping**	**40**	**5**	**0.4**	**6.8**	**0.3**	**0.5**	**4.6**	**10.0**	**3.8**	**13.8**	**0.1**	**0.5**	**0.5**
	Type of organization:													
	Multiunit companies, total	8	3	0.2	3.7	0.2	0.3	2.7	5.2	1.8	7.1	(Z)	0.3	0.3
	Corp. ownership or control	8	3	0.2	3.7	0.2	0.3	2.7	5.2	1.8	7.1	(Z)	0.3	0.3
	Single unit companies, total	32	2	0.2	3.0	0.1	0.2	1.8	4.8	1.9	6.7	0.1	0.2	0.2
	Corp. ownership or control	29	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	37	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2795	**Lithographic Platemaking Services**	**697**	**217**	**15.2**	**273.9**	**10.6**	**20.4**	**181.5**	**466.8**	**198.9**	**667.0**	**27.4**	**53.8**	**54.5**
	Type of organization:													
	Multiunit companies, total	103	70	5.8	109.2	3.8	7.7	67.1	201.1	92.6	296.8	8.3	36.3	33.5
	Corp. ownership or control	103	70	5.8	109.2	3.8	7.7	67.1	201.1	92.6	296.8	8.3	36.3	33.5
	Single unit companies, total	594	147	9.4	164.7	6.8	12.7	114.5	265.7	106.3	370.2	19.1	17.5	21.1
	Corp. ownership or control	542	144	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	52	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	645	214	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	52	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	35	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	15	1	0.2	2.7	0.2	0.3	2.3	3.7	4.3	7.9	0.3	0.4	0.6
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28	**CHEMICALS AND ALLIED PRODUCTS**	**12 173**	**4 602**	**880.2**	**13 839.3**	**543.8**	**1 089.9**	**7 446.2**	**56 720.6**	**62 293.8**	**118 153.6**	**8 198.9**	**13 447.5**	**14 791.3**
	Type of organization:													
	Multiunit companies, total	5 364	3 423	790.1	12 648.9	491.2	988.4	6 920.6	53 273.9	57 957.3	110 403.8	7 889.7	12 528.3	13 804.8
	Corp. ownership or control	5 231	3 359	782.8	12 538.5	486.1	977.0	6 849.8	52 693.2	56 939.4	108 858.2	77 862.2	12 317.4	13 527.4
	Noncorporate ownership	133	64	7.3	110.4	5.2	11.4	70.8	580.7	1 017.9	1 545.6	323.8	210.9	277.4
	Single unit companies, total	6 809	1 179	90.0	1 190.5	52.6	101.4	525.6	3 446.6	4 336.5	7 749.9	309.2	919.2	986.4
	Corp. ownership or control	6 153	1 153	85.2	1 107.2	50.4	97.3	501.4	3 252.0	3 905.5	7 119.5	294.2	848.3	915.8
	Noncorporate ownership	656	26	4.8	83.3	2.2	4.1	24.2	194.6	431.0	630.3	14.9	71.0	70.7
	Legal form of organization:													
	Corporate	11 384	4 512	868.0	13 645.7	536.4	1 074.3	7 351.2	55 945.2	60 845.3	115 977.7	7 860.1	13 165.7	14 443.2
	Noncorporate, total	789	90	12.2	193.7	7.3	15.5	95.0	775.4	1 448.8	2 175.9	338.7	281.8	348.1
	Individual	423	8	1.1	12.8	0.8	1.5	6.9	42.8	51.3	96.0	3.1	12.6	11.1
	Partnership	169	13	3.5	67.2	1.1	2.2	15.3	143.0	355.6	501.8	10.7	54.1	55.1
	Other and unknown	197	69	7.6	113.7	5.4	11.8	72.8	589.5	1 041.9	1 578.2	324.9	215.0	281.8
2812	**Alkalies and Chlorine**	**49**	**33**	**11.8**	**215.9**	**8.0**	**16.0**	**136.2**	**822.5**	**826.7**	**1 654.8**	**220.0**	**132.4**	**141.8**
	Type of organization:													
	Multiunit companies, total	37	32	11.6	211.4	7.8	15.7	133.3	810.5	806.9	1 623.1	218.2	128.9	137.8
	Corp. ownership or control	37	32	11.6	211.4	7.8	15.7	133.3	810.5	806.9	1 623.1	218.2	128.9	137.8
	Single unit companies, total	12	1	0.2	4.5	0.2	0.3	2.9	12.1	19.8	31.6	1.8	3.5	3.9
	Corp. ownership or control	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	46	33	11.8	215.9	8.0	16.0	136.1	822.3	826.4	1 654.3	(D)	132.4	141.7
	Noncorporate, total	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.2	0.5	(D)	(Z)	(Z)
	Individual	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.2	0.5	(D)	(Z)	(Z)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
28	**CHEMICALS AND ALLIED PRODUCTS—Con.**													
2813	**Industrial Gases**	**562**	**102**	**7.5**	**117.2**	**4.6**	**9.6**	**67.0**	**732.8**	**515.9**	**1 234.6**	**243.0**	**27.8**	**45.6**
	Type of organization:													
	Multiunit companies, total	498	93	6.6	104.9	4.1	8.6	60.3	675.8	458.0	1 119.9	226.6	23.9	41.3
	Corp. ownership or control	498	93	6.6	104.9	4.1	8.6	60.3	675.8	458.0	1 119.9	226.6	23.9	41.3
	Single unit companies, total	64	9	0.9	12.3	0.5	1.0	6.7	57.0	57.9	114.7	16.4	3.9	4.3
	Corp. ownership or control	62	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	560	102	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2816	**Inorganic Pigments**	**106**	**66**	**11.9**	**179.8**	**8.0**	**16.4**	**110.2**	**567.9**	**695.9**	**1 259.9**	**124.3**	**240.7**	**251.5**
	Type of organization:													
	Multiunit companies, total	68	57	11.3	171.2	7.6	15.6	105.0	546.9	664.0	1 207.1	122.6	233.3	243.8
	Corp. ownership or control	68	57	11.3	171.2	7.6	15.6	105.0	546.9	664.0	1 207.1	122.6	233.3	243.8
	Single unit companies, total	38	9	0.6	8.6	0.4	0.8	5.1	21.0	31.9	52.7	1.7	7.4	7.7
	Corp. ownership or control	35	9	0.6	8.5	0.4	0.8	5.1	20.6	31.4	51.9	1.6	7.2	7.5
	Noncorporate ownership	3	–	(Z)	0.1	(Z)	(Z)	0.1	0.4	0.5	0.9	0.1	0.2	0.2
	Legal form of organization:													
	Corporate	103	66	11.9	179.7	8.0	16.4	110.1	567.5	695.4	1 259.0	124.2	240.5	251.3
	Noncorporate, total	3	–	(Z)	0.1	(Z)	(Z)	0.1	0.4	0.5	0.9	0.1	0.2	0.2
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2819	**Industrial Inorganic Chemicals, N.E.C.**	**565**	**289**	**78.8**	**1 334.2**	**47.3**	**96.7**	**720.1**	**4 363.9**	**4 391.8**	**8 695.7**	**468.2**	**760.3**	**866.9**
	Type of organization:													
	Multiunit companies, total	370	251	74.4	1 251.1	45.6	93.7	697.1	4 213.4	4 214.5	8 366.3	437.0	715.6	831.7
	Corp. ownership or control	369	250	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	195	38	4.4	83.1	1.8	3.5	22.9	150.5	177.3	329.4	31.2	35.7	35.2
	Corp. ownership or control	177	37	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	18	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	546	288	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	19	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	8	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.4	(Z)	(Z)	(Z)
	Partnership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2821	**Plastics Materials and Resins**	**397**	**310**	**57.2**	**985.6**	**36.7**	**76.6**	**575.7**	**4 142.7**	**6 772.6**	**10 818.2**	**895.2**	**982.3**	**1 093.6**
	Type of organization:													
	Multiunit companies, total	324	274	54.9	956.5	35.2	73.4	560.2	4 055.4	6 629.7	10 588.8	878.7	962.2	1 071.6
	Corp. ownership or control	324	274	54.9	956.5	35.2	73.4	560.2	4 055.4	6 629.7	10 588.8	878.7	962.2	1 071.6
	Single unit companies, total	73	36	2.3	29.1	1.5	3.2	15.5	87.3	142.9	229.5	16.5	20.1	22.0
	Corp. ownership or control	68	36	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	392	310	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
2822	**Synthetic Rubber**	**63**	**30**	**10.0**	**185.2**	**7.1**	**14.2**	**125.7**	**568.6**	**1 294.8**	**1 863.3**	**53.2**	**148.9**	**154.3**
	Type of organization:													
	Multiunit companies, total	29	26	9.3	171.8	6.6	13.0	116.5	545.8	1 216.7	1 762.3	(D)	135.9	139.6
	Corp. ownership or control	29	26	9.3	171.8	6.6	13.0	116.5	545.8	1 216.7	1 762.3	(D)	135.9	139.6
	Single unit companies, total	34	4	0.8	13.4	0.6	1.2	9.1	22.9	78.1	101.0	(D)	13.1	14.7
	Corp. ownership or control	28	4	0.8	13.2	0.5	1.2	9.0	22.2	76.4	98.7	(D)	12.9	14.5
	Noncorporate ownership	6	–	(Z)	0.2	(Z)	(Z)	0.1	0.7	1.7	2.3	(D)	0.1	0.1
	Legal form of organization:													
	Corporate	57	30	10.0	185.0	7.1	14.1	125.5	568.0	1 293.1	1 861.0	53.1	148.8	154.1
	Noncorporate, total	6	–	(Z)	0.2	(Z)	(Z)	0.1	0.7	1.7	2.3	0.1	0.1	0.1
	Individual	3	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.7	1.0	(Z)	0.1	0.1
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2823	**Cellulosic Manmade Fibers**	**25**	**10**	**16.0**	**213.7**	**12.6**	**25.2**	**151.8**	**327.2**	**683.2**	**1 002.8**	**29.4**	**108.1**	**111.3**
	Type of organization:													
	Multiunit companies, total	10	10	15.9	212.8	12.5	25.1	151.2	325.7	680.8	998.9	29.3	107.7	110.8
	Corp. ownership or control	10	10	15.9	212.8	12.5	25.1	151.2	325.7	680.8	998.9	29.3	107.7	110.8
	Single unit companies, total	15	–	0.1	0.9	0.1	0.1	0.6	1.5	2.4	3.9	0.2	0.5	0.5
	Corp. ownership or control	12	–	0.1	0.9	0.1	0.1	0.6	1.4	2.3	3.7	0.2	0.4	0.4
	Noncorporate ownership	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Legal form of organization:													
	Corporate	22	10	16.0	213.6	12.6	25.2	151.8	327.1	683.1	1 002.6	29.4	108.1	111.2
	Noncorporate, total	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
28	**CHEMICALS AND ALLIED PRODUCTS**—Con.													
2824	**Organic Fibers, Noncellulosic**	**66**	**58**	**74.0**	**1 086.1**	**54.8**	**105.8**	**704.8**	**2 804.4**	**3 618.1**	**6 379.7**	**338.5**	**614.9**	**661.8**
	Type of organization:													
	Multiunit companies, total	56	54	72.6	1 072.0	53.7	103.3	695.1	2 780.4	3 587.8	6 325.9	336.3	612.1	658.7
	Corp. ownership or control	55	54	72.6	1 071.9	53.7	103.3	695.0	2 781.3	3 587.8	6 325.9	(D)	610.3	658.7
	Noncorporate ownership	1	–	(Z)	0.1	(Z)	(Z)	0.1	(S)	–	–	(D)	1.8	–
	Single unit companies, total	10	4	1.4	14.1	1.2	2.4	9.7	24.0	30.4	53.8	2.2	2.8	3.2
	Corp. ownership or control	8	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	64	58	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(Z)	0.1	(Z)	(Z)	0.1	(S)	0.1	0.2	(D)	1.9	(Z)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(Z)	0.1	(Z)	(Z)	0.1	(S)	–	–	(D)	1.8	–
2831	**Biological Products**	**310**	**113**	**15.7**	**210.2**	**8.8**	**17.3**	**90.5**	**563.4**	**350.6**	**898.5**	**35.4**	**222.3**	**246.9**
	Type of organization:													
	Multiunit companies, total	130	88	13.9	189.3	7.6	15.2	80.8	510.9	323.5	819.3	31.8	206.9	231.1
	Corp. ownership or control	130	88	13.9	189.3	7.6	15.2	80.8	510.9	323.5	819.3	31.8	206.9	231.1
	Single unit companies, total	180	25	1.8	20.9	1.1	2.1	9.8	52.5	27.1	79.2	3.7	15.4	15.8
	Corp. ownership or control	161	24	1.7	19.9	1.1	2.0	9.2	49.4	25.7	74.6	3.5	14.0	14.4
	Noncorporate ownership	19	1	0.1	1.1	0.1	0.1	0.5	3.1	1.4	4.5	0.1	1.4	1.4
	Legal form of organization:													
	Corporate	291	112	15.6	209.1	8.7	17.2	90.0	560.3	349.2	893.9	35.3	220.9	245.5
	Noncorporate, total	19	1	0.1	1.1	0.1	0.1	0.5	3.1	1.4	4.5	0.1	1.4	1.4
	Individual	14	–	(Z)	0.4	(Z)	(Z)	0.2	1.1	0.4	1.5	(Z)	0.6	0.6
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2833	**Medicinals and Botanicals**	**177**	**76**	**14.4**	**219.9**	**8.4**	**17.1**	**127.2**	**1 162.2**	**739.0**	**1 889.9**	**123.8**	**297.9**	**307.0**
	Type of organization:													
	Multiunit companies, total	67	50	12.7	197.1	7.4	15.2	116.0	1 080.9	661.6	1 731.8	114.7	273.2	280.9
	Corp. ownership or control	67	50	12.7	197.1	7.4	15.2	116.0	1 080.9	661.6	1 731.8	114.7	273.2	280.9
	Single unit companies, total	110	26	1.7	22.8	1.0	1.9	11.2	81.3	77.4	158.1	9.1	24.7	26.1
	Corp. ownership or control	104	25	1.7	22.3	1.0	1.8	11.0	78.7	75.9	154.0	8.8	24.0	25.4
	Noncorporate ownership	6	1	(Z)	0.5	(Z)	(Z)	0.3	2.6	1.5	4.1	0.3	0.7	0.7
	Legal form of organization:													
	Corporate	171	75	14.4	219.4	8.4	17.1	127.0	1 159.6	737.5	1 885.8	123.5	297.2	306.3
	Noncorporate, total	6	1	(Z)	0.5	(Z)	(Z)	0.3	2.6	1.5	4.1	0.3	0.7	0.7
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2834	**Pharmaceutical Preparations**	**756**	**293**	**126.4**	**2 029.5**	**63.1**	**123.1**	**779.4**	**8 214.4**	**3 394.2**	**11 459.4**	**419.3**	**1 711.5**	**1 892.6**
	Type of organization:													
	Multiunit companies, total	263	205	118.0	1 928.9	58.4	114.1	737.9	7 875.2	3 188.1	10 917.9	405.7	1 621.4	1 797.5
	Corp. ownership or control	262	205	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	493	88	8.4	100.6	4.7	9.0	41.5	339.2	206.1	541.5	13.5	90.1	95.0
	Corp. ownership or control	462	86	8.1	98.4	4.6	8.8	40.9	332.4	200.3	528.7	13.4	87.9	93.0
	Noncorporate ownership	31	2	0.2	2.1	0.1	0.2	0.6	6.9	5.8	12.8	0.1	2.2	2.1
	Legal form of organization:													
	Corporate	724	291	126.1	2 027.3	63.0	122.9	778.7	8 208.4	3 387.4	11 446.4	419.2	1 709.3	1 890.5
	Noncorporate, total	32	2	0.2	2.2	0.1	0.2	0.7	6.0	6.9	13.0	0.1	2.2	2.1
	Individual	16	–	(Z)	0.2	(Z)	(Z)	0.1	0.8	0.2	1.0	(Z)	0.1	0.1
	Partnership	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2841	**Soap and Other Detergents**	**638**	**225**	**32.1**	**521.6**	**20.5**	**41.0**	**308.1**	**2 867.5**	**2 817.9**	**5 671.4**	**135.5**	**616.7**	**643.4**
	Type of organization:													
	Multiunit companies, total	185	134	26.1	438.4	17.2	34.7	272.8	2 610.0	2 545.9	5 144.1	123.0	562.8	585.1
	Corp. ownership or control	185	134	26.1	438.4	17.2	34.7	272.8	2 610.0	2 545.9	5 144.1	123.0	562.8	585.1
	Single unit companies, total	453	91	6.0	83.2	3.3	6.4	35.3	257.5	272.0	527.3	12.6	53.9	58.2
	Corp. ownership or control	416	88	5.7	79.9	3.0	5.8	33.1	245.2	260.8	504.0	12.2	51.6	55.4
	Noncorporate ownership	37	3	0.3	3.3	0.3	0.6	2.2	12.3	11.2	23.3	0.4	2.3	2.8
	Legal form of organization:													
	Corporate	601	222	31.8	518.3	20.2	40.5	305.9	2 855.2	2 806.7	5 648.1	135.1	614.4	640.5
	Noncorporate, total	37	3	0.3	3.3	0.3	0.6	2.2	12.3	11.2	23.3	0.4	2.3	2.8
	Individual	28	2	0.2	2.4	0.2	0.4	1.4	8.9	8.1	16.9	0.3	1.7	1.8
	Partnership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2842	**Polishes and Sanitation Goods**	**1 022**	**238**	**22.1**	**274.7**	**14.1**	**27.2**	**148.5**	**1 667.2**	**1 497.2**	**3 157.3**	**51.8**	**264.3**	**274.9**
	Type of organization:													
	Multiunit companies, total	191	121	14.1	179.6	9.3	18.7	106.4	1 379.7	1 161.9	2 537.9	39.0	205.9	210.7
	Corp. ownership or control	191	121	14.1	179.6	9.3	18.7	106.4	1 379.7	1 161.9	2 537.9	39.0	205.9	210.7
	Single unit companies, total	831	117	8.0	95.1	4.8	8.6	42.1	287.5	335.3	619.4	12.8	58.4	64.2
	Corp. ownership or control	720	117	7.8	92.5	4.6	8.3	40.9	275.6	323.7	595.9	12.3	56.2	62.0
	Noncorporate ownership	111	–	0.2	2.6	0.2	0.2	1.2	11.9	11.6	23.5	0.5	2.1	2.1

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
28	**CHEMICALS AND ALLIED PRODUCTS**—Con.													
2842	**Polishes and Sanitation Goods**—Con.													
	Legal form of organization:													
	Corporate	911	238	21.9	272.0	13.9	27.0	147.2	1 655.4	1 485.6	3 133.8	51.3	262.1	272.7
	Noncorporate, total	111	–	0.2	2.6	0.2	0.2	1.2	11.9	11.6	23.5	0.5	2.1	2.1
	Individual	80	–	0.2	1.8	0.1	0.2	0.9	8.1	7.5	15.7	0.2	1.4	1.4
	Partnership	25	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2843	**Surface Active Agents**	**175**	**84**	**6.6**	**101.9**	**3.7**	**7.7**	**47.3**	**345.7**	**603.2**	**944.8**	**41.1**	**106.9**	**116.3**
	Type of organization:													
	Multiunit companies, total	78	59	5.0	78.1	2.8	5.9	38.3	293.1	517.0	806.6	35.7	93.1	101.7
	Corp. ownership or control	78	59	5.0	78.1	2.8	5.9	38.3	293.1	517.0	806.6	35.7	93.1	101.7
	Single unit companies, total	97	25	1.5	23.8	0.9	1.8	9.0	52.6	86.3	138.3	5.3	13.8	14.7
	Corp. ownership or control	95	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	173	84	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2844	**Toilet Preparations**	**693**	**192**	**50.9**	**627.9**	**32.8**	**62.9**	**318.9**	**4 526.7**	**2 059.4**	**6 557.2**	**105.6**	**712.0**	**760.3**
	Type of organization:													
	Multiunit companies, total	155	119	44.4	560.4	28.7	54.9	287.7	4 220.2	1 901.2	6 091.4	97.7	646.5	695.2
	Corp. ownership or control	154	119	44.4	560.4	28.7	54.9	287.7	4 220.2	1 901.2	6 091.4	97.7	646.5	695.2
	Noncorporate ownership	1	–	–	–	–	–	–	–	–	–	–	–	–
	Single unit companies, total	538	73	6.5	67.4	4.1	8.0	31.2	306.6	158.3	465.9	7.9	65.4	65.1
	Corp. ownership or control	483	73	6.5	66.8	4.1	8.0	30.9	302.8	156.5	460.3	7.8	64.8	64.5
	Noncorporate ownership	55	–	(Z)	0.6	(Z)	0.1	0.3	3.8	1.8	5.6	0.1	0.7	0.6
	Legal form of organization:													
	Corporate	637	192	50.8	627.3	32.8	62.8	318.6	4 523.0	2 057.6	6 551.7	105.6	711.3	759.7
	Noncorporate, total	56	–	(Z)	0.6	(Z)	0.1	0.3	3.8	1.8	5.6	0.1	0.7	0.6
	Individual	37	–	(Z)	0.4	(Z)	(Z)	0.2	2.4	1.1	3.5	(Z)	0.4	0.4
	Partnership	10	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	9	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2851	**Paints and Allied Products**	**1 579**	**653**	**61.4**	**882.6**	**33.0**	**66.2**	**394.1**	**2 821.3**	**3 848.9**	**6 629.7**	**167.4**	**864.2**	**937.6**
	Type of organization:													
	Multiunit companies, total	577	425	46.4	678.1	25.1	50.8	312.6	2 318.5	3 109.9	5 395.4	143.9	706.8	766.2
	Corp. ownership or control	571	420	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 002	228	15.0	204.5	7.9	15.4	81.5	502.8	739.0	1 234.2	23.6	157.3	171.4
	Corp. ownership or control	924	224	14.7	200.6	7.6	15.0	79.5	490.9	721.6	1 204.9	23.0	154.0	168.1
	Noncorporate ownership	78	4	0.3	3.9	0.2	0.4	2.0	11.9	17.4	29.4	0.5	3.4	3.3
	Legal form of organization:													
	Corporate	1 495	644	60.7	875.0	32.6	65.3	389.7	2 773.7	3 792.7	6 526.1	166.6	853.3	925.9
	Noncorporate, total	84	9	0.7	7.6	0.4	0.8	4.4	47.6	56.1	103.5	0.8	10.9	11.7
	Individual	52	3	0.2	2.8	0.1	0.3	1.4	8.4	11.8	20.3	0.2	2.3	2.3
	Partnership	18	1	0.1	0.8	0.1	0.1	0.4	2.7	4.3	7.0	0.1	0.8	0.8
	Other and unknown	14	5	0.4	3.9	0.2	0.5	2.5	36.5	40.0	76.2	0.5	7.8	8.6
2861	**Gum and Wood Chemicals**	**119**	**37**	**4.8**	**54.0**	**3.8**	**7.8**	**38.9**	**185.0**	**205.3**	**391.3**	**27.0**	**63.6**	**65.7**
	Type of organization:													
	Multiunit companies, total	45	30	4.2	48.3	3.3	6.9	35.1	168.0	182.6	351.3	24.6	57.2	59.5
	Corp. ownership or control	45	30	4.2	48.3	3.3	6.9	35.1	168.0	182.6	351.3	24.6	57.2	59.5
	Single unit companies, total	74	7	0.6	5.7	0.5	0.9	3.9	17.0	22.7	39.9	2.4	6.4	6.2
	Corp. ownership or control	58	7	0.5	5.3	0.4	0.8	3.6	16.1	21.5	37.8	2.2	6.1	5.9
	Noncorporate ownership	16	–	(Z)	0.3	(Z)	0.1	0.3	1.0	1.2	2.1	0.2	0.4	0.4
	Legal form of organization:													
	Corporate	103	37	4.7	53.6	3.7	7.7	38.6	184.0	204.1	389.1	26.8	63.2	65.3
	Noncorporate, total	16	–	(Z)	0.3	(Z)	0.1	0.3	1.0	1.2	2.1	0.2	0.4	0.4
	Individual	8	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	0.6	1.0	0.1	0.2	0.2
	Partnership	8	–	(Z)	0.1	(Z)	(Z)	0.1	0.5	0.6	1.1	0.1	0.2	0.2
2865	**Cyclic Crudes and Intermediates**	**191**	**127**	**35.7**	**631.5**	**23.4**	**46.6**	**369.8**	**2 214.4**	**3 453.6**	**5 637.0**	**443.1**	**784.2**	**844.4**
	Type of organization:													
	Multiunit companies, total	138	117	35.0	620.8	23.0	45.8	364.2	2 189.3	3 402.2	5 561.1	438.2	773.3	832.2
	Corp. ownership or control	138	117	35.0	620.8	23.0	45.8	364.2	2 189.3	3 402.2	5 561.1	438.2	773.3	832.2
	Single unit companies, total	53	10	0.7	10.7	0.4	0.8	5.6	25.1	51.4	75.9	4.8	11.0	12.2
	Corp. ownership or control	51	10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	189	127	35.7	631.5	23.4	46.6	369.8	2 214.4	3 453.5	5 637.0	443.1	784.2	844.4
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
28	**CHEMICALS AND ALLIED PRODUCTS—Con.**													
2869	**Industrial Organic Chemicals, N.E.C.**	**569**	**346**	**112.3**	**2 108.7**	**70.7**	**145.7**	**1 216.5**	**10 475.7**	**13 948.8**	**24 232.8**	**2 882.6**	**2 591.5**	**2 942.7**
	Type of organization:													
	Multiunit companies, total	356	300	108.3	2 042.6	68.3	141.1	1 183.6	10 212.2	13 450.8	23 475.4	2 850.1	2 512.7	2 855.9
	Corp. ownership or control	356	300	108.3	2 042.6	68.3	141.1	1 183.6	10 212.2	13 450.8	23 475.4	2 850.1	2 512.7	2 855.9
	Single unit companies, total	213	46	4.0	66.2	2.4	4.5	33.0	263.5	498.0	757.4	32.5	78.8	86.8
	Corp. ownership or control	201	43	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	12	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	557	343	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	12	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	8	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.4	0.7	0.1	0.1	0.1
	Partnership	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2873	**Nitrogenous Fertilizers**	**152**	**88**	**12.1**	**207.9**	**7.9**	**17.1**	**128.4**	**1 202.0**	**1 450.0**	**2 603.4**	**734.4**	**296.9**	**378.0**
	Type of organization:													
	Multiunit companies, total	95	79	11.5	199.4	7.4	16.2	122.8	1 172.9	1 405.3	2 531.5	719.5	287.5	366.2
	Corp. ownership or control	76	61	8.5	147.0	5.6	11.9	92.5	841.4	1 035.4	1 852.5	445.4	196.5	243.4
	Noncorporate ownership	19	18	3.0	52.4	1.9	4.2	30.3	331.4	369.9	679.0	274.1	91.0	122.8
	Single unit companies, total	57	9	0.6	8.5	0.4	0.9	5.7	29.1	44.7	71.9	14.9	9.4	11.7
	Corp. ownership or control	49	7	0.5	7.8	0.4	0.8	5.1	27.3	39.5	65.3	14.2	8.4	10.2
	Noncorporate ownership	8	2	0.1	0.7	(Z)	0.1	0.6	1.8	5.2	6.6	0.7	1.0	1.5
	Legal form of organization:													
	Corporate	125	68	9.1	154.8	6.0	12.8	97.5	868.7	1 074.9	1 917.8	459.6	204.9	253.6
	Noncorporate, total	27	20	3.0	53.1	1.9	4.3	30.9	333.3	375.1	685.6	274.7	92.0	124.3
	Individual	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	22	20	3.0	53.0	1.9	4.3	30.9	332.8	374.7	684.7	274.5	91.9	124.2
2874	**Phosphatic Fertilizers**	**91**	**69**	**14.4**	**212.8**	**10.1**	**21.7**	**139.2**	**817.7**	**1 917.6**	**2 681.7**	**111.8**	**353.9**	**419.7**
	Type of organization:													
	Multiunit companies, total	85	66	14.1	210.2	9.9	21.5	137.9	812.2	1 904.8	2 663.6	(D)	350.8	416.5
	Corp. ownership or control	74	57	11.7	171.5	8.1	17.2	109.4	638.8	1 485.3	2 099.9	(D)	277.6	311.7
	Noncorporate ownership	11	9	2.4	38.8	1.8	4.2	28.5	173.3	419.5	563.8	(D)	73.2	104.8
	Single unit companies, total	6	3	0.3	2.6	0.2	0.3	1.3	5.5	12.8	18.1	(D)	3.1	3.2
	Corp. ownership or control	6	3	0.3	2.6	0.2	0.3	1.3	5.5	12.8	18.1	(D)	3.1	3.2
	Corporate	80	60	12.0	174.0	8.3	17.5	110.7	644.4	1 498.1	2 118.0	(D)	280.7	314.9
	Legal form of organization:													
	Noncorporate, total	11	9	2.4	38.8	1.8	4.2	28.5	173.3	419.5	563.8	(D)	73.2	104.8
	Other and unknown	11	9	2.4	38.8	1.8	4.2	28.5	173.3	419.5	563.8	(D)	73.2	104.8
2875	**Fertilizers, Mixing Only**	**673**	**204**	**12.4**	**139.1**	**8.1**	**16.0**	**68.9**	**488.9**	**1 373.0**	**1 866.6**	**41.9**	**303.3**	**308.5**
	Type of organization:													
	Multiunit companies, total	348	139	8.7	96.4	5.6	11.1	47.6	357.1	1 043.6	1 405.8	28.6	241.6	245
	Corp. ownership or control	266	112	7.4	84.9	4.6	9.2	40.9	323.8	872.5	1 204.2	22.9	209.9	208
	Noncorporate ownership	82	27	1.2	11.4	1.0	1.9	6.7	33.3	171.1	201.6	5.7	31.6	37.0
	Single unit companies, total	325	65	3.8	42.7	2.5	5.0	21.3	131.8	329.4	460.8	13.3	61.8	63.4
	Corp. ownership or control	276	61	3.5	39.9	2.3	4.5	19.7	124.2	304.8	428.6	12.5	57.8	59.4
	Noncorporate ownership	49	4	0.3	2.9	0.2	0.5	1.7	7.6	24.6	32.2	0.8	4.0	4.0
	Legal form of organization:													
	Corporate	542	173	10.9	124.8	6.9	13.6	60.6	448.0	1 177.3	1 632.8	35.4	267.7	267.4
	Noncorporate, total	131	31	1.5	14.3	1.2	2.4	8.4	40.9	195.7	233.8	6.5	35.6	41.1
	Individual	23	1	0.1	0.8	0.1	0.2	0.4	2.0	5.3	7.4	0.4	1.1	1.0
	Partnership	15	–	0.1	0.5	(Z)	0.1	0.3	2.1	4.1	6.1	0.1	0.9	0.9
	Other and unknown	93	30	1.4	13.1	1.1	2.2	7.7	36.9	186.3	220.3	6.0	33.7	39.2
2879	**Agricultural Chemicals, N.E.C.**	**409**	**121**	**15.0**	**224.1**	**9.3**	**17.9**	**118.2**	**1 299.3**	**1 496.2**	**2 780.4**	**219.2**	**440.2**	**460.6**
	Type of organization:													
	Multiunit companies, total	165	86	12.2	189.6	7.6	14.7	102.9	1 179.1	1 332.6	2 496.1	198.6	400.3	420.0
	Corp. ownership or control	156	82	11.9	186.1	7.4	14.3	100.5	1 172.5	1 317.1	2 473.4	(D)	395.2	416.1
	Noncorporate ownership	9	4	0.3	3.6	0.2	0.5	2.4	6.6	15.4	22.7	(D)	5.2	3.9
	Single unit companies, total	244	35	2.7	34.5	1.7	3.2	15.3	120.2	163.6	284.3	20.5	39.9	40.6
	Corp. ownership or control	217	34	2.6	32.6	1.6	3.1	14.7	114.0	153.3	268.1	20.0	38.1	38.3
	Noncorporate ownership	27	1	0.1	1.9	0.1	0.1	0.6	6.2	10.3	16.2	0.6	1.8	2.3
	Legal form of organization:													
	Corporate	373	116	14.5	218.7	9.0	17.4	115.2	1 286.5	1 470.4	2 741.6	(D)	433.2	454.4
	Noncorporate, total	36	5	0.4	5.5	0.3	0.6	3.0	12.8	25.7	38.9	(D)	7.0	6.2
	Individual	22	–	(Z)	0.7	(Z)	0.1	0.4	3.3	3.0	6.4	0.4	0.8	0.8
	Partnership	5	1	0.1	1.2	(Z)	(Z)	0.2	2.9	7.3	9.8	0.2	1.0	1.4
	Other and unknown	9	4	0.3	3.6	0.2	0.5	2.4	6.6	15.4	22.7	(D)	5.2	3.9
2891	**Adhesives and Sealants**	**573**	**213**	**16.7**	**230.7**	**10.2**	**20.6**	**113.5**	**748.7**	**1 071.6**	**1 813.1**	**39.0**	**187.3**	**202.5**
	Type of organization:													
	Multiunit companies, total	283	155	12.7	176.7	7.8	15.8	89.7	615.9	888.8	1 498.7	32.2	157.2	169.1
	Corp. ownership or control	283	155	12.7	176.7	7.8	15.8	89.7	615.9	888.8	1 498.7	32.2	157.2	169.1
	Single unit companies, total	290	58	3.9	54.0	2.4	4.7	23.7	132.7	182.8	314.4	6.7	30.1	33.4
	Corp. ownership or control	270	58	3.9	53.6	2.4	4.7	23.5	131.4	180.5	310.7	6.7	29.7	33.0
	Noncorporate ownership	20	–	(Z)	0.5	(Z)	(Z)	0.2	1.4	2.3	3.7	(Z)	0.4	0.3
	Legal form of organization:													
	Corporate	553	213	16.6	230.2	10.2	20.5	113.2	747.3	1 069.3	1 809.4	38.9	186.9	202.2
	Noncorporate, total	20	–	(Z)	0.5	(Z)	(Z)	0.2	1.4	2.3	3.7	(Z)	0.4	0.3
	Individual	13	–	(Z)	0.3	(Z)	(Z)	0.2	0.9	1.6	2.5	(Z)	0.2	0.2
	Partnership	5	–	(Z)	0.1	(Z)	(Z)	0.1	0.5	0.7	1.1	(Z)	0.1	0.1
	Other and unknown	2	–	–	–	–	–	–	(Z)	–	–	–	0.1	–

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
28	**CHEMICALS AND ALLIED PRODUCTS**—Con.													
2892	**Explosives**	**97**	**53**	**12.3**	**173.2**	**8.4**	**16.1**	**101.4**	**410.7**	**258.3**	**666.3**	**26.1**	**54.8**	**59.8**
	Type of organization:													
	Multiunit companies, total	60	45	11.6	164.3	7.9	15.3	96.4	392.9	219.3	609.7	24.5	50.4	54.3
	Corp. ownership or control	60	45	11.6	164.3	7.9	15.3	96.4	392.9	219.3	609.7	24.5	50.4	54.3
	Single unit companies, total	37	8	0.7	9.0	0.4	0.8	5.0	17.8	39.0	56.6	1.6	4.4	5.5
	Corp. ownership or control	33	8	0.7	8.9	0.4	0.8	5.0	17.6	38.9	56.3	1.6	4.3	5.5
	Noncorporate ownership	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	(Z)	(Z)
	Legal form of organization:													
	Corporate	93	53	12.3	173.2	8.3	16.1	101.4	410.5	258.1	666.0	26.1	54.8	59.8
	Noncorporate, total	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	(Z)	(Z)
	Individual	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	(Z)	(Z)
2893	**Printing Ink**	**446**	**157**	**10.1**	**145.1**	**5.8**	**11.4**	**71.6**	**367.8**	**583.5**	**944.9**	**17.0**	**101.7**	**116.7**
	Type of organization:													
	Multiunit companies, total	296	132	8.2	116.7	4.7	9.4	59.1	307.1	495.4	797.2	14.4	85.7	98.5
	Corp. ownership or control	296	132	8.2	116.7	4.7	9.4	59.1	307.1	495.4	797.2	14.4	85.7	98.5
	Single unit companies, total	150	25	1.8	28.4	1.0	2.0	12.5	60.7	88.1	147.7	2.7	16.0	18.2
	Corp. ownership or control	140	23	1.7	27.3	1.0	2.0	12.0	58.4	82.9	140.2	2.6	15.1	17.3
	Noncorporate ownership	10	2	0.1	1.1	(Z)	0.1	0.5	2.3	5.2	7.4	0.1	0.9	0.9
	Legal form of organization:													
	Corporate	436	155	10.0	144.0	5.7	11.4	71.1	365.5	578.3	937.4	17.0	100.8	115.7
	Noncorporate, total	10	2	0.1	1.1	(Z)	0.1	0.5	2.3	5.2	7.4	0.1	0.9	0.9
	Individual	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	(Z)	–
2895	**Carbon Black**	**31**	**31**	**2.5**	**42.5**	**2.0**	**4.6**	**32.5**	**170.2**	**303.9**	**468.4**	**22.7**	**27.3**	**32.7**
	Type of organization:													
	Multiunit companies, total	31	31	2.5	42.5	2.0	4.6	32.5	170.2	303.9	468.4	22.7	27.3	32.7
	Corp. ownership or control	31	31	2.5	42.5	2.0	4.6	32.5	170.2	303.9	468.4	22.7	27.3	32.7
	Corporate	31	31	2.5	42.5	2.0	4.6	32.5	170.2	303.9	468.4	22.7	27.3	32.7
	Legal form of organization:													
2899	**Chemical Preparations, N.E.C.**	**1 639**	**384**	**35.3**	**483.4**	**20.7**	**41.5**	**242.0**	**1 841.7**	**2 122.5**	**3 950.6**	**182.6**	**431.7**	**456.5**
	Type of organization:													
	Multiunit companies, total	424	245	23.9	339.7	14.1	29.0	177.8	1 454.8	1 660.6	3 108.3	136.4	339.0	353.2
	Corp. ownership or control	422	244	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 215	139	11.4	143.7	6.7	12.5	64.2	386.9	461.9	842.3	46.2	92.7	103.3
	Corp. ownership or control	1 087	137	11.1	141.0	6.5	12.1	62.5	379.7	451.7	823.3	45.0	88.7	100.8
	Noncorporate ownership	128	2	0.2	2.7	0.2	0.3	1.6	7.1	10.2	19.0	1.2	3.9	2.5
	Legal form of organization:													
	Corporate	1 509	381	35.0	480.3	20.5	41.1	240.1	1 832.9	2 110.7	3 928.3	181.2	427.4	453.6
	Noncorporate, total	130	3	0.3	3.2	0.2	0.4	1.9	8.8	11.8	22.3	1.4	4.3	2.9
	Individual	81	1	0.1	1.3	0.1	0.2	0.8	2.1	5.3	9.1	0.6	2.7	1.1
	Partnership	40	1	0.1	1.1	0.1	0.2	0.8	4.2	4.1	8.2	(D)	1.0	1.2
	Other and unknown	9	1	0.1	0.7	(Z)	0.1	0.4	2.5	2.4	5.0	(D)	0.6	0.6
29	**PETROLEUM AND COAL PRODUCTS**	**2 206**	**773**	**146.8**	**2 696.2**	**101.1**	**207.9**	**1 765.4**	**16 377.6**	**81 655.4**	**97 452.7**	**2 261.3**	**4 912.9**	**5 656.3**
	Type of organization:													
	Multiunit companies, total	1 329	589	133.4	2 496.8	92.1	189.5	1 650.1	15 881.0	80 051.5	95 356.3	2 200.0	4 778.1	5 513.6
	Corp. ownership or control	1 313	579	130.7	2 447.3	90.1	185.5	1 612.9	15 656.0	78 276.3	93 446.5	2 149.3	4 507.5	5 179.6
	Noncorporate ownership	16	10	2.7	49.5	1.9	4.0	37.2	225.1	1 775.1	1 909.8	50.8	270.6	334.0
	Single unit companies, total	877	184	13.4	199.4	9.0	18.4	115.4	496.6	1 604.0	2 096.4	61.2	134.8	142.7
	Corp. ownership or control	773	176	12.3	183.4	8.3	16.9	104.1	463.2	1 521.2	1 981.2	48.6	129.4	135.6
	Noncorporate ownership	104	8	1.0	16.0	0.8	1.5	11.3	33.4	82.8	115.3	12.6	5.4	7.2
	Legal form of organization:													
	Corporate	2 086	755	143.1	2 630.7	98.4	202.5	1 717.0	16 119.2	79 797.6	95 427.7	2 197.9	4 636.8	5 315.2
	Noncorporate, total	120	18	3.7	65.5	2.7	5.5	48.5	258.4	1 857.9	2 025.1	63.4	276.0	341.1
	Individual	46	–	0.1	1.1	0.1	0.1	0.6	3.4	6.5	9.8	0.2	0.6	0.8
	Partnership	40	6	0.6	11.5	0.5	0.9	8.0	22.7	62.2	84.2	11.9	3.7	5.3
	Other and unknown	34	12	3.0	52.9	2.2	4.4	39.9	232.4	1 789.2	1 931.1	51.2	271.7	335.0
2911	**Petroleum Refining**	**349**	**279**	**102.5**	**2 055.3**	**70.8**	**144.4**	**1 366.4**	**14 423.9**	**77 854.6**	**91 688.8**	**2 108.6**	**4 471.6**	**5 196.2**
	Type of organization:													
	Multiunit companies, total	293	255	100.2	2 010.4	69.2	140.8	1 340.0	14 269.3	76 952.2	90 630.9	2 085.3	4 402.6	5 129.1
	Corp. ownership or control	284	246	97.6	1 962.0	67.4	137.0	1 303.7	14 034.3	75 189.9	88 737.2	2 035.2	4 155.0	4 798.8
	Noncorporate ownership	9	9	2.6	48.4	1.9	3.9	36.3	235.0	1 762.3	1 893.7	50.1	247.6	330.3
	Single unit companies, total	56	24	2.3	44.9	1.6	3.5	26.4	154.6	902.4	1 057.9	23.3	69.0	67.1
	Corp. ownership or control	45	22	2.2	43.9	1.5	3.4	25.6	146.4	878.7	1 026.6	16.5	68.5	65.8
	Noncorporate ownership	11	2	0.1	1.0	(Z)	0.1	0.7	8.2	23.7	31.3	6.8	0.6	1.4
	Legal form of organization:													
	Corporate	329	268	99.9	2 005.8	68.9	140.4	1 329.4	14 180.7	76 068.6	89 763.8	2 051.7	4 223.4	4 864.6
	Noncorporate, total	20	11	2.7	49.5	1.9	4.0	37.0	243.2	1 786.1	1 925.0	56.9	248.2	331.6
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	13	9	2.6	48.5	1.9	3.9	36.3	235.2	1 763.1	1 894.6	50.2	247.7	330.3

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
29	**PETROLEUM AND COAL PRODUCTS**—Con.													
2951	**Paving Mixtures and Blocks**	**1 022**	**164**	**12.8**	**189.6**	**9.6**	**20.1**	**133.6**	**507.8**	**1 072.1**	**1 578.3**	**57.3**	**53.5**	**62.8**
	Type of organization:													
	Multiunit companies, total	649	92	7.3	110.7	5.5	11.7	80.0	356.9	766.9	1 123.1	33.0	36.1	42.9
	Corp. ownership or control	648	92	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	373	72	5.5	78.9	4.1	8.3	53.5	150.9	305.2	455.1	24.3	17.4	19.9
	Corp. ownership or control	335	68	4.9	67.7	3.6	7.3	44.9	138.3	271.5	409.0	19.3	15.9	17.6
	Noncorporate ownership	38	4	0.7	11.2	0.5	1.0	8.6	12.6	33.6	46.1	5.0	1.5	2.3
	Legal form of organization:													
	Corporate	983	160	12.1	178.3	9.1	19.0	124.8	494.9	1 038.2	1 531.4	52.3	52.0	60.5
	Noncorporate, total	39	4	0.7	11.4	0.5	1.0	8.7	13.0	33.9	46.8	5.0	1.5	2.3
	Individual	13	–	(Z)	0.4	(Z)	(Z)	0.3	0.8	2.3	3.1	0.1	0.1	0.1
	Partnership	19	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2952	**Asphalt Felts and Coatings**	**275**	**164**	**19.5**	**271.7**	**14.3**	**31.0**	**185.9**	**764.2**	**1 320.8**	**2 077.6**	**55.2**	**142.6**	**157.2**
	Type of organization:													
	Multiunit companies, total	177	132	17.7	247.9	13.1	28.4	172.3	708.5	1 223.3	1 925.1	50.8	132.9	146.6
	Corp. ownership or control	177	132	17.7	247.9	13.1	28.4	172.3	708.5	1 223.3	1 925.1	50.8	132.9	146.6
	Single unit companies, total	98	32	1.8	23.8	1.2	2.6	13.6	55.7	97.4	152.5	4.4	9.7	10.7
	Corp. ownership or control	88	31	1.7	22.7	1.1	2.4	12.9	53.7	92.7	145.9	4.4	9.4	10.4
	Noncorporate ownership	10	1	0.1	1.1	0.1	0.2	0.8	2.0	4.7	6.6	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	265	163	19.4	270.6	14.2	30.8	185.1	762.2	1 316.1	2 071.0	55.2	142.3	156.9
	Noncorporate, total	10	1	0.1	1.1	0.1	0.2	0.8	2.0	4.7	6.6	(Z)	0.3	0.3
	Individual	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2992	**Lubricating Oils and Greases**	**490**	**143**	**10.3**	**157.1**	**5.4**	**10.4**	**65.4**	**524.8**	**1 101.0**	**1 644.7**	**25.6**	**192.9**	**180.8**
	Type of organization:													
	Multiunit companies, total	176	93	6.9	109.9	3.4	6.8	46.2	406.2	834.1	1 262.4	18.2	159.5	141.3
	Corp. ownership or control	170	92	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	314	50	3.4	47.2	1.9	3.5	19.1	118.6	267.0	382.3	7.4	33.4	39.5
	Corp. ownership or control	276	49	3.2	44.8	1.8	3.4	18.1	109.8	249.6	356.3	6.9	30.8	36.8
	Noncorporate ownership	38	1	0.2	2.4	0.1	0.2	1.0	8.8	17.3	26.0	0.5	2.5	2.7
	Legal form of organization:													
	Corporate	446	141	10.1	153.8	5.2	10.1	63.6	526.3	1 071.3	1 603.3	24.4	167.4	174.4
	Noncorporate, total	44	2	0.2	3.3	0.2	0.3	1.7	(S)	29.8	41.4	1.2	25.5	6.4
	Individual	25	–	(Z)	0.6	(Z)	(Z)	0.2	1.7	3.5	5.1	(D)	0.5	0.6
	Partnership	9	1	0.1	1.6	0.1	0.1	0.7	5.9	11.4	17.2	(D)	1.7	1.7
	Other and unknown	10	1	0.1	1.1	0.1	0.1	0.8	(S)	14.9	19.1	0.7	23.4	4.1
2999	**Petroleum and Coal Products, N.E.C.**	**70**	**23**	**1.6**	**22.5**	**1.1**	**2.1**	**14.2**	**157.0**	**306.9**	**463.3**	**14.5**	**52.3**	**59.3**
	Type of organization:													
	Multiunit companies, total	34	17	1.3	17.9	0.8	1.7	11.5	140.1	274.9	414.7	12.6	47.0	53.8
	Corp. ownership or control	34	17	1.3	17.9	0.8	1.7	11.5	140.1	274.9	414.7	12.6	47.0	53.8
	Single unit companies, total	36	6	0.4	4.6	0.2	0.4	2.7	16.8	32.1	48.6	1.9	5.3	5.6
	Corp. ownership or control	29	6	0.3	4.3	0.2	0.4	2.5	15.0	28.7	43.4	1.7	4.8	5.0
	Noncorporate ownership	7	–	(Z)	0.3	(Z)	(Z)	0.2	1.8	3.4	5.2	0.3	0.6	0.6
	Legal form of organization:													
	Corporate	63	23	1.6	22.2	1.0	2.1	14.0	155.1	303.5	458.1	14.3	51.8	58.8
	Noncorporate, total	7	–	(Z)	0.3	(Z)	(Z)	0.2	1.8	3.4	5.2	0.3	0.6	0.6
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
30	**RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS**	**11 943**	**5 294**	**721.3**	**8 536.0**	**563.7**	**1 110.6**	**5 841.6**	**19 740.0**	**20 217.8**	**39 552.8**	**1 645.3**	**4 441.4**	**4 952.7**
	Type of organization:													
	Multiunit companies, total	3 372	2 723	535.2	6 649.1	413.7	822.5	4 599.4	15 761.0	16 212.7	31 612.5	1 312.7	3 674.3	4 106.4
	Corp. ownership or control	3 369	2 722	535.2	6 648.7	413.7	822.5	4 599.2	15 760.4	16 212.0	31 611.1	(D)	3 674.1	4 106.2
	Noncorporate ownership	3	1	(Z)	0.3	(Z)	0.1	0.2	0.6	0.7	1.4	(D)	0.2	0.2
	Single unit companies, total	8 571	2 571	186.1	1 886.9	150.0	288.1	1 242.2	3 979.0	4 005.1	7 940.3	332.7	767.1	846.3
	Corp. ownership or control	7 382	2 507	180.2	1 832.8	145.0	278.6	1 204.3	3 856.1	3 883.8	7 697.8	321.7	743.3	820.3
	Noncorporate ownership	1 189	64	5.9	54.1	5.0	9.5	37.9	122.9	121.3	242.5	11.0	23.8	26.1
	Legal form of organization:													
	Corporate	10 751	5 229	715.4	8 481.6	558.7	1 101.0	5 803.5	19 616.5	20 095.8	39 309.0	1 634.3	4 417.4	4 926.5
	Noncorporate, total	1 192	65	5.9	54.4	5.1	9.6	38.1	123.5	122.0	243.9	11.0	24.0	26.2
	Individual	787	31	3.2	29.2	2.8	4.9	20.3	63.8	57.5	120.8	4.9	12.4	13.1
	Partnership	333	29	2.4	22.1	2.0	4.1	15.8	52.4	56.8	107.9	5.7	9.7	11.5
	Other and unknown	72	5	0.3	3.1	0.3	0.5	2.1	7.3	7.7	15.2	0.5	2.0	1.6
3011	**Tires and Inner Tubes**	**200**	**126**	**114.0**	**1 832.4**	**88.3**	**176.4**	**1 366.0**	**4 347.3**	**4 803.0**	**8 971.0**	**289.0**	**1 015.0**	**1 172.1**
	Type of organization:													
	Multiunit companies, total	122	114	112.2	1 810.1	86.8	173.4	1 349.7	4 303.5	4 697.8	8 822.7	285.6	1 004.7	1 160.8
	Corp. ownership or control	122	114	112.2	1 810.1	86.8	173.4	1 349.7	4 303.5	4 697.8	8 822.7	285.6	1 004.7	1 160.8
	Single unit companies, total	78	12	1.8	22.3	1.4	3.0	16.4	43.9	105.2	148.3	3.4	10.3	11.2
	Corp. ownership or control	64	12	1.7	21.7	1.4	2.9	15.9	42.3	103.5	145.1	3.3	9.9	10.8
	Noncorporate ownership	14	–	(Z)	0.6	(Z)	0.1	0.4	1.5	1.7	3.2	0.1	0.4	0.4

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
30	**RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS—Con.**													
3011	**Tires and Inner Tubes—Con.**													
	Legal form of organization:													
	Corporate	186	126	113.9	1 831.8	88.2	176.4	1 365.6	4 345.8	4 801.3	8 967.7	288.9	1 014.6	1 171.7
	Noncorporate, total	14	-	(Z)	0.6	(Z)	0.1	0.4	1.5	1.7	3.2	0.1	0.4	0.4
	Individual	12	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3021	**Rubber and Plastics Footwear**	**84**	**50**	**19.8**	**159.1**	**16.4**	**30.0**	**115.9**	**272.3**	**256.2**	**517.0**	**11.3**	**129.0**	**140.7**
	Type of organization:													
	Multiunit companies, total	37	35	18.1	145.3	14.9	27.5	107.1	248.3	242.0	478.3	10.2	121.6	134.2
	Corp. ownership or control	37	35	18.1	145.3	14.9	27.5	107.1	248.3	242.0	478.3	10.2	121.6	134.2
	Single unit companies, total	47	15	1.7	13.8	1.4	2.5	8.9	24.1	14.3	38.7	1.1	7.3	6.5
	Corp. ownership or control	41	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	78	49	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	4	-	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(D)	(Z)	(Z)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3031	**Reclaimed Rubber**	**21**	**9**	**0.9**	**11.5**	**0.7**	**1.5**	**8.4**	**24.8**	**16.8**	**r41.6**	**0.5**	**3.7**	**3.7**
	Type of organization:													
	Multiunit companies, total	5	5	0.5	7.3	0.4	0.9	5.8	13.0	8.0	r21.2	(D)	2.1	2.0
	Corp. ownership or control	5	5	0.5	7.3	0.4	0.9	5.8	13.0	8.0	r21.2	(D)	2.1	2.0
	Single unit companies, total	16	4	0.3	4.2	0.3	0.5	2.7	11.7	8.8	r20.4	(D)	1.6	1.7
	Corp. ownership or control	13	4	0.3	4.2	0.3	0.5	2.6	11.7	8.7	r20.4	(D)	1.6	1.7
	Noncorporate ownership	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	r0.1	(D)	(Z)	(Z)
	Legal form of organization:													
	Corporate	18	9	0.9	11.5	0.7	1.5	8.4	24.7	16.8	r41.6	(D)	3.7	3.7
	Noncorporate, total	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	r0.1	(D)	(Z)	(Z)
	Individual	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	r0.1	(D)	(Z)	(Z)
3041	**Rubber and Plastics Hose and Belting**	**146**	**103**	**34.4**	**457.4**	**23.4**	**45.3**	**274.9**	**973.5**	**800.1**	**1 765.7**	**55.3**	**267.6**	**275.4**
	Type of organization:													
	Multiunit companies, total	97	82	32.2	428.8	21.9	42.5	260.3	918.5	746.5	1 657.7	(D)	253.2	259.9
	Corp. ownership or control	97	82	32.2	428.8	21.9	42.5	260.3	918.5	746.5	1 657.7	(D)	253.2	259.9
	Single unit companies, total	49	21	2.2	28.6	1.5	2.8	14.6	55.0	53.6	107.9	(D)	14.4	15.5
	Corp. ownership or control	47	21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	144	103	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3069	**Fabricated Rubber Products, N.E.C.**	**1 280**	**621**	**98.5**	**1 164.0**	**77.1**	**153.3**	**795.4**	**2 351.9**	**2 231.2**	**4 565.0**	**135.0**	**476.6**	**510.5**
	Type of organization:													
	Multiunit companies, total	416	342	73.5	895.7	57.0	114.2	616.0	1 830.0	1 748.0	3 561.2	103.2	365.9	393.7
	Corp. ownership or control	415	342	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	864	279	25.0	268.2	20.0	39.1	179.4	521.9	483.2	1 003.8	31.9	110.7	116.8
	Corp. ownership or control	754	274	24.5	262.9	19.6	38.3	175.3	511.5	471.9	982.3	31.2	108.9	114.9
	Noncorporate ownership	110	5	0.5	5.3	0.4	0.8	4.1	10.3	11.3	21.5	0.6	1.8	1.9
	Legal form of organization:													
	Corporate	1 169	616	98.0	1 158.6	76.6	152.4	791.3	2 341.5	2 219.8	4 543.2	134.4	474.8	508.6
	Noncorporate, total	111	5	0.5	5.4	0.4	0.8	4.1	10.5	11.4	21.8	0.6	1.8	1.9
	Individual	76	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	33	2	0.2	2.3	0.2	0.4	1.8	4.1	4.9	9.0	0.3	0.6	0.7
	Other and unknown	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3079	**Miscellaneous Plastics Products**	**10 212**	**4 385**	**453.7**	**4 911.7**	**358.0**	**704.1**	**3 281.0**	**11 770.1**	**12 110.4**	**23 692.6**	**1 154.2**	**2 549.6**	**2 850.3**
	Type of organization:													
	Multiunit companies, total	2 695	2 145	298.6	3 361.9	232.6	463.9	2 260.5	8 447.7	8 770.4	17 071.4	859.4	1 926.8	2 155.8
	Corp. ownership or control	2 693	2 144	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	7 517	2 240	155.1	1 549.9	125.3	240.2	1 020.4	3 322.4	3 340.0	6 621.1	294.8	622.8	694.6
	Corp. ownership or control	6 463	2 182	149.9	1 502.5	120.9	231.7	987.7	3 212.8	3 232.6	6 405.5	284.5	601.7	671.4
	Noncorporate ownership	1 054	58	5.2	47.4	4.4	8.4	32.7	109.6	107.5	215.6	10.3	21.1	23.2
	Legal form of organization:													
	Corporate	9 156	4 326	448.5	4 864.1	353.5	695.6	3 248.0	11 660.0	12 002.4	23 475.9	1 143.9	2 528.2	2 827.0
	Noncorporate, total	1 056	59	5.3	47.6	4.5	8.5	32.9	110.1	108.0	216.7	10.3	21.3	23.3
	Individual	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	10.8	11.5
	Partnership	294	26	2.0	19.0	1.7	3.6	13.3	46.9	51.0	96.7	5.4	8.6	10.3
	Other and unknown	70	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
31	**LEATHER AND LEATHER PRODUCTS**	**3 075**	**1 486**	**242.5**	**1 859.7**	**211.5**	**381.9**	**1 408.1**	**3 718.8**	**3 932.6**	**7 607.4**	**96.2**	**1 033.0**	**1 098.9**
	Type of organization:													
	Multiunit companies, total	764	675	165.7	1 272.5	145.4	264.0	984.2	2 656.7	2 763.3	5 386.3	62.0	730.2	780.9
	Corp. ownership or control	763	675	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 311	811	76.8	587.2	66.1	117.8	424.0	1 062.1	1 169.3	2 221.1	34.3	302.9	318.0
	Corp. ownership or control	1 745	776	73.5	564.9	63.1	112.8	407.1	1 016.6	1 119.2	2 125.8	32.6	291.0	305.9
	Noncorporate ownership	566	35	3.3	22.3	3.0	5.0	16.8	45.5	50.1	95.3	1.6	11.9	12.2
	Legal form of organization:													
	Corporate	2 508	1 451	239.1	1 837.2	208.5	376.9	1 391.2	3 672.7	3 882.0	7 511.1	94.6	1 021.2	1 086.6
	Noncorporate, total	567	35	3.3	22.5	3.0	5.0	17.0	46.1	50.6	96.3	1.7	11.9	12.3
	Individual	382	15	1.8	12.6	1.6	2.7	9.5	25.4	23.5	48.4	0.8	5.6	6.0
	Partnership	150	17	1.3	8.4	1.2	2.0	6.3	17.9	23.3	40.9	0.7	4.4	5.3
	Other and unknown	35	3	0.2	1.6	0.2	0.3	1.2	2.8	3.8	7.0	0.1	1.8	1.1
3111	**Leather Tanning and Finishing**	**465**	**191**	**23.0**	**254.8**	**19.6**	**38.2**	**192.2**	**535.1**	**927.6**	**1 456.1**	**30.7**	**176.1**	**187.6**
	Type of organization:													
	Multiunit companies, total	99	79	14.1	156.4	12.0	23.6	121.7	349.5	613.2	955.9	20.3	117.3	128.2
	Corp. ownership or control	98	79	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	366	112	9.0	98.4	7.6	14.6	70.6	185.6	314.3	500.2	10.4	58.8	59.4
	Corp. ownership or control	292	107	8.6	94.8	7.3	14.0	67.9	175.6	297.0	473.4	9.4	55.9	55.7
	Noncorporate ownership	74	5	0.4	3.6	0.4	0.7	2.7	10.0	17.3	26.7	0.9	2.9	3.7
	Legal form of organization:													
	Corporate	390	186	22.6	251.1	19.2	37.5	189.4	524.5	909.8	1 428.4	29.7	173.2	183.8
	Noncorporate, total	75	5	0.4	3.8	0.4	0.7	2.8	10.6	17.8	27.7	1.0	2.9	3.8
	Individual	42	2	0.1	1.4	0.1	0.2	1.2	3.9	4.4	7.8	0.5	0.8	1.2
	Partnership	26	3	0.2	1.8	0.2	0.4	1.3	5.3	11.5	16.7	(D)	1.8	2.2
	Other and unknown	7	–	0.1	0.6	(Z)	0.1	0.4	1.4	1.9	3.1	(D)	0.3	0.4
3131	**Boot and Shoe Cut Stock and Findings**	**190**	**96**	**8.5**	**65.3**	**7.4**	**13.0**	**48.8**	**109.4**	**159.1**	**270.6**	**3.0**	**33.0**	**31.2**
	Type of organization:													
	Multiunit companies, total	46	39	4.6	34.1	4.1	7.3	27.4	55.6	80.8	138.9	1.9	18.2	16.0
	Corp. ownership or control	46	39	4.6	34.1	4.1	7.3	27.4	55.6	80.8	138.9	1.9	18.2	16.0
	Single unit companies, total	144	57	3.9	31.2	3.3	5.6	21.4	53.8	78.3	131.7	1.2	14.8	15.2
	Corp. ownership or control	126	56	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	18	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	172	95	8.4	64.9	7.3	12.8	48.4	108.5	158.1	268.8	3.0	32.8	31.0
	Noncorporate, total	18	1	0.1	0.4	0.1	0.1	0.3	0.9	0.9	1.8	(Z)	0.2	0.2
	Individual	10	1	0.1	0.2	0.1	0.1	0.2	0.5	0.4	0.9	(Z)	0.1	0.1
	Partnership	7	–	(Z)	0.2	(Z)	(Z)	0.2	0.3	0.5	0.9	(Z)	0.1	0.1
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3142	**House Slippers**	**78**	**55**	**8.1**	**54.5**	**7.0**	**11.7**	**39.6**	**108.8**	**92.7**	**201.2**	**2.3**	**28.9**	**29.7**
	Type of organization:													
	Multiunit companies, total	25	20	4.1	26.4	3.4	5.8	19.3	61.6	48.2	109.5	0.5	16.2	17.0
	Corp. ownership or control	25	20	4.1	26.4	3.4	5.8	19.3	61.6	48.2	109.5	0.5	16.2	17.0
	Single unit companies, total	53	35	4.0	28.1	3.5	5.9	20.2	47.2	44.5	91.7	1.9	12.7	12.7
	Corp. ownership or control	46	34	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	71	54	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	5	–	(Z)	0.1	(Z)	(Z)	0.1	0.1	0.1	0.3	(D)	(Z)	(Z)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	-0.3	–	–	–	0.5	–
3143	**Men's Footwear, Except Athletic**	**213**	**180**	**55.0**	**417.0**	**49.2**	**90.1**	**332.2**	**871.9**	**880.0**	**1 734.5**	**14.5**	**245.6**	**272.2**
	Type of organization:													
	Multiunit companies, total	154	148	50.2	380.4	45.4	82.7	306.2	802.3	807.6	1 593.1	13.0	224.9	250.6
	Corp. ownership or control	154	148	50.2	380.4	45.4	82.7	306.2	802.3	807.6	1 593.1	13.0	224.9	250.6
	Single unit companies, total	59	32	4.8	36.5	3.7	7.4	26.0	69.6	72.4	141.4	1.5	20.7	21.6
	Corp. ownership or control	46	30	4.4	35.1	3.4	6.8	24.8	66.8	70.1	136.2	1.4	20.0	20.8
	Noncorporate ownership	13	2	0.4	1.5	0.3	0.6	1.2	2.8	2.4	5.2	(Z)	0.7	0.7
	Legal form of organization:													
	Corporate	200	178	54.7	415.5	48.8	89.5	331.0	869.2	877.6	1 729.3	14.4	244.9	271.4
	Noncorporate, total	13	2	0.4	1.5	0.3	0.6	1.2	2.8	2.4	5.2	(Z)	0.7	0.7
	Individual	7	1	0.1	0.5	0.1	0.1	0.4	0.8	0.4	1.2	(Z)	0.2	0.2
	Partnership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3144	**Women's Footwear, Except Athletic**	**328**	**241**	**57.6**	**388.6**	**51.3**	**91.3**	**315.6**	**755.0**	**607.1**	**1 361.2**	**9.7**	**148.3**	**147.4**
	Type of organization:													
	Multiunit companies, total	149	140	44.1	298.4	39.4	70.7	245.8	610.6	479.7	1 091.6	5.9	117.2	114.9
	Corp. ownership or control	149	140	44.1	298.4	39.4	70.7	245.8	610.6	479.7	1 091.6	5.9	117.2	114.9
	Single unit companies, total	179	101	13.5	90.2	11.9	20.6	69.8	144.4	127.4	269.6	3.8	31.0	32.5
	Corp. ownership or control	153	97	13.1	87.4	11.5	19.9	67.5	139.9	123.1	260.7	3.8	30.5	31.9
	Noncorporate ownership	26	4	0.4	2.8	0.4	0.7	2.3	4.5	4.3	8.8	(Z)	0.5	0.6

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
31	**LEATHER AND LEATHER PRODUCTS—Con.**													
3144	**Women's Footwear, Except Athletic—Con.**													
	Legal form of organization:													
	Corporate	302	237	57.1	385.8	50.9	90.6	313.3	750.5	602.8	1 352.3	9.7	147.7	146.8
	Noncorporate, total	26	4	0.4	2.8	0.4	0.7	2.3	4.5	4.3	8.8	(Z)	0.5	0.6
	Individual	15	1	0.3	2.0	0.3	0.5	1.6	3.1	3.1	6.2	(Z)	0.3	0.3
	Partnership	8	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3149	**Footwear, Except Rubber, N.E.C.**	**192**	**127**	**24.8**	**171.4**	**21.8**	**38.2**	**135.1**	**333.7**	**269.3**	**594.8**	**10.6**	**96.0**	**108.7**
	Type of organization:													
	Multiunit companies, total	72	69	18.4	127.5	16.3	28.8	102.7	263.1	211.9	466.1	7.6	74.8	88.1
	Corp. ownership or control	72	69	18.4	127.5	16.3	28.8	102.7	263.1	211.9	466.1	7.6	74.8	88.1
	Single unit companies, total	120	58	6.5	43.9	5.5	9.4	32.4	70.5	57.4	128.7	3.0	21.2	20.6
	Corp. ownership or control	95	58	6.4	43.3	5.4	9.3	31.9	69.4	56.3	126.4	3.0	20.5	20.3
	Noncorporate ownership	25	–	0.1	0.6	0.1	0.1	0.5	1.2	1.1	2.4	(Z)	0.7	0.3
	Legal form of organization:													
	Corporate	167	127	24.7	170.8	21.7	38.1	134.6	332.5	268.2	592.4	10.6	95.4	108.4
	Noncorporate, total	25	–	0.1	0.6	0.1	0.1	0.5	1.2	1.1	2.4	(Z)	0.7	0.3
	Individual	18	–	0.1	0.5	0.1	0.1	0.4	0.9	0.8	1.7	(Z)	0.3	0.3
	Partnership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3151	**Leather Gloves and Mittens**	**101**	**66**	**5.5**	**33.9**	**4.7**	**8.2**	**25.5**	**67.6**	**111.8**	**178.0**	**1.9**	**30.9**	**33.7**
	Type of organization:													
	Multiunit companies, total	41	37	3.4	21.5	2.9	5.2	16.1	42.5	66.3	109.0	1.4	21.5	21.3
	Corp. ownership or control	41	37	3.4	21.5	2.9	5.2	16.1	42.5	66.3	109.0	1.4	21.5	21.3
	Single unit companies, total	60	29	2.1	12.5	1.8	3.0	9.5	25.2	45.5	69.0	0.5	9.4	12.3
	Corp. ownership or control	43	25	1.9	11.4	1.6	2.7	8.6	23.1	43.3	64.8	0.5	9.0	11.8
	Noncorporate ownership	17	4	0.2	1.1	0.2	0.3	0.9	2.1	2.2	4.2	(Z)	0.4	0.5
	Legal form of organization:													
	Corporate	84	62	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	17	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	13	1	0.1	0.7	0.1	0.2	0.6	1.3	1.4	2.7	(Z)	0.3	0.3
	Partnership	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3161	**Luggage**	**298**	**130**	**19.2**	**164.1**	**15.8**	**29.0**	**105.5**	**328.3**	**328.0**	**654.9**	**8.1**	**114.8**	**113.5**
	Type of organization:													
	Multiunit companies, total	47	41	9.7	92.3	7.6	14.2	54.7	184.5	187.1	368.7	4.5	57.3	58.1
	Corp. ownership or control	47	41	9.7	92.3	7.6	14.2	54.7	184.5	187.1	368.7	4.5	57.3	58.1
	Single unit companies, total	251	89	9.5	71.7	8.3	14.8	50.8	143.8	140.9	286.2	3.6	57.5	55.3
	Corp. ownership or control	193	87	9.1	69.0	8.0	14.3	48.8	138.3	136.4	276.3	3.4	56.4	54.2
	Noncorporate ownership	58	2	0.4	2.7	0.3	0.5	2.0	5.4	4.5	9.9	0.1	1.0	1.2
	Legal form of organization:													
	Corporate	240	128	18.9	161.4	15.5	28.4	103.5	322.9	323.5	645.0	7.9	113.8	112.3
	Noncorporate, total	58	2	0.4	2.7	0.3	0.5	2.0	5.4	4.5	9.9	0.1	1.0	1.2
	Individual	44	–	0.2	1.6	0.2	0.3	1.1	3.1	2.5	5.6	(Z)	0.7	0.7
	Partnership	13	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3171	**Women's Handbags and Purses**	**418**	**186**	**20.3**	**144.0**	**18.2**	**32.8**	**109.1**	**266.5**	**241.9**	**505.2**	**6.6**	**56.1**	**61.9**
	Type of organization:													
	Multiunit companies, total	49	38	7.6	53.6	6.7	12.1	39.6	112.9	112.6	226.0	2.6	25.2	25.8
	Corp. ownership or control	49	38	7.6	53.6	6.7	12.1	39.6	112.9	112.6	226.0	2.6	25.2	25.8
	Single unit companies, total	369	148	12.7	90.4	11.5	20.7	69.5	153.5	129.3	279.3	4.0	30.9	36.1
	Corp. ownership or control	280	137	12.0	86.3	10.9	19.7	66.3	146.8	123.1	266.1	3.8	29.2	34.6
	Noncorporate ownership	89	11	0.6	4.1	0.6	1.0	3.2	6.8	6.2	13.1	0.2	1.7	1.5
	Legal form of organization:													
	Corporate	329	175	19.6	139.9	17.6	31.8	105.9	259.7	235.7	492.1	6.4	54.4	60.4
	Noncorporate, total	89	11	0.6	4.1	0.6	1.0	3.2	6.8	6.2	13.1	0.2	1.7	1.5
	Individual	61	6	0.4	2.3	0.3	0.6	1.8	4.4	3.5	8.0	0.1	1.0	0.9
	Partnership	23	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3172	**Personal Leather Goods**	**260**	**97**	**11.9**	**98.2**	**9.6**	**17.2**	**60.9**	**205.8**	**161.2**	**366.8**	**4.8**	**60.2**	**62.5**
	Type of organization:													
	Multiunit companies, total	33	29	6.4	57.0	5.1	9.1	35.0	117.2	96.4	215.6	2.4	39.0	38.2
	Corp. ownership or control	33	29	6.4	57.0	5.1	9.1	35.0	117.2	96.4	215.6	2.4	39.0	38.2
	Single unit companies, total	227	68	5.4	41.2	4.5	8.1	25.9	88.6	64.8	151.1	2.4	21.1	24.4
	Corp. ownership or control	162	67	5.2	39.7	4.3	7.8	25.0	84.9	62.3	145.1	2.4	20.3	23.6
	Noncorporate ownership	65	1	0.2	1.6	0.2	0.3	0.9	3.6	2.4	6.0	0.1	0.8	0.8
	Legal form of organization:													
	Corporate	195	96	11.6	96.6	9.5	16.9	59.9	202.2	158.7	360.7	4.8	59.4	61.7
	Noncorporate, total	65	1	0.2	1.6	0.2	0.3	0.9	3.6	2.4	6.0	0.1	0.8	0.8
	Individual	48	–	0.1	1.1	0.1	0.2	0.7	2.4	1.5	3.9	(Z)	0.5	0.5
	Partnership	14	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
31	**LEATHER AND LEATHER PRODUCTS**—Con.													
3199	**Leather Goods, N.E.C.**	**532**	**117**	**8.6**	**67.9**	**7.0**	**12.4**	**43.7**	**136.7**	**154.0**	**284.2**	**4.1**	**43.2**	**50.6**
	Type of organization:													
	Multiunit companies, total	49	35	3.1	24.9	2.5	4.6	15.7	56.7	59.5	112.0	1.9	18.5	22.8
	Corp. ownership or control	49	35	3.1	24.9	2.5	4.6	15.7	56.7	59.5	112.0	1.9	18.5	22.8
	Single unit companies, total	483	82	5.5	43.0	4.5	7.8	28.0	80.0	94.5	172.2	2.2	24.7	27.8
	Corp. ownership or control	309	78	5.0	39.3	4.1	7.1	25.4	72.0	86.3	156.2	2.0	22.4	25.3
	Noncorporate ownership	174	4	0.5	3.7	0.4	0.7	2.6	7.9	8.2	16.0	0.1	2.3	2.5
	Legal form of organization:													
	Corporate	358	113	8.1	64.2	6.6	11.7	41.1	128.8	145.7	268.2	4.0	40.9	48.1
	Noncorporate, total	174	4	0.5	3.7	0.4	0.7	2.6	7.9	8.2	16.0	0.1	2.3	2.5
	Individual	119	3	0.3	2.2	0.3	0.4	1.5	4.7	5.4	10.0	0.1	1.5	1.5
	Partnership	45	1	0.1	1.3	0.1	0.2	0.8	2.8	2.4	5.1	(Z)	0.6	0.8
	Other and unknown	10	–	(Z)	0.2	(Z)	0.1	0.2	0.5	0.5	1.0	(Z)	0.2	0.2
32	**STONE, CLAY, AND GLASS PRODUCTS**	**17 744**	**5 201**	**613.7**	**7 943.1**	**484.4**	**960.7**	**5 766.6**	**19 129.6**	**16 444.8**	**35 476.6**	**1 881.4**	**3 995.3**	**4 279.3**
	Type of organization:													
	Multiunit companies, total	5 154	3 000	454.7	6 117.9	363.1	724.9	4 572.4	15 298.5	12 529.9	27 755.5	1 486.9	3 360.3	3 585.2
	Corp. ownership or control	5 135	2 993	453.7	6 108.4	362.4	723.6	4 564.6	15 280.8	12 506.1	27 714.0	1 483.7	3 356.6	3 581.9
	Noncorporate ownership	19	7	0.9	9.4	0.7	1.3	7.8	17.7	23.8	41.5	3.1	3.7	3.3
	Single unit companies, total	12 590	2 201	159.1	1 825.2	121.3	235.8	1 194.1	3 831.1	3 914.9	7 721.1	394.5	635.0	694.1
	Corp. ownership or control	9 229	2 090	145.1	1 678.6	109.9	214.9	1 091.7	3 461.8	3 590.9	7 027.2	360.4	574.7	628.2
	Noncorporate ownership	3 361	111	13.9	146.6	11.4	20.8	102.5	369.3	324.0	693.9	34.2	60.3	65.8
	Legal form of organization:													
	Corporate	14 364	5 083	598.9	7 787.1	472.3	938.6	5 656.3	18 742.6	16 097.0	34 741.2	1 844.1	3 931.3	4 210.2
	Noncorporate, total	3 380	118	14.8	156.0	12.1	22.1	110.2	387.0	347.8	735.4	37.3	64.0	69.1
	Individual	2 224	32	6.8	71.3	5.7	10.1	49.2	178.8	160.7	339.0	18.4	28.1	28.9
	Partnership	999	64	5.9	62.0	4.8	8.9	44.3	151.1	138.0	288.5	12.4	20.4	22.6
	Other and unknown	157	22	2.1	22.7	1.6	3.0	16.7	57.1	49.1	107.9	6.5	15.6	17.6
3211	**Flat Glass**	**62**	**32**	**21.9**	**401.0**	**18.5**	**39.9**	**328.2**	**931.0**	**656.0**	**1 576.6**	**81.1**	**191.9**	**211.4**
	Type of organization:													
	Multiunit companies, total	34	28	21.7	397.9	18.3	39.5	325.9	924.7	651.5	1 565.9	80.8	190.4	209.8
	Corp. ownership or control	34	28	21.7	397.9	18.3	39.5	325.9	924.7	651.5	1 565.9	80.8	190.4	209.8
	Single unit companies, total	28	4	0.3	3.0	0.2	0.4	2.3	6.3	4.6	10.7	0.3	1.4	1.5
	Corp. ownership or control	22	4	0.2	2.8	0.2	0.4	2.2	5.8	4.2	9.9	0.3	1.3	1.4
	Noncorporate ownership	6	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	0.3	0.8	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	56	32	21.9	400.8	18.5	39.9	328.0	930.5	655.7	1 575.8	81.1	191.7	211.3
	Noncorporate, total	6	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	0.3	0.8	(Z)	0.1	0.1
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3221	**Glass Containers**	**126**	**124**	**70.8**	**975.4**	**62.5**	**120.1**	**823.0**	**2 138.9**	**1 495.3**	**3 664.2**	**220.9**	**429.6**	**408.7**
	Type of organization:													
	Multiunit companies, total	122	121	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	122	121	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	126	124	70.8	975.4	62.5	120.1	823.0	2 138.9	1 495.3	3 664.2	220.9	429.6	408.7
	Legal form of organization:													
3229	**Pressed and Blown Glass, N.E.C.**	**382**	**125**	**46.2**	**572.8**	**38.6**	**74.4**	**445.9**	**1 453.1**	**675.0**	**2 120.1**	**143.6**	**331.2**	**350.7**
	Type of organization:													
	Multiunit companies, total	102	87	41.6	528.3	34.5	67.0	411.3	1 373.6	639.6	2 006.0	138.0	316.0	334.3
	Corp. ownership or control	102	87	41.6	528.3	34.5	67.0	411.3	1 373.6	639.6	2 006.0	138.0	316.0	334.3
	Single unit companies, total	280	38	4.7	44.6	4.1	7.4	34.6	79.5	35.4	114.0	5.6	15.3	16.4
	Corp. ownership or control	192	36	4.4	42.1	3.8	7.1	32.7	74.1	33.0	106.3	5.2	14.2	15.3
	Noncorporate ownership	88	2	0.3	2.4	0.2	0.4	1.9	5.4	2.4	7.7	0.4	1.1	1.1
	Legal form of organization:													
	Corporate	294	123	46.0	570.4	38.4	74.0	444.1	1 447.7	672.6	2 112.3	143.2	330.2	349.6
	Noncorporate, total	88	2	0.3	2.4	0.2	0.4	1.9	5.4	2.4	7.7	0.4	1.1	1.1
	Individual	67	1	0.2	1.7	0.2	0.2	1.3	3.8	1.6	5.4	0.3	0.7	0.8
	Partnership	19	1	0.1	0.7	0.1	0.1	0.6	1.6	0.7	2.3	0.2	0.3	0.3
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
3231	**Products Of Purchased Glass**	**1 101**	**325**	**36.2**	**429.2**	**28.8**	**56.7**	**305.9**	**960.2**	**896.5**	**1 842.4**	**73.4**	**261.5**	**285.6**
	Type of organization:													
	Multiunit companies, total	223	157	22.5	282.2	17.8	35.7	206.3	667.4	611.2	1 267.3	49.9	190.4	208.4
	Corp. ownership or control	223	157	22.5	282.2	17.8	35.7	206.3	667.4	611.2	1 267.3	49.9	190.4	208.4
	Single unit companies, total	878	168	13.7	147.1	11.0	21.0	99.6	292.8	285.2	575.2	23.6	71.1	77.2
	Corp. ownership or control	639	164	13.0	139.6	10.4	19.9	94.2	276.4	270.3	543.8	23.1	66.6	72.7
	Noncorporate ownership	239	4	0.7	7.4	0.6	1.1	5.4	16.4	15.0	31 4	0.5	4.5	4.5
	Legal form of organization:													
	Corporate	862	321	35.5	421.8	28.2	55.6	300.6	943.8	881.5	1 811.0	73.0	257.0	281.1
	Noncorporate, total	239	4	0.7	7.4	0.6	1.1	5.4	16.4	15.0	31.4	0.5	4.5	4.5
	Individual	173	–	0 4	4.5	0.4	0.6	3.2	10.5	9.0	19.5	0.3	2.9	2.9
	Partnership	63	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
32	**STONE, CLAY, AND GLASS PRODUCTS—Con.**													
3241	**Cement, Hydraulic**	**201**	**160**	**27.8**	**485.1**	**22.2**	**44.4**	**380.0**	**1 671.5**	**1 343.0**	**3 042.3**	**296.6**	**463.2**	**484.8**
	Type of organization:													
	Multiunit companies, total	166	154	26.8	469.4	21.5	42.9	368.7	1 615.5	1 293.7	2 935.4	294.6	442.0	461.2
	Corp. ownership or control	166	154	26.8	469.4	21.5	42.9	368.7	1 615.5	1 293.7	2 935.4	294.6	442.0	461.2
	Single unit companies, total	35	8	1.0	15.6	0.7	1.5	11.3	56.1	49.3	106.9	2.0	21.2	23.6
	Corp. ownership or control	28	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	194	159	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3251	**Brick and Structural Clay Tile**	**352**	**262**	**20.5**	**197.3**	**17.0**	**34.0**	**149.2**	**467.9**	**299.8**	**777.7**	**49.6**	**98.3**	**93.2**
	Type of organization:													
	Multiunit companies, total	179	165	14.4	138.9	12.1	24.3	108.3	349.6	212.3	570.2	34.6	74.3	70.7
	Corp. ownership or control	177	163	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	173	97	6.0	58.4	4.9	9.7	40.9	118.2	87.6	207.5	15.0	23.9	22.5
	Corp. ownership or control	148	90	5.6	54.6	4.6	9.0	38.2	105.2	82.0	188.8	14.3	21.8	20.4
	Noncorporate ownership	25	7	0.4	3.8	0.3	0.7	2.7	13.1	5.6	18.7	0.7	2.1	2.1
	Legal form of organization:													
	Corporate	325	253	19.9	192.4	16.5	33.1	145.4	453.1	291.0	754.2	48.8	95.6	90.6
	Noncorporate, total	27	9	0.5	4.9	0.5	0.9	3.9	14.8	8.8	23.6	0.9	2.7	2.7
	Individual	13	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	11	6	0.3	2.9	0.3	0.5	2.2	7.2	4.2	11.4	0.4	1.0	1.0
	Other and unknown	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3253	**Ceramic Wall and Floor Tile**	**79**	**48**	**7.8**	**78.3**	**6.3**	**12.8**	**56.4**	**155.4**	**98.7**	**252.5**	**6.6**	**40.3**	**42.1**
	Type of organization:													
	Multiunit companies, total	31	30	6.6	68.0	5.4	11.0	49.2	138.1	88.4	225.2	5.6	36.0	37.3
	Corp. ownership or control	31	30	6.6	68.0	5.4	11.0	49.2	138.1	88.4	225.2	5.6	36.0	37.3
	Single unit companies, total	48	18	1.2	10.3	1.0	1.8	7.2	17.3	10.3	27.3	1.1	4.4	4.7
	Corp. ownership or control	34	16	1.1	9.6	0.9	1.7	6.7	15.8	9.7	25.3	1.0	4.2	4.5
	Noncorporate ownership	14	2	0.1	0.7	0.1	0.1	0.5	1.4	0.6	2.0	0.1	0.1	0.2
	Legal form of organization:													
	Corporate	65	46	7.7	77.6	6.3	12.7	55.9	154.0	98.1	250.5	6.6	40.2	41.9
	Noncorporate, total	14	2	0.1	0.7	0.1	0.1	0.5	1.4	0.6	2.0	0.1	0.1	0.2
	Individual	13	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3255	**Clay Refractories**	**167**	**104**	**11.3**	**146.8**	**8.8**	**17.6**	**106.5**	**308.4**	**296.8**	**607.2**	**20.0**	**131.4**	**126.4**
	Type of organization:													
	Multiunit companies, total	107	84	10.0	132.0	7.8	15.7	96.1	280.9	271.1	554.2	18.6	123.7	118.2
	Corp. ownership or control	107	84	10.0	132.0	7.8	15.7	96.1	280.9	271.1	554.2	18.6	123.7	118.2
	Single unit companies, total	60	20	1.2	14.8	1.0	1.8	10.4	27.5	25.8	53.0	1.4	7.7	8.2
	Corp. ownership or control	49	18	1.1	14.2	0.9	1.7	9.9	26.5	25.0	51.3	1.3	7.4	8.0
	Noncorporate ownership	11	2	0.1	0.6	0.1	0.1	0.5	1.0	0.7	1.7	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	156	102	11.2	146.2	8.7	17.5	106.0	307.4	296.1	605.5	19.9	131.1	126.2
	Noncorporate, total	11	2	0.1	0.6	0.1	0.1	0.5	1.0	0.7	1.7	(Z)	0.3	0.3
	Individual	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3259	**Structural Clay Products, N.E.C.**	**113**	**57**	**5.5**	**64.0**	**4.5**	**8.9**	**48.2**	**126.1**	**90.4**	**214.6**	**6.1**	**34.5**	**37.2**
	Type of organization:													
	Multiunit companies, total	42	36	4.1	48.0	3.4	6.7	36.1	98.9	70.1	167.5	4.6	29.2	31.4
	Corp. ownership or control	42	36	4.1	48.0	3.4	6.7	36.1	98.9	70.1	167.5	4.6	29.2	31.4
	Single unit companies, total	71	21	1.4	15.9	1.1	2.2	12.1	27.2	20.3	47.1	1.4	5.3	5.8
	Corp. ownership or control	59	21	1.4	15.6	1.1	2.2	11.9	26.7	19.9	46.1	1.4	5.2	5.6
	Noncorporate ownership	12	–	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.4	0.9	(Z)	0.2	0.2
	Legal form of organization:													
	Corporate	101	57	5.5	63.7	4.5	8.9	48.0	125.6	90.0	213.6	6.0	34.3	37.1
	Noncorporate, total	12	–	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.4	0.9	(Z)	0.2	0.2
	Individual	6	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
	Partnership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3261	**Vitreous Plumbing Fixtures**	**70**	**38**	**9.2**	**117.2**	**7.8**	**15.6**	**96.9**	**277.3**	**132.9**	**411.4**	**7.3**	**49.1**	**48.9**
	Type of organization:													
	Multiunit companies, total	34	31	8.5	109.1	7.2	14.4	90.9	256.3	120.9	378.4	6.1	44.3	44.1
	Corp. ownership or control	34	31	8.5	109.1	7.2	14.4	90.9	256.3	120.9	378.4	6.1	44.3	44.1
	Single unit companies, total	36	7	0.7	8.1	0.6	1.2	6.1	21.1	11.9	33.0	1.2	4.7	4.8
	Corp. ownership or control	22	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
32	**STONE, CLAY, AND GLASS PRODUCTS**—Con.													
3261	**Vitreous Plumbing Fixtures**—Con.													
	Legal form of organization:													
	Corporate	56	36	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	8	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3262	**Vitreous China Food Utensils**	**28**	**14**	**7.3**	**72.3**	**6.0**	**11.1**	**53.6**	**140.0**	**34.1**	**170.7**	**5.4**	**26.2**	**30.0**
	Type of organization:													
	Multiunit companies, total	11	10	6.9	68.3	5.7	10.4	50.7	132.3	31.6	160.8	5.2	24.6	28.2
	Corp. ownership or control	11	10	6.9	68.3	5.7	10.4	50.7	132.3	31.6	160.8	5.2	24.6	28.2
	Single unit companies, total	17	4	0.4	4.0	0.4	0.7	2.9	7.7	2.4	9.9	0.2	1.6	1.8
	Corp. ownership or control	14	4	0.4	3.9	0.4	0.7	2.9	7.6	2.4	9.8	(D)	1.6	1.8
	Noncorporate ownership	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(D)	(Z)	(Z)
	Legal form of organization:													
	Corporate	25	14	7.3	72.2	6.0	11.1	53.6	139.9	34.0	170.6	(D)	26.2	30.0
	Noncorporate, total	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(D)	(Z)	(Z)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3263	**Fine Earthenware Food Utensils**	**23**	**17**	**4.7**	**38.4**	**3.5**	**6.4**	**27.1**	**61.2**	**21.7**	**81.3**	**1.7**	**14.9**	**17.2**
	Type of organization:													
	Multiunit companies, total	6	5	2.5	21.6	1.6	3.0	14.0	36.6	13.1	47.7	0.9	9.5	11.7
	Corp. ownership or control	5	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	17	12	2.2	16.8	2.0	3.4	13.1	24.7	8.6	33.6	0.8	5.4	5.4
	Corp. ownership or control	16	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	21	16	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3264	**Porcelain Electrical Supplies**	**86**	**56**	**11.4**	**144.4**	**9.1**	**17.6**	**98.0**	**253.9**	**117.5**	**367.5**	**20.9**	**54.3**	**59.3**
	Type of organization:													
	Multiunit companies, total	41	36	9.4	122.3	7.3	14.2	82.1	211.1	102.7	310.3	19.0	49.3	53.8
	Corp. ownership or control	41	36	9.4	122.3	7.3	14.2	82.1	211.1	102.7	310.3	19.0	49.3	53.8
	Single unit companies, total	45	20	2.0	22.1	1.7	3.4	15.9	42.8	14.7	57.2	1.9	5.0	5.5
	Corp. ownership or control	42	19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	83	55	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3269	**Pottery Products, N.E.C.**	**727**	**116**	**10.6**	**87.4**	**9.2**	**17.1**	**66.2**	**161.2**	**70.7**	**230.0**	**9.8**	**24.6**	**26.7**
	Type of organization:													
	Multiunit companies, total	43	34	3.9	34.3	3.4	6.5	26.5	68.2	29.5	96.7	3.1	11.6	12.3
	Corp. ownership or control	43	34	3.9	34.3	3.4	6.5	26.5	68.2	29.5	96.7	3.1	11.6	12.3
	Single unit companies, total	684	82	6.7	53.1	5.8	10.6	39.7	93.0	41.2	133.3	6.8	13.0	14.4
	Corp. ownership or control	345	75	5.7	46.4	4.9	9.1	34.7	79.8	34.9	114.0	6.0	11.0	12.2
	Noncorporate ownership	339	7	0.9	6.6	0.9	1.4	5.0	13.1	6.2	19.3	0.7	2.0	2.2
	Legal form of organization:													
	Corporate	388	109	9.6	80.7	8.3	15.6	61.3	148.0	64.4	210.7	9.1	22.5	24.5
	Noncorporate, total	339	7	0.9	6.6	0.9	1.4	5.0	13.1	6.2	19.3	0.7	2.0	2.2
	Individual	246	2	0.5	3.8	0.5	0.8	2.8	7.4	3.6	11.0	0.5	1.3	1.3
	Partnership	76	4	0.4	2.5	0.3	0.6	1.9	5.2	2.5	7.6	0.3	0.7	0.8
	Other and unknown	17	1	(Z)	0.3	(Z)	0.1	0.3	0.6	0.2	0.7	(Z)	0.1	0.1
3271	**Concrete Block and Brick**	**1 273**	**348**	**18.7**	**237.1**	**11.8**	**24.1**	**126.6**	**520.3**	**627.7**	**1 143.8**	**55.6**	**118.4**	**124.0**
	Type of organization:													
	Multiunit companies, total	306	138	6.8	87.5	4.4	9.2	49.6	198.1	229.3	425.9	21.2	48.9	50.4
	Corp. ownership or control	306	138	6.8	87.5	4.4	9.2	49.6	198.1	229.3	425.9	21.2	48.9	50.4
	Single unit companies, total	967	210	11.9	149.6	7.4	14.9	77.0	322.2	398.3	717.8	34.4	69.4	73.6
	Corp. ownership or control	775	200	11.0	140.4	6.8	13.8	72.0	298.8	372.9	668.9	32.4	64.2	68.4
	Noncorporate ownership	192	10	0.9	9.2	0.6	1.1	5.0	23.4	25.4	48.9	2.0	5.2	5.1
	Legal form of organization:													
	Corporate	1 081	338	17.8	227.9	11.2	23.0	121.6	496.9	602.3	1 094.8	53.6	113.2	118.8
	Noncorporate, total	192	10	0.9	9.2	0.6	1.1	5.0	23.4	25.4	48.9	2.0	5.2	5.1
	Individual	111	4	0.5	4.5	0.3	0.6	2.5	11.6	11.0	22.7	1.2	2.3	2.2
	Partnership	73	5	0.4	4.0	0.2	0.5	2.3	9.5	12.3	21.7	(D)	2.1	2.3
	Other and unknown	8	1	0.1	0.7	(Z)	(Z)	0.2	2.3	2.0	4.5	(D)	0.8	0.6

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
32	**STONE, CLAY, AND GLASS PRODUCTS**—Con.													
3272	**Concrete Products, N.E.C.**	**3 916**	**862**	**61.7**	**734.9**	**48.1**	**96.0**	**494.5**	**1 529.3**	**1 234.1**	**2 736.2**	**134.4**	**357.0**	**389.7**
	Type of organization:													
	Multiunit companies, total	800	469	31.5	389.3	24.7	50.4	270.3	846.7	675.9	1 504.2	68.9	213.0	235.7
	Corp. ownership or control	797	468	31.4	388.8	24.6	50.3	270.0	845.7	674.3	1 501.6	(D)	212.8	235.5
	Noncorporate ownership	3	1	0.1	0.5	(Z)	0.1	0.4	1.1	1.6	2.6	(D)	0.2	0.2
	Single unit companies, total	3 116	393	30.2	345.6	23.4	45.7	224.2	682.6	558.2	1 232.1	65.5	144.0	154.0
	Corp. ownership or control	2 123	373	27.3	315.0	21.0	41.3	203.4	613.7	505.5	1 110.9	59.7	130.3	139.6
	Noncorporate ownership	993	20	2.9	30.6	2.4	4.4	20.8	68.9	52.7	121.1	5.8	13.7	14.4
	Legal form of organization:													
	Corporate	2 920	841	58.7	703.8	45.6	91.6	473.4	1 459.3	1 179.8	2 612.5	128.4	343.1	375.1
	Noncorporate, total	996	21	2.9	31.1	2.5	4.5	21.1	70.0	54.2	123.7	6.0	13.9	14.7
	Individual	693	4	1.7	18.5	1.4	2.6	12.6	42.6	32.2	74.5	3.1	8.6	8.8
	Partnership	268	10	1.0	9.3	0.8	1.4	6.5	21.5	16.5	37.4	2.2	3.9	4.7
	Other and unknown	35	7	0.3	3.3	0.2	0.4	2.0	6.0	5.5	11.8	0.8	1.4	1.2
3273	**Ready-mixed Concrete**	**5 433**	**1 357**	**87.9**	**1 175.8**	**62.0**	**125.3**	**766.6**	**2 693.2**	**3 757.0**	**6 440.6**	**353.1**	**193.7**	**231.5**
	Type of organization:													
	Multiunit companies, total	1 866	671	43.6	605.7	30.5	64.0	395.6	1 425.7	2 056.5	3 477.1	177.5	106.6	126.2
	Corp. ownership or control	1 853	667	42.8	598.0	30.0	63.0	389.3	1 410.8	2 037.4	3 443.1	174.8	103.7	123.7
	Noncorporate ownership	13	4	0.7	7.8	0.6	1.0	6.3	14.9	19.0	34.0	2.8	2.9	2.5
	Single unit companies, total	3 567	686	44.4	570.1	31.5	61.3	371.1	1 267.5	1 700.5	2 963.5	175.6	87.2	105.4
	Corp. ownership or control	2 810	650	40.2	519.8	28.3	55.5	336.0	1 138.8	1 538.9	2 673.5	158.3	79.0	96.0
	Noncorporate ownership	757	36	4.2	50.3	3.2	5.9	35.0	128.6	161.6	290.0	17.3	8.2	9.4
	Legal form of organization:													
	Corporate	4 663	1 317	83.0	1 117.8	58.3	118.5	725.3	2 549.7	3 576.3	6 116.7	333.0	182.7	219.6
	Noncorporate, total	770	40	4.9	58.0	3.8	6.8	41.3	143.6	180.6	323.9	20.1	11.1	11.9
	Individual	434	14	2.1	24.5	1.6	3.0	17.2	60.1	79.7	139.8	9.8	4.5	4.7
	Partnership	278	19	1.8	21.9	1.3	2.4	15.1	59.9	70.7	130.3	5.9	3.2	4.2
	Other and unknown	58	7	1.1	11 6	0.8	1.4	9.0	23.6	30.2	53.8	4.4	3.4	3.0
3274	**Lime**	**94**	**63**	**5.9**	**75.4**	**4.8**	**9.8**	**59.4**	**218.2**	**264.8**	**484.2**	**29.7**	**39.0**	**47.2**
	Type of organization:													
	Multiunit companies, total	64	56	5.2	67.6	4.4	8.9	54.3	196.5	243.9	441.7	26.6	36.6	44.6
	Corp. ownership or control	64	56	5.2	67.6	4.4	8.9	54.3	196.5	243.9	441.7	26.6	36.6	44.6
	Single unit companies, total	30	7	0.6	7.9	0.5	0.9	5.1	21.7	20.8	42.6	3.1	2.3	2.6
	Corp. ownership or control	21	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	9	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	85	61	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	9	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.4	(Z)	(Z)	(Z)
	Partnership	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3275	**Gypsum Products**	**128**	**81**	**9.5**	**143.6**	**7.6**	**17.3**	**111.5**	**429.6**	**565.6**	**1 000.0**	**31.9**	**66.6**	**72.4**
	Type of organization:													
	Multiunit companies, total	85	75	9.1	138.7	7.3	16.6	107.8	418.6	533.2	955.0	31.1	62 8	68.8
	Corp. ownership or control	85	75	9.1	138.7	7.3	16.6	107.8	418.6	533.2	955.0	31.1	62.8	68.8
	Single unit companies, total	43	6	0.4	4.8	0.3	0.7	3.7	11.1	32.4	45.0	0.8	3.8	3.6
	Corp. ownership or control	34	6	0.4	4.5	0.3	0.7	3.4	9.4	30.9	41.8	0.8	3.6	3.4
	Noncorporate ownership	9	–	(Z)	0.4	(Z)	(Z)	0.3	1.7	1.5	3.2	(Z)	0.2	0.2
	Legal form of organization:													
	Corporate	119	81	9.5	143.2	7.6	17.3	111.2	427.9	564.1	996.8	31.9	66.4	72.2
	Noncorporate, total	9	–	(Z)	0.4	(Z)	(Z)	0.3	1.7	1.5	3.2	(Z)	0.2	0.2
	Individual	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3281	**Cut Stone and Stone Products**	**993**	**164**	**12.7**	**131.5**	**10.6**	**21.4**	**98.8**	**238.2**	**157.5**	**393.0**	**10.4**	**50.0**	**53.8**
	Type of organization:													
	Multiunit companies, total	109	50	4.3	49.9	3.6	7.2	38.6	85.8	58.7	144.1	4.1	23.0	23.2
	Corp. ownership or control	109	50	4.3	49.9	3.6	7.2	38.6	85.8	58.7	144.1	4.1	23.0	23.2
	Single unit companies, total	884	114	8.3	81.6	7.0	14.2	60.2	152.4	98.8	248.9	6.2	27.0	30.6
	Corp. ownership or control	629	107	7.3	72.6	6.1	12.5	53.3	131.0	86.7	215.5	5.5	23.3	26.7
	Noncorporate ownership	255	7	1.0	9.1	0.9	1.7	6.9	21.4	12.1	33.4	0.7	3.7	3.9
	Legal form of organization:													
	Corporate	738	157	11.7	122.4	9.7	19.7	91 9	216.8	145.4	359.6	9.6	46.2	49.9
	Noncorporate, total	255	7	1.0	9.1	0.9	1.7	6.9	21.4	12.1	33.4	0.7	3.7	3.9
	Individual	164	1	0.5	4.3	0.4	0.8	3.2	10.7	6.6	17.1	0.3	1.9	2.1
	Partnership	83	6	0.5	4.6	0.4	0.9	3.6	10.1	5.1	15.3	0.4	1.8	1.8
	Other and unknown	8	–	(Z)	0.2	(Z)	(Z)	0.2	0.6	0.4	1.0	(Z)	0.1	0.1
3291	**Abrasive Products**	**410**	**178**	**28.3**	**392.3**	**20.1**	**38.5**	**241.2**	**1 097.7**	**914.4**	**1 955.8**	**48.7**	**247.8**	**317.7**
	Type of organization:													
	Multiunit companies, total	120	95	23.1	327.5	16.3	31.2	202.7	951.0	766.7	1 663.5	40.5	212.7	278.7
	Corp. ownership or control	120	95	23.1	327.5	16.3	31.2	202.7	951.0	766.7	1 663.5	40.5	212.7	278.7
	Single unit companies, total	290	83	5.1	64.8	3.8	7.4	38.5	146.7	147.7	292.3	8.2	35.1	39.1
	Corp. ownership or control	255	83	5.0	63.4	3.7	7.2	37.6	141.9	144.2	284.0	7.9	33.9	37.9
	Noncorporate ownership	35	–	0.1	1.5	0.1	0.2	0.9	4.8	3.5	8.3	0.2	1.2	1.2
	Legal form of organization:													
	Corporate	375	178	28.2	390.9	20.1	38.4	240.3	1 092.9	910.8	1 947.4	48.5	246.6	316.6
	Noncorporate, total	35	–	0.1	1.5	0.1	0.2	0.9	4.8	3.5	8.3	0.2	1.2	1.2
	Individual	30	–	0.1	1.2	0.1	0.1	0.8	4.1	2.9	7.1	0.2	1.0	1.0
	Partnership	5	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.6	1.2	(Z)	0.2	0.2

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
32	**STONE, CLAY, AND GLASS PRODUCTS**—Con.													
3292	**Asbestos Products**	**123**	**76**	**13.9**	**179.9**	**11.0**	**22.6**	**137.4**	**439.3**	**448.7**	**882.1**	**26.0**	**161.3**	**168.0**
	Type of organization:													
	Multiunit companies, total	72	61	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	72	61	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	51	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	50	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	122	76	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3293	**Gaskets, Packing, and Sealing Devices**	**433**	**217**	**33.0**	**371.3**	**25.0**	**47.5**	**237.3**	**748.3**	**524.9**	**1 267.1**	**46.5**	**195.5**	**208.6**
	Type of organization:													
	Multiunit companies, total	128	113	25.7	290.6	19.4	36.8	189.3	587.2	391.2	973.9	37.2	157.2	167.9
	Corp. ownership or control	128	113	25.7	290.6	19.4	36.8	189.3	587.2	391.2	973.9	37.2	157.2	167.9
	Single unit companies, total	305	104	7.4	80.7	5.6	10.7	48.0	161.1	133.7	293.2	9.3	38.3	40.7
	Corp. ownership or control	260	98	6.9	76.6	5.2	10.1	45.3	152.4	127.6	278.5	8.8	35.4	37.6
	Noncorporate ownership	45	6	0.5	4.1	0.4	0.7	2.7	8.7	6.1	14.7	0.5	2.9	3.1
	Legal form of organization:													
	Corporate	388	211	32.6	367.2	24.6	46.8	234.6	739.6	518.8	1 252.3	46.0	192.5	205.5
	Noncorporate, total	45	6	0.5	4.1	0.4	0.7	2.7	8.7	6.1	14.7	0.5	2.9	3.1
	Individual	31	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	10	3	0.2	1.5	0.1	0.2	1.2	3.8	2.6	6.3	0.3	1.6	1.8
	Other and unknown	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3295	**Minerals, Ground Or Treated**	**466**	**151**	**11.5**	**156.3**	**8.9**	**18.1**	**111.8**	**479.4**	**480.6**	**957.3**	**50.2**	**116.4**	**116.3**
	Type of organization:													
	Multiunit companies, total	251	124	9.3	129.5	7.2	14.8	94.2	410.7	415.0	823.6	39.2	105.4	103.6
	Corp. ownership or control	251	124	9.3	129.5	7.2	14.8	94.2	410.7	415.0	823.6	39.2	105.4	103.6
	Single unit companies, total	215	27	2.2	26.8	1.7	3.3	17.6	68.7	65.6	133.6	11.0	11.0	12.6
	Corp. ownership or control	176	27	2.0	24.9	1.6	3.0	16.3	63.8	60.7	123.8	10.4	10.1	11.6
	Noncorporate ownership	39	–	0.2	1.9	0.1	0.2	1.3	5.0	4.9	9.9	0.6	1.0	1.0
	Legal form of organization:													
	Corporate	427	151	11.3	154.4	8.7	17.9	110.5	474.4	475.7	947.4	49.6	115.5	115.2
	Noncorporate, total	39	–	0.2	1.9	0.1	0.2	1.3	5.0	4.9	9.9	0.6	1.0	1.0
	Individual	28	–	0.1	1.1	0.1	0.1	0.7	3.0	2.4	5.4	0.4	0.5	0.6
	Partnership	10	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3296	**Mineral Wool**	**153**	**90**	**22.6**	**313.8**	**18.6**	**38.3**	**244.5**	**1 053.7**	**738.6**	**1 790.5**	**85.9**	**116.5**	**121.5**
	Type of organization:													
	Multiunit companies, total	87	75	20.9	295.4	17.3	35.0	232.0	1 000.2	680.1	1 678.8	82.8	107.3	111.2
	Corp. ownership or control	87	75	20.9	295.4	17.3	35.0	232.0	1 000.2	680.1	1 678.8	82.8	107.3	111.2
	Single unit companies, total	66	15	1.7	18.4	1.3	3.4	12.5	53.5	58.5	111.7	3.2	9.2	10.4
	Corp. ownership or control	55	15	1.6	17.9	1.2	3.3	12.1	52.4	57.6	109.7	3.1	9.1	10.2
	Noncorporate ownership	11	–	(Z)	0.5	(Z)	0.1	0.4	1.1	0.9	2.0	0.1	0.2	0.2
	Legal form of organization:													
	Corporate	142	90	22.6	313.3	18.5	38.3	244.1	1 052.6	737.7	1 788.5	85.8	116.3	121.4
	Noncorporate, total	11	–	(Z)	0.5	(Z)	0.1	0.4	1.1	0.9	2.0	0.1	0.2	0.2
	Individual	10	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3297	**Nonclay Refractories**	**109**	**66**	**9.1**	**134.3**	**6.8**	**13.5**	**92.5**	**352.1**	**336.4**	**680.2**	**37.1**	**141.8**	**159.5**
	Type of organization:													
	Multiunit companies, total	68	56	8.6	126.4	6.4	12.7	87.8	332.9	321.4	646.2	36.1	136.6	153.8
	Corp. ownership or control	68	56	8.6	126.4	6.4	12.7	87.8	332.9	321.4	646.2	36.1	136.6	153.8
	Single unit companies, total	41	10	0.6	7.9	0.4	0.8	4.7	19.2	15.0	34.1	1.0	5.2	5.6
	Corp. ownership or control	38	10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	106	66	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3299	**Nonmetallic Mineral Products, N.E.C.**	**696**	**70**	**7.7**	**87.2**	**6.2**	**11.4**	**59.1**	**224.1**	**166.6**	**387.3**	**28.7**	**40.5**	**46.9**
	Type of organization:													
	Multiunit companies, total	57	39	4.2	49.6	3.3	6.3	34.8	145.1	105.4	247.5	15.5	25.7	31.2
	Corp. ownership or control	57	39	4.2	49.6	3.3	6.3	34.8	145.1	105.4	247.5	15.5	25.7	31.2
	Single unit companies, total	639	31	3.5	37.6	2.9	5.1	24.4	79.0	61.2	139.9	13.2	14.8	15.7
	Corp. ownership or control	389	30	3.0	33.4	2.4	4.4	21.3	67.9	54.3	121.9	10.8	12.7	13.6
	Noncorporate ownership	250	1	0.5	4.2	0.4	0.7	3.1	11.1	6.9	18.0	2.4	2.1	2.1
	Legal form of organization:													
	Corporate	446	69	7.2	83.0	5.7	10.7	56.0	213.0	159.7	369.3	26.3	38.4	44.8
	Noncorporate, total	250	1	0.5	4.2	0.4	0.7	3.1	11.1	6.9	18.0	2.4	2.1	2.1
	Individual	169	1	0.3	2.6	0.3	0.4	2.0	7.1	4.2	11.3	1.5	1.2	1.2
	Partnership	72	–	0.1	1.3	0.1	0.2	0.9	3.1	2.2	5.3	0.6	0.7	0.7
	Other and unknown	9	–	(Z)	0.3	(Z)	0.1	0.3	1.0	0.5	1.4	0.3	0.2	0.2

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
33	**PRIMARY METAL INDUSTRIES**	**7 376**	**3 981**	**1 113.6**	**18 745.0**	**885.3**	**1 744.0**	**14 065.2**	**37 568.2**	**66 171.3**	**103 179.4**	**4 496.8**	**17 884.5**	**18 458.3**
	Type of organization:													
	Multiunit companies, total	2 628	2 296	974.3	16 973.1	771.6	1 520.2	12 811.3	34 143.9	61 759.0	95 348.9	4 208.1	17 027.9	17 517.2
	Corp. ownership or control	2 622	2 291	973.8	16 967.8	771.1	1 519.2	12 806.8	34 136.7	61 751.7	95 334.5	4 207.9	17 026.3	17 515.3
	Noncorporate ownership	6	5	0.5	5.3	0.5	1.0	4.5	7.2	7.3	14.4	0.2	1.5	1.9
	Single unit companies, total	4 748	1 685	139.3	1 771.9	113.7	223.8	1 253.9	3 454.2	4 412.4	7 830.5	288.7	856.6	941.0
	Corp. ownership or control	4 053	1 642	134.3	1 712.1	109.4	215.7	1 207.8	3 340.3	4 266.3	7 571.6	280.3	828.6	911.4
	Noncorporate ownership	695	43	5.0	59.8	4.4	8.1	46.1	114.0	146.1	258.9	8.4	28.0	29.6
	Legal form of organization:													
	Corporate	6 675	3 933	1 108.1	18 679.9	880.5	1 734.9	14 014.6	37 477.0	66 018.0	102 906.0	4 488.2	17 855.0	18 426.7
	Noncorporate, total	701	48	5.5	65.1	4.8	9.0	50.6	121.2	153.4	273.4	8.5	29.5	31.5
	Individual	472	16	2.2	26.8	1.9	3.6	19.9	50.8	67.1	116.9	3.1	12.2	13.4
	Partnership	204	25	2.5	30.0	2.2	4.1	23.7	57.7	71.9	129.5	5.1	14.8	15.4
	Other and unknown	25	7	0.8	8.3	0.7	1.4	7.0	12.6	14.3	27.0	0.3	2.5	2.8
3312	**Blast Furnaces and Steel Mills**	**504**	**250**	**441.9**	**8 725.7**	**350.2**	**668.7**	**6 653.0**	**15 331.9**	**26 715.0**	**41 998.2**	**2 143.0**	**8 620.6**	**8 471.6**
	Type of organization:													
	Multiunit companies, total	235	205	436.8	8 645.4	346.2	661.1	6 595.4	15 206.7	26 408.8	41 568.4	2 121.1	8 539.0	8 384.7
	Corp. ownership or control	235	205	436.8	8 645.4	346.2	661.1	6 595.4	15 206.7	26 408.8	41 568.4	2 121.1	8 539.0	8 384.7
	Single unit companies, total	269	45	5.1	80.2	4.0	7.6	57.7	125.2	306.2	429.8	22.0	81.6	86.9
	Corp. ownership or control	233	44	4.9	76.9	3.8	7.2	55.2	119.0	300.4	417.9	21.2	79.8	85.2
	Noncorporate ownership	36	1	0.2	3.3	0.2	0.4	2.5	6.2	5.8	12.0	0.8	1.8	1.8
	Legal form of organization:													
	Corporate	468	249	441.7	8 722.4	350.0	668.3	6 650.6	15 325.7	26 709.2	41 986.3	2 142.3	8 618.8	8 469.8
	Noncorporate, total	36	1	0.2	3.3	0.2	0.4	2.5	6.2	5.8	12.0	0.8	1.8	1.8
	Individual	25	–	(Z)	0.6	(Z)	0.1	0.5	1.0	1.8	2.8	0.2	0.6	0.6
	Partnership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3313	**Electrometallurgical Products**	**42**	**31**	**8.9**	**139.2**	**7.0**	**14.3**	**103.9**	**274.6**	**687.0**	**930.6**	**53.2**	**367.3**	**403.8**
	Type of organization:													
	Multiunit companies, total	32	30	8.8	138.0	6.9	14.2	103.0	272.7	681.8	923.6	52.9	365.8	402.2
	Corp. ownership or control	32	30	8.8	138.0	6.9	14.2	103.0	272.7	681.8	923.6	52.9	365.8	402.2
	Single unit companies, total	10	1	0.1	1.2	0.1	0.1	1.0	1.9	5.2	7.0	0.3	1.5	1.6
	Corp. ownership or control	8	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	40	31	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3315	**Steel Wire and Related Products**	**335**	**223**	**31.7**	**436.6**	**24.3**	**49.0**	**304.9**	**924.4**	**1 341.2**	**2 258.6**	**79.4**	**409.7**	**422.8**
	Type of organization:													
	Multiunit companies, total	182	156	26.2	371.4	20.2	40.7	263.3	785.2	1 132.5	1 912.1	68.5	354.0	362.7
	Corp. ownership or control	182	156	26.2	371.4	20.2	40.7	263.3	785.2	1 132.5	1 912.1	68.5	354.0	362.7
	Single unit companies, total	153	67	5.4	65.2	4.1	8.2	41.6	139.1	208.7	346.5	10.9	55.7	60.1
	Corp. ownership or control	139	65	5.3	63.6	4.0	8.0	40.5	135.6	204.0	338.3	10.7	54.0	58.3
	Noncorporate ownership	14	2	0.1	1.7	0.1	0.2	1.2	3.5	4.7	8.2	0.2	1.7	1.7
	Legal form of organization:													
	Corporate	321	221	31.5	435.0	24.2	48.8	303.8	920.8	1 336.5	2 250.4	79.2	408.0	421.1
	Noncorporate, total	14	2	0.1	1.7	0.1	0.2	1.2	3.5	4.7	8.2	0.2	1.7	1.7
	Individual	8	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3316	**Cold Finishing Of Steel Shapes**	**155**	**94**	**19.4**	**334.6**	**14.6**	**28.7**	**238.8**	**799.6**	**1 936.8**	**2 713.2**	**49.6**	**383.3**	**436.6**
	Type of organization:													
	Multiunit companies, total	84	73	17.4	301.8	13.0	25.5	216.4	715.1	1 745.8	2 440.2	41.6	344.6	390.1
	Corp. ownership or control	84	73	17.4	301.8	13.0	25.5	216.4	715.1	1 745.8	2 440.2	41.6	344.6	390.1
	Single unit companies, total	71	21	2.0	32.8	1.6	3.2	22.4	84.5	191.0	273.1	8.0	38.8	46.5
	Corp. ownership or control	62	21	2.0	32.5	1.6	3.2	22.2	84.0	189.8	271.3	8.0	38.5	46.3
	Noncorporate ownership	9	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	1.2	1.7	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	146	94	19.4	334.3	14.5	28.7	238.6	799.1	1 935.7	2 711.5	49.5	383.0	436.3
	Noncorporate, total	9	–	(Z)	0.2	(Z)	(Z)	0.2	0.5	1.2	1.7	(Z)	0.3	0.3
	Individual	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3317	**Steel Pipe and Tubes**	**180**	**142**	**27.8**	**449.4**	**21.8**	**43.7**	**330.6**	**987.9**	**1 731.9**	**2 681.4**	**117.5**	**546.9**	**571.6**
	Type of organization:													
	Multiunit companies, total	118	110	25.0	408.3	19.5	39.2	302.5	892.6	1 590.7	2 449.1	113.0	507.1	524.6
	Corp. ownership or control	118	110	25.0	408.3	19.5	39.2	302.5	892.6	1 590.7	2 449.1	113.0	507.1	524.6
	Single unit companies, total	62	32	2.8	41.1	2.3	4.5	28.1	95.2	141.2	232.3	4.5	39.8	47.0
	Corp. ownership or control	59	32	2.8	41.1	2.3	4.5	28.1	95.1	141.1	232.0	4.5	39.8	47.0
	Noncorporate ownership	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	(Z)	(Z)
	Legal form of organization:													
	Corporate	177	142	27.8	449.4	21.7	43.7	330.6	987.7	1 731.8	2 681.1	117.5	546.9	571.5
	Noncorporate, total	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	(Z)	(Z)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
33	**PRIMARY METAL INDUSTRIES—Con.**													
3321	**Gray Iron Foundries**	**984**	**683**	**138.8**	**2 146.0**	**116.8**	**236.1**	**1 703.2**	**4 070.7**	**3 355.5**	**7 388.7**	**503.1**	**596.2**	**654.4**
	Type of organization:													
	Multiunit companies, total	324	302	106.9	1 754.0	89.8	183.2	1 406.5	3 370.1	2 864.3	6 198.8	434.9	513.1	564.7
	Corp. ownership or control	323	301	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	660	381	31.9	392.1	27.1	52.9	296.7	700.6	491.2	1 189.9	68.2	83.1	89.7
	Corp. ownership or control	591	372	31.0	381.1	26.3	51.4	287.9	678.2	476.8	1 153.2	66.6	81.0	87.4
	Noncorporate ownership	69	9	0.9	10.9	0.8	1.5	8.8	22.4	14.3	36.7	1.6	2.2	2.3
	Legal form of organization:													
	Corporate	914	673	137.6	2 132.3	115.8	234.2	1 692.2	4 044.8	3 339.6	7 346.9	501.5	593.7	651.4
	Noncorporate, total	70	10	1.2	13.8	1.0	1.9	11.0	25.9	15.9	41.7	1.6	2.6	3.0
	Individual	45	2	0.3	3.1	0.2	0.4	2.6	5.5	4.6	10.1	0.4	0.7	0.7
	Partnership	23	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3322	**Malleable Iron Foundries**	**66**	**53**	**18.2**	**273.0**	**14.6**	**27.9**	**202.5**	**458.8**	**265.7**	**721.9**	**28.9**	**41.1**	**43.6**
	Type of organization:													
	Multiunit companies, total	41	41	15.6	235.2	12.5	24.2	175.6	398.4	227.7	623.5	27.0	35.2	37.3
	Corp. ownership or control	41	41	15.6	235.2	12.5	24.2	175.6	398.4	227.7	623.5	27.0	35.2	37.3
	Single unit companies, total	25	12	2.6	37.9	2.1	3.8	26.9	60.5	38.1	98.3	1.9	5.9	6.2
	Corp. ownership or control	22	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	63	52	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3324	**Steel Investment Foundries**	**92**	**68**	**10.5**	**128.7**	**8.1**	**16.5**	**85.9**	**267.4**	**144.8**	**407.5**	**10.9**	**57.0**	**65.6**
	Type of organization:													
	Multiunit companies, total	36	34	7.1	84.5	5.4	10.9	55.9	181.5	101.1	280.2	8.0	42.4	46.2
	Corp. ownership or control	36	34	7.1	84.5	5.4	10.9	55.9	181.5	101.1	280.2	8.0	42.4	46.2
	Single unit companies, total	56	34	3.4	44.2	2.7	5.6	30.0	85.9	43.8	127.4	2.9	14.6	19.4
	Corp. ownership or control	55	34	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	91	68	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3325	**Steel Foundries, N.E.C.**	**323**	**229**	**54.8**	**781.5**	**44.2**	**87.3**	**591.0**	**1 439.8**	**882.3**	**2 312.1**	**115.9**	**332.8**	**341.3**
	Type of organization:													
	Multiunit companies, total	135	128	42.0	608.1	33.7	66.1	465.5	1 127.4	704.6	1 823.9	92.8	282.6	289.3
	Corp. ownership or control	135	128	42.0	608.1	33.7	66.1	465.5	1 127.4	704.6	1 823.9	92.8	282.6	289.3
	Single unit companies, total	188	101	12.8	173.4	10.5	21.2	125.6	312.3	177.7	488.2	23.1	50.2	52.0
	Corp. ownership or control	172	98	12.5	169.5	10.2	20.7	122.7	308.9	170.0	477.1	22.9	48.6	50.4
	Noncorporate ownership	16	3	0.3	3.8	0.2	0.5	2.9	3.4	7.7	11.1	0.2	1.6	1.6
	Legal form of organization:													
	Corporate	307	226	54.5	777.6	43.9	86.8	588.1	1 436.3	874.6	2 301.0	115.7	331.2	339.7
	Noncorporate, total	16	3	0.3	3.8	0.2	0.5	2.9	3.4	7.7	11.1	0.2	1.6	1.6
	Individual	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	0.1	0.9	0.1	0.1	0.8	1.5	0.9	2.4	0.1	0.3	0.3
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3331	**Primary Copper**	**27**	**27**	**13.1**	**217.3**	**10.6**	**20.6**	**167.5**	**904.3**	**3 062.5**	**3 918.1**	**(D)**	**700.0**	**756.6**
	Type of organization:													
	Multiunit companies, total	27	27	13.1	217.3	10.6	20.6	167.5	904.3	3 062.5	3 918.1	(D)	700.0	756.6
	Corp. ownership or control	27	27	13.1	217.3	10.6	20.6	167.5	904.3	3 062.5	3 918.1	(D)	700.0	756.6
	Corporate	27	27	13.1	217.3	10.6	20.6	167.5	904.3	3 062.5	3 918.1	(D)	700.0	756.6
	Legal form of organization:													
3332	**Primary Lead**	**7**	**7**	**2.5**	**40.5**	**2.0**	**4.1**	**30.2**	**189.5**	**524.8**	**699.6**	**(D)**	**162.3**	**186.0**
	Type of organization:													
	Multiunit companies, total	7	7	2.5	40.5	2.0	4.1	30.2	189.5	524.8	699.6	(D)	162.3	186.0
	Corp. ownership or control	7	7	2.5	40.5	2.0	4.1	30.2	189.5	524.8	699.6	(D)	162.3	186.0
	Corporate	7	7	2.5	40.5	2.0	4.1	30.2	189.5	524.8	699.6	(D)	162.3	186.0
	Legal form of organization:													
3333	**Primary Zinc**	**9**	**7**	**4.6**	**70.5**	**3.5**	**6.9**	**49.3**	**114.3**	**308.3**	**430.7**	**39.8**	**176.6**	**154.1**
	Type of organization:													
	Multiunit companies, total	8	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	8	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	9	7	4.6	70.5	3.5	6.9	49.3	114.3	308.3	430.7	39.8	176.6	154.1
	Legal form of organization:													
3334	**Primary Aluminum**	**32**	**32**	**28.6**	**555.0**	**22.8**	**45.5**	**426.3**	**1 980.9**	**2 694.5**	**4 647.8**	**158.7**	**590.1**	**646.8**
	Type of organization:													
	Multiunit companies, total	30	30	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	30	30	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	32	32	28.6	555.0	22.8	45.5	426.3	1 980.9	2 694.5	4 647.8	158.7	590.1	646.8
	Legal form of organization:													

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
33	**PRIMARY METAL INDUSTRIES**—Con.													
3339	**Primary Nonferrous Metals, N.E.C.**	**85**	**26**	**8.6**	**148.8**	**6.0**	**12.1**	**95.1**	**429.5**	**553.3**	**963.9**	**97.1**	**190.5**	**208.5**
	Type of organization:													
	Multiunit companies, total	29	24	8.3	144.1	5.8	11.7	92.1	418.1	528.5	928.9	91.7	182.4	199.3
	Corp. ownership or control	29	24	8.3	144.1	5.8	11.7	92.1	418.1	528.5	928.9	91.7	182.4	199.3
	Single unit companies, total	56	2	0.3	4.7	0.2	0.4	3.0	11.4	24.8	35.0	5.5	8.0	9.2
	Corp. ownership or control	52	2	0.3	4.7	0.2	0.4	3.0	11.4	24.6	34.8	5.5	8.0	9.1
	Noncorporate ownership	4	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	81	26	8.6	148.8	6.0	12.1	95.1	429.5	553.2	963.7	97.1	190.4	208.4
	Noncorporate, total	4	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	0.1	0.1
	Individual	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	-	-	-	-	-	-	-	-	-	-	-
3341	**Secondary Nonferrous Metals**	**460**	**200**	**18.9**	**269.8**	**14.0**	**28.4**	**169.7**	**769.3**	**2 792.2**	**3 558.0**	**114.3**	**459.5**	**485.2**
	Type of organization:													
	Multiunit companies, total	144	118	12.5	177.5	9.2	18.5	113.3	520.6	1 890.1	2 409.7	84.9	313.0	333.1
	Corp. ownership or control	144	118	12.5	177.5	9.2	18.5	113.3	520.6	1 890.1	2 409.7	84.9	313.0	333.1
	Single unit companies, total	316	82	6.4	92.4	4.9	9.9	56.4	248.7	902.0	1 148.4	29.5	146.5	152.1
	Corp. ownership or control	265	78	6.1	87.9	4.6	9.4	53.1	240.4	867.8	1 106.1	28.2	141.5	146.8
	Noncorporate ownership	51	4	0.3	4.5	0.3	0.5	3.3	8.3	34.2	42.3	1.3	5.1	5.3
	Legal form of organization:													
	Corporate	409	196	18.6	265.3	13.8	27.8	166.4	761.0	2 757.9	3 515.7	113.1	454.4	479.9
	Noncorporate, total	51	4	0.3	4.5	0.3	0.5	3.3	8.3	34.2	42.3	1.3	5.1	5.3
	Individual	27	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	21	2	0.2	2.7	0.2	0.3	2.2	4.3	22.2	26.4	0.9	3.6	3.6
	Other and unknown	3	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3351	**Copper Rolling and Drawing**	**140**	**99**	**31.3**	**455.5**	**24.2**	**50.5**	**338.7**	**973.7**	**3 019.9**	**4 013.8**	**64.4**	**496.1**	**472.1**
	Type of organization:													
	Multiunit companies, total	94	84	29.8	435.5	23.0	47.9	324.0	932.0	2 927.0	3 881.1	62.7	480.3	454.0
	Corp. ownership or control	94	84	29.8	435.5	23.0	47.9	324.0	932.0	2 927.0	3 881.1	62.7	480.3	454.0
	Single unit companies, total	46	15	1.5	20.0	1.2	2.5	14.7	41.7	92.9	132.6	1.7	15.8	18.1
	Corp. ownership or control	42	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	136	98	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3353	**Aluminum Sheet, Plate, and Foil**	**53**	**45**	**31.4**	**613.5**	**25.0**	**50.6**	**480.1**	**1 340.6**	**4 900.5**	**5 970.7**	**157.7**	**1 325.2**	**1 625.2**
	Type of organization:													
	Multiunit companies, total	45	43	31.3	611.3	24.9	50.4	478.6	1 335.6	4 884.8	5 950.5	(D)	1 320.6	1 619.7
	Corp. ownership or control	45	43	31.3	611.3	24.9	50.4	478.6	1 335.6	4 884.8	5 950.5	(D)	1 320.6	1 619.7
	Single unit companies, total	8	2	0.1	2.2	0.1	0.2	1.5	5.0	15.6	20.2	(D)	4.6	5.5
	Corp. ownership or control	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	51	45	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3354	**Aluminum Extruded Products**	**193**	**146**	**26.5**	**355.9**	**21.2**	**44.0**	**264.1**	**678.6**	**1 386.1**	**2 050.0**	**48.2**	**312.8**	**337.2**
	Type of organization:													
	Multiunit companies, total	123	114	24.1	327.9	19.3	40.2	245.7	624.5	1 275.1	1 886.8	40.9	293.9	315.0
	Corp. ownership or control	122	113	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	70	32	2.4	28.1	1.9	3.9	18.4	54.1	111.0	163.1	7.2	18.9	22.2
	Corp. ownership or control	67	31	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	189	144	26.4	354.4	21.1	43.8	262.9	675.2	1 381.3	2 041.7	(D)	311.2	335.7
	Noncorporate, total	4	2	0.1	1.6	0.1	0.2	1.2	3.4	4.8	8.2	(D)	1.6	1.6
	Individual	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3355	**Aluminum Rolling and Drawing, N.E.C.**	**22**	**15**	**4.7**	**78.1**	**3.6**	**6.9**	**56.5**	**222.8**	**754.9**	**1 001.0**	**16.1**	**183.6**	**169.5**
	Type of organization:													
	Multiunit companies, total	15	15	4.7	77.6	3.6	6.9	56.1	221.8	752.1	997.1	16.0	182.4	168.4
	Corp. ownership or control	15	15	4.7	77.6	3.6	6.9	56.1	221.8	752.1	997.1	16.0	182.4	168.4
	Single unit companies, total	7	-	(Z)	0.5	(Z)	0.1	0.4	1.0	2.9	3.9	0.1	1.2	1.2
	Corp. ownership or control	6	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	21	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
33	**PRIMARY METAL INDUSTRIES**—Con.													
3356	**Nonferrous Rolling and Drawing, N.E.C.**	**173**	**88**	**17.2**	**260.2**	**12.0**	**24.7**	**158.7**	**569.0**	**2 000.4**	**2 596.5**	**34.3**	**483.7**	**477.5**
	Type of organization:													
	Multiunit companies, total	82	67	14.9	226.3	10.3	21.3	137.8	496.5	1 753.0	2 279.2	28.7	447.2	434.6
	Corp. ownership or control	82	67	14.9	226.3	10.3	21.3	137.8	496.5	1 753.0	2 279.2	28.7	447.2	434.6
	Single unit companies, total	91	19	2.3	33.9	1.7	3.5	20.4	72.5	246.6	317.2	5.6	36.5	42.9
	Corp. ownership or control	78	18	2.1	30.7	1.5	3.1	17.6	67.4	238.2	303.5	5.1	34.4	40.5
	Noncorporate ownership	13	1	0.2	3.2	0.2	0.4	2.8	5.1	8.4	13.7	0.6	2.1	2.4
	Legal form of organization:													
	Corporate	160	85	16.9	257.0	11.8	24.4	155.4	563.9	1 992.0	2 582.8	33.8	490.6	475.1
	Noncorporate, total	13	1	0.2	3.2	0.2	0.4	2.8	5.1	8.4	13.7	0.6	2.1	2.4
	Individual	9	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3357	**Nonferrous Wire Drawing and Insulating**	**421**	**320**	**66.3**	**876.8**	**50.0**	**101.8**	**603.4**	**2 117.6**	**4 493.1**	**6 595.4**	**139.8**	**948.0**	**960.7**
	Type of organization:													
	Multiunit companies, total	280	256	61.2	820.0	46.2	94.1	566.6	1 994.3	4 273.3	6 249.5	131.8	896.1	909.8
	Corp. ownership or control	280	256	61.2	820.0	46.2	94.1	566.6	1 994.3	4 273.3	6 249.5	131.8	896.1	909.8
	Single unit companies, total	141	64	5.0	56.7	3.8	7.7	36.7	123.3	219.8	345.9	8.0	51.9	51.0
	Corp. ownership or control	134	63	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	414	319	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	–	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.5	0.7	(Z)	0.1	0.1
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3361	**Aluminum Foundries**	**1 038**	**461**	**52.2**	**691.4**	**44.2**	**86.3**	**531.0**	**1 262.7**	**1 213.6**	**2 459.1**	**121.1**	**174.7**	**205.4**
	Type of organization:													
	Multiunit companies, total	173	149	28.7	415.9	24.1	47.8	324.0	770.2	787.8	1 546.6	91.2	113.3	134.0
	Corp. ownership or control	170	146	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	865	312	23.5	275.5	20.1	38.5	207.0	492.5	425.8	912.5	29.9	61.4	71.4
	Corp. ownership or control	695	304	22.6	265.8	19.3	37.2	199.6	476.1	408.8	879.1	28.9	59.1	69.0
	Noncorporate ownership	170	8	0.9	9.7	0.8	1.4	7.4	16.4	17.0	33.4	1.0	2.3	2.4
	Legal form of organization:													
	Corporate	865	450	51.1	679.8	43.2	84.5	521.7	1 243.7	1 192.8	2 419.4	120.0	171.9	202.3
	Noncorporate, total	173	11	1.1	11.6	1.0	1.8	9.4	19.1	20.8	39.7	1.1	2.8	3.0
	Individual	129	6	0.6	6.3	0.5	0.9	4.9	11.0	10.1	21.1	0.6	1.4	1.5
	Partnership	40	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3362	**Brass, Bronze, and Copper Foundries**	**489**	**180**	**12.6**	**148.3**	**10.2**	**19.8**	**106.7**	**283.0**	**274.1**	**553.3**	**17.9**	**55.6**	**59.2**
	Type of organization:													
	Multiunit companies, total	80	61	5.4	66.0	4.3	8.4	47.9	139.7	124.0	262.0	6.7	32.6	32.0
	Corp. ownership or control	80	61	5.4	66.0	4.3	8.4	47.9	139.7	124.0	262.0	6.7	32.6	32.0
	Single unit companies, total	409	119	7.2	82.4	5.9	11.5	58.7	143.3	150.1	291.2	11.2	23.1	27.2
	Corp. ownership or control	329	117	6.8	78.0	5.5	10.8	55.5	135.3	143.5	276.7	10.9	21.9	25.8
	Noncorporate ownership	80	2	0.4	4.3	0.3	0.6	3.2	8.1	6.6	14.5	0.3	1.2	1.4
	Legal form of organization:													
	Corporate	409	178	12.2	144.0	9.9	19.2	103.5	274.9	267.5	538.8	17.6	54.5	57.8
	Noncorporate, total	80	2	0.4	4.3	0.3	0.6	3.2	8.1	6.6	14.5	0.3	1.2	1.4
	Individual	53	–	0.2	2.0	0.2	0.3	1.4	3.8	3.1	6.9	0.2	0.7	0.8
	Partnership	26	2	0.2	2.3	0.2	0.3	1.8	4.3	3.5	7.6	0.1	0.4	0.6
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3369	**Nonferrous Foundries, N.E.C.**	**365**	**164**	**17.3**	**204.1**	**14.2**	**28.0**	**144.9**	**413.9**	**396.1**	**813.7**	**24.7**	**86.6**	**84.7**
	Type of organization:													
	Multiunit companies, total	61	52	8.9	110.6	7.2	14.3	81.3	221.3	213.2	439.9	11.8	55.9	53.4
	Corp. ownership or control	61	52	8.9	110.6	7.2	14.3	81.3	221.3	213.2	439.9	11.8	55.9	53.4
	Single unit companies, total	304	112	8.4	93.4	7.0	13.7	63.7	192.6	182.9	373.8	12.9	30.7	31.3
	Corp. ownership or control	260	109	8.1	90.4	6.7	13.2	61.4	186.3	178.3	362.9	12.7	29.9	30.6
	Noncorporate ownership	44	3	0.3	3.0	0.2	0.5	2.3	6.3	4.6	10.9	0.1	0.8	0.8
	Legal form of organization:													
	Corporate	321	161	17.0	201.1	14.0	27.5	142.6	407.6	391.5	802.8	24.6	85.8	83.9
	Noncorporate, total	44	3	0.3	3.0	0.2	0.5	2.3	6.3	4.6	10.9	0.1	0.8	0.8
	Individual	30	–	0.1	0.9	0.1	0.1	0.6	2.1	1.8	3.9	0.1	0.3	0.3
	Partnership	14	3	0.2	2.1	0.2	0.3	1.6	4.2	2.8	7.0	(Z)	0.5	0.4
3398	**Metal Heat Treating**	**753**	**273**	**16.9**	**220.1**	**13.3**	**27.6**	**147.9**	**466.8**	**281.9**	**744.9**	**42.2**	**48.5**	**69.0**
	Type of organization:													
	Multiunit companies, total	156	96	6.7	90.6	5.2	11.3	62.3	214.8	181.0	392.4	20.3	26.8	44.4
	Corp. ownership or control	156	96	6.7	90.6	5.2	11.3	62.3	214.8	181.0	392.4	20.3	26.8	44.4
	Single unit companies, total	597	177	10.2	129.5	8.1	16.2	85.7	252.0	100.8	352.5	21.9	21.7	24.7
	Corp. ownership or control	528	173	9.8	124.8	7.8	15.6	82.5	241.1	96.2	336.9	21.3	20.6	23.5
	Noncorporate ownership	69	4	0.4	4.7	0.4	0.7	3.2	10.9	4.7	15.6	0.6	1.0	1.1
	Legal form of organization:													
	Corporate	684	269	16.5	215.4	12.9	26.9	144.8	455.9	277.2	729.3	41.6	47.4	67.9
	Noncorporate, total	69	4	0.4	4.7	0.4	0.7	3.2	10.9	4.7	15.6	0.6	1.0	1.1
	Individual	48	3	0.3	3.5	0.2	0.5	2.2	8.2	3.7	11.9	0.4	0.8	0.9
	Partnership	19	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
33	**PRIMARY METAL INDUSTRIES**—Con.													
3399	**Primary Metal Products, N.E.C.**	**427**	**119**	**9.0**	**124.4**	**6.9**	**13.9**	**81.2**	**296.5**	**454.9**	**750.6**	**27.3**	**135.9**	**149.2**
	Type of organization:													
	Multiunit companies, total	86	67	5.3	76.2	3.9	7.9	48.7	191.4	306.3	498.4	19.1	95.2	102.7
	Corp. ownership or control	85	67	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	341	52	3.7	48.2	3.0	6.0	32.5	105.1	148.6	252.2	8.3	40.7	46.4
	Corp. ownership or control	247	50	3.5	45.1	2.8	5.6	30.0	98.2	137.7	234.3	7.7	37.4	43.3
	Noncorporate ownership	94	2	0.2	3.1	0.2	0.4	2.5	6.9	10.9	17.8	0.6	3.3	3.1
	Legal form of organization:													
	Corporate	332	117	8.8	121.2	6.6	13.5	78.7	289.5	444.0	732.7	26.8	132.6	146.0
	Noncorporate, total	95	2	0.3	3.2	0.2	0.4	2.5	7.0	11.0	17.9	0.6	3.3	3.1
	Individual	62	–	0.1	1.4	0.1	0.2	1.0	3.1	3.4	6.5	0.4	1.0	1.0
	Partnership	31	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
34	**FABRICATED METAL PRODUCTS**	**33 712**	**12 739**	**1 555.7**	**21 035.9**	**1 191.6**	**2 373.8**	**14 428.8**	**45 511.5**	**45 384.8**	**90 023.5**	**2 606.1**	**14 111.8**	**15 306.2**
	Type of organization:													
	Multiunit companies, total	59	5 356	1 034.6	14 725.8	783.2	1 572.4	10 252.7	33 333.4	34 291.0	66 931.3	1 854.5	10 919.2	11 814.9
	Corp. ownership or control	6 836	5 340	1 032.1	14 691.7	781.0	1 568.0	10 235.5	33 239.3	34 143.9	66 687.3	1 851.3	10 877.9	11 771.8
	Noncorporate ownership	23	16	2.5	34.1	2.2	4.4	27.2	94.1	148.1	244.1	3.2	41.3	43.0
	Single unit companies, total	26 853	7 383	521.1	6 310.1	408.4	801.4	4 176.2	12 178.1	11 093.8	23 092.2	751.6	3 192.7	3 491.3
	Corp. ownership or control	21 713	7 154	496.8	6 052.0	388.3	764.9	3 998.2	11 644.7	10 659.2	22 119.7	725.2	3 021.1	3 322.3
	Noncorporate ownership	5 140	229	24.3	258.1	20.1	36.5	178.0	533.4	434.7	972.5	26.4	171.5	169.0
	Legal form of organization:													
	Corporate	49	12 494	1 528.9	20 743.7	1 189.3	2 333.0	14 223.6	44 884.9	44 802.1	88 806.9	2 576.5	13 899.0	15 094.1
	Noncorporate, total	5 163	245	26.8	292.2	22.3	40.9	205.2	627.6	582.7	1 216.6	29.7	212.9	212.0
	Individual	3 561	100	13.3	137.0	11.3	20.1	94.7	274.8	229.2	502.7	13.3	65.9	68.1
	Partnership	1 376	105	9.2	104.0	7.3	13.8	71.5	223.5	172.1	400.9	10.8	92.6	88.2
	Other and unknown	226	40	4.3	51.1	3.6	6.9	38.9	129.3	181.4	313.0	5.6	54.4	55.7
3411	**Metal Cans**	**403**	**300**	**59.8**	**1 066.3**	**50.2**	**106.4**	**870.8**	**3 254.3**	**5 068.7**	**8 242.8**	**176.9**	**889.0**	**1 032.9**
	Type of organization:													
	Multiunit companies, total	311	278	58.3	1 046.8	48.9	103.9	857.8	3 211.7	5 000.0	8 132.0	174.4	874.5	1 016.8
	Corp. ownership or control	307	274	57.7	1 035.5	48.4	102.9	848.0	3 167.8	4 906.7	7 992.0	(D)	853.8	996.3
	Noncorporate ownership	4	4	0.6	11.3	0.5	1.0	9.7	43.9	93.3	140.1	(D)	20.7	20.6
	Single unit companies, total	92	22	1.6	19.5	1.3	2.5	13.0	42.6	68.8	110.8	2.5	14.4	16.1
	Corp. ownership or control	72	21	1.5	18.7	1.2	2.4	12.4	40.7	66.0	106.1	2.4	13.8	15.5
	Noncorporate ownership	20	1	0.1	0.8	(Z)	0.1	0.6	1.9	2.8	4.7	0.1	0.6	0.6
	Legal form of organization:													
	Corporate	379	295	59.2	1 054.2	49.6	105.3	860.5	3 208.5	4 972.7	8 098.1	175.8	867.6	1 011.7
	Noncorporate, total	24	5	0.6	12.0	0.5	1.1	10.3	45.8	96.1	144.8	1.1	21.4	21.2
	Individual	17	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	4	0.6	11.3	0.5	1.0	9.7	43.9	93.3	140.1	(D)	20.7	20.6
3412	**Metal Barrels, Drums, and Pails**	**184**	**113**	**12.4**	**180.3**	**9.8**	**20.1**	**128.8**	**389.6**	**551.2**	**937.1**	**31.8**	**132.0**	**135.0**
	Type of organization:													
	Multiunit companies, total	112	88	9.8	144.8	7.7	15.8	103.2	315.9	464.2	777.1	27.7	111.3	111.7
	Corp. ownership or control	112	88	9.8	144.8	7.7	15.8	103.2	315.9	464.2	777.1	27.7	111.3	111.7
	Single unit companies, total	72	25	2.6	35.5	2.1	4.3	25.6	73.7	87.0	160.1	4.2	20.7	23.3
	Corp. ownership or control	61	24	2.5	34.5	2.1	4.2	24.8	72.4	84.1	155.9	(D)	20.1	22.7
	Noncorporate ownership	11	1	0.1	1.0	0.1	0.1	0.8	1.3	2.9	4.2	(D)	0.6	0.6
	Legal form of organization:													
	Corporate	173	112	12.4	179.3	9.8	20.0	128.1	388.3	548.3	932.9	(D)	131.4	134.4
	Noncorporate, total	11	1	0.1	1.0	0.1	0.1	0.8	1.3	2.9	4.2	(D)	0.6	0.6
	Individual	8	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3421	**Cutlery**	**130**	**62**	**14.9**	**159.6**	**12.1**	**23.5**	**118.3**	**492.0**	**219.1**	**711.4**	**23.3**	**129.0**	**132.1**
	Type of organization:													
	Multiunit companies, total	33	29	10.0	108.2	8.0	15.5	81.5	357.5	138.3	500.4	15.9	91.4	87.8
	Corp. ownership or control	33	29	10.0	108.2	8.0	15.5	81.5	357.5	138.3	500.4	15.9	91.4	87.8
	Single unit companies, total	97	33	4.9	51.4	4.1	8.0	36.8	134.6	80.8	211.0	7.4	37.6	44.4
	Corp. ownership or control	80	33	4.8	50.8	4.0	7.9	36.3	132.8	79.9	208.4	7.3	37.1	43.9
	Noncorporate ownership	17	–	0.1	0.6	0.1	0.1	0.4	1.7	0.9	2.6	0.1	0.5	0.5
	Legal form of organization:													
	Corporate	113	62	14.8	159.0	12.1	23.4	117.9	490.3	218.2	708.8	23.2	128.4	131.6
	Noncorporate, total	17	–	0.1	0.6	0.1	0.1	0.4	1.7	0.9	2.6	0.1	0.5	0.5
	Individual	12	–	(Z)	0.3	(Z)	0.1	0.2	0.8	0.5	1.2	(Z)	0.2	0.2
	Partnership	5	–	(Z)	0.3	(Z)	0.1	0.2	1.0	0.5	1.4	(Z)	0.3	0.3
3423	**Hand and Edge Tools, N.E.C.**	**724**	**296**	**47.0**	**566.4**	**36.9**	**72.8**	**394.7**	**1 421.4**	**898.7**	**2 279.2**	**72.0**	**437.3**	**487.4**
	Type of organization:													
	Multiunit companies, total	163	141	33.3	408.5	25.8	51.4	285.8	1 085.9	682.4	1 732.3	57.5	332.4	376.8
	Corp. ownership or control	163	141	33.3	408.5	25.8	51.4	285.8	1 085.9	682.4	1 732.3	57.5	332.4	376.8
	Single unit companies, total	561	155	13.7	158.0	11.0	21.4	108.9	335.5	216.4	546.9	14.6	104.9	110.7
	Corp. ownership or control	481	152	13.3	154.6	10.7	20.8	106.5	328.4	211.3	534.8	14.3	103.0	108.6
	Noncorporate ownership	80	3	0.4	3.3	0.3	0.6	2.4	7.1	5.1	12.0	0.3	1.9	2.1

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS—Con.**													
3423	**Hand and Edge Tools, N.E.C.—Con.**													
	Legal form of organization:													
	Corporate	644	293	46.6	563.1	36.6	72.2	392.3	1 414.3	893.7	2 267.2	71.7	435.4	485.3
	Noncorporate, total	80	3	0.4	3.3	0.3	0.6	2.4	7.1	5.1	12.0	0.3	1.9	2.1
	Individual	55	2	0.3	2.2	0.2	0.4	1.6	4.6	3.8	8.2	0.2	1.1	1.3
	Partnership	25	1	0.1	1.1	0.1	0.2	0.8	2.6	1.3	3.8	0.1	0.7	0.7
3425	**Hand Saws and Saw Blades**	**115**	**55**	**7.6**	**94.3**	**5.7**	**11.4**	**62.7**	**230.6**	**137.6**	**363.3**	**13.4**	**68.3**	**75.5**
	Type of organization:													
	Multiunit companies, total	32	29	5.8	74.2	4.4	8.6	49.4	182.8	109.6	287.9	11.6	55.0	60.9
	Corp. ownership or control	32	29	5.8	74.2	4.4	8.6	49.4	182.8	109.6	287.9	11.6	55.0	60.9
	Single unit companies, total	83	26	1.8	20.1	1.4	2.8	13.3	47.8	28.0	75.3	1.8	13.3	14.6
	Corp. ownership or control	72	25	1.7	19.6	1.3	2.7	13.0	46.7	27.3	73.6	1.7	13.0	14.2
	Noncorporate ownership	11	1	0.1	0.4	(Z)	0.1	0.3	1.1	0.7	1.8	0.1	0.4	0.4
	Legal form of organization:													
	Corporate	104	54	7.5	93.8	5.7	11.3	62.4	229.5	136.9	361.5	13.3	68.0	75.1
	Noncorporate, total	11	1	0.1	0.4	(Z)	0.1	0.3	1.1	0.7	1.8	0.1	0.4	0.4
	Individual	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3429	**Hardware, N.E.C.**	**1 168**	**464**	**99.2**	**1 359.0**	**77.9**	**156.8**	**977.7**	**3 032.6**	**2 239.0**	**5 202.6**	**190.2**	**750.6**	**849.7**
	Type of organization:													
	Multiunit companies, total	304	246	80.2	1 146.3	62.7	127.9	837.7	2 585.1	1 864.3	4 387.1	163.2	623.6	711.5
	Corp. ownership or control	304	246	80.2	1 146.3	62.7	127.9	837.7	2 585.1	1 864.3	4 387.1	163.2	623.6	711.5
	Single unit companies, total	864	218	19.0	212.7	15.2	28.8	140.0	447.5	374.7	815.6	27.0	127.1	138.2
	Corp. ownership or control	730	215	18.6	208.1	14.9	28.2	136.7	437.4	367.4	798.1	26.5	124.2	135.3
	Noncorporate ownership	134	3	0.4	4.6	0.4	0.6	3.3	10.1	7.3	17.4	0.5	2.8	2.8
	Legal form of organization:													
	Corporate	1 034	461	98.8	1 354.4	77.5	156.1	974.4	3 022.5	2 231.8	5 185.2	189.8	747.8	846.9
	Noncorporate, total	134	3	0.4	4.6	0.4	0.6	3.3	10.1	7.3	17.4	0.5	2.8	2.8
	Individual	98	2	0.3	3.3	0.3	0.4	2.3	7.0	5.0	11.9	0.3	1.9	1.9
	Partnership	30	1	0.1	1.3	0.1	0.2	0.9	3.0	2.2	5.2	0.1	0.9	0.9
	Other and unknown	6	–	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.1	0.3	(Z)	0.1	(Z)
3431	**Metal Sanitary Ware**	**101**	**37**	**8.1**	**109.7**	**6.7**	**14.4**	**87.5**	**248.7**	**223.6**	**477.6**	**11.3**	**72.1**	**65.5**
	Type of organization:													
	Multiunit companies, total	34	28	7.2	99.2	6.0	13.0	79.9	230.0	202.5	437.8	10.4	64.8	58.4
	Corp. ownership or control	34	28	7.2	99.2	6.0	13.0	79.9	230.0	202.5	437.8	10.4	64.8	58.4
	Single unit companies, total	67	9	0.9	10.4	0.7	1.4	7.6	18.8	21.1	39.8	0.9	7.4	7.1
	Corp. ownership or control	53	9	0.9	10.1	0.7	1.4	7.3	18.0	20.3	38.3	0.9	7.1	6.9
	Noncorporate ownership	14	–	(Z)	0.4	(Z)	0.1	0.3	0.8	0.8	1.5	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	87	37	8.1	109.3	6.7	14.4	87.2	247.9	222.9	476.0	11.3	71.9	65.2
	Noncorporate, total	14	–	(Z)	0.4	(Z)	0.1	0.3	0.8	0.8	1.5	(Z)	0.3	0.3
	Individual	6	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.3	0.6	(Z)	0.1	0.1
	Partnership	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3432	**Plumbing Fittings and Brass Goods**	**213**	**110**	**19.3**	**215.0**	**15.3**	**30.0**	**145.0**	**579.3**	**601.6**	**1 166.4**	**30.3**	**219.6**	**239.8**
	Type of organization:													
	Multiunit companies, total	78	68	15.1	168.7	11.9	23.7	113.3	474.5	489.6	949.6	24.1	183.0	201.5
	Corp. ownership or control	78	68	15.1	168.7	11.9	23.7	113.3	474.5	489.6	949.6	24.1	183.0	201.5
	Single unit companies, total	135	42	4.2	46.3	3.4	6.2	31.7	104.8	112.0	216.8	6.2	36.7	38.3
	Corp. ownership or control	120	40	4.0	44.1	3.3	5.9	29.8	101.7	106.3	207.8	(D)	34.1	35.9
	Noncorporate ownership	15	2	0.2	2.2	0.1	0.3	1.9	3.1	5.7	9.0	(D)	2.6	2.3
	Legal form of organization:													
	Corporate	198	108	19.2	212.8	15.1	29.7	143.1	576.2	595.9	1 157.4	(D)	217.0	237.5
	Noncorporate, total	15	2	0.2	2.2	0.1	0.3	1.9	3.1	5.7	9.0	(D)	2.6	2.3
	Individual	12	1	0.1	1.4	0.1	0.2	1.3	2.0	3.8	5.9	0.2	1.1	0.9
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3433	**Heating Equipment, Except Electric**	**701**	**194**	**25.8**	**312.2**	**18.7**	**36.0**	**190.3**	**745.6**	**716.7**	**1 443.6**	**32.4**	**234.0**	**262.6**
	Type of organization:													
	Multiunit companies, total	121	94	17.1	205.7	12.4	23.8	127.9	508.1	490.6	986.8	22.2	158.7	179.2
	Corp. ownership or control	121	94	17.1	205.7	12.4	23.8	127.9	508.1	490.6	986.8	22.2	158.7	179.2
	Single unit companies, total	580	100	8.6	106.4	6.3	12.2	62.4	237.4	226.1	456.8	10.3	75.2	83.4
	Corp. ownership or control	496	95	8.3	103.3	6.0	11.7	60.4	230.8	219.7	443.9	10.0	72.8	81.0
	Noncorporate ownership	84	5	0.3	3.1	0.3	0.5	2.0	6.6	6.4	12.9	0.2	2.4	2.5
	Legal form of organization:													
	Corporate	617	189	25.5	309.0	18.4	35.5	188.3	739.0	710.3	1 430.7	32.2	231.6	260.2
	Noncorporate, total	84	5	0.3	3.1	0.3	0.5	2.0	6.6	6.4	12.9	0.2	2.4	2.5
	Individual	42	3	0.2	1.4	0.1	0.3	0.9	3.0	2.8	5.8	0.1	1.1	1.1
	Partnership	37	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS—Con.**													
3441	**Fabricated Structural Metal**	**2 462**	**1 074**	**99.3**	**1 313.6**	**72.8**	**144.2**	**836.9**	**2 559.8**	**3 018.0**	**5 505.2**	**144.1**	**1 132.6**	**1 220.9**
	Type of organization:													
	Multiunit companies, total	452	354	51.8	680.1	37.8	74.7	440.8	1 386.8	1 658.1	2 989.7	68.8	736.5	795.0
	Corp. ownership or control	452	354	51.8	680.1	37.8	74.7	440.8	1 386.8	1 658.1	2 989.7	68.8	736.5	795.0
	Single unit companies, total	2 010	720	47.5	633.5	34.9	69.5	396.1	1 173.0	1 359.9	2 515.5	75.4	396.2	425.9
	Corp. ownership or control	1 771	703	46.0	615.6	33.7	67.3	384.1	1 137.3	1 322.9	2 443.2	72.9	384.7	413.8
	Noncorporate ownership	239	17	1.5	17.9	1.2	2.2	12.0	35.6	37.0	72.3	2.4	11.5	12.1
	Legal form of organization:													
	Corporate	2 223	1 057	97.8	1 295.7	71.6	142.0	824.9	2 524.1	2 981.0	5 432.9	141.7	1 121.2	1 208.8
	Noncorporate, total	239	17	1.5	17.9	1.2	2.2	12.0	35.6	37.0	72.3	2.4	11.5	12.1
	Individual	174	10	1.0	11.4	0.8	1.4	7.5	22.4	24.1	46.4	1.6	8.2	8.5
	Partnership	51	6	0.5	5.7	0.4	0.7	4.0	11.5	11.2	22.5	0.6	2.8	3.0
	Other and unknown	14	1	0.1	0.8	0.1	0.1	0.5	1.8	1.7	3.4	0.3	0.5	0.6
3442	**Metal Doors, Sash, and Trim**	**1 672**	**644**	**65.8**	**671.3**	**50.1**	**97.0**	**425.0**	**1 418.3**	**1 751.5**	**3 135.6**	**70.7**	**438.8**	**519.0**
	Type of organization:													
	Multiunit companies, total	403	298	40.8	414.2	31.0	60.3	267.0	911.8	1 137.0	2 025.3	47.9	290.2	342.8
	Corp. ownership or control	398	295	40.4	410.6	30.8	59.8	264.5	904.7	1 129.2	2 010.5	47.3	287.7	340.1
	Noncorporate ownership	5	3	0.3	3.6	0.3	0.6	2.6	7.0	7.8	14.8	0.6	2.5	2.7
	Single unit companies, total	1 269	346	25.0	257.1	19.1	36.7	157.9	506.6	614.6	1 110.3	22.9	148.7	176.2
	Corp. ownership or control	1 023	337	23.6	243.4	17.9	34.7	148.6	482.7	587.6	1 059.6	22.2	140.9	168.1
	Noncorporate ownership	246	9	1.4	13.7	1.1	2.0	9.3	23.9	27.0	50.7	0.7	7.8	8.1
	Legal form of organization:													
	Corporate	1 421	632	64.1	654.0	48.7	94.4	413.1	1 387.4	1 716.7	3 070.2	69.4	428.6	508.1
	Noncorporate, total	251	12	1.7	17.3	1.4	2.6	11.9	30.9	34.8	65.5	1.3	10.3	10.9
	Individual	181	1	0.5	5.1	0.4	0.7	3.3	10.6	12.4	23.0	0.4	3.4	3.5
	Partnership	54	6	0.8	7.8	0.6	1.2	5.5	11.5	12.7	24.0	0.2	3.8	4.1
	Other and unknown	16	5	0.4	4.4	0.3	0.7	3.0	8.8	9.7	18.5	0.7	3.1	3.3
3443	**Fabricated Plate Work (Boiler Shops)**	**1 864**	**944**	**123.5**	**1 777.8**	**87.7**	**171.6**	**1 125.8**	**4 075.3**	**3 395.3**	**7 432.4**	**179.8**	**1 576.3**	**1 566.9**
	Type of organization:													
	Multiunit companies, total	490	399	86.9	1 253.3	60.3	116.7	782.3	3 087.3	2 575.9	5 633.0	125.1	1 230.0	1 204.3
	Corp. ownership or control	490	399	86.9	1 253.3	60.3	116.7	782.3	3 087.3	2 575.9	5 633.0	125.1	1 230.0	1 204.3
	Single unit companies, total	1 374	545	36.6	524.5	27.4	54.9	343.5	987.9	819.4	1 799.5	54.8	346.4	362.6
	Corp. ownership or control	1 179	529	34.8	501.4	26.2	52.6	329.5	929.7	784.5	1 699.6	52.3	290.1	313.5
	Noncorporate ownership	195	16	1.7	23.1	1.2	2.2	14.0	58.2	34.9	99.9	2.5	56.3	49.1
	Legal form of organization:													
	Corporate	1 669	928	121.7	1 754.7	86.5	169.3	1 111.8	4 017.1	3 360.3	7 332.5	177.3	1 520.0	1 517.8
	Noncorporate, total	195	16	1.7	23.1	1.2	2.2	14.0	58.2	34.9	99.9	2.5	56.3	49.1
	Individual	134	5	0.6	7.4	0.5	0.9	5.1	15.3	11.5	26.7	0.7	4.3	4.5
	Partnership	55	9	0.9	13.6	0.6	1.1	7.5	38.1	19.4	64.4	1.6	50.3	42.9
	Other and unknown	6	2	0.2	2.1	0.1	0.2	1.4	4.7	4.0	8.8	0.2	1.7	1.7
3444	**Sheet Metal Work**	**3 430**	**1 008**	**77.4**	**980.2**	**56.7**	**109.5**	**636.6**	**2 095.1**	**2 809.0**	**4 863.5**	**110.6**	**771.5**	**841.9**
	Type of organization:													
	Multiunit companies, total	535	357	35.3	443.1	25.2	48.3	283.9	1 086.3	1 759.0	2 817.9	60.8	504.4	546.3
	Corp. ownership or control	533	355	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 895	651	42.2	537.2	31.5	61.1	352.7	1 008.7	1 050.0	2 045.6	49.8	267.1	295.6
	Corp. ownership or control	2 236	626	39.6	507.1	29.4	57.4	331.9	950.3	980.8	1 917.8	46.8	248.4	276.9
	Noncorporate ownership	659	25	2.5	30.0	2.1	3.7	20.8	58.4	69.2	127.8	3.1	18.8	18.7
	Legal form of organization:													
	Corporate	2 769	981	74.8	949.3	54.6	105.6	615.3	2 032.9	2 727.5	4 719.7	107.4	748.0	817.6
	Noncorporate, total	661	27	2.6	30.9	2.1	3.8	21.3	62.2	81.5	143.9	3.2	23.5	24.3
	Individual	499	8	1.4	16.8	1.1	1.9	11.4	32.5	39.2	71.4	1.7	9.4	9.7
	Partnership	130	13	0.9	10.9	0.7	1.4	7.8	21.5	21.8	43.4	1.1	5.9	5.9
	Other and unknown	32	6	0.4	3.2	0.3	0.5	2.2	8.2	20.5	29.1	0.5	8.3	8.7
3446	**Architectural Metal Work**	**1 511**	**225**	**20.8**	**247.7**	**15.1**	**29.4**	**152.3**	**505.5**	**450.8**	**947.1**	**22.2**	**156.7**	**167.3**
	Type of organization:													
	Multiunit companies, total	122	80	9.3	111.9	6.5	12.9	69.7	241.2	245.5	486.0	8.4	89.9	89.7
	Corp. ownership or control	120	80	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 389	145	11.5	135.8	8.5	16.4	82.6	264.3	205.3	461.1	13.9	66.8	77.7
	Corp. ownership or control	826	141	10.2	121.0	7.4	14.5	72.9	233.1	181.9	406.6	12.6	59.3	69.9
	Noncorporate ownership	563	4	1.3	14.8	1.1	1.9	9.7	31.2	23.4	54.5	1.2	7.6	7.8
	Legal form of organization:													
	Corporate	946	221	19.5	232.6	14.0	27.4	142.4	473.6	426.7	891.2	20.8	148.9	159.3
	Noncorporate, total	565	4	1.3	15.1	1.1	2.0	9.9	31.9	24.1	55.9	1.4	7.9	8.0
	Individual	460	1	0.9	10.0	0.8	1.3	6.5	21.5	16.8	38.2	0.7	5.0	5.1
	Partnership	87	3	0.4	4.2	0.3	0.5	2.9	8.5	5.8	14.3	0.4	2.4	2.4
	Other and unknown	18	–	0.1	0.9	0.1	0.1	0.6	1.9	1.5	3.3	0.3	0.5	0.5
3448	**Prefabricated Metal Buildings**	**466**	**199**	**22.7**	**289.7**	**15.9**	**31.6**	**174.9**	**694.5**	**1 100.6**	**1 779.2**	**32.2**	**296.1**	**304.6**
	Type of organization:													
	Multiunit companies, total	127	111	16.3	215.2	11.3	22.6	130.3	536.4	879.5	1 402.7	22.8	236.2	240.8
	Corp. ownership or control	126	110	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	339	88	6.4	74.4	4.6	8.9	44.6	158.1	221.0	376.5	9.4	59.9	63.8
	Corp. ownership or control	278	88	6.2	73.1	4.5	8.8	43.8	154.4	215.2	367.0	9.2	58.3	62.2
	Noncorporate ownership	61	–	0.1	1.4	0.1	0.2	0.8	3.7	5 8	9.4	0.2	1.5	1.6

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS—Con.**													
3448	**Prefabricated Metal Buildings—Con.**													
	Legal form of organization:													
	Corporate	404	198	22.4	286.3	15.6	31.1	172.6	687.8	1 086.1	1 757.7	31.8	288.9	297.4
	Noncorporate, total	62	1	0.3	3.4	0.2	0.4	2.3	6.7	14.5	21.5	0.4	7.2	7.2
	Individual	41	–	0.1	1.0	0.1	0.1	0.6	2.3	3.7	5.9	0.1	1.0	1.0
	Partnership	13	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3449	**Miscellaneous Metal Work -**	**412**	**185**	**16.3**	**211.5**	**10.2**	**20.2**	**115.7**	**436.9**	**893.6**	**1 330.8**	**20.5**	**204.8**	**211.8**
	Type of organization:													
	Multiunit companies, total	190	134	12.7	168.2	7.7	15.4	90.1	360.6	733.4	1 096.0	17.0	171.5	172.5
	Corp. ownership or control	190	134	12.7	168.2	7.7	15.4	90.1	360.6	733.4	1 096.0	17.0	171.5	172.5
	Single unit companies, total	222	51	3.5	43.3	2.5	4.7	25.6	76.3	160.2	234.8	3.5	33.3	39.3
	Corp. ownership or control	182	50	3.4	42.0	2.4	4.6	24.8	73.5	156.7	228.6	3.4	32.3	38.3
	Noncorporate ownership	40	1	0.1	1.3	0.1	0.1	0.7	2.7	3.5	6.2	0.1	1.0	1.0
	Legal form of organization:													
	Corporate	372	184	16.1	210.2	10.1	20.0	115.0	434.2	890.1	1 324.6	20.3	203.7	210.8
	Noncorporate, total	40	1	0.1	1.3	0.1	0.1	0.7	2.7	3.5	6.2	0.1	1.0	1.0
	Individual	31	1	0.1	0.9	0.1	0.1	0.5	1.7	2.1	3.8	0.1	0.6	0.7
	Partnership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3451	**Screw Machine Products -**	**1 770**	**654**	**43.8**	**551.6**	**36.0**	**74.3**	**395.5**	**1 023.9**	**762.2**	**1 771.7**	**71.9**	**207.9**	**230.6**
	Type of organization:													
	Multiunit companies, total	156	118	11.2	147.2	8.9	19.0	106.0	289.1	217.7	503.0	20.5	75.8	82.7
	Corp. ownership or control	156	118	11.2	147.2	8.9	19.0	106.0	289.1	217.7	503.0	20.5	75.8	82.7
	Single unit companies, total	1 614	536	32.6	404.4	27.1	55.3	289.5	734.8	544.4	1 268.8	51.3	132.1	147.8
	Corp. ownership or control	1 364	516	31.1	388.3	25.8	53.0	277.5	699.9	518.6	1 208.4	49.6	125.9	141.1
	Noncorporate ownership	250	20	1.5	16.1	1.3	2.4	12.0	34.9	25.8	60.4	1.7	6.2	6.8
	Legal form of organization:													
	Corporate	1 520	634	42.3	535.5	34.7	71.9	383.5	989.0	736.3	1 711.3	70.1	201.7	223.8
	Noncorporate, total	250	20	1.5	16.1	1.3	2.4	12.0	34.9	25.8	60.4	1.7	6.2	6.8
	Individual	176	8	0.8	8.3	0.7	1.3	6.2	16.8	11.7	28.4	1.0	2.9	3.1
	Partnership	70	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3452	**Bolts, Nuts, Rivets, and Washers**	**857**	**448**	**60.9**	**862.4**	**45.6**	**93.9**	**587.6**	**1 840.3**	**1 510.1**	**3 319.5**	**112.3**	**673.3**	**714.3**
	Type of organization:													
	Multiunit companies, total	286	241	46.3	671.8	34.4	71.4	463.8	1 447.0	1 173.0	2 594.0	88.1	550.6	583.2
	Corp. ownership or control	286	241	46.3	671.8	34.4	71.4	463.8	1 447.0	1 173.0	2 594.0	88.1	550.6	583.2
	Single unit companies, total	571	207	14.7	190.6	11.2	22.5	123.8	393.3	337.1	725.5	24.2	122.8	131.1
	Corp. ownership or control	510	198	14.1	184.6	10.7	21.7	119.4	380.2	328.2	703.7	23.7	119.3	127.5
	Noncorporate ownership	61	9	0.5	6.0	0.4	0.8	4.4	13.1	8.9	21.8	0.5	3.5	3.6
	Legal form of organization:													
	Corporate	796	439	60.4	856.4	45.2	93.0	583.2	1 827.2	1 501.2	3 297.7	111.8	669.9	710.7
	Noncorporate, total	61	9	0.5	6.0	0.4	0.8	4.4	13.1	8.9	21.8	0.5	3.5	3.6
	Individual	41	5	0.3	3.7	0.3	0.5	2.7	8.5	5.2	13.5	0.3	2.3	2.6
	Partnership	18	4	0.2	2.3	0.2	0.3	1.7	4.6	3.7	8.3	0.1	1.1	1.0
	Other and unknown	2	–	–	–	–	–	–	(Z)	–	–	–	0.1	–
3462	**Iron and Steel Forgings -**	**358**	**231**	**39.1**	**641.5**	**31.0**	**60.8**	**474.8**	**1 301.4**	**1 505.4**	**2 795.7**	**126.7**	**429.8**	**452.7**
	Type of organization:													
	Multiunit companies, total	144	130	29.9	499.2	23.6	46.6	375.5	1 016.0	1 158.9	2 169.4	86.6	333.9	352.2
	Corp. ownership or control	144	130	29.9	499.2	23.6	46.6	375.5	1 016.0	1 158.9	2 169.4	86.6	333.9	352.2
	Single unit companies, total	214	101	9.3	142.2	7.4	14.2	99.3	285.4	346.5	626.3	40.0	95.9	100.5
	Corp. ownership or control	195	99	9.1	139.8	7.2	14.0	97.6	280.8	340.8	616.1	39.8	94.6	99.4
	Noncorporate ownership	19	2	0.2	2.4	0.1	0.2	1.7	4.6	5.7	10.3	0.2	1.3	1.1
	Legal form of organization:													
	Corporate	339	229	39.0	639.1	30.9	60.6	473.1	1 296.8	1 499.7	2 785.4	126.5	428.5	451.6
	Noncorporate, total	19	2	0.2	2.4	0.1	0.2	1.7	4.6	5.7	10.3	0.2	1.3	1.1
	Individual	11	1	0.1	0.8	(Z)	0.1	0.7	1.5	3.2	4.7	0.1	0.3	0.3
	Partnership	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3463	**Nonferrous Forgings**	**47**	**31**	**5.4**	**93.7**	**4.2**	**8.2**	**54.8**	**240.7**	**234.9**	**456.7**	**13.7**	**101.1**	**123.8**
	Type of organization:													
	Multiunit companies, total	21	20	4.8	84.5	3.7	7.3	59.8	222.1	221.4	425.2	13.3	96.7	118.4
	Corp. ownership or control	21	20	4.8	84.5	3.7	7.3	59.8	222.1	221.4	425.2	13.3	96.7	118.4
	Single unit companies, total	26	11	0.6	9.1	0.5	0.9	5.0	18.6	13.6	31.5	0.5	4.4	5.3
	Corp. ownership or control	24	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	45	31	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3465	**Automotive Stampings**	**591**	**432**	**132.4**	**2 446.0**	**112.5**	**236.8**	**1 956.6**	**4 654.5**	**5 130.8**	**9 739.2**	**292.2**	**872.8**	**948.3**
	Type of organization:													
	Multiunit companies, total	236	214	114.1	2 204.7	97.8	207.6	1 794.2	4 167.8	4 523.3	8 652.1	245.2	761.7	824.5
	Corp. ownership or control	235	213	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	355	218	18.2	241.3	14.7	29.2	162.4	486.7	607.6	1 087.2	47.0	111.1	123.9
	Corp. ownership or control	339	213	17.9	237.9	14.5	28.8	159.7	479.3	599.8	1 072.2	46.8	109.7	121.9
	Noncorporate ownership	16	5	0.3	3.4	0.2	0.4	2.6	7.4	7.8	14.9	0.1	1.4	2.0

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS**—Con.													
3465	**Automotive Stampings**—Con.													
	Legal form of organization:													
	Corporate	574	426	131.6	2 434.7	111.8	235.6	1 948.0	4 631.6	5 108.1	9 694.2	291.6	868.8	943.5
	Noncorporate, total	17	6	0.8	11.3	0.7	1.3	8.6	22.9	22.7	45.1	0.6	4.0	4.8
	Individual	9	2	0.1	1.8	0.1	0.2	1.4	2.9	3.0	5.8	(Z)	1.0	1.2
	Partnership	6	3	0.1	1.6	0.1	0.2	1.2	4.5	4.8	9.1	0.1	0.4	0.8
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3466	**Crowns and Closures**	**56**	**43**	**7.9**	**104.8**	**6.5**	**12.6**	**80.2**	**265.4**	**283.2**	**536.9**	**17.1**	**99.2**	**121.0**
	Type of organization:													
	Multiunit companies, total	31	29	6.3	86.7	5.2	10.0	66.3	228.1	243.5	462.0	14.7	87.6	107.9
	Corp. ownership or control	31	29	6.3	86.7	5.2	10.0	66.3	228.1	243.5	462.0	14.7	87.6	107.9
	Single unit companies, total	25	14	1.6	18.1	1.3	2.6	13.9	37.3	39.6	74.9	2.4	11.6	13.1
	Corp. ownership or control	22	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	53	42	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3469	**Metal Stampings, N.E.C.**	**2 663**	**1 138**	**103.2**	**1 225.4**	**82.0**	**161.2**	**842.5**	**2 451.5**	**2 318.0**	**4 735.7**	**154.7**	**657.2**	**715.7**
	Type of organization:													
	Multiunit companies, total	422	339	51.2	604.8	39.9	78.1	417.1	1 330.4	1 350.1	2 659.1	82.7	431.1	467.3
	Corp. ownership or control	421	338	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 241	799	52.0	620.5	42.1	83.1	425.4	1 121.0	967.9	2 076.7	72.0	226.1	248.5
	Corp. ownership or control	1 938	779	50.0	602.9	40.5	80.4	412.9	1 088.7	936.4	2 012.7	70.2	217.4	239.6
	Noncorporate ownership	303	20	1.9	17.6	1.6	2.7	12.5	32.4	31.5	64.0	1.8	8.8	8.9
	Legal form of organization:													
	Corporate	2 359	1 117	100.8	1 203.1	80.0	157.5	825.8	2 405.2	2 279.9	4 652.3	152.7	645.0	702.8
	Noncorporate, total	304	21	2.4	22.3	2.0	3.7	16.7	46.2	38.1	83.4	2.0	12.1	12.9
	Individual	207	10	0.9	9.3	0.8	1.3	6.7	17.3	16.2	33.5	1.0	4.3	4.4
	Partnership	82	6	0.6	6.0	0.5	1.0	4.4	10.1	11.4	21.4	0.6	3.0	3.0
	Other and unknown	15	5	0.9	7.0	0.7	1.3	5.6	18.9	10.5	28.5	0.4	4.9	5.5
3471	**Plating and Polishing**	**3 447**	**904**	**61.2**	**634.8**	**51.2**	**101.3**	**446.1**	**1 181.8**	**674.1**	**1 848.5**	**73.2**	**112.5**	**128.3**
	Type of organization:													
	Multiunit companies, total	297	186	14.3	160.0	11.7	23.8	112.4	322.7	266.2	585.4	16.3	51.0	55.9
	Corp. ownership or control	295	184	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	3 150	718	46.9	474.8	39.5	77.4	333.7	859.1	407.9	1 263.1	56.9	61.5	72.3
	Corp. ownership or control	2 349	677	42.7	436.4	35.8	70.6	305.8	783.1	379.9	1 159.2	53.1	56.2	66.7
	Noncorporate ownership	801	41	4.2	38.4	3.7	6.8	27.9	76.0	28.0	103.9	3.8	5.3	5.6
	Legal form of organization:													
	Corporate	2 644	861	56.8	594.5	47.3	94.1	417.1	1 101.7	644.1	1 738.7	69.4	106.3	121.6
	Noncorporate, total	803	43	4.4	40.3	3.9	7.1	29.0	80.1	30.0	109.9	3.8	6.2	6.6
	Individual	545	22	2.6	22.0	2.3	4.1	16.0	43.9	15.3	59.2	1.7	3.0	3.2
	Partnership	230	17	1.5	14.9	1.3	2.4	10.8	29.5	11.5	40.9	2.0	2.1	2.2
	Other and unknown	28	4	0.4	3.4	0.3	0.6	2.2	6.7	3.2	9.9	0.1	1.1	1.2
3479	**Metal Coating and Allied Services**	**1 648**	**469**	**32.3**	**373.7**	**25.9**	**52.2**	**260.2**	**781.1**	**831.7**	**1 607.7**	**47.9**	**139.2**	**159.0**
	Type of organization:													
	Multiunit companies, total	269	174	13.7	177.0	10.5	22.0	124.5	441.5	602.3	1 040.8	27.8	96.4	111.6
	Corp. ownership or control	267	173	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 379	295	18.6	196.7	15.4	30.3	135.7	339.7	229.4	567.0	20.1	42.7	47.3
	Corp. ownership or control	1 042	287	17.4	184.4	14.4	28.2	126.8	315.6	213.5	527.2	18.9	39.9	44.1
	Noncorporate ownership	337	8	1.2	12.3	1.1	2.0	8.9	24.1	15.9	39.7	1.2	2.9	3.2
	Legal form of organization:													
	Corporate	1 309	460	31.0	360.4	24.8	50.0	250.4	755.6	815.3	1 565.9	46.6	136.2	155.6
	Noncorporate, total	339	9	1.3	13.3	1.2	2.2	9.8	25.5	16.5	41.8	1.3	3.0	3.3
	Individual	253	3	0.8	7.7	0.7	1.3	5.2	15.1	10.4	25.4	0.7	2.1	2.2
	Partnership	73	4	0.3	3.9	0.3	0.6	3.1	7.2	5.0	12.1	(D)	0.7	0.9
	Other and unknown	13	2	0.2	1.7	0.2	0.3	1.5	3.3	1.1	4.4	(D)	0.2	0.3
3482	**Small Arms Ammunition**	**65**	**16**	**10.3**	**138.1**	**7.7**	**15.4**	**95.3**	**247.5**	**183.0**	**436.2**	**42.9**	**121.9**	**117.6**
	Type of organization:													
	Multiunit companies, total	19	15	9.9	134.4	7.4	15.0	92.9	237.7	178.0	421.5	42.4	118.2	113.8
	Corp. ownership or control	19	15	9.9	134.4	7.4	15.0	92.9	237.7	178.0	421.5	42.4	118.2	113.8
	Single unit companies, total	46	1	0.3	3.7	0.3	0.5	2.5	9.8	4.9	14.7	0.4	3.8	3.8
	Corp. ownership or control	33	1	0.3	3.4	0.2	0.4	2.3	9.2	4.4	13.5	0.4	3.3	3.3
	Noncorporate ownership	13	–	(Z)	0.3	(Z)	(Z)	0.2	0.6	0.5	1.2	(Z)	0.5	0.5
	Legal form of organization:													
	Corporate	52	16	10.2	137.8	7.7	15.4	95.1	246.8	182.4	435.0	42.8	121.5	117.1
	Noncorporate, total	13	–	(Z)	0.3	(Z)	(Z)	0.2	0.6	0.5	1.2	(Z)	0.5	0.5
	Individual	12	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS—Con.**													
3483	**Ammunition, Except for Small Arms, N.E.C.**	**80**	**48**	**18.9**	**248.1**	**12.4**	**23.5**	**133.2**	**448.7**	**262.5**	**716.5**	**9.2**	**63.5**	**58.3**
	Type of organization:													
	Multiunit companies, total	45	40	18.3	241.6	11.9	22.6	128.1	437.5	253.9	697.3	8.4	60.0	54.7
	Corp. ownership or control	45	40	18.3	241.6	11.9	22.6	128.1	437.5	253.9	697.3	8.4	60.0	54.7
	Single unit companies, total	35	8	0.6	6.5	0.5	0.9	4.4	11.1	8.6	19.2	0.8	3.5	3.5
	Corp. ownership or control	27	8	0.6	6.4	0.5	0.9	4.4	11.0	8.4	18.9	(D)	3.5	3.5
	Noncorporate ownership	8	-	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.3	(D)	0.1	(Z)
	Legal form of organization:													
	Corporate	72	48	18.9	248.1	12.4	23.5	133.2	448.7	262.5	716.5	(D)	63.5	58.3
	Noncorporate, total	8	-	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.3	(D)	0.1	(Z)
	Individual	5	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	-	-	-	-	-	(Z)	-	-	-	0.1	-
3484	**Small Arms**	**112**	**46**	**17.5**	**237.8**	**13.1**	**27.1**	**157.3**	**481.5**	**286.7**	**754.9**	**20.5**	**153.5**	**166.7**
	Type of organization:													
	Multiunit companies, total	35	30	16.6	227.3	12.4	25.6	150.5	457.9	272.2	717.5	19.7	147.6	160.0
	Corp. ownership or control	35	30	16.6	227.3	12.4	25.6	150.5	457.9	272.2	717.5	19.7	147.6	160.0
	Single unit companies, total	77	16	0.9	10.6	0.7	1.5	6.8	23.6	14.5	37.5	0.8	5.9	6.7
	Corp. ownership or control	62	14	0.8	9.5	0.6	1.3	6.0	21.9	12.6	34.0	0.7	5.4	6.1
	Noncorporate ownership	15	2	0.1	1.1	0.1	0.2	0.8	1.7	1.9	3.5	(Z)	0.5	0.7
	Legal form of organization:													
	Corporate	97	44	17.4	236.7	13.0	26.9	156.5	479.8	284.8	751.4	20.4	153.0	166.1
	Noncorporate, total	15	2	0.1	1.1	0.1	0.2	0.8	1.7	1.9	3.5	(Z)	0.5	0.7
	Individual	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3489	**Ordnance and Accessories, N.E.C.**	**89**	**41**	**23.6**	**367.7**	**13.7**	**25.8**	**173.3**	**559.2**	**232.4**	**733.8**	**10.1**	**123.9**	**176.2**
	Type of organization:													
	Multiunit companies, total	29	27	22.6	356.3	13.0	24.5	166.9	537.6	211.8	691.4	9.0	117.1	169.7
	Corp. ownership or control	29	27	22.6	356.3	13.0	24.5	166.9	537.6	211.8	691.4	9.0	117.1	169.7
	Single unit companies, total	60	14	1.0	11.4	0.7	1.3	6.4	21.6	20.6	42.5	1.0	6.8	6.5
	Corp. ownership or control	52	14	1.0	11.2	0.7	1.3	6.3	21.3	20.4	42.1	1.0	6.7	6.4
	Noncorporate ownership	8	-	(Z)	0.2	(Z)	(Z)	0.1	0.3	0.1	0.4	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	81	41	23.6	367.5	13.7	25.8	173.2	558.9	232.3	733.4	10.0	123.8	176.1
	Noncorporate, total	8	-	(Z)	0.2	(Z)	(Z)	0.1	0.3	0.1	0.4	(Z)	0.1	0.1
	Individual	4	-	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(Z)	0.1	0.1
	Partnership	3	-	(Z)	0.1	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(Z)	(Z)	(Z)
	Other and unknown	1	-	-	-	-	-	-	-	-	-	-	-	-
3493	**Steel Springs, Except Wire**	**131**	**59**	**8.2**	**119.8**	**6.6**	**13.3**	**88.0**	**249.9**	**259.3**	**500.5**	**14.1**	**73.7**	**81.6**
	Type of organization:													
	Multiunit companies, total	39	34	6.0	88.1	4.7	9.5	65.2	191.5	197.6	382.5	10.8	55.0	62.0
	Corp. ownership or control	39	34	6.0	88.1	4.7	9.5	65.2	191.5	197.6	382.5	10.8	55.0	62.0
	Single unit companies, total	92	25	2.3	31.8	1.9	3.8	22.8	58.3	61.7	118.0	3.3	18.7	19.5
	Corp. ownership or control	71	25	2.2	31.1	1.8	3.7	22.3	57.1	60.0	115.1	3.3	18.2	19.1
	Noncorporate ownership	21	-	0.1	0.6	(Z)	0.1	0.5	1.3	1.7	2.9	(Z)	0.5	0.5
	Legal form of organization:													
	Corporate	110	59	8.2	119.2	6.6	13.2	87.5	248.6	257.6	497.6	14.0	73.2	81.1
	Noncorporate, total	21	-	0.1	0.6	(Z)	0.1	0.5	1.3	1.7	2.9	(Z)	0.5	0.5
	Individual	15	-	(Z)	0.4	(Z)	(Z)	0.3	0.7	1.0	1.7	(Z)	0.3	0.3
	Partnership	5	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3494	**Valves and Pipe Fittings**	**902**	**532**	**108.7**	**1 467.3**	**76.0**	**149.6**	**909.8**	**3 385.9**	**2 382.5**	**5 662.3**	**201.2**	**1 374.8**	**1 508.2**
	Type of organization:													
	Multiunit companies, total	380	334	89.0	1 207.0	61.7	120.7	748.8	2 785.9	1 939.1	4 642.6	165.5	1 162.2	1 273.6
	Corp. ownership or control	380	334	89.0	1 207.0	61.7	120.7	748.8	2 785.9	1 939.1	4 642.6	165.5	1 162.2	1 273.6
	Single unit companies, total	522	198	19.7	260.3	14.3	28.9	161.0	600.0	443.5	1 019.7	35.7	212.6	234.6
	Corp. ownership or control	484	197	19.6	258.1	14.1	28.6	159.7	593.7	439.4	1 009.3	35.4	210.2	232.2
	Noncorporate ownership	38	1	0.2	2.3	0.1	0.3	1.3	6.3	4.1	10.4	0.4	2.5	2.5
	Legal form of organization:													
	Corporate	864	531	108.6	1 465.1	75.8	149.3	908.5	3 379.6	2 378.5	5 651.9	200.9	1 372.3	1 505.7
	Noncorporate, total	38	1	0.2	2.3	0.1	0.3	1.3	6.3	4.1	10.4	0.4	2.5	2.5
	Individual	20	-	(Z)	0.8	(Z)	0.1	0.4	1.5	1.3	2.9	0.1	0.8	0.8
	Partnership	14	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3495	**Wire Springs**	**332**	**226**	**21.7**	**253.5**	**18.0**	**35.4**	**187.8**	**497.7**	**458.6**	**957.7**	**27.6**	**105.9**	**104.5**
	Type of organization:													
	Multiunit companies, total	131	116	13.8	162.2	11.5	22.5	123.5	328.6	328.9	658.8	18.6	76.0	72.6
	Corp. ownership or control	131	116	13.8	162.2	11.5	22.5	123.5	328.6	328.9	658.8	18.6	76.0	72.6
	Single unit companies, total	201	110	8.0	91.4	6.6	12.9	64.4	169.2	129.7	298.9	9.0	29.9	31.9
	Corp. ownership or control	187	107	7.8	89.6	6.4	12.6	62.9	166.0	127.2	293.3	8.8	29.1	31.1
	Noncorporate ownership	14	3	0.2	1.8	0.1	0.3	1.4	3.1	2.5	5.6	0.2	0.7	0.7
	Legal form of organization:													
	Corporate	318	223	21.6	251.7	17.9	35.1	186.4	494.6	456.1	952.1	27.4	105.2	103.7
	Noncorporate, total	14	3	0.2	1.8	0.1	0.3	1.4	3.1	2.5	5.6	0.2	0.7	0.7
	Individual	13	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
34	**FABRICATED METAL PRODUCTS—Con.**													
3496	**Miscellaneous Fabricated Wire Products**	**1 114**	**387**	**32.4**	**354.5**	**25.5**	**49.4**	**232.2**	**721.7**	**728.3**	**1 435.0**	**47.3**	**233.6**	**252.8**
	Type of organization:													
	Multiunit companies, total	208	134	16.7	192.9	12.9	25.3	128.0	415.1	435.8	838.3	31.6	155.8	169.5
	Corp. ownership or control	206	134	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	906	253	15.7	161.6	12.6	24.2	104.2	306.6	292.4	596.7	15.6	77.7	83.3
	Corp. ownership or control	725	247	15.0	154.7	12.0	23.0	99.4	292.9	279.1	569.7	15.0	73.8	79.3
	Noncorporate ownership	181	5	0.7	6.9	0.6	1.1	4.8	13.7	13.4	27.1	0.6	3.9	3.9
	Legal form of organization:													
	Corporate	931	381	31.7	347.4	24.9	48.3	227.2	707.4	713.9	1 406.5	46.6	229.4	248.6
	Noncorporate, total	183	6	0.7	7.1	0.6	1.2	5.0	14.2	14.4	28.5	0.7	4.1	4.1
	Individual	128	2	0.4	3.7	0.3	0.6	2.5	7.0	6.8	13.8	0.4	2.2	2.2
	Partnership	44	2	0.2	2.3	0.2	0.4	1.7	4.8	4.6	9.4	0.2	1.0	1.1
	Other and unknown	11	2	0.1	1.2	0.1	0.2	0.8	2.4	3.0	5.3	0.1	0.9	0.9
3497	**Metal Foil and Leaf**	**77**	**52**	**9.4**	**125.8**	**6.6**	**13.0**	**87.1**	**298.0**	**607.2**	**895.1**	**16.1**	**124.6**	**141.1**
	Type of organization:													
	Multiunit companies, total	43	39	8.0	107.9	5.6	11.0	75.5	260.6	536.7	787.6	13.1	109.2	124.8
	Corp. ownership or control	43	39	8.0	107.9	5.6	11.0	75.5	260.6	536.7	787.6	13.1	109.2	124.8
	Single unit companies, total	34	13	1.4	17.9	1.0	2.0	11.6	37.3	70.4	107.5	3.0	15.4	16.3
	Corp. ownership or control	31	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	74	50	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3498	**Fabricated Pipe and Fittings**	**579**	**278**	**28.2**	**390.0**	**21.4**	**40.6**	**265.4**	**887.2**	**1 015.4**	**1 872.7**	**51.0**	**395.3**	**418.4**
	Type of organization:													
	Multiunit companies, total	192	155	20.1	283.5	15.0	29.2	195.5	683.5	812.5	1 470.2	36.8	333.3	349.7
	Corp. ownership or control	192	155	20.1	283.5	15.0	29.2	195.5	683.5	812.5	1 470.2	36.8	333.3	349.7
	Single unit companies, total	387	123	8.1	106.4	6.3	11.3	70.0	203.7	202.9	402.6	14.2	62.0	68.7
	Corp. ownership or control	330	118	7.7	101.4	6.0	10.8	67.0	193.0	193.0	382.1	14.0	59.0	65.5
	Noncorporate ownership	57	5	0.4	5.1	0.3	0.5	3.0	10.7	9.9	20.5	0.3	2.9	3.2
	Legal form of organization:													
	Corporate	522	273	27.8	384.9	21.0	40.1	262.4	876.5	1 005.5	1 852.3	50.8	392.4	415.2
	Noncorporate, total	57	5	0.4	5.1	0.3	0.5	3.0	10.7	9.9	20.5	0.3	2.9	3.2
	Individual	34	1	0.2	2.1	0.1	0.2	1.3	4.2	4.5	8.6	0.2	1.6	1.8
	Partnership	22	4	0.2	2.9	0.2	0.3	1.7	6.5	5.4	11.9	0.1	1.3	1.4
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3499	**Fabricated Metal Products, N.E.C.**	**3 238**	**794**	**70.8**	**844.7**	**54.1**	**104.8**	**547.8**	**1 814.5**	**1 643.5**	**3 429.2**	**94.8**	**539.2**	**574.3**
	Type of organization:													
	Multiunit companies, total	369	247	32.1	400.0	23.7	46.3	256.8	971.1	938.1	1 891.4	45.8	346.6	364.8
	Corp. ownership or control	368	246	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 869	547	38.8	444.7	30.5	58.5	291.0	843.4	705.4	1 537.9	48.9	192.6	209.5
	Corp. ownership or control	2 268	531	36.3	420.9	28.5	55.0	275.5	791.7	666.2	1 447.1	46.3	179.9	196.5
	Noncorporate ownership	601	16	2.4	23.8	2.0	3.5	15.5	51.7	39.2	90.8	2.7	12.7	13.0
	Legal form of organization:													
	Corporate	2 636	777	68.4	820.7	52.2	101.2	532.1	1 762.6	1 604.0	3 337.9	91.9	526.4	561.2
	Noncorporate, total	602	17	2.4	24.0	2.0	3.6	15.7	52.0	39.5	91.4	2.8	12.8	13.2
	Individual	297	8	1.3	11.3	1.0	1.9	7.3	24.6	18.0	42.4	1.3	5.4	5.5
	Partnership	278	5	0.9	10.4	0.8	1.4	6.7	22.7	17.4	40.1	1.0	6.0	6.2
	Other and unknown	27	4	0.2	2.3	0.2	0.3	1.7	4.7	4.1	8.9	0.5	1.4	1.4
35	**MACHINERY, EXCEPT ELECTRICAL**	**48 200**	**12 446**	**2 083.3**	**30 557.5**	**1 413.8**	**2 803.0**	**18 298.4**	**67 222.5**	**56 531.6**	**122 187.7**	**4 402.4**	**25 153.3**	**27 170.9**
	Type of organization:													
	Multiunit companies, total	6 651	5 111	1 521.5	22 972.5	998.9	1 975.7	13 465.4	53 042.7	47 029.8	98 802.0	3 544.1	21 510.7	23 100.1
	Corp. ownership or control	6 634	5 102	1 520.0	22 958.7	997.7	1 973.6	13 456.5	53 006.1	46 973.3	98 709.6	3 541.9	21 479.5	23 068.3
	Noncorporate ownership	17	9	1.5	13.9	1.2	2.1	8.9	36.6	56.5	92.4	2.2	31.2	31.8
	Single unit companies, total	41 549	7 335	561.8	7 584.9	414.9	827.4	4 833.0	14 179.8	9 501.8	23 385.6	858.3	3 642.6	4 070.8
	Corp. ownership or control	31 306	7 139	526.7	7 155.3	385.6	774.5	4 536.6	13 289.3	9 022.4	22 019.8	798.1	3 472.6	3 893.8
	Noncorporate ownership	10 243	196	35.1	429.6	29.3	52.9	296.4	890.5	479.3	1 365.8	60.3	170.1	176.9
	Legal form of organization:													
	Corporate	37 940	12 241	2 046.7	30 114.0	1 383.3	2 748.1	17 993.1	66 295.4	55 995.8	120 729.4	4 339.9	24 952.0	26 962.1
	Noncorporate, total	10 260	205	36.6	443.5	30.5	54.9	305.3	927.1	535.8	1 458.3	62.5	201.3	208.7
	Individual	7 734	102	22.7	271.3	19.2	33.6	188.9	571.5	290.6	859.1	41.1	102.4	107.8
	Partnership	2 195	72	10.6	134.4	8.6	16.5	91.3	269.1	157.8	424.6	15.7	53.6	56.4
	Other and unknown	331	31	3.3	37.8	2.6	4.9	25.0	86.6	87.3	174.5	5.7	45.3	44.6
3511	**Turbines and Turbine Generator Sets**	**83**	**37**	**40.8**	**709.1**	**24.8**	**51.1**	**368.5**	**1 553.1**	**1 243.4**	**2 729.7**	**44.1**	**775.5**	**827.6**
	Type of organization:													
	Multiunit companies, total	34	30	40.4	702.1	24.5	50.4	364.2	1 538.1	1 231.6	2 703 0	43.4	769.2	821.3
	Corp. ownership or control	34	30	40.4	702.1	24.5	50.4	364.2	1 538.1	1 231.6	2 703.0	43.4	769.2	821.3
	Single unit companies, total	49	7	0.5	7 0	0.3	0.7	4.3	15.0	11.8	26.6	0.7	6.3	6.3
	Corp. ownership or control	45	7	0.4	6.7	0.3	0.6	4.2	14.3	11.2	25.4	0.7	5.9	6.0
	Noncorporate ownership	4	–	(Z)	0.3	(Z)	(Z)	0.1	0.6	0.6	1.2	(Z)	0.3	0.3

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3511	**Turbines and Turbine Generator Sets**—Con.													
	Legal form of organization:													
	Corporate	79	37	40.8	708.8	24.8	51.1	368.4	1 552.5	1 242.8	2 728.5	44.1	775.2	827.3
	Noncorporate, total	4	–	(Z)	0.3	(Z)	(Z)	0.1	0.6	0.6	1.2	(Z)	0.3	0.3
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3519	**Internal Combustion Engines, N.E.C.**	**232**	**131**	**88.8**	**1 528.6**	**65.3**	**130.1**	**1 036.2**	**3 406.5**	**4 459.7**	**7 696.5**	**285.8**	**1 133.5**	**1 342.0**
	Type of organization:													
	Multiunit companies, total	106	98	86.0	1 492.0	63.3	126.1	1 013.9	3 332.3	4 372.8	7 536.2	282.5	1 108.7	1 315.9
	Corp. ownership or control	106	98	86.0	1 492.0	63.3	126.1	1 013.9	3 332.3	4 372.8	7 536.2	282.5	1 108.7	1 315.9
	Single unit companies, total	126	33	2.8	36.6	2.1	4.0	22.2	74.2	86.9	160.3	3.3	24.8	26.1
	Corp. ownership or control	110	33	2.8	36.3	2.0	3.9	22.0	73.6	86.2	158.9	3.2	24.6	25.9
	Noncorporate ownership	16	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.8	1.4	0.1	0.2	0.2
	Legal form of organization:													
	Corporate	216	131	88.8	1 528.2	65.3	130.1	1 036.0	3 405.9	4 459.0	7 695.1	285.7	1 133.3	1 341.7
	Noncorporate, total	16	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.8	1.4	0.1	0.2	0.2
	Individual	10	–	(Z)	0.2	(Z)	(Z)	0.1	0.3	0.5	0.8	(Z)	0.1	0.1
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3523	**Farm Machinery and Equipment**	**2 004**	**664**	**131.3**	**1 971.9**	**96.2**	**182.7**	**1 313.3**	**4 854.4**	**5 469.8**	**10 281.7**	**341.9**	**2 088.8**	**2 083.4**
	Type of organization:													
	Multiunit companies, total	347	283	101.8	1 613.7	73.8	141.2	1 088.1	4 100.5	4 609.9	8 681.4	297.5	1 738.7	1 712.1
	Corp. ownership or control	342	280	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 657	381	29.6	358.2	22.4	41.5	225.2	753.9	859.9	1 600.2	44.4	350.1	371.3
	Corp. ownership or control	1 332	370	27.8	336.2	21.0	39.1	211.1	704.7	802.5	1 494.7	41.7	330.4	351.0
	Noncorporate ownership	325	11	1.7	22.0	1.4	2.3	14.1	49.2	57.3	105.5	2.7	19.7	20.2
	Legal form of organization:													
	Corporate	1 674	650	129.3	1 945.9	94.5	179.9	1 296.5	4 795.8	5 401.2	10 155.5	338.6	2 064.6	2 058.6
	Noncorporate, total	330	14	2.0	26.0	1.6	2.7	16.8	58.6	68.6	126.1	3.3	24.3	24.8
	Individual	226	3	0.7	8.0	0.6	0.9	5.4	18.2	20.3	38.3	1.2	7.1	7.4
	Partnership	84	5	0.7	8.3	0.5	0.9	4.7	18.4	26.1	43.8	0.8	8.6	8.8
	Other and unknown	20	6	0.7	9.7	0.5	1.0	6.7	22.0	22.2	44.1	1.3	8.6	8.7
3524	**Lawn and Garden Equipment**	**155**	**92**	**19.6**	**224.6**	**14.7**	**27.7**	**143.1**	**635.8**	**941.0**	**1 575.3**	**28.6**	**352.9**	**380.7**
	Type of organization:													
	Multiunit companies, total	66	56	17.2	200.2	12.9	24.5	128.2	581.7	853.6	1 433.9	26.3	314.6	341.6
	Corp. ownership or control	63	53	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	89	36	2.4	24.4	1.8	3.2	14.9	54.1	87.4	141.4	2.3	38.3	39.1
	Corp. ownership or control	85	36	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	148	89	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	7	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3531	**Construction Machinery**	**922**	**446**	**155.3**	**2 547.1**	**111.2**	**212.7**	**1 708.1**	**5 744.3**	**6 822.6**	**12 628.7**	**498.3**	**3 171.8**	**3 142.3**
	Type of organization:													
	Multiunit companies, total	320	272	140.6	2 344.6	100.5	191.8	1 580.4	5 345.9	6 403.1	11 823.7	472.2	2 982.9	2 935.6
	Corp. ownership or control	320	272	140.6	2 344.6	100.5	191.8	1 580.4	5 345.9	6 403.1	11 823.7	472.2	2 982.9	2 935.6
	Single unit companies, total	602	174	14.7	202.5	10.7	20.9	127.7	398.4	419.5	805.1	26.1	188.9	206.7
	Corp. ownership or control	538	173	14.5	200.0	10.5	20.6	126.0	393.7	413.7	794.7	25.6	186.4	204.1
	Noncorporate ownership	64	1	0.2	2.5	0.1	0.2	1.6	4.6	5.8	10.4	0.5	2.5	2.5
	Legal form of organization:													
	Corporate	858	445	155.2	2 544.6	111.0	212.5	1 706.4	5 739.7	6 816.8	12 618.4	497.8	3 169.3	3 139.7
	Noncorporate, total	64	1	0.2	2.5	0.1	0.2	1.6	4.6	5.8	10.4	0.5	2.5	2.5
	Individual	38	–	0.1	1.3	0.1	0.1	0.9	2.5	3.1	5.6	0.3	1.5	1.5
	Partnership	17	1	0.1	0.8	(Z)	0.1	0.5	1.5	2.0	3.5	(D)	0.8	0.8
	Other and unknown	9	–	(Z)	0.4	(Z)	(Z)	0.2	0.6	0.7	1.3	(D)	0.2	0.2
3532	**Mining Machinery**	**344**	**168**	**31.4**	**425.9**	**20.3**	**39.7**	**262.9**	**1 018.8**	**1 021.9**	**1 996.7**	**67.0**	**603.7**	**646.1**
	Type of organization:													
	Multiunit companies, total	124	105	26.9	366.1	17.2	33.7	227.3	884.0	889.5	1 731.3	58.9	543.2	582.5
	Corp. ownership or control	124	105	26.9	366.1	17.2	33.7	227.3	884.0	889.5	1 731.3	58.9	543.2	582.5
	Single unit companies, total	220	63	4.5	59.8	3.1	6.0	35.5	134.9	132.4	265.4	8.0	60.6	63.6
	Corp. ownership or control	194	61	4.3	58.2	3.0	5.9	34.5	131.4	129.3	258.8	7.9	59.2	62.2
	Noncorporate ownership	26	2	0.1	1.6	0.1	0.2	1.1	3.5	3.1	6.5	0.2	1.4	1.4
	Legal form of organization:													
	Corporate	318	166	31.2	424.3	20.2	39.5	261.8	1 015.4	1 018.8	1 990.2	66.8	602.4	644.7
	Noncorporate, total	26	2	0.1	1.6	0.1	0.2	1.1	3.5	3.1	6.5	0.2	1.4	1.4
	Individual	21	2	0.1	1.4	0.1	0.2	1.0	3.0	2.6	5.7	0.2	1.1	1.2
	Partnership	5	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.5	0.9	(Z)	0.3	0.3

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3533	**Oil Field Machinery**	**478**	**247**	**58.6**	**867.5**	**39.8**	**83.4**	**543.3**	**2 437.6**	**1 493.4**	**3 912.4**	**257.5**	**1 216.0**	**1 212.5**
	Type of organization:													
	Multiunit companies, total	199	157	52.1	775.0	35.2	73.7	488.8	2 221.7	1 334.9	3 544.9	239.2	1 142.1	1 129.1
	Corp. ownership or control	199	157	52.1	775.0	35.2	73.7	488.8	2 221.7	1 334.9	3 544.9	239.2	1 142.1	1 129.1
	Single unit companies, total	279	90	6.6	92.5	4.6	9.7	54.5	215.9	158.5	367.6	18.3	73.8	83.4
	Corp. ownership or control	246	88	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	33	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	445	245	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	33	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	19	–	(Z)	0.4	(Z)	(Z)	0.2	1.1	0.7	1.7	0.1	0.4	0.4
	Partnership	11	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3534	**Elevators and Moving Stairways**	**152**	**72**	**10.2**	**141.9**	**5.9**	**11.5**	**69.4**	**284.5**	**205.9**	**489.7**	**8.8**	**123.0**	**119.1**
	Type of organization:													
	Multiunit companies, total	47	37	8.1	112.7	4.6	9.0	53.4	232.2	169.4	402.2	6.3	106.6	101.7
	Corp. ownership or control	47	37	8.1	112.7	4.6	9.0	53.4	232.2	169.4	402.2	6.3	106.6	101.7
	Single unit companies, total	105	35	2.1	29.2	1.3	2.5	16.0	52.3	36.4	87.6	2.5	16.4	17.4
	Corp. ownership or control	99	35	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	146	72	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	6	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
3535	**Conveyors and Conveying Equipment**	**616**	**294**	**32.9**	**476.5**	**19.2**	**38.5**	**226.6**	**1 018.9**	**899.2**	**1 897.9**	**34.7**	**329.9**	**363.8**
	Type of organization:													
	Multiunit companies, total	163	128	21.3	316.7	11.5	23.2	140.2	699.5	621.3	1 308.5	24.4	241.1	264.0
	Corp. ownership or control	163	128	21.3	316.7	11.5	23.2	140.2	699.5	621.3	1 308.5	24.4	241.1	264.0
	Single unit companies, total	453	166	11.6	159.8	7.7	15.3	86.4	319.4	277.9	589.4	10.3	88.8	99.9
	Corp. ownership or control	424	165	11.5	158.2	7.6	15.2	85.5	316.3	276.0	584.3	9.7	87.8	99.0
	Noncorporate ownership	29	1	0.1	1.5	0.1	0.2	0.9	3.1	1.9	5.1	0.5	1.0	0.8
	Legal form of organization:													
	Corporate	587	293	32.8	475.0	19.1	38.3	225.7	1 015.8	897.3	1 892.8	34.1	328.9	363.0
	Noncorporate, total	29	1	0.1	1.5	0.1	0.2	0.9	3.1	1.9	5.1	0.5	1.0	0.8
	Individual	19	1	0.1	0.9	0.1	0.1	0.5	1.7	0.9	2.7	(D)	0.4	0.4
	Partnership	8	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3536	**Hoists, Cranes, and Monorails**	**242**	**121**	**15.8**	**210.5**	**10.6**	**20.6**	**122.0**	**453.2**	**387.0**	**836.0**	**17.9**	**196.6**	**203.6**
	Type of organization:													
	Multiunit companies, total	72	60	11.7	154.9	7.7	15.1	88.6	343.5	285.6	626.7	14.9	154.3	158.6
	Corp. ownership or control	72	60	11.7	154.9	7.7	15.1	88.6	343.5	285.6	626.7	14.9	154.3	158.6
	Single unit companies, total	170	61	4.1	55.6	2.9	5.5	33.4	109.7	101.4	209.3	2.9	42.3	45.0
	Corp. ownership or control	155	60	4.0	54.1	2.8	5.3	32.3	107.0	99.2	204.3	2.9	41.1	43.9
	Noncorporate ownership	15	1	0.1	1.5	0.1	0.2	1.2	2.7	2.2	4.9	(Z)	1.2	1.0
	Legal form of organization:													
	Corporate	227	120	15.7	209.0	10.5	20.4	120.8	450.6	384.8	831.1	17.8	195.4	202.5
	Noncorporate, total	15	1	0.1	1.5	0.1	0.2	1.2	2.7	2.2	4.9	(Z)	1.2	1.0
	Individual	9	–	(Z)	0.4	(Z)	(Z)	0.3	0.9	0.7	1.7	(D)	0.4	0.4
	Partnership	6	1	0.1	1.1	0.1	0.1	0.9	1.8	1.4	3.3	(D)	0.8	0.6
3537	**Industrial Trucks and Tractors**	**475**	**170**	**28.8**	**427.3**	**19.4**	**36.7**	**252.2**	**878.2**	**1 045.2**	**1 920.1**	**48.3**	**454.7**	**469.1**
	Type of organization:													
	Multiunit companies, total	101	82	21.0	328.2	14.0	26.3	195.2	693.8	838.3	1 526.4	39.9	354.0	366.4
	Corp. ownership or control	101	82	21.0	328.2	14.0	26.3	195.2	693.8	838.3	1 526.4	39.9	354.0	366.4
	Single unit companies, total	374	88	7.9	99.1	5.4	10.4	57.0	184.4	206.9	393.7	8.4	100.7	102.8
	Corp. ownership or control	338	88	7.8	97.8	5.3	10.3	56.2	182.0	203.7	388.1	8.2	99.1	101.1
	Noncorporate ownership	36	–	0.1	1.3	0.1	0.1	0.8	2.4	3.2	5.6	0.2	1.5	1.7
	Legal form of organization:													
	Corporate	439	170	28.7	426.0	19.3	36.6	251.5	875.7	1 042.0	1 914.5	48.1	453.1	467.5
	Noncorporate, total	36	–	0.1	1.3	0.1	0.1	0.8	2.4	3.2	5.6	0.2	1.5	1.7
	Individual	28	–	0.1	1.1	0.1	0.1	0.6	2.0	2.8	4.8	0.1	1.4	1.4
	Partnership	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3541	**Machine Tools, Metal Cutting Types**	**919**	**307**	**59.5**	**951.0**	**37.3**	**76.6**	**542.2**	**1 871.0**	**1 049.6**	**2 819.1**	**82.2**	**741.5**	**878.4**
	Type of organization:													
	Multiunit companies, total	171	135	45.6	732.9	27.8	57.3	411.8	1 479.1	826.1	2 223.9	60.5	606.6	720.7
	Corp. ownership or control	171	135	45.6	732.9	27.8	57.3	411.8	1 479.1	826.1	2 223.9	60.5	606.6	720.7
	Single unit companies, total	748	172	13.9	218.2	9.5	19.2	130.4	391.9	223.5	595.2	21.7	134.8	157.7
	Corp. ownership or control	619	170	13.5	211.9	9.2	18.7	126.8	381.3	217.7	578.3	21.3	130.0	153.5
	Noncorporate ownership	129	2	0.4	6.2	0.3	0.6	3.6	10.6	5.7	16.9	0.4	4.8	4.2
	Legal form of organization:													
	Corporate	790	305	59.1	944.8	37.0	76.0	538.6	1 860.4	1 043.8	2 802.2	81.8	736.7	874.2
	Noncorporate, total	129	2	0.4	6.2	0.3	0.6	3.6	10.6	5.7	16.9	0.4	4.8	4.2
	Individual	96	1	0.3	4.6	0.2	0.4	2.7	8.7	4.3	12.9	0.3	3.3	3.4
	Partnership	29	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3542	**Machine Tools, Metal Forming Types**	**426**	**163**	**23.7**	**360.7**	**16.1**	**32.8**	**219.4**	**721.9**	**444.0**	**1 130.6**	**24.7**	**317.2**	**359.6**
	Type of organization:													
	Multiunit companies, total	102	81	17.8	271.9	12.0	24.3	165.3	559.7	338.4	865.7	19.2	250.4	290.6
	Corp. ownership or control	102	81	17.8	271.9	12.0	24.3	165.3	559.7	338.4	865.7	19.2	250.4	290.6
	Single unit companies, total	324	82	5.9	88.9	4.1	8.6	54.1	162.2	105.7	264.9	5.5	66.9	69.0
	Corp. ownership or control	285	82	5.8	87.9	4.1	8.5	53.5	160.0	104.2	261.2	5.4	65.8	68.0
	Noncorporate ownership	39	-	0.1	1.0	0.1	0.1	0.6	2.2	1.5	3.7	0.1	1.1	1.1
	Legal form of organization:													
	Corporate	387	163	23.6	359.7	16.0	32.7	218.8	719.7	442.6	1 127.0	24.6	316.2	358.6
	Noncorporate, total	39	-	0.1	1.0	0.1	0.1	0.6	2.2	1.5	3.7	0.1	1.1	1.1
	Individual	26	-	(Z)	0.7	(Z)	0.1	0.4	1.5	1.0	2.5	(Z)	0.7	0.7
	Partnership	10	-	(Z)	0.4	(Z)	(Z)	0.2	0.7	0.5	1.1	(Z)	0.3	0.3
	Other and unknown	3	-	-	-	-	-	-	-	-	-	-	-	-
3544	**Special Dies, Tools, Jigs, and Fixtures**	**7 152**	**1 426**	**105.6**	**1 706.3**	**86.3**	**183.8**	**1 260.4**	**2 786.9**	**1 170.7**	**3 901.3**	**175.7**	**378.6**	**449.9**
	Type of organization:													
	Multiunit companies, total	446	256	25.4	454.9	20.1	44.3	338.5	759.2	347.6	1 095.4	39.0	127.3	143.6
	Corp. ownership or control	445	256	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	6 706	1 170	80.2	1 251.4	66.2	139.5	921.8	2 027.7	823.2	2 805.9	136.7	251.3	306.3
	Corp. ownership or control	5 160	1 142	75.1	1 185.1	61.7	131.3	871.8	1 904.3	775.4	2 635.9	126.5	236.5	290.1
	Noncorporate ownership	1 546	28	5.1	66.3	4.5	8.2	50.0	123.3	47.7	170.0	10.2	14.8	16.2
	Legal form of organization:													
	Corporate	5 605	1 398	100.5	1 639.9	81.8	175.6	1 210.3	2 663.5	1 123.0	3 731.2	165.5	363.8	433.7
	Noncorporate, total	1 547	28	5.1	66.4	4.5	8.2	50.1	123.4	47.8	170.1	10.2	14.8	16.2
	Individual	1 149	14	3.2	41.9	2.9	5.1	31.5	80.8	32.8	113.2	7.0	10.1	10.7
	Partnership	375	11	1.7	22.4	1.5	2.8	17.0	38.9	14.0	52.3	3.0	4.2	5.1
	Other and unknown	23	3	0.2	2.1	0.1	0.3	1.5	3.6	0.9	4.6	0.2	0.5	0.4
3545	**Machine Tool Accessories**	**1 412**	**492**	**54.1**	**762.5**	**39.9**	**80.2**	**498.2**	**1 585.8**	**833.0**	**2 384.5**	**77.2**	**413.3**	**468.5**
	Type of organization:													
	Multiunit companies, total	296	220	35.7	514.5	26.0	52.1	333.9	1 118.3	586.9	1 680.7	54.8	307.9	349.2
	Corp. ownership or control	296	220	35.7	514.5	26.0	52.1	333.9	1 118.3	586.9	1 680.7	54.8	307.9	349.2
	Single unit companies, total	1 116	272	18.3	248.0	13.9	28.0	164.4	467.6	246.2	703.8	22.3	105.4	119.3
	Corp. ownership or control	931	264	17.6	238.5	13.3	26.9	158.2	448.1	236.4	675.0	21.6	101.3	114.7
	Noncorporate ownership	185	8	0.8	9.5	0.6	1.1	6.2	19.5	9.7	28.8	0.7	4.1	4.6
	Legal form of organization:													
	Corporate	1 227	484	53.3	753.1	39.3	79.1	492.1	1 566.3	823.3	2 355.7	76.4	409.1	463.9
	Noncorporate, total	185	8	0.8	9.5	0.6	1.1	6.2	19.5	9.7	28.8	0.7	4.1	4.6
	Individual	126	1	0.4	4.8	0.3	0.6	3.1	10.8	5.7	16.2	0.4	2.2	2.5
	Partnership	48	4	0.3	3.4	0.2	0.4	2.3	6.1	2.7	8.6	0.2	1.1	1.3
	Other and unknown	11	3	0.1	1.2	0.1	0.1	0.8	2.6	1.3	4.0	0.1	0.8	0.8
3546	**Power Driven Hand Tools**	**124**	**71**	**27.7**	**325.7**	**20.0**	**38.5**	**210.4**	**931.9**	**703.2**	**1 623.2**	**39.0**	**311.4**	**326.0**
	Type of organization:													
	Multiunit companies, total	57	50	26.1	307.2	18.8	36.2	199.2	891.5	626.3	1 502.2	37.3	285.0	303.4
	Corp. ownership or control	57	50	26.1	307.2	18.8	36.2	199.2	891.5	626.3	1 502.2	37.3	285.0	303.4
	Single unit companies, total	67	21	1.6	18.5	1.2	2.3	11.2	40.4	76.9	121.0	1.7	26.4	22.7
	Corp. ownership or control	59	21	1.6	18.1	1.2	2.2	10.9	39.5	76.3	119.4	1.7	26.1	22.4
	Noncorporate ownership	8	-	(Z)	0.4	(Z)	0.1	0.3	0.9	0.6	1.6	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	116	71	27.6	325.3	19.9	38.4	210.1	931.0	702.5	1 621.7	39.0	311.1	325.8
	Noncorporate, total	8	-	(Z)	0.4	(Z)	0.1	0.3	0.9	0.6	1.6	(Z)	0.3	0.3
	Individual	3	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	-	(Z)	0.3	(Z)	(Z)	0.2	0.5	0.4	0.9	(Z)	0.1	0.1
	Other and unknown	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3547	**Rolling Mill Machinery**	**63**	**38**	**7.9**	**128.2**	**5.4**	**10.4**	**78.4**	**286.9**	**198.3**	**507.4**	**9.1**	**154.5**	**131.8**
	Type of organization:													
	Multiunit companies, total	27	25	7.0	114.1	4.8	9.2	70.1	257.5	171.0	452.3	8.2	145.7	121.1
	Corp. ownership or control	27	25	7.0	114.1	4.8	9.2	70.1	257.5	171.0	452.3	8.2	145.7	121.1
	Single unit companies, total	36	13	0.9	14.0	0.6	1.2	8.3	29.4	27.3	55.1	0.9	8.8	10.7
	Corp. ownership or control	34	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	61	37	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3549	**Metalworking Machinery, N.E.C.**	**534**	**183**	**19.4**	**279.5**	**12.8**	**25.2**	**154.1**	**562.2**	**389.1**	**916.8**	**30.7**	**193.7**	**233.8**
	Type of organization:													
	Multiunit companies, total	93	77	10.9	165.7	7.0	14.0	88.8	346.6	236.8	558.5	18.8	130.3	158.7
	Corp. ownership or control	93	77	10.9	165.7	7.0	14.0	88.8	346.6	236.8	558.5	18.8	130.3	158.7
	Single unit companies, total	441	106	8.5	113.8	5.8	11.2	65.3	215.6	152.3	358.3	11.9	63.3	75.1
	Corp. ownership or control	390	102	8.1	110.0	5.5	10.8	63.2	209.0	148.4	347.7	11.4	61.3	73.1
	Noncorporate ownership	51	4	0.4	3.8	0.2	0.4	2.1	6.6	4.0	10.5	0.5	2.0	2.0
	Legal form of organization:													
	Corporate	483	179	19.1	275.7	12.6	24.8	151.9	555.6	385.1	906.3	30.2	191.6	231.8
	Noncorporate, total	51	4	0.4	3.8	0.2	0.4	2.1	6.6	4.0	10.5	0.5	2.0	2.0
	Individual	36	2	0.2	2.3	0.1	0.2	1.2	3.9	2.7	6.6	0.2	1.1	1.1
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3551	**Food Products Machinery**	**740**	**315**	**36.3**	**522.1**	**22.8**	**45.4**	**292.6**	**1 056.4**	**765.3**	**1 786.8**	**46.9**	**453.4**	**499.4**
	Type of organization:													
	Multiunit companies, total	196	156	24.9	365.7	15.2	30.7	203.8	758.1	539.5	1 268.5	35.4	350.3	387.0
	Corp. ownership or control	196	156	24.9	365.7	15.2	30.7	203.8	758.1	539.5	1 268.5	35.4	350.3	387.0
	Single unit companies, total	544	159	11.4	156.4	7.5	14.7	88.8	298.3	225.8	518.2	11.5	103.1	112.4
	Corp. ownership or control	480	157	11.1	153.4	7.4	14.4	86.9	292.0	220.9	507.1	11.3	100.9	110.2
	Noncorporate ownership	64	2	0.3	3.1	0.2	0.3	2.0	6.3	4.9	11.2	0.3	2.3	2.3
	Legal form of organization:													
	Corporate	676	313	36.0	519.1	22.6	45.0	290.7	1 050.1	760.4	1 775.6	46.6	451.2	497.1
	Noncorporate, total	64	2	0.3	3.1	0.2	0.3	2.0	6.3	4.9	11.2	0.3	2.3	2.3
	Individual	52	2	0.2	2.7	0.2	0.3	1.8	5.6	4.3	9.9	0.2	2.0	2.0
	Partnership	11	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.6	1.3	(Z)	0.3	0.3
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3552	**Textile Machinery**	**639**	**217**	**26.0**	**300.8**	**18.3**	**36.3**	**185.3**	**540.0**	**389.3**	**951.0**	**32.2**	**256.7**	**233.5**
	Type of organization:													
	Multiunit companies, total	137	110	18.2	213.0	12.7	25.1	131.9	382.3	275.4	680.0	24.3	209.0	182.6
	Corp. ownership or control	135	109	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	502	107	7.8	87.8	5.6	11.2	53.4	157.7	113.9	271.0	7.9	47.7	50.8
	Corp. ownership or control	424	104	7.4	84.4	5.3	10.7	51.2	151.0	109.6	260.1	7.6	45.4	48.6
	Noncorporate ownership	78	3	0.4	3.4	0.3	0.5	2.2	6.6	4.4	11.0	0.3	2.2	2.2
	Legal form of organization:													
	Corporate	559	213	25.4	295.1	17.9	35.7	182.1	529.8	381.5	933.2	31.9	253.0	229.5
	Noncorporate, total	80	4	0.6	5.7	0.4	0.7	3.2	10.2	7.8	17.9	0.3	3.7	3.9
	Individual	49	2	0.2	1.9	0.2	0.3	1.2	3.3	2.6	6.0	0.2	1.1	1.1
	Partnership	26	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3553	**Woodworking Machinery**	**301**	**105**	**10.3**	**131.2**	**7.4**	**14.7**	**81.9**	**317.8**	**276.0**	**585.6**	**13.8**	**100.6**	**111.6**
	Type of organization:													
	Multiunit companies, total	51	39	5.9	74.2	4.3	8.5	48.0	196.9	193.0	386.2	8.5	64.4	69.8
	Corp. ownership or control	51	39	5.9	74.2	4.3	8.5	48.0	196.9	193.0	386.2	8.5	64.4	69.8
	Single unit companies, total	250	66	4.5	57.0	3.1	6.2	33.9	120.9	83.1	199.4	5.3	36.2	41.8
	Corp. ownership or control	207	66	4.4	55.9	3.0	6.1	33.2	117.8	80.8	194.0	5.0	35.3	40.8
	Noncorporate ownership	43	–	0.1	1.1	0.1	0.1	0.7	3.2	2.3	5.4	0.2	0.9	1.0
	Legal form of organization:													
	Corporate	258	105	10.2	130.1	7.3	14.6	81.2	314.7	273.7	580.2	13.5	99.6	110.6
	Noncorporate, total	43	–	0.1	1.1	0.1	0.1	0.7	3.2	2.3	5.4	0.2	0.9	1.0
	Individual	30	–	0.1	0.7	0.1	0.1	0.4	1.8	1.3	3.1	0.2	0.5	0.6
	Partnership	11	–	(Z)	0.5	(Z)	0.1	0.3	1.4	1.0	2.3	0.1	0.4	0.4
	Other and unknown	2	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
3554	**Paper Industries Machinery**	**213**	**103**	**16.4**	**247.5**	**9.3**	**18.8**	**123.8**	**464.9**	**357.8**	**826.9**	**17.2**	**225.0**	**220.2**
	Type of organization:													
	Multiunit companies, total	80	60	12.8	195.9	7.0	14.1	94.4	368.2	294.1	668.7	12.1	187.6	180.2
	Corp. ownership or control	80	60	12.8	195.9	7.0	14.1	94.4	368.2	294.1	668.7	12.1	187.6	180.2
	Single unit companies, total	133	43	3.6	51.6	2.4	4.8	29.4	96.7	63.7	158.2	5.1	37.4	39.9
	Corp. ownership or control	122	42	3.5	49.8	2.3	4.6	28.1	93.5	61.6	152.0	4.9	35.8	39.2
	Noncorporate ownership	11	1	0.1	1.8	0.1	0.2	1.2	3.2	2.1	6.2	0.1	1.6	0.8
	Legal form of organization:													
	Corporate	202	102	16.2	245.7	9.3	18.7	122.6	461.7	355.7	820.7	17.0	223.3	219.4
	Noncorporate, total	11	1	0.1	1.8	0.1	0.2	1.2	3.2	2.1	6.2	0.1	1.6	0.8
	Individual	7	–	(Z)	0.5	(Z)	(Z)	0.3	0.9	0.8	1.7	(Z)	0.4	0.4
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3555	**Printing Trades Machinery**	**595**	**199**	**25.5**	**369.2**	**15.6**	**31.7**	**192.9**	**793.6**	**573.2**	**1 350.9**	**46.8**	**316.7**	**355.4**
	Type of organization:													
	Multiunit companies, total	157	101	18.8	277.5	11.3	23.3	143.7	620.8	449.0	1 058.0	37.2	265.9	297.4
	Corp. ownership or control	157	101	18.8	277.5	11.3	23.3	143.7	620.8	449.0	1 058.0	37.2	265.9	297.4
	Single unit companies, total	438	98	6.7	91.7	4.3	8.4	49.1	172.8	124.2	293.0	9.5	50.8	57.9
	Corp. ownership or control	374	94	6.4	87.5	4.1	8.0	46.6	164.1	119.3	279.5	9.2	49.1	56.0
	Noncorporate ownership	64	4	0.3	4.2	0.2	0.4	2.5	8.7	5.0	13.5	0.3	1.7	1.9
	Legal form of organization:													
	Corporate	531	195	25.2	365.0	15.4	31.4	190.4	784.9	568.2	1 337.5	46.4	315.0	353.5
	Noncorporate, total	64	4	0.3	4.2	0.2	0.4	2.5	8.7	5.0	13.5	0.3	1.7	1.9
	Individual	45	3	0.2	3.3	0.2	0.3	2.0	6.2	3.6	9.6	0.3	1.0	1.3
	Partnership	17	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3559	**Special Industry Machinery, N.E.C.**	**1 602**	**548**	**70.6**	**1 045.1**	**44.1**	**88.7**	**573.4**	**2 098.7**	**1 595.7**	**3 627.0**	**86.8**	**820.0**	**889.2**
	Type of organization:													
	Multiunit companies, total	308	235	48.5	731.7	29.5	59.2	396.4	1 499.0	1 120.2	2 568.9	58.7	643.1	693.3
	Corp. ownership or control	307	235	48.5	731.7	29.5	59.2	396.4	1 499.0	1 120.2	2 568.9	58.7	643.1	693.3
	Noncorporate ownership	1	–	–	–	–	–	–	–	–	–	–	–	–
	Single unit companies, total	1 294	313	22.1	313.4	14.6	29.5	177.0	599.8	475.5	1 058.1	28.1	176.9	195.9
	Corp. ownership or control	1 159	306	21.4	305.4	14.2	28.7	172.7	582.4	461.3	1 026.8	27.5	171.6	190.4
	Noncorporate ownership	135	7	0.7	8.0	0.5	0.8	4.4	17.3	14.2	31.3	0.7	5.3	5.5

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3559	**Special Industry Machinery, N.E.C.**—Con.													
	Legal form of organization:													
	Corporate	1 466	541	69.9	1 037.1	43.7	87.9	569.1	2 081.4	1 581.5	3 595.7	86.2	814.7	883.7
	Noncorporate, total	136	7	0.7	8.0	0.5	0.8	4.4	17.3	14.2	31.3	0.7	5.3	5.5
	Individual	102	2	0.4	5.0	0.3	0.5	2.7	9.9	9.4	19.3	0.3	3.4	3.5
	Partnership	24	4	0.2	2.2	0.1	0.3	1.3	4.6	3.3	8.0	0.2	1.5	1.3
	Other and unknown	10	1	0.1	0.8	(Z)	0.1	0.3	2.8	1.5	4.0	0.1	0.5	0.7
3561	**Pumps and Pumping Equipment**	**613**	**285**	**63.0**	**900.6**	**39.8**	**79.5**	**506.9**	**2 141.6**	**1 721.2**	**3 773.7**	**123.5**	**925.1**	**1 024.0**
	Type of organization:													
	Multiunit companies, total	228	196	54.7	788.6	34.6	68.9	444.6	1 900.4	1 492.7	3 314.2	107.2	832.6	917.6
	Corp. ownership or control	228	196	54.7	788.6	34.6	68.9	444.6	1 900.4	1 492.7	3 314.2	107.2	832.6	917.6
	Single unit companies, total	385	89	8.3	112.0	5.3	10.7	62.3	241.2	228.5	459.5	16.3	92.5	106.5
	Corp. ownership or control	334	89	8.1	109.8	5.1	10.4	61.1	235.8	224.1	449.7	16.0	89.9	103.8
	Noncorporate ownership	51	–	0.2	2.2	0.1	0.2	1.2	5.4	4.4	9.8	0.3	2.6	2.6
	Legal form of organization:													
	Corporate	562	285	62.9	898.4	39.7	79.3	505.7	2 136.1	1 716.8	3 763.9	123.2	922.5	1 021.4
	Noncorporate, total	51	–	0.2	2.2	0.1	0.2	1.2	5.4	4.4	9.8	0.3	2.6	2.6
	Individual	30	–	0.1	1.0	0.1	0.1	0.6	2.5	2.0	4.5	0.2	1.2	1.2
	Partnership	18	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3562	**Ball and Roller Bearings**	**149**	**104**	**50.6**	**752.6**	**41.3**	**82.4**	**579.9**	**1 472.7**	**1 139.9**	**2 567.3**	**132.9**	**569.0**	**621.7**
	Type of organization:													
	Multiunit companies, total	91	83	47.8	718.6	38.9	77.7	553.7	1 405.0	1 086.2	2 448.5	128.4	538.6	588.1
	Corp. ownership or control	91	83	47.8	718.6	38.9	77.7	553.7	1 405.0	1 086.2	2 448.5	128.4	538.6	588.1
	Single unit companies, total	58	21	2.8	34.0	2.4	4.7	26.1	67.7	53.7	118.8	4.5	30.5	33.5
	Corp. ownership or control	54	21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	145	104	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3563	**Air and Gas Compressors**	**175**	**103**	**32.0**	**465.6**	**19.1**	**38.2**	**255.2**	**1 145.5**	**953.3**	**2 075.6**	**55.8**	**589.0**	**610.9**
	Type of organization:													
	Multiunit companies, total	85	65	29.4	432.9	17.2	34.7	235.2	1 070.1	874.2	1 925.2	52.1	562.2	579.4
	Corp. ownership or control	85	65	29.4	432.9	17.2	34.7	235.2	1 070.1	874.2	1 925.2	52.1	562.2	579.4
	Single unit companies, total	90	38	2.5	32.7	1.9	3.5	20.1	75.5	79.1	150.4	3.8	26.8	31.4
	Corp. ownership or control	80	37	2.5	32.0	1.8	3.4	19.6	74.1	78.1	148.0	3.7	26.4	31.0
	Noncorporate ownership	10	1	0.1	0.7	0.1	0.1	0.5	1.4	1.0	2.4	0.1	0.4	0.4
	Legal form of organization:													
	Corporate	165	102	31.9	464.9	19.0	38.1	254.7	1 144.1	952.3	2 073.2	55.7	588.6	610.4
	Noncorporate, total	10	1	0.1	0.7	0.1	0.1	0.5	1.4	1.0	2.4	0.1	0.4	0.4
	Individual	4	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.3	0.5	(Z)	0.2	0.2
	Partnership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3564	**Blowers and Fans**	**482**	**198**	**28.0**	**356.8**	**18.6**	**36.7**	**209.6**	**776.7**	**662.8**	**1 430.8**	**37.5**	**232.6**	**242.9**
	Type of organization:													
	Multiunit companies, total	140	120	20.8	269.2	13.5	26.6	156.1	597.5	512.3	1 104.5	27.9	188.3	192.7
	Corp. ownership or control	140	120	20.8	269.2	13.5	26.6	156.1	597.5	512.3	1 104.5	27.9	188.3	192.7
	Single unit companies, total	342	78	7.2	87.6	5.2	10.1	53.5	179.2	150.4	326.3	9.6	44.3	50.2
	Corp. ownership or control	318	77	7.1	86.4	5.1	10.0	52.8	176.8	148.6	322.1	9.5	43.7	49.5
	Noncorporate ownership	24	1	0.1	1.2	0.1	0.1	0.6	2.4	1.8	4.2	0.1	0.6	0.7
	Legal form of organization:													
	Corporate	458	197	27.9	355.6	18.6	36.6	208.9	774.3	660.9	1 426.6	37.4	232.0	242.2
	Noncorporate, total	24	1	0.1	1.2	0.1	0.1	0.6	2.4	1.8	4.2	0.1	0.6	0.7
	Individual	17	–	0.1	0.6	(Z)	0.1	0.3	1.3	1.1	2.4	(D)	0.4	0.3
	Partnership	5	1	0.1	0.6	(Z)	0.1	0.3	1.2	0.7	1.8	(D)	0.2	0.4
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
3565	**Industrial Patterns**	**1 002**	**115**	**9.3**	**152.7**	**8.0**	**15.8**	**122.2**	**252.5**	**72.0**	**320.6**	**11.1**	**20.6**	**25.2**
	Type of organization:													
	Multiunit companies, total	34	15	1.0	19.0	0.9	1.7	15.1	32.8	10.0	41.4	1.3	3.3	4.8
	Corp. ownership or control	34	15	1.0	19.0	0.9	1.7	15.1	32.8	10.0	41.4	1.3	3.3	4.8
	Single unit companies, total	968	100	8.3	133.7	7.1	14.1	107.1	219.7	62.0	279.1	9.8	17.2	20.5
	Corp. ownership or control	674	99	7.5	121.2	6.3	12.6	97.0	195.0	55.2	247.6	8.5	15.3	18.5
	Noncorporate ownership	294	1	0.9	12.5	0.8	1.4	10.1	24.7	6.8	31.5	1.3	2.0	2.0
	Legal form of organization:													
	Corporate	708	114	8.5	140.2	7.2	14.4	112.2	227.8	65.2	289.1	9.8	18.6	23.2
	Noncorporate, total	294	1	0.9	12.5	0.8	1.4	10.1	24.7	6.8	31.5	1.3	2.0	2.0
	Individual	230	–	0.6	8.3	0.5	1.0	6.7	17.1	4.8	21.8	1.0	1.5	1.5
	Partnership	61	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3566	**Speed Changers, Drives, and Gears**	**327**	**162**	**25.3**	**365.4**	**17.6**	**35.0**	**226.7**	**803.1**	**429.7**	**1 222.3**	**48.5**	**283.6**	**297.8**
	Type of organization:													
	Multiunit companies, total	91	75	18.3	267.4	12.4	24.7	165.3	607.6	326.7	925.5	34.4	230.3	241.6
	Corp. ownership or control	91	75	18.3	267.4	12.4	24.7	165.3	607.6	326.7	925.5	34.4	230.3	241.6
	Single unit companies, total	236	87	7.0	97.9	5.2	10.3	61.4	195.5	103.0	296.8	14.2	53.4	56.3
	Corp. ownership or control	208	85	6.7	93.7	5.0	9.9	58.5	186.5	99.0	284.0	13.8	50.9	53.6
	Noncorporate ownership	28	2	0.3	4.3	0.2	0.4	2.9	9.0	4.1	12.8	0.3	2.4	2.6

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3566	**Speed Changers, Drives, and Gears**—Con.													
	Legal form of organization:													
	Corporate	299	160	25.0	361.1	17.4	34.6	223.8	794.1	425.6	1 209.5	48.2	281.2	295.2
	Noncorporate, total	28	2	0.3	4.3	0.2	0.4	2.9	9.0	4.1	12.8	0.3	2.4	2.6
	Individual	15	–	(Z)	0.5	(Z)	0.1	0.3	1.4	0.7	2.2	0.1	0.5	0.5
	Partnership	13	2	0.2	3.7	0.2	0.4	2.6	7.5	3.3	10.6	0.2	1.9	2.1
3567	**Industrial Furnaces and Ovens**	**327**	**137**	**15.2**	**209.4**	**9.3**	**17.9**	**107.4**	**469.3**	**305.4**	**746.3**	**13.4**	**118.1**	**151.4**
	Type of organization:													
	Multiunit companies, total	83	60	10.0	141.5	5.9	11.6	73.1	322.9	224.8	521.8	8.8	84.3	114.1
	Corp. ownership or control	83	60	10.0	141.5	5.9	11.6	73.1	322.9	224.8	521.8	8.8	84.3	114.1
	Single unit companies, total	244	77	5.3	67.9	3.3	6.2	34.3	146.5	80.6	224.5	4.6	33.8	37.3
	Corp. ownership or control	212	75	5.1	66.1	3.2	6.0	33.2	139.1	78.6	215.2	4.2	32.4	35.8
	Noncorporate ownership	32	2	0.1	1.8	0.1	0.2	1.1	7.3	2.0	9.3	0.4	1.5	1.5
	Legal form of organization:													
	Corporate	295	135	15.1	207.6	9.2	17.7	106.3	462.0	303.4	737.0	13.0	116.6	149.9
	Noncorporate, total	32	2	0.1	1.8	0.1	0.2	1.1	7.3	2.0	9.3	0.4	1.5	1.5
	Individual	22	–	(Z)	0.6	(Z)	0.1	0.3	2.2	0.3	2.5	(Z)	0.4	0.4
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3568	**Power Transmission Equipment, N.E.C.**	**226**	**163**	**32.5**	**464.8**	**23.8**	**45.8**	**306.8**	**1 009.1**	**650.2**	**1 626.0**	**50.3**	**381.8**	**418.8**
	Type of organization:													
	Multiunit companies, total	106	98	27.0	393.1	19.7	37.7	261.1	874.7	551.7	1 395.7	42.5	337.4	370.2
	Corp. ownership or control	106	98	27.0	393.1	19.7	37.7	261.1	874.7	551.7	1 395.7	42.5	337.4	370.2
	Single unit companies, total	120	65	5.6	71.7	4.2	8.1	45.7	134.4	98.5	230.3	7.8	44.4	48.6
	Corp. ownership or control	114	63	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	220	161	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	6	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	(S)	–	–	–	0.2	–
3569	**General Industrial Machinery, N.E.C.**	**1 646**	**539**	**57.5**	**783.2**	**34.9**	**69.2**	**397.7**	**1 602.2**	**1 194.8**	**2 779.5**	**79.6**	**578.2**	**621.2**
	Type of organization:													
	Multiunit companies, total	324	237	34.4	488.6	20.2	41.0	239.1	1 018.3	792.8	1 807.3	51.3	415.6	434.3
	Corp. ownership or control	324	237	34.4	488.6	20.2	41.0	239.1	1 018.3	792.8	1 807.3	51.3	415.6	434.3
	Single unit companies, total	1 322	302	23.0	294.6	14.7	28.2	158.6	583.9	402.0	972.2	28.3	162.6	186.9
	Corp. ownership or control	1 185	295	21.9	282.5	13.9	26.8	151.2	560.4	386.5	933.5	27.2	157.4	181.1
	Noncorporate ownership	137	7	1.1	12.1	0.8	1.4	7.4	23.6	15.5	38.7	1.1	5.3	5.8
	Legal form of organization:													
	Corporate	1 509	532	56.3	771.1	34.1	67.9	390.3	1 578.6	1 179.3	2 740.8	78.4	572.9	615.3
	Noncorporate, total	137	7	1.1	12.1	0.8	1.4	7.4	23.6	15.5	38.7	1.1	5.3	5.8
	Individual	93	4	0.8	8.1	0.6	1.0	5.1	15.8	10.6	26.1	0.8	3.4	3.7
	Partnership	36	3	0.3	3.7	0.2	0.4	2.1	7.5	4.4	11.7	0.3	1.7	1.9
	Other and unknown	8	–	(Z)	0.3	(Z)	(Z)	0.2	0.3	0.5	0.9	0.1	0.2	0.1
3573	**Electronic Computing Equipment**	**932**	**435**	**192.7**	**3 004.3**	**85.5**	**172.4**	**978.4**	**7 623.5**	**5 701.2**	**12 923.6**	**651.5**	**2 526.0**	**3 007.9**
	Type of organization:													
	Multiunit companies, total	303	262	171.3	2 704.0	75.5	152.3	874.7	6 982.6	5 258.5	11 864.9	610.7	2 326.4	2 765.7
	Corp. ownership or control	303	262	171.3	2 704.0	75.5	152.3	874.7	6 982.6	5 258.5	11 864.9	610.7	2 326.4	2 765.7
	Single unit companies, total	629	173	21.4	300.3	10.0	20.0	103.7	640.9	442.6	1 058.7	40.8	199.6	242.3
	Corp. ownership or control	581	172	21.2	298.1	9.9	19.9	102.8	636.6	440.0	1 051.8	40.6	198.2	240.8
	Noncorporate ownership	48	1	0.2	2.2	0.1	0.2	0.9	4.3	2.6	6.9	0.2	1.4	1.5
	Legal form of organization:													
	Corporate	884	434	192.5	3 002.1	85.4	172.2	977.5	7 619.2	5 698.6	12 916.7	651.3	2 524.6	3 006.4
	Noncorporate, total	48	1	0.2	2.2	0.1	0.2	0.9	4.3	2.6	6.9	0.2	1.4	1.5
	Individual	21	–	0.1	0.7	(Z)	0.1	0.3	1.6	1.2	2.8	0.1	0.6	0.6
	Partnership	17	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	10	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3574	**Calculating and Accounting Machines**	**64**	**31**	**17.1**	**220.7**	**10.4**	**18.1**	**92.9**	**391.3**	**450.5**	**850.0**	**56.3**	**222.0**	**218.2**
	Type of organization:													
	Multiunit companies, total	23	19	14.5	188.8	8.9	15.7	82.8	329.2	403.7	743.9	54.2	196.2	190.4
	Corp. ownership or control	23	19	14.5	188.8	8.9	15.7	82.8	329.2	403.7	743.9	54.2	196.2	190.4
	Single unit companies, total	41	12	2.6	31.9	1.5	2.4	10.1	62.1	46.8	106.1	2.2	25.8	27.8
	Corp. ownership or control	34	12	2.6	31.8	1.5	2.4	10.1	61.9	46.6	105.6	2.2	25.7	27.7
	Noncorporate ownership	7	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.4	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	57	31	17.1	220.6	10.4	18.1	92.9	391.1	450.3	849.6	56.3	221.9	218.1
	Noncorporate, total	7	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.4	(Z)	0.1	0.1
	Individual	7	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.2	0.4	(Z)	0.1	0.1

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3576	**Scales and Balances, Except Laboratory**	**103**	**46**	**7.1**	**84.5**	**4.7**	**9.1**	**46.9**	**214.9**	**138.8**	**348.1**	**6.8**	**79.6**	**85.7**
	Type of organization:													
	Multiunit companies, total	35	27	5.6	65.9	3.7	7.3	37.2	174.0	115.9	285.0	5.4	68.7	73.5
	Corp. ownership or control	35	27	5.6	65.9	3.7	7.3	37.2	174.0	115.9	285.0	5.4	68.7	73.5
	Single unit companies, total	68	19	1.4	18.7	1.0	1.8	9.7	40.9	22.9	63.1	1.5	10.9	12.2
	Corp. ownership or control	56	19	1.4	18.3	0.9	1.8	9.6	39.8	22.3	61.4	1.4	10.5	11.8
	Noncorporate ownership	12	-	(Z)	0.3	(Z)	(Z)	0.2	1.1	0.6	1.7	(Z)	0.4	0.4
	Legal form of organization:													
	Corporate	91	46	7.1	84.2	4.6	9.1	46.8	213.8	138.2	346.4	6.8	79.2	85.3
	Noncorporate, total	12	-	(Z)	0.3	(Z)	(Z)	0.2	1.1	0.6	1.7	(Z)	0.4	0.4
	Individual	12	-	(Z)	0.3	(Z)	(Z)	0.2	1.1	0.6	1.7	(Z)	0.4	0.4
3579	**Office Machines, N.E.C. and Typewriters**	**215**	**98**	**42.4**	**639.1**	**22.9**	**43.7**	**266.1**	**1 691.4**	**1 077.1**	**2 719.7**	**111.5**	**504.2**	**575.3**
	Type of organization:													
	Multiunit companies, total	86	72	39.2	600.3	20.7	39.8	245.5	1 607.0	1 031.6	2 591.4	107.0	483.5	552.3
	Corp. ownership or control	86	72	39.2	600.3	20.7	39.8	245.5	1 607.0	1 031.6	2 591.4	107.0	483.5	552.3
	Single unit companies, total	129	26	3.2	38.8	2.1	4.0	20.6	84.4	45.5	128.3	4.5	20.7	23.0
	Corp. ownership or control	114	26	3.2	38.5	2.1	4.0	20.5	83.9	45.3	127.6	4.4	20.5	22.8
	Noncorporate ownership	15	-	(Z)	0.3	(Z)	(Z)	0.1	0.5	0.2	0.8	(Z)	0.2	0.2
	Legal form of organization:													
	Corporate	200	98	42.4	638.8	22.9	43.7	266.0	1 690.8	1 076.9	2 719.0	111.4	504.0	575.2
	Noncorporate, total	15	-	(Z)	0.3	(Z)	(Z)	0.1	0.5	0.2	0.8	(Z)	0.2	0.2
	Individual	12	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	-	-	-	-	-	(Z)	-	-	-	(Z)	-
3581	**Automatic Merchandising Machines**	**113**	**35**	**8.8**	**103.2**	**6.4**	**12.4**	**65.1**	**211.7**	**214.5**	**410.1**	**7.9**	**83.2**	**109.6**
	Type of organization:													
	Multiunit companies, total	30	20	6.4	80.2	4.7	9.1	49.4	166.6	173.0	326.3	6.0	64.0	85.1
	Corp. ownership or control	30	20	6.4	80.2	4.7	9.1	49.4	166.6	173.0	326.3	6.0	64.0	85.1
	Single unit companies, total	83	15	2.3	23.0	1.8	3.3	15.8	45.1	41.4	83.9	1.9	19.2	24.4
	Corp. ownership or control	76	15	2.3	22.9	1.8	3.3	15.7	44.9	41.3	83.5	1.9	19.1	24.4
	Noncorporate ownership	7	-	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.2	0.3	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	106	35	8.8	103.1	6.4	12.4	65.1	211.5	214.3	409.8	7.9	83.1	109.5
	Noncorporate, total	7	-	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.2	0.3	(Z)	0.1	0.1
	Individual	4	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	-	-	-	-	-	-	-	-	-	-	-	-
3582	**Commercial Laundry Equipment**	**94**	**38**	**4.6**	**54.4**	**3.3**	**6.4**	**35.6**	**117.3**	**104.9**	**220.3**	**2.2**	**49.1**	**53.5**
	Type of organization:													
	Multiunit companies, total	22	21	2.8	33.8	1.9	3.7	21.6	74.6	68.3	141.9	1.1	31.8	34.8
	Corp. ownership or control	22	21	2.8	33.8	1.9	3.7	21.6	74.6	68.3	141.9	1.1	31.8	34.8
	Single unit companies, total	72	17	1.8	20.7	1.4	2.6	13.9	42.7	36.6	78.4	1.2	17.4	18.8
	Corp. ownership or control	61	16	1.7	19.8	1.3	2.5	13.4	41.0	35.1	75.3	1.1	16.8	18.1
	Noncorporate ownership	11	1	0.1	0.9	0.1	0.1	0.5	1.8	1.4	3.2	(Z)	0.6	0.6
	Legal form of organization:													
	Corporate	83	37	4.5	53.6	3.2	6.2	35.0	115.6	103.5	217.1	2.2	48.6	52.9
	Noncorporate, total	11	1	0.1	0.9	0.1	0.1	0.5	1.8	1.4	3.2	(Z)	0.6	0.6
	Individual	5	-	(Z)	0.1	(Z)	(Z)	0.1	0.2	0.2	0.4	(D)	0.1	0.1
	Partnership	6	1	0.1	0.8	0.1	0.1	0.5	1.5	1.3	2.8	(D)	0.5	0.5
3585	**Refrigeration and Heating Equipment**	**860**	**457**	**138.6**	**1 849.7**	**104.4**	**205.4**	**1 270.2**	**4 469.2**	**5 235.7**	**9 638.1**	**233.0**	**1 507.9**	**1 632.7**
	Type of organization:													
	Multiunit companies, total	323	278	124.0	1 675.0	93.5	180.4	1 160.7	4 105.4	4 840.0	8 886.7	215.5	1 387.9	1 497.3
	Corp. ownership or control	323	278	124.0	1 675.0	93.5	180.4	1 160.7	4 105.4	4 840.0	8 886.7	215.5	1 387.9	1 497.3
	Single unit companies, total	537	179	14.6	174.8	10.9	25.0	109.5	363.8	395.6	751.4	17.5	120.0	135.3
	Corp. ownership or control	487	175	14.3	170.7	10.7	24.2	106.6	354.3	384.5	731.0	17.0	118.0	133.1
	Noncorporate ownership	50	4	0.3	4.1	0.3	0.8	2.8	9.5	11.1	20.4	0.5	2.0	2.2
	Legal form of organization:													
	Corporate	810	453	138.3	1 845.7	104.1	204.6	1 267.3	4 459.7	5 224.5	9 617.7	232.5	1 505.9	1 630.4
	Noncorporate, total	50	4	0.3	4.1	0.3	0.8	2.8	9.5	11.1	20.4	0.5	2.0	2.2
	Individual	27	1	0.1	1.3	0.1	0.1	0.9	2.6	2.5	5.1	0.1	0.7	0.7
	Partnership	16	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3586	**Measuring and Dispensing Pumps**	**59**	**30**	**7.4**	**97.3**	**5.1**	**9.7**	**57.9**	**218.0**	**158.2**	**375.7**	**6.2**	**89.5**	**97.9**
	Type of organization:													
	Multiunit companies, total	20	18	6.6	88.7	4.6	8.7	52.6	201.6	142.2	343.2	5.2	84.2	92.4
	Corp. ownership or control	20	18	6.6	88.7	4.6	8.7	52.6	201.6	142.2	343.2	5.2	84.2	92.4
	Single unit companies, total	39	12	0.7	8.6	0.5	1.0	5.3	16.4	16.0	32.5	1.0	5.3	5.5
	Corp. ownership or control	32	11	0.7	8.4	0.5	1.0	5.2	15.9	15.7	31.7	(D)	5.1	5.3
	Noncorporate ownership	7	1	(Z)	0.2	(Z)	(Z)	0.1	0.5	0.3	0.8	(D)	0.2	0.2
	Legal form of organization:													
	Corporate	52	29	7.3	97.1	5.1	9.7	57.8	217.5	157.9	374.9	(D)	89.3	97.7
	Noncorporate, total	7	1	(Z)	0.2	(Z)	(Z)	0.1	0.5	0.3	0.8	(D)	0.2	0.2
	Individual	6	1	(Z)	0.2	(Z)	(Z)	0.1	0.5	0.3	0.8	(D)	0.2	0.2
	Other and unknown	1	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**MACHINERY, EXCEPT ELECTRICAL**—Con.													
3589	**Service Industry Machinery, N.E.C.**	**988**	**277**	**32.1**	**411.8**	**19.2**	**36.9**	**208.6**	**946.4**	**849.3**	**1 771.8**	**38.5**	**324.4**	**365.9**
	Type of organization:													
	Multiunit companies, total	182	131	20.0	263.5	11.4	22.0	129.4	628.8	561.7	1 171.3	25.3	232.9	267.4
	Corp. ownership or control	181	130	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	806	146	12.1	148.3	7.8	14.9	79.2	317.6	287.6	600.5	13.2	91.4	98.5
	Corp. ownership or control	702	140	11.3	140.1	7.3	14.0	74.9	300.6	272.4	568.4	12.7	87.1	93.8
	Noncorporate ownership	104	6	0.7	8.2	0.5	0.9	4.3	17.0	15.3	32.1	0.5	4.3	4.6
	Legal form of organization:													
	Corporate	883	270	31.3	403.1	18.7	35.9	203.9	927.8	831.5	1 735.7	38.0	319.1	360.2
	Noncorporate, total	105	7	0.8	8.6	0.5	0.9	4.7	18.6	17.8	36.1	0.5	5.2	5.7
	Individual	68	3	0.4	3.8	0.2	0.4	1.9	8.0	5.4	13.3	0.3	1.8	2.0
	Partnership	28	3	0.3	4.1	0.2	0.4	2.3	8.4	9.4	17.7	0.2	2.4	2.5
	Other and unknown	9	1	0.1	0.8	(Z)	0.1	0.5	2.1	3.1	5.1	(Z)	1.0	1.2
3592	**Carburetors, Pistons, Rings, and Valves**	**151**	**84**	**32.2**	**508.5**	**26.0**	**52.5**	**388.5**	**924.9**	**503.8**	**1 400.6**	**79.9**	**202.7**	**240.0**
	Type of organization:													
	Multiunit companies, total	50	47	29.4	474.0	23.7	47.8	362.5	862.0	462.6	1 297.6	75.4	185.3	219.4
	Corp. ownership or control	50	47	29.4	474.0	23.7	47.8	362.5	862.0	462.6	1 297.6	75.4	185.3	219.4
	Single unit companies, total	101	37	2.8	34.6	2.4	4.6	25.9	62.9	41.1	103.1	4.5	17.4	20.6
	Corp. ownership or control	89	33	2.5	31.3	2.1	4.2	23.4	57.7	37.8	94.6	4.4	15.7	18.2
	Noncorporate ownership	12	4	0.3	3.2	0.3	0.5	2.5	5.1	3.4	8.5	0.1	1.8	2.4
	Legal form of organization:													
	Corporate	139	80	31.9	505.3	25.8	52.0	385.9	919.7	500.4	1 392.1	79.9	200.9	237.6
	Noncorporate, total	12	4	0.3	3.2	0.3	0.5	2.5	5.1	3.4	8.5	0.1	1.8	2.4
	Individual	9	4	0.3	3.2	0.3	0.4	2.5	5.0	3.3	8.4	0.1	1.8	2.4
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3599	**Machinery, Except Electrical, N.E.C.**	**19 248**	**2 500**	**190.5**	**2 471.8**	**150.8**	**298.0**	**1 717.1**	**4 437.6**	**2 234.0**	**6 611.2**	**340.9**	**737.6**	**822.7**
	Type of organization:													
	Multiunit companies, total	695	414	33.8	454.1	25.5	50.7	311.4	871.5	486.6	1 338.5	64.9	228.4	252.8
	Corp. ownership or control	691	413	33.7	453.3	25.4	50.6	310.7	869.9	486.4	1 336.7	(D)	228.3	252.7
	Noncorporate ownership	4	1	0.1	0.7	0.1	0.1	0.7	1.6	0.3	1.8	(D)	0.1	0.1
	Single unit companies, total	18 553	2 086	156.7	2 017.8	125.3	247.3	1 405.7	3 566.0	1 747.4	5 272.6	275.9	509.2	569.9
	Corp. ownership or control	12 082	2 001	138.3	1 802.2	109.4	219.0	1 252.7	3 109.9	1 540.3	4 611.5	240.1	443.3	500.4
	Noncorporate ownership	6 471	85	18.4	215.6	15.9	28.2	153.0	456.2	207.1	661.1	35.8	66.0	69.5
	Legal form of organization:													
	Corporate	12 773	2 414	172.0	2 255.5	134.8	269.7	1 563.4	3 979.8	2 026.6	5 948.2	304.8	671.6	753.1
	Noncorporate, total	6 475	86	18.5	216.3	16.0	28.4	153.7	457.8	207.4	662.9	36.1	66.0	69.6
	Individual	5 046	54	13.5	157.1	11.7	20.7	111.3	342.7	153.4	494.6	26.4	49.5	51.8
	Partnership	1 264	25	4.3	51.1	3.7	6.6	36.5	100.5	47.6	147.3	8 3	14.3	15.6
	Other and unknown	165	7	0.7	8.1	0.6	1.1	5.9	14.6	6.4	21.0	1.4	2.2	2.2
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**	**14 973**	**6 338**	**1 723.1**	**22 544.2**	**1 191.4**	**2 309.2**	**12 951.6**	**50 365.7**	**39 369.5**	**88 433.1**	**2 866.5**	**14 273.0**	**16 058.7**
	Type of organization:													
	Multiunit companies, total	4 092	3 501	1 475.4	19 881.8	1 010.7	1 965.6	11 424.7	44 949.8	35 144.0	78 869.2	2 569.7	12 785.4	14 429.0
	Corp. ownership or control	4 084	3 496	1 474.2	19 867.5	1 009.7	1 964.1	11 415.0	44 912.2	35 099.0	78 787.1	2 568.1	12 772.0	14 414.6
	Noncorporate ownership	8	5	1.2	14.2	1.0	1.5	9.8	37.6	44.9	82.1	1.6	13.4	14.4
	Single unit companies, total	10 881	2 837	247.7	2 662.4	180.7	343.6	1 526.9	5 415.9	4 225.5	9 563.9	296.7	1 487.6	1 629.8
	Corp. ownership or control	9 506	2 784	241.0	2 588.9	175.6	334.2	1 483.3	5 267.6	4 089.4	9 281.6	283.9	1 447.3	1 586.4
	Noncorporate ownership	1 375	53	6.6	73.5	5.1	9.3	43.6	148.3	136.1	282.3	12.8	40.3	43.4
	Legal form of organization:													
	Corporate	13 590	6 280	1 715.2	22 456.4	1 185.3	2 298.3	12 898.3	50 179.7	39 188.4	88 068.7	2 852.0	14 219.3	16 000.9
	Noncorporate, total	1 383	58	7.9	87.8	6.1	10.8	53.4	185.9	181.1	364.4	14.5	53.7	57.8
	Individual	904	21	3.7	42.2	2.8	5.1	23.7	83.4	82.8	164.0	9.2	20.9	23.9
	Partnership	366	22	2.1	21.7	1.7	3.3	14.2	45.3	36.5	81.5	2.0	11.9	12.5
	Other and unknown	113	15	2.0	23.8	1.5	2.5	15.5	57.2	61.9	119.0	3.3	20.9	21.4
3612	**Transformers**	**279**	**143**	**43.3**	**529.6**	**32.8**	**62.5**	**349.8**	**1 170.0**	**1 061.8**	**2 209.1**	**67.2**	**344.1**	**385.8**
	Type of organization:													
	Multiunit companies, total	108	90	38.0	478.0	28.7	54.9	317.4	1 066.9	953.6	2 000.4	62.3	314.0	352.5
	Corp. ownership or control	106	88	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	171	53	5.3	51.6	4.1	7.5	32.4	103.1	108.2	208.7	4.9	30.1	33.3
	Corp. ownership or control	146	52	5.2	50.6	4.0	7.4	31.7	101.1	106.7	205.3	4.9	29.5	32.8
	Noncorporate ownership	25	1	0.1	1.0	0.1	0.1	0.7	2.0	1.5	3.4	0.1	0.5	0.5
	Legal form of organization:													
	Corporate	252	140	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	27	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	18	1	0.1	0.6	0.1	0.1	0.5	1.3	0.9	2.2	0.1	0.3	0.3
	Partnership	6	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.6	1.2	(Z)	0.2	0.2
	Other and unknown	3	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3613	**Switchgear and Switchboard Apparatus**	**668**	**316**	**72.0**	**901.7**	**52.1**	**99.9**	**560.1**	**2 165.9**	**1 437.2**	**3 562.6**	**73.9**	**600.1**	**653.8**
	Type of organization:													
	Multiunit companies, total	230	189	62.1	780.6	45.1	86.3	491.2	1 921.9	1 258.5	3 143.7	65.1	529.3	575.6
	Corp. ownership or control	230	189	62.1	780.6	45.1	86.3	491.2	1 921.9	1 258.5	3 143.7	65.1	529.3	575.6
	Single unit companies, total	438	127	10.0	121.2	7.1	13.6	68.9	244.0	178.8	418.9	8.9	70.8	78.2
	Corp. ownership or control	404	126	9.8	118.3	6.9	13.3	67.3	237.5	172.7	406.5	8.8	67.7	74.9
	Noncorporate ownership	34	1	0.2	2.9	0.1	0.3	1.6	6.4	6.1	12.4	0.1	3.1	3.3

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
35	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3613	**Switchgear and Switchboard Apparatus**—Con.													
	Legal form of organization:													
	Corporate	634	315	71.8	898.8	52.0	99.5	558.5	2 159.5	1 431.1	3 550.2	73.8	597.0	650.5
	Noncorporate, total	34	1	0.2	2.9	0.1	0.3	1.6	6.4	6.1	12.4	0.1	3.1	3.3
	Individual	29	1	0.2	2.7	0.1	0.3	1.6	6.1	5.9	11.9	0.1	3.0	3.2
	Partnership	5	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.2	0.5	(Z)	0.1	0.1
3621	**Motors and Generators**	**447**	**299**	**96.9**	**1 177.6**	**74.2**	**145.8**	**802.6**	**2 609.8**	**1 917.9**	**4 462.7**	**162.6**	**678.0**	**771.4**
	Type of organization:													
	Multiunit companies, total	218	204	87.6	1 079.0	67.3	131.7	743.6	2 413.6	1 750.8	4 103.8	152.1	620.0	704.0
	Corp. ownership or control	218	204	87.6	1 079.0	67.3	131.7	743.6	2 413.6	1 750.8	4 103.8	152.1	620.0	704.0
	Single unit companies, total	229	95	9.3	98.7	6.9	14.1	59.0	196.2	167.1	358.9	10.5	58.0	67.4
	Corp. ownership or control	208	94	9.2	97.3	6.8	13.9	58.1	193.5	164.8	353.9	10.4	57.1	66.5
	Noncorporate ownership	21	1	0.1	1.4	0.1	0.2	0.9	2.7	2.3	5.0	0.1	0.9	0.9
	Legal form of organization:													
	Corporate	426	298	96.8	1 176.3	74.1	145.6	801.7	2 607.1	1 915.6	4 457.8	162.5	677.1	770.5
	Noncorporate, total	21	1	0.1	1.4	0.1	0.2	0.9	2.7	2.3	5.0	0.1	0.9	0.9
	Individual	14	–	0.1	0.7	(Z)	0.1	0.4	1.1	0.8	1.9	(Z)	0.4	0.3
	Partnership	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3622	**Industrial Controls**	**726**	**283**	**55.4**	**726.6**	**35.3**	**69.0**	**380.1**	**1 602.2**	**962.1**	**2 511.4**	**57.5**	**563.9**	**616.1**
	Type of organization:													
	Multiunit companies, total	177	149	46.3	612.6	29.2	57.4	319.6	1 376.0	807.5	2 134.8	47.7	494.6	540.3
	Corp. ownership or control	177	149	46.3	612.6	29.2	57.4	319.6	1 376.0	807.5	2 134.8	47.7	494.6	540.3
	Single unit companies, total	549	134	9.2	114.0	6.2	11.6	60.5	226.2	154.6	376.6	9.9	69.4	75.7
	Corp. ownership or control	492	134	9.1	113.0	6.1	11.5	60.0	223.6	153.0	372.4	9.8	68.4	74.8
	Noncorporate ownership	57	–	0.1	1.0	0.1	0.1	0.5	2.5	1.7	4.2	0.1	0.9	0.9
	Legal form of organization:													
	Corporate	669	283	55.4	725.6	35.3	68.9	379.6	1 599.7	960.4	2 507.2	57.4	563.0	615.1
	Noncorporate, total	57	–	0.1	1.0	0.1	0.1	0.5	2.5	1.7	4.2	0.1	0.9	0.9
	Individual	44	–	0.1	0.7	(Z)	0.1	0.4	1.9	1.3	3.2	0.1	0.7	0.7
	Partnership	9	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3623	**Welding Apparatus, Electric**	**176**	**87**	**17.5**	**285.7**	**11.3**	**23.0**	**165.1**	**582.7**	**632.9**	**1 189.6**	**38.7**	**226.2**	**258.8**
	Type of organization:													
	Multiunit companies, total	64	54	14.5	240.8	9.3	18.8	139.5	498.9	560.8	1 037.2	35.5	201.6	228.6
	Corp. ownership or control	64	54	14.5	240.8	9.3	18.8	139.5	498.9	560.8	1 037.2	35.5	201.6	228.6
	Single unit companies, total	112	33	2.9	44.9	2.0	4.2	25.7	83.8	72.1	152.4	3.1	24.6	30.2
	Corp. ownership or control	103	33	2.9	44.4	2.0	4.1	25.4	82.6	70.7	149.9	3.1	24.1	29.6
	Noncorporate ownership	9	–	(Z)	0.5	(Z)	(Z)	0.3	1.2	1.3	2.5	0.1	0.5	0.5
	Legal form of organization:													
	Corporate	167	87	17.4	285.2	11.2	22.9	164.8	581.5	631.6	1 187.1	38.6	225.7	258.3
	Noncorporate, total	9	–	(Z)	0.5	(Z)	(Z)	0.3	1.2	1.3	2.5	0.1	0.5	0.5
	Individual	6	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.8	1.5	(Z)	0.3	0.3
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3624	**Carbon and Graphite Products**	**74**	**48**	**12.1**	**164.1**	**9.0**	**17.7**	**110.9**	**408.4**	**337.5**	**735.2**	**35.4**	**200.0**	**215.9**
	Type of organization:													
	Multiunit companies, total	37	34	10.6	146.8	7.9	15.5	99.6	375.0	319.2	684.0	33.5	194.1	209.0
	Corp. ownership or control	37	34	10.6	146.8	7.9	15.5	99.6	375.0	319.2	684.0	33.5	194.1	209.0
	Single unit companies, total	37	14	1.5	17.2	1.2	2.2	11.3	33.4	18.3	51.2	1.9	5.9	6.9
	Corp. ownership or control	36	14	1.5	17.2	1.2	2.2	11.3	33.4	18.3	51.2	1.9	5.9	6.9
	Noncorporate ownership	1	–	–	–	–	–	–	–	–	–	–	–	–
	Legal form of organization:													
	Corporate	73	48	12.1	164.1	9.0	17.7	110.9	408.4	337.5	735.2	35.4	200.0	215.9
	Noncorporate, total	1	–	–	–	–	–	–	–	–	–	–	–	–
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3629	**Electrical Industrial Apparatus, N.E.C.**	**223**	**102**	**16.5**	**188.6**	**12.2**	**23.4**	**113.4**	**411.0**	**294.0**	**692.4**	**16.8**	**123.3**	**140.0**
	Type of organization:													
	Multiunit companies, total	58	47	11.7	135.1	8.7	16.7	80.8	310.1	206.1	504.6	11.6	92.2	105.1
	Corp. ownership or control	58	47	11.7	135.1	8.7	16.7	80.8	310.1	206.1	504.6	11.6	92.2	105.1
	Single unit companies, total	165	55	4.8	53.5	3.5	6.7	32.6	100.9	88.0	187.7	5.2	31.1	34.9
	Corp. ownership or control	149	53	4.7	52.3	3.4	6.6	31.7	98.7	86.7	184.2	5.0	30.4	34.3
	Noncorporate ownership	16	2	0.1	1.2	0.1	0.1	0.8	2.3	1.2	3.5	0.2	0.6	0.6
	Legal form of organization:													
	Corporate	207	100	16.4	187.4	12.1	23.2	112.5	408.8	292.8	688.9	16.6	122.6	139.4
	Noncorporate, total	16	2	0.1	1.2	0.1	0.1	0.8	2.3	1.2	3.5	0.2	0.6	0.6
	Individual	10	1	0.1	0.8	0.1	0.1	0.6	1.5	0.7	2.3	0.2	0.4	0.4
	Partnership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3631	**Household Cooking Equipment**	**96**	**58**	**25.4**	**289.1**	**19.1**	**36.8**	**197.9**	**784.1**	**943.9**	**1 707.2**	**36.1**	**283.7**	**303.8**
	Type of organization:													
	Multiunit companies, total	50	47	23.7	270.0	17.7	34.1	184.8	734.2	895.7	1 609.6	34.1	268.8	287.8
	Corp. ownership or control	50	47	23.7	270.0	17.7	34.1	184.8	734.2	895.7	1 609.6	34.1	268.8	287.8
	Single unit companies, total	46	11	1.8	19.1	1.4	2.7	13.1	50.0	48.2	97.7	2.0	14.9	16.0
	Corp. ownership or control	41	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	91	58	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	–	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	–	(Z)	(Z)
3632	**Household Refrigerators and Freezers**	**42**	**25**	**35.8**	**468.6**	**29.8**	**56.9**	**358.0**	**1 166.1**	**1 447.6**	**2 576.6**	**46.9**	**352.1**	**399.1**
	Type of organization:													
	Multiunit companies, total	24	22	35.5	464.2	29.5	56.4	354.8	1 155.9	1 436.0	2 555.2	(D)	350.2	396.7
	Corp. ownership or control	24	22	35.5	464.2	29.5	56.4	354.8	1 155.9	1 436.0	2 555.2	(D)	350.2	396.7
	Single unit companies, total	18	3	0.4	4.4	0.3	0.6	3.2	10.2	11.6	21.4	(D)	1.9	2.5
	Corp. ownership or control	16	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	40	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3633	**Household Laundry Equipment**	**31**	**24**	**19.4**	**262.4**	**15.9**	**29.4**	**202.4**	**844.7**	**953.1**	**1 792.8**	**27.3**	**162.1**	**170.6**
	Type of organization:													
	Multiunit companies, total	24	22	19.2	260.3	15.8	29.1	201.0	840.6	949.1	1 784.9	(D)	161.7	170.0
	Corp. ownership or control	24	22	19.2	260.3	15.8	29.1	201.0	840.6	949.1	1 784.9	(D)	161.7	170.0
	Single unit companies, total	7	2	0.2	2.0	0.2	0.3	1.4	4.1	4.0	7.9	(D)	0.4	0.6
	Corp. ownership or control	5	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	29	24	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3634	**Electric Housewares and Fans**	**291**	**148**	**47.3**	**458.7**	**37.6**	**71.4**	**305.0**	**1 365.7**	**1 169.8**	**2 531.2**	**47.8**	**409.2**	**429.5**
	Type of organization:													
	Multiunit companies, total	121	104	42.9	422.6	33.9	64.3	281.3	1 271.4	1 068.6	2 334.8	42.8	383.9	401.6
	Corp. ownership or control	121	104	42.9	422.6	33.9	64.3	281.3	1 271.4	1 068.6	2 334.8	42.8	383.9	401.6
	Single unit companies, total	170	44	4.5	36.1	3.7	7.0	23.7	94.2	101.2	196.4	5.0	25.2	27.9
	Corp. ownership or control	153	43	4.4	35.4	3.7	6.9	23.2	92.5	99.5	192.9	5.0	24.6	27.2
	Noncorporate ownership	17	1	0.1	0.7	0.1	0.1	0.5	1.8	1.7	3.4	0.1	0.6	0.6
	Legal form of organization:													
	Corporate	274	147	47.3	458.0	37.6	71.3	304.5	1 363.9	1 168.1	2 527.7	47.7	408.6	428.8
	Noncorporate, total	17	1	0.1	0.7	0.1	0.1	0.5	1.8	1.7	3.4	0.1	0.6	0.6
	Individual	13	–	(Z)	0.2	(Z)	(Z)	0.2	0.6	0.6	1.1	(Z)	0.2	0.2
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3635	**Household Vacuum Cleaners**	**35**	**22**	**10.4**	**116.6**	**7.3**	**12.9**	**78.9**	**378.8**	**264.9**	**639.9**	**16.2**	**81.0**	**85.2**
	Type of organization:													
	Multiunit companies, total	13	12	9.6	108.1	6.8	11.9	73.7	364.4	242.7	603.1	15.9	74.6	79.8
	Corp. ownership or control	13	12	9.6	108.1	6.8	11.9	73.7	364.4	242.7	603.1	15.9	74.6	79.8
	Single unit companies, total	22	10	0.8	8.5	0.6	1.0	5.2	14.4	22.2	36.8	0.4	6.5	5.4
	Corp. ownership or control	19	10	0.8	8.4	0.6	1.0	5.1	14.1	22.0	36.3	0.4	6.4	5.4
	Noncorporate ownership	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.3	0.2	0.4	(Z)	0.1	0.1
	Legal form of organization:													
	Corporate	32	22	10.4	116.5	7.3	12.9	78.8	378.5	264.7	639.5	16.2	80.9	85.2
	Noncorporate, total	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.3	0.2	0.4	(Z)	0.1	0.1
	Individual	3	–	(Z)	0.1	(Z)	(Z)	(Z)	0.3	0.2	0.4	(Z)	0.1	0.1
3636	**Sewing Machines**	**91**	**25**	**8.2**	**107.0**	**6.1**	**10.6**	**66.8**	**208.9**	**108.9**	**304.9**	**8.1**	**103.6**	**122.3**
	Type of organization:													
	Multiunit companies, total	14	12	7.4	97.1	5.5	9.5	60.7	188.4	95.0	271.4	7.0	93.5	111.3
	Corp. ownership or control	14	12	7.4	97.1	5.5	9.5	60.7	188.4	95.0	271.4	7.0	93.5	111.3
	Single unit companies, total	77	13	0.8	10.0	0.6	1.1	6.1	20.5	13.8	33.5	1.1	10.1	11.0
	Corp. ownership or control	60	12	0.7	9.3	0.5	1.0	5.7	19.2	13.2	31.6	1.0	9.4	10.3
	Noncorporate ownership	17	1	0.1	0.7	(Z)	0.1	0.4	1.3	0.6	1.9	0.1	0.7	0.7
	Legal form of organization:													
	Corporate	74	24	8.2	106.3	6.0	10.5	66.4	207.6	108.3	303.0	8.0	102.9	121.6
	Noncorporate, total	17	1	0.1	0.7	(Z)	0.1	0.4	1.3	0.6	1.9	0.1	0.7	0.7
	Individual	10	–	(Z)	0.3	(Z)	(Z)	0.2	0.4	0.2	0.6	(Z)	0.2	0.2
	Partnership	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3639	**Household Appliances, N.E.C.**	**80**	**40**	**15.7**	**195.6**	**12.8**	**25.1**	**143.2**	**527.9**	**667.5**	**1 184.0**	**24.6**	**132.6**	**164.2**
	Type of organization:													
	Multiunit companies, total	38	33	15.2	189.2	12.4	24.3	138.7	514.5	647.2	1 150.3	24.1	128.3	159.7
	Corp. ownership or control	38	33	15.2	189.2	12.4	24.3	138.7	514.5	647.2	1 150.3	24.1	128.3	159.7
	Single unit companies, total	42	7	0.5	6.4	0.4	0.8	4.5	13.4	20.3	33.6	0.5	4.3	4.5
	Corp. ownership or control	39	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	77	40	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3641	**Electric Lamps**	**167**	**64**	**28.7**	**322.4**	**25.3**	**47.5**	**266.3**	**1 089.2**	**574.9**	**1 651.4**	**36.6**	**104.3**	**121.4**
	Type of organization:													
	Multiunit companies, total	58	53	27.2	309.5	24.1	45.3	256.6	1 054.1	557.2	1 598.6	35.4	99.7	116.7
	Corp. ownership or control	58	53	27.2	309.5	24.1	45.3	256.6	1 054.1	557.2	1 598.6	35.4	99.7	116.7
	Single unit companies, total	109	11	1.4	12.9	1.2	2.2	9.7	35.1	17.7	52.7	1.3	4.6	4.7
	Corp. ownership or control	92	10	1.3	12.1	1.1	2.0	9.1	32.7	16.9	49.6	1.2	4.3	4.4
	Noncorporate ownership	17	1	0.1	0.7	0.1	0.2	0.6	2.3	0.8	3.2	0.1	0.3	0.3
	Legal form of organization:													
	Corporate	150	63	28.6	321.7	25.2	47.3	265.7	1 086.8	574.1	1 648.2	36.6	104.1	121.1
	Noncorporate, total	17	1	0.1	0.7	0.1	0.2	0.6	2.3	0.8	3.2	0.1	0.3	0.3
	Individual	9	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.1	0.4	(Z)	(Z)	(Z)
	Partnership	8	1	0.1	0.6	0.1	0.2	0.6	2.0	0.7	2.7	0.1	0.2	0.2
3643	**Current-carrying Wiring Devices**	**413**	**198**	**43.9**	**480.3**	**33.6**	**66.2**	**312.1**	**1 100.1**	**738.7**	**1 795.2**	**55.8**	**284.7**	**341.5**
	Type of organization:													
	Multiunit companies, total	153	128	36.9	410.6	28.2	55.9	267.3	951.3	625.4	1 535.0	49.6	244.7	298.7
	Corp. ownership or control	153	128	36.9	410.6	28.2	55.9	267.3	951.3	625.4	1 535.0	49.6	244.7	298.7
	Single unit companies, total	260	70	6.9	69.7	5.4	10.3	44.7	148.8	113.3	260.2	6.2	40.0	42.8
	Corp. ownership or control	233	69	6.8	68.7	5.3	10.1	44.1	146.6	111.8	256.4	6.2	39.2	42.1
	Noncorporate ownership	27	1	0.1	1.0	0.1	0.2	0.7	2.3	1.5	3.8	0.1	0.8	0.8
	Legal form of organization:													
	Corporate	386	197	43.8	479.3	33.5	66.1	311.4	1 097.9	737.2	1 791.4	55.7	284.0	340.8
	Noncorporate, total	27	1	0.1	1.0	0.1	0.2	0.7	2.3	1.5	3.8	0.1	0.8	0.8
	Individual	17	–	(Z)	0.3	(Z)	(Z)	0.2	0.6	0.4	1.1	(Z)	0.2	0.2
	Partnership	9	1	0.1	0.7	0.1	0.1	0.5	1.6	1.1	2.7	0.1	0.6	0.6
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3644	**Noncurrent-carrying Wiring Devices**	**202**	**123**	**25.8**	**330.1**	**18.4**	**35.9**	**210.9**	**744.4**	**682.4**	**1 421.8**	**32.8**	**335.3**	**350.5**
	Type of organization:													
	Multiunit companies, total	88	79	21.5	281.3	15.0	29.2	178.4	628.5	587.2	1 212.3	28.4	303.6	316.1
	Corp. ownership or control	88	79	21.5	281.3	15.0	29.2	178.4	628.5	587.2	1 212.3	28.4	303.6	316.1
	Single unit companies, total	114	44	4.3	48.9	3.4	6.7	32.5	116.0	95.2	209.5	4.4	31.8	34.4
	Corp. ownership or control	107	43	4.3	48.1	3.4	6.6	32.0	114.5	94.1	207.0	4.4	31.3	33.9
	Noncorporate ownership	7	1	0.1	0.7	(Z)	0.1	0.5	1.4	1.0	2.5	(Z)	0.5	0.5
	Legal form of organization:													
	Corporate	195	122	25.8	329.4	18.4	35.8	210.4	743.0	681.4	1 419.3	32.8	334.9	350.0
	Noncorporate, total	7	1	0.1	0.7	(Z)	0.1	0.5	1.4	1.0	2.5	(Z)	0.5	0.5
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3645	**Residential Lighting Fixtures**	**710**	**244**	**23.7**	**229.5**	**18.2**	**33.4**	**139.4**	**494.2**	**495.6**	**986.6**	**11.8**	**183.1**	**193.2**
	Type of organization:													
	Multiunit companies, total	99	79	12.0	123.5	8.8	16.5	72.7	262.9	270.5	533.3	5.4	117.8	122.1
	Corp. ownership or control	99	79	12.0	123.5	8.8	16.5	72.7	262.9	270.5	533.3	5.4	117.8	122.1
	Single unit companies, total	611	165	11.7	106.0	9.4	16.9	66.6	231.3	225.1	453.2	6.4	65.3	71.1
	Corp. ownership or control	501	160	11.1	100.5	8.9	15.9	63.0	218.1	213.7	428.9	6.2	61.7	67.1
	Noncorporate ownership	110	5	0.6	5.5	0.5	1.0	3.7	13.1	11.3	24.3	0.2	3.6	4.0
	Legal form of organization:													
	Corporate	600	239	23.1	223.9	17.7	32.4	135.7	481.1	484.2	962.2	11.6	179.6	189.2
	Noncorporate, total	110	5	0.6	5.5	0.5	1.0	3.7	13.1	11.3	24.3	0.2	3.6	4.0
	Individual	75	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	26	4	0.4	3.2	0.3	0.7	2.2	8.0	6.1	13.9	0.1	1.7	2.1
	Other and unknown	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3646	**Commercial Lighting Fixtures**	**218**	**122**	**15.6**	**169.1**	**11.1**	**20.6**	**98.8**	**434.7**	**498.4**	**922.7**	**18.0**	**162.5**	**182.3**
	Type of organization:													
	Multiunit companies, total	71	55	10.3	112.4	7.2	13.1	63.9	304.3	344.3	640.0	13.8	118.6	135.1
	Corp. ownership or control	70	54	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	147	67	5.3	56.7	4.0	7.5	34.9	130.4	154.2	282.6	4.2	43.9	47.1
	Corp. ownership or control	135	67	5.2	56.3	3.9	7.4	34.6	129.4	153.1	280.5	4.2	43.5	46.7
	Noncorporate ownership	12	–	(Z)	0.4	(Z)	0.1	0.3	1.0	1.1	2.1	(Z)	0.4	0.4

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3646	**Commercial Lighting Fixtures**—Con.													
	Legal form of organization:													
	Corporate	205	121	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	13	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	7	–	(Z)	0.3	(Z)	(Z)	0.2	0.7	0.7	1.4	(Z)	0.3	0.3
	Partnership	4	–	(Z)	0.1	(Z)	(Z)	0.1	0.3	0.4	0.7	(Z)	0.1	0.1
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3647	**Vehicular Lighting Equipment**	**75**	**43**	**14.5**	**246.0**	**11.4**	**23.3**	**178.8**	**536.0**	**388.9**	**908.5**	**46.3**	**78.2**	**97.1**
	Type of organization:													
	Multiunit companies, total	26	24	12.5	225.7	9.8	20.2	166.1	493.4	351.9	829.9	44.9	67.0	84.0
	Corp. ownership or control	26	24	12.5	225.7	9.8	20.2	166.1	493.4	351.9	829.9	44.9	67.0	84.0
	Single unit companies, total	49	19	2.1	20.3	1.6	3.0	12.7	42.6	36.9	78.6	1.4	11.1	13.1
	Corp. ownership or control	44	19	2.0	20.0	1.6	3.0	12.4	41.8	36.1	77.0	1.4	10.9	12.9
	Noncorporate ownership	5	–	(Z)	0.4	(Z)	(Z)	0.3	0.8	0.8	1.6	(Z)	0.2	0.2
	Legal form of organization:													
	Corporate	70	43	14.5	245.6	11.4	23.2	178.5	535.2	388.0	906.9	46.2	78.0	97.0
	Noncorporate, total	5	–	(Z)	0.4	(Z)	(Z)	0.3	0.8	0.8	1.6	(Z)	0.2	0.2
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3648	**Lighting Equipment, N.E.C.**	**224**	**119**	**12.8**	**148.0**	**9.1**	**17.7**	**85.8**	**342.6**	**333.0**	**671.0**	**15.8**	**118.8**	**128.6**
	Type of organization:													
	Multiunit companies, total	68	59	8.8	105.0	6.2	12.2	60.4	253.3	245.6	495.8	11.4	92.0	98.5
	Corp. ownership or control	68	59	8.8	105.0	6.2	12.2	60.4	253.3	245.6	495.8	11.4	92.0	98.5
	Single unit companies, total	156	60	4.0	43.0	2.9	5.6	25.3	89.3	87.4	175.2	4.4	26.8	30.1
	Corp. ownership or control	139	60	3.9	42.6	2.9	5.5	25.1	88.3	86.7	173.5	4.4	26.5	29.8
	Noncorporate ownership	17	–	(Z)	0.4	(Z)	0.1	0.2	1.0	0.7	1.7	0.1	0.3	0.3
	Legal form of organization:													
	Corporate	207	119	12.8	147.6	9.1	17.7	85.5	341.6	332.3	669.3	15.7	118.5	128.3
	Noncorporate, total	17	–	(Z)	0.4	(Z)	0.1	0.2	1.0	0.7	1.7	0.1	0.3	0.3
	Individual	14	–	(Z)	0.3	(Z)	0.1	0.2	0.7	0.5	1.2	(Z)	0.2	0.2
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3651	**Radio and TV Receiving Sets**	**581**	**192**	**74.6**	**852.4**	**57.6**	**106.6**	**570.0**	**2 350.9**	**3 393.8**	**5 731.6**	**105.8**	**794.8**	**835.0**
	Type of organization:													
	Multiunit companies, total	121	106	65.5	769.3	50.5	94.2	518.8	2 156.3	3 169.9	5 319.1	96.6	732.1	765.3
	Corp. ownership or control	120	106	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	460	86	9.1	83.1	7.1	12.3	51.3	194.6	223.9	412.5	9.2	62.7	69.7
	Corp. ownership or control	397	85	8.9	81.5	6.9	12.0	50.2	191.5	220.0	405.5	9.1	61.6	68.6
	Noncorporate ownership	63	1	0.2	1.6	0.2	0.3	1.0	3.1	3.9	7.0	0.2	1.1	1.1
	Legal form of organization:													
	Corporate	517	191	74.4	850.8	57.4	106.2	569.0	2 347.7	3 389.9	5 724.5	105.7	793.7	833.9
	Noncorporate, total	64	1	0.2	1.7	0.2	0.3	1.0	3.2	3.9	7.1	0.2	1.1	1.1
	Individual	40	–	0.1	0.9	0.1	0.1	0.6	1.9	2.3	4.2	0.1	0.7	0.7
	Partnership	17	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3652	**Phonograph Records and Prerecorded Tape**	**709**	**133**	**23.1**	**244.6**	**17.8**	**37.2**	**170.0**	**727.3**	**461.5**	**1 181.7**	**29.8**	**108.8**	**121.3**
	Type of organization:													
	Multiunit companies, total	85	45	15.0	165.5	12.0	25.7	122.1	502.8	308.1	803.8	20.8	78.6	89.4
	Corp. ownership or control	85	45	15.0	165.5	12.0	25.7	122.1	502.8	308.1	803.8	20.8	78.6	89.4
	Single unit companies, total	624	88	8.2	79.1	5.8	11.5	47.8	224.5	153.3	377.9	9.1	30.2	31.8
	Corp. ownership or control	541	86	7.8	75.7	5.5	10.9	45.4	217.2	146.5	363.7	8.8	28.9	30.6
	Noncorporate ownership	83	2	0.4	3.4	0.3	0.6	2.4	7.3	6.8	14.2	0.3	1.3	1.3
	Legal form of organization:													
	Corporate	626	131	22.8	241.2	17.5	36.7	167.5	719.9	454.7	1 167.5	29.5	107.5	120.0
	Noncorporate, total	83	2	0.4	3.4	0.3	0.6	2.4	7.3	6.8	14.2	0.3	1.3	1.3
	Individual	57	–	0.1	0.9	0.1	0.1	0.7	2.1	2.0	4.1	0.1	0.3	0.3
	Partnership	18	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	8	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3661	**Telephone and Telegraph Apparatus**	**264**	**154**	**124.4**	**1 818.0**	**87.1**	**164.2**	**1 125.9**	**4 192.0**	**3 858.6**	**7 858.3**	**217.3**	**1 220.2**	**1 503.3**
	Type of organization:													
	Multiunit companies, total	112	103	118.5	1 746.9	83.2	157.1	1 086.9	4 049.3	3 744.1	7 603.3	208.2	1 177.3	1 456.8
	Corp. ownership or control	112	103	118.5	1 746.9	83.2	157.1	1 086.9	4 049.3	3 744.1	7 603.3	208.2	1 177.3	1 456.8
	Single unit companies, total	152	51	6.0	71.0	3.9	7.1	39.0	142.6	114.5	255.0	9.1	42.9	46.5
	Corp. ownership or control	137	49	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	15	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	249	152	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	15	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	9	–	(Z)	0.3	(Z)	(Z)	0.3	0.5	0.2	0.6	(Z)	0.1	0.1
	Partnership	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3662	**Radio and TV Communication Equipment**	**2 121**	**972**	**334.1**	**5 177.0**	**172.4**	**335.2**	**2 100.3**	**9 938.0**	**5 178.0**	**14 886.0**	**471.4**	**2 890.3**	**3 158.7**
	Type of organization:													
	Multiunit companies, total	654	556	298.7	4 731.6	151.6	295.3	1 899.1	9 102.1	4 624.8	13 490.0	427.6	2 597.8	2 869.6
	Corp. ownership or control	653	555	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	1 467	416	35.4	445.5	20.9	40.0	201.2	835.9	553.2	1 395.9	43.9	292.5	289.0
	Corp. ownership or control	1 330	412	35.0	440.2	20.6	39.5	198.9	825.2	546.4	1 378.3	43.5	288.9	285.7
	Noncorporate ownership	137	4	0.4	5.2	0.3	0.4	2.2	10.7	6.8	17.6	0.3	3.6	3.3
	Legal form of organization:													
	Corporate	1 983	967	333.7	5 171.2	172.1	334.8	2 097.8	9 926.0	5 170.5	14 866.2	471.0	2 886.2	3 154.9
	Noncorporate, total	138	5	0.5	5.8	0.3	0.5	2.5	12.0	7.5	19.7	0.4	4.0	3.8
	Individual	88	2	0.2	3.0	0.2	0.3	1.3	7.1	4.9	11.9	0.2	1.8	2.0
	Partnership	34	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	16	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3671	**Electron Tubes, All Types**	**146**	**60**	**36.7**	**514.1**	**27.5**	**53.7**	**324.5**	**909.6**	**683.7**	**1 581.7**	**52.6**	**231.1**	**254.7**
	Type of organization:													
	Multiunit companies, total	48	41	34.3	487.2	25.7	50.4	309.8	862.9	644.7	1 495.7	50.2	221.6	244.7
	Corp. ownership or control	48	41	34.3	487.2	25.7	50.4	309.8	862.9	644.7	1 495.7	50.2	221.6	244.7
	Single unit companies, total	98	19	2.5	26.8	1.8	3.3	14.8	46.7	39.0	86.0	2.4	9.6	10.0
	Corp. ownership or control	80	18	2.3	25.6	1.6	3.0	13.6	44.7	38.4	83.4	(D)	9.4	9.8
	Noncorporate ownership	18	1	0.2	1.2	0.2	0.3	1.1	2.0	0.6	2.6	(D)	0.2	0.3
	Legal form of organization:													
	Corporate	128	59	36.5	512.8	27.3	53.3	323.4	907.6	683.1	1 579.1	(D)	230.9	254.5
	Noncorporate, total	18	1	0.2	1.2	0.2	0.3	1.1	2.0	0.6	2.6	(D)	0.2	0.3
	Individual	14	1	0.2	1.2	0.2	0.3	1.1	1.9	0.6	2.4	(D)	0.2	0.2
	Partnership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3674	**Semiconductors and Related Devices**	**545**	**219**	**114.0**	**1 601.1**	**63.5**	**126.5**	**670.3**	**3 414.0**	**2 011.2**	**5 327.1**	**409.0**	**819.3**	**909.5**
	Type of organization:													
	Multiunit companies, total	159	135	104.2	1 491.6	57.0	113.8	616.1	3 164.0	1 877.5	4 951.8	380.6	762.3	843.3
	Corp. ownership or control	159	135	104.2	1 491.6	57.0	113.8	616.1	3 164.0	1 877.5	4 951.8	380.6	762.3	843.3
	Single unit companies, total	386	84	9.8	109.4	6.5	12.7	54.2	250.0	133.7	375.3	28.3	57.0	66.2
	Corp. ownership or control	349	82	9.5	106.2	6.3	12.2	52.3	242.0	129.4	363.1	27.7	55.4	64.5
	Noncorporate ownership	37	2	0.3	3.2	0.2	0.5	1.9	8.1	4.3	12.2	0.7	1.6	1.8
	Legal form of organization:													
	Corporate	508	217	113.7	1 597.9	63.3	126.1	668.4	3 405.9	2 006.9	5 314.8	408.3	817.7	907.7
	Noncorporate, total	37	2	0.3	3.2	0.2	0.5	1.9	8.1	4.3	12.2	0.7	1.6	1.8
	Individual	21	1	0.2	2.3	0.2	0.4	1.5	6.1	3.5	9.5	0.4	1.2	1.4
	Partnership	13	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3675	**Electronic Capacitors**	**118**	**97**	**28.9**	**260.5**	**23.4**	**45.7**	**179.0**	**486.1**	**266.2**	**742.3**	**34.0**	**135.8**	**152.4**
	Type of organization:													
	Multiunit companies, total	67	64	24.8	225.1	20.1	39.2	156.8	423.1	240.1	654.4	30.6	124.5	139.2
	Corp. ownership or control	67	64	24.8	225.1	20.1	39.2	156.8	423.1	240.1	654.4	30.6	124.5	139.2
	Single unit companies, total	51	33	4.0	35.4	3.3	6.5	22.3	63.0	26.2	87.9	3.4	11.3	13.2
	Corp. ownership or control	49	32	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	116	96	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3676	**Electronic Resistors**	**101**	**80**	**21.3**	**210.9**	**15.9**	**32.4**	**130.6**	**401.0**	**186.2**	**578.3**	**25.1**	**93.7**	**104.2**
	Type of organization:													
	Multiunit companies, total	61	54	19.0	190.4	14.0	29.0	117.7	362.6	169.1	524.9	19.9	88.8	96.4
	Corp. ownership or control	61	54	19.0	190.4	14.0	29.0	117.7	362.6	169.1	524.9	19.9	88.8	96.4
	Single unit companies, total	40	26	2.3	20.5	1.8	3.4	12.9	38.4	17.0	53.4	5.3	4.9	7.8
	Corp. ownership or control	38	26	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	99	80	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3677	**Electronic Coils and Transformers**	**294**	**194**	**20.7**	**166.6**	**17.1**	**31.8**	**113.1**	**289.1**	**221.0**	**506.4**	**9.2**	**73.2**	**74.5**
	Type of organization:													
	Multiunit companies, total	84	74	11.5	93.8	9.6	18.0	64.8	171.8	137.2	306.2	6.3	50.4	49.7
	Corp. ownership or control	84	74	11.5	93.8	9.6	18.0	64.8	171.8	137.2	306.2	6.3	50.4	49.7
	Single unit companies, total	210	120	9.1	72.8	7.6	13.9	48.3	117.3	83.8	200.3	2.9	22.8	24.8
	Corp. ownership or control	190	117	8.9	71.5	7.4	13.6	47.3	115.0	82.4	196.6	2.8	22.3	24.4
	Noncorporate ownership	20	3	0.2	1.3	0.2	0.3	1.0	2.3	1.4	3.7	(Z)	0.5	0.5
	Legal form of organization:													
	Corporate	274	191	20.5	165.3	17.0	31.6	112.1	286.7	219.6	502.8	9.1	72.8	74.1
	Noncorporate, total	20	3	0.2	1.3	0.2	0.3	1.0	2.3	1.4	3.7	(Z)	0.5	0.5
	Individual	16	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	4	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3678	**Electronic Connectors**	**133**	**107**	**26.0**	**303.6**	**19.1**	**37.6**	**185.1**	**754.2**	**371.7**	**1 104.6**	**40.4**	**204.5**	**234.5**
	Type of organization:													
	Multiunit companies, total	73	69	22.4	266.5	16.5	32.5	163.2	681.0	336.5	999.5	36.7	189.2	214.5
	Corp. ownership or control	73	69	22.4	266.5	16.5	32.5	163.2	681.0	336.5	999.5	36.7	189.2	214.5
	Single unit companies, total	60	38	3.6	37.1	2.6	5.1	21.9	73.2	35.2	105.1	3.7	15.3	20.0
	Corp. ownership or control	57	38	3.6	37.1	2.6	5.1	21.9	73.2	35.2	105.0	(D)	15.3	20.0
	Noncorporate ownership	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(D)	(Z)	(Z)
	Legal form of organization:													
	Corporate	130	107	26.0	303.6	19.1	37.6	185.1	754.2	371.7	1 104.5	(D)	204.5	234.5
	Noncorporate, total	3	-	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	(Z)	0.1	(D)	(Z)	(Z)
	Individual	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3679	**Electronic Components, N.E.C.**	**3 118**	**914**	**125.9**	**1 499.7**	**91.4**	**181.0**	**854.7**	**3 005.7**	**2 650.4**	**5 549.2**	**212.3**	**888.0**	**1 043.4**
	Type of organization:													
	Multiunit companies, total	439	368	80.4	1 021.5	56.6	113.6	569.1	2 113.7	2 027.6	4 048.7	149.3	670.0	801.6
	Corp. ownership or control	437	368	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	2 679	546	45.6	478.2	34.8	67.4	285.6	892.0	622.8	1 500.5	63.0	218.0	241.8
	Corp. ownership or control	2 282	534	44.4	465.0	33.9	65.8	277.9	866.0	602.0	1 453.7	60.9	209.6	233.5
	Noncorporate ownership	397	12	1.2	13.2	0.9	1.6	7.6	26.0	20.9	46.9	2.0	8.4	8.3
	Legal form of organization:													
	Corporate	2 719	902	124.8	1 486.5	90.5	179.3	847.0	2 979.7	2 629.5	5 502.2	210.2	879.6	1 035.1
	Noncorporate, total	399	12	1.2	13.2	0.9	1.6	7.7	26.1	20.9	47.0	2.1	8.4	8.3
	Individual	250	6	0.7	8.0	0.5	1.0	4.6	15.4	12.5	27.9	1.2	5.0	5.1
	Partnership	119	2	0.3	3.6	0.3	0.5	2.1	7.5	5.7	13.1	0.6	2.1	2.2
	Other and unknown	30	4	0.1	1.6	0.1	0.2	1.0	3.2	2.7	5.9	0.3	1.3	1.1
3691	**Storage Batteries**	**218**	**134**	**25.9**	**358.7**	**21.1**	**43.4**	**276.4**	**927.8**	**1 103.6**	**1 982.5**	**122.2**	**239.4**	**292.9**
	Type of organization:													
	Multiunit companies, total	114	106	24.0	335.3	19.6	40.4	260.8	875.9	1 029.6	1 857.0	115.1	222.6	275.2
	Corp. ownership or control	113	105	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	104	28	2.0	23.4	1.5	2.9	15.6	52.0	74.0	125.5	7.1	16.7	17.7
	Corp. ownership or control	75	26	1.8	21.2	1.4	2.7	14.1	47.9	67.5	115.0	6.2	15.3	16.1
	Noncorporate ownership	29	2	0.2	2.2	0.1	0.3	1.6	4.0	6.5	10.5	0.9	1.4	1.6
	Legal form of organization:													
	Corporate	188	131	25.7	355.7	20.9	43.0	274.1	921.7	1 093.7	1 966.8	120.5	237.5	290.5
	Noncorporate, total	30	3	0.2	3.0	0.2	0.4	2.3	6.1	9.8	15.7	1.7	1.9	2.4
	Individual	19	-	0.1	0.7	0.1	0.1	0.6	1.9	2.2	4.1	0.2	0.6	0.6
	Partnership	9	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3692	**Primary Batteries, Dry and Wet**	**58**	**33**	**11.0**	**118.2**	**9.0**	**18.0**	**87.4**	**343.2**	**329.4**	**666.1**	**35.4**	**90.2**	**100.1**
	Type of organization:													
	Multiunit companies, total	31	27	10.3	111.0	8.5	17.1	83.1	319.4	318.1	631.3	32.0	86.4	96.0
	Corp. ownership or control	31	27	10.3	111.0	8.5	17.1	83.1	319.4	318.1	631.3	32.0	86.4	96.0
	Single unit companies, total	27	6	0.7	7.2	0.5	0.9	4.3	23.8	11.3	34.8	3.3	3.8	4.2
	Corp. ownership or control	19	6	0.6	7.0	0.5	0.9	4.2	23.3	10.9	33.8	3.3	3.6	4.0
	Noncorporate ownership	8	-	(Z)	0.2	(Z)	(Z)	0.1	0.5	0.5	1.0	(Z)	0.2	0.2
	Legal form of organization:													
	Corporate	50	33	11.0	118.0	9.0	17.9	87.3	342.7	328.9	665.1	35.3	90.0	100.0
	Noncorporate, total	8	-	(Z)	0.2	(Z)	(Z)	0.1	0.5	0.5	1.0	(Z)	0.2	0.2
	Individual	6	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3693	**X-ray, Electromedical, and Electrotheraputic Apparatus**	**243**	**126**	**30.9**	**467.6**	**17.1**	**33.3**	**195.5**	**1 231.9**	**726.7**	**1 884.7**	**63.4**	**412.6**	**542.3**
	Type of organization:													
	Multiunit companies, total	97	84	26.8	411.3	14.9	29.0	173.9	1 105.8	639.1	1 676.8	57.5	375.0	491.7
	Corp. ownership or control	97	84	26.8	411.3	14.9	29.0	173.9	1 105.8	639.1	1 676.8	57.5	375.0	491.7
	Single unit companies, total	146	42	4.1	56.3	2.2	4.3	21.6	126.1	87.6	207.9	5.9	37.6	50.7
	Corp. ownership or control	134	42	4.1	56.0	2.2	4.3	21.5	125.5	87.1	206.8	5.9	37.3	50.4
	Noncorporate ownership	12	-	(Z)	0.3	(Z)	(Z)	0.1	0.6	0.5	1.1	(Z)	0.3	0.3
	Legal form of organization:													
	Corporate	231	126	30.9	467.4	17.1	33.3	195.4	1 231.3	726.2	1 883.5	63.4	412.3	542.1
	Noncorporate, total	12	-	(Z)	0.3	(Z)	(Z)	0.1	0.6	0.5	1.1	(Z)	0.3	0.3
	Individual	9	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3694	**Engine Electrical Equipment**	**409**	**181**	**63.8**	**948.4**	**51.8**	**102.6**	**708.6**	**2 041.3**	**1 647.3**	**3 647.2**	**146.0**	**442.1**	**488.3**
	Type of organization:													
	Multiunit companies, total	101	89	55.5	864.9	45.2	90.0	652.0	1 874.9	1 496.9	3 334.3	135.2	404.8	444.0
	Corp. ownership or control	101	89	55.5	864.9	45.2	90.0	652.0	1 874.9	1 496.9	3 334.3	135.2	404.8	444.0
	Single unit companies, total	308	92	8.3	83.5	6.6	12.6	56.6	166.4	150.4	312.8	10.8	37.4	44.2
	Corp. ownership or control	245	88	7.4	70.9	6.1	11.6	51.1	146.1	118.5	262.4	(D)	35.9	40.5
	Noncorporate ownership	63	4	0.9	12.6	0.5	1.0	5.5	20.3	31.9	50.5	(D)	1.4	3.7

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
36	**ELECTRIC AND ELECTRONIC EQUIPMENT**—Con.													
3694	**Engine Electrical Equipment**—Con.													
	Legal form of organization:													
	Corporate	346	177	62.9	935.8	51.3	101.7	703.1	2 021.0	1 615.4	3 596.7	(D)	440.7	484.5
	Noncorporate, total	63	4	0.9	12.6	0.5	1.0	5.5	20.3	31.9	50.5	(D)	1.4	3.7
	Individual	44	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	17	1	0.1	0.8	(Z)	0.1	0.6	1.8	1.4	3.2	0.1	0.4	0.4
	Other and unknown	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3699	**Electrical Equipment and Supplies, N.E.C.**	**647**	**209**	**20.7**	**205.3**	**16.7**	**31.1**	**133.9**	**386.2**	**369.2**	**749.0**	**16.2**	**102.1**	**112.4**
	Type of organization:													
	Multiunit companies, total	107	84	11.1	117.5	8.9	16.9	78.1	204.6	207.7	409.7	10.3	53.7	58.2
	Corp. ownership or control	107	84	11.1	117.5	8.9	16.9	78.1	204.6	207.7	409.7	10.3	53.7	58.2
	Single unit companies, total	540	125	9.6	87.8	7.8	14.1	55.8	181.6	161.4	339.3	6.0	48.4	54.2
	Corp. ownership or control	461	121	9.1	83.7	7.4	13.5	53.1	173.4	154.5	324.2	5.7	46.3	52.1
	Noncorporate ownership	79	4	0.5	4.1	0.4	0.7	2.7	8.1	7.0	15.1	0.3	2.1	2.1
	Legal form of organization:													
	Corporate	568	205	20.3	201.2	16.3	30.4	131.2	378.1	362.2	733.9	15.9	100.0	110.3
	Noncorporate, total	79	4	0.5	4.1	0.4	0.7	2.7	8.1	7.0	15.1	0.3	2.1	2.1
	Individual	48	3	0.3	2.6	0.3	0.4	1.7	5.2	4.5	9.7	0.2	1.3	1.3
	Partnership	18	1	0.1	1.2	0.1	0.2	0.7	2.3	1.9	4.2	0.1	0.6	0.6
	Other and unknown	13	–	(Z)	0.3	(Z)	0.1	0.2	0.7	0.5	1.2	(Z)	0.2	0.2
37	**TRANSPORTATION EQUIPMENT**	**10 176**	**3 653**	**1 768.2**	**30 673.5**	**1 284.4**	**2 612.7**	**20 314.3**	**64 291.1**	**103 489.6**	**166 954.0**	**4 670.9**	**20 745.1**	**22 240.5**
	Type of organization:													
	Multiunit companies, total	2 355	1 968	1 615.4	28 856.4	1 162.0	2 375.9	19 044.0	60 859.5	99 633.8	159 751.3	4 486.3	19 599.6	21 005.9
	Corp. ownership or control	2 350	1 964	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	5	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	7 821	1 685	152.8	1 817.1	122.4	236.9	1 270.3	3 431.6	3 855.8	7 202.8	184.6	1 082.3	1 234.6
	Corp. ownership or control	6 093	1 632	146.0	1 742.0	116.5	226.0	1 213.8	3 279.9	3 670.7	6 868.3	167.9	1 028.9	1 170.8
	Noncorporate ownership	1 728	53	6.8	75.0	5.9	10.8	56.5	151.7	185.2	334.5	16.7	53.4	63.8
	Legal form of organization:													
	Corporate	8 443	3 596	1 760.6	30 589.0	1 277.9	2 600.9	20 250.8	64 122.0	103 282.5	166 579.9	4 653.0	20 624.7	22 173.9
	Noncorporate, total	1 733	57	7.5	84.5	6.5	11.8	63.5	169.1	207.2	374.1	17.9	57.2	66.5
	Individual	1 185	24	3.8	39.7	3.4	5.9	29.9	80.7	105.6	184.9	9.5	30.3	32.7
	Partnership	394	20	2.3	27.8	1.9	3.8	20.8	55.6	61.9	117.0	5.7	19.5	26.6
	Other and unknown	154	13	1.4	17.0	1.2	2.1	12.8	32.8	39.7	72.1	2.6	7.4	7.3
3711	**Motor Vehicles and Car Bodies**	**322**	**119**	**343.6**	**7 077.6**	**289.9**	**620.4**	**5 724.9**	**18 723.7**	**58 131.6**	**76 517.8**	**1 706.1**	**3 325.8**	**4 010.8**
	Type of organization:													
	Multiunit companies, total	98	94	340.5	7 038.1	287.5	615.7	5 694.8	18 662.0	58 019.9	76 345.8	1 702.8	3 301.3	3 981.7
	Corp. ownership or control	98	94	340.5	7 038.1	287.5	615.7	5 694.8	18 662.0	58 019.9	76 345.8	1 702.8	3 301.3	3 981.7
	Single unit companies, total	224	25	3.1	39.6	2.4	4.7	30.1	61.7	111.7	172.0	3.3	24.5	29.1
	Corp. ownership or control	187	24	3.1	38.6	2.3	4.6	29.2	60.3	108.8	167.7	3.3	24.2	28.8
	Noncorporate ownership	37	1	0.1	1.0	0.1	0.1	0.9	1.4	2.9	4.3	0.1	0.3	0.3
	Legal form of organization:													
	Corporate	285	118	343.5	7 076.6	289.8	620.3	5 724.0	18 722.3	58 128.7	76 513.4	1 706.1	3 325.5	4 010.5
	Noncorporate, total	37	1	0.1	1.0	0.1	0.1	0.9	1.4	2.9	4.3	0.1	0.3	0.3
	Individual	24	1	0.1	0.8	0.1	0.1	0.7	1.2	2.4	3.6	0.1	0.3	0.3
	Partnership	10	–	(Z)	0.2	(Z)	(Z)	0.1	0.2	0.5	0.7	(Z)	(Z)	(Z)
	Other and unknown	3	–	–	–	–	–	–	(Z)	–	–	–	(Z)	–
3713	**Truck and Bus Bodies**	**820**	**313**	**34.8**	**428.6**	**27.4**	**53.9**	**307.6**	**946.3**	**1 076.2**	**2 003.3**	**44.2**	**306.0**	**352.1**
	Type of organization:													
	Multiunit companies, total	161	126	19.0	246.8	15.1	30.2	182.7	611.8	635.0	1 238.8	28.3	178.8	204.3
	Corp. ownership or control	160	125	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	659	187	15.7	181.8	12.3	23.7	124.8	334.5	441.2	764.6	16.0	127.3	147.8
	Corp. ownership or control	527	182	15.2	176.2	11.9	22.9	120.8	323.7	425.0	737.6	15.4	122.5	142.9
	Noncorporate ownership	132	5	0.5	5.6	0.5	0.8	4.0	10.8	16.2	27.0	0.5	4.8	4.9
	Legal form of organization:													
	Corporate	687	307	34.2	422.7	26.9	53.0	303.3	934.7	1 058.9	1 974.7	43.4	301.3	346.9
	Noncorporate, total	133	6	0.6	5.9	0.5	0.9	4.2	11.7	17.3	28.7	0.8	4.8	5.2
	Individual	82	–	0.3	2.8	0.2	0.4	1.9	5.3	8.2	13.6	(D)	2.6	2 5
	Partnership	39	3	0.2	2.3	0.2	0.3	1.7	4.4	6.4	10.7	0.3	1.8	1.9
	Other and unknown	12	3	0.1	0.9	0.1	0.1	0.6	1.9	2.6	4.4	(D)	0.4	0.8
3714	**Motor Vehicle Parts and Accessories**	**2 623**	**997**	**450.7**	**8 004.0**	**372.5**	**777.2**	**6 284.9**	**16 263.8**	**19 749.7**	**35 750.8**	**1 833.2**	**3 699.6**	**4 124.1**
	Type of organization:													
	Multiunit companies, total	788	665	419.0	7 612.8	347.2	727.8	6 014.3	15 447.0	18 881.8	34 098.7	1 782.5	3 470.9	3 871.7
	Corp. ownership or control	788	665	419.0	7 612.8	347.2	727.8	6 014.3	15 447.0	18 881.8	34 098.7	1 782.5	3 470.9	3 871.7
	Single unit companies, total	1 835	332	31.7	391.2	25.3	49.4	270.5	816.8	867.9	1 652.1	50.6	228.6	252.4
	Corp. ownership or control	1 503	325	30.6	376.7	24.3	47.5	259.6	785.1	833.4	1 586.5	47.9	220.5	243.4
	Noncorporate ownership	332	7	1.1	14.5	1.0	1.9	10.9	31.7	34.5	65.6	2.8	8 2	9.0
	Legal form of organization:													
	Corporate	2 291	990	449.6	7 989.5	371.5	775.3	6 274.0	16 232.1	19 715.2	35 685.2	1 830.4	3 691.4	4 115.0
	Noncorporate, total	332	7	1.1	14.5	1.0	1.9	10.9	31.7	34.5	65.6	2.8	8.2	9.0
	Individual	229	3	0.6	8.1	0.6	1.0	6.4	16.7	19.5	36.2	1.3	4.1	4.3
	Partnership	86	4	0.5	5.7	0.4	0.9	3.9	13.5	13.5	26.6	1.3	3.8	4.4
	Other and unknown	17	–	(Z)	0.7	(Z)	0.1	0.5	1.4	1.5	2.8	0.1	0.2	0.3

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
37	**TRANSPORTATION EQUIPMENT**—Con.													
3715	**Truck Trailers**	**353**	**165**	**28.1**	**322.0**	**22.5**	**43.1**	**229.9**	**645.9**	**1 285.3**	**1 910.1**	**36.2**	**283.0**	**355.0**
	Type of organization:													
	Multiunit companies, total	93	78	21.3	244.4	17.2	32.8	175.5	492.5	1 051.2	1 525.6	30.0	225.6	288.7
	Corp. ownership or control	93	78	21.3	244.4	17.2	32.8	175.5	492.5	1 051.2	1 525.6	30.0	225.6	288.7
	Single unit companies, total	260	87	6.7	77.6	5.3	10.3	54.4	153.4	234.1	384.5	6.2	57.4	66.3
	Corp. ownership or control	206	85	6.5	75.4	5.2	10.0	52.9	149.0	226.8	373.0	6.0	55.6	64.3
	Noncorporate ownership	54	2	0.2	2.2	0.2	0.3	1.5	4.4	7.3	11.5	0.2	1.9	2.0
	Legal form of organization:													
	Corporate	299	163	27.9	319.8	22.3	42.8	228.4	641.5	1 278.0	1 898.5	36.0	281.1	353.0
	Noncorporate, total	54	2	0.2	2.2	0.2	0.3	1.5	4.4	7.3	11.5	0.2	1.9	2.0
	Individual	31	1	0.1	1.5	0.1	0.2	1.0	2.9	5.2	8.0	0.2	1.3	1.4
	Partnership	19	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3716	**Motor Homes Produced on Purchased Chassis**	**116**	**114**	**19.2**	**205.4**	**15.4**	**29.6**	**135.1**	**443.3**	**1 132.5**	**1 564.5**	**16.4**	**212.5**	**220.6**
	Type of organization:													
	Multiunit companies, total	63	63	13.5	148.9	10.6	20.7	96.6	304.2	850.5	1 146.7	12.1	171.4	173.9
	Corp. ownership or control	63	63	13.5	148.9	10.6	20.7	96.6	304.2	850.5	1 146.7	12.1	171.4	173.9
	Single unit companies, total	53	51	5.7	56.5	4.7	8.9	38.5	139.1	281.9	417.8	4.3	41.1	46.7
	Corp. ownership or control	52	50	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	115	113	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3721	**Aircraft**	**176**	**74**	**222.7**	**3 975.9**	**119.0**	**232.7**	**1 765.2**	**8 134.1**	**6 742.7**	**14 834.2**	**202.4**	**6 550.7**	**6 618.5**
	Type of organization:													
	Multiunit companies, total	64	57	220.8	3 951.9	117.6	229.9	1 749.5	8 090.7	6 707.9	14 756.1	200.9	6 527.4	6 594.9
	Corp. ownership or control	64	57	220.8	3 951.9	117.6	229.9	1 749.5	8 090.7	6 707.9	14 756.1	200.9	6 527.4	6 594.9
	Single unit companies, total	112	17	1.9	24.0	1.4	2.7	15.7	43.5	34.7	78.2	1.5	23.3	23.6
	Corp. ownership or control	97	16	1.7	22.2	1.3	2.5	13.9	39.2	31.7	70.8	(D)	22.3	22.6
	Noncorporate ownership	15	1	0.1	1.8	0.1	0.2	1.7	4.3	3.1	7.4	(D)	1.0	1.0
	Legal form of organization:													
	Corporate	161	73	222.5	3 974.0	118.9	232.4	1 763.5	8 129.8	6 739.6	14 826.9	(D)	6 549.7	6 617.5
	Noncorporate, total	15	1	0.1	1.8	0.1	0.2	1.7	4.3	3.1	7.4	(D)	1.0	1.0
	Individual	11	–	(Z)	0.2	(Z)	(Z)	0.1	0.3	0.5	0.9	(Z)	0.6	0.5
	Partnership	2	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3724	**Aircraft Engines and Engine Parts**	**269**	**177**	**106.1**	**1 939.4**	**62.4**	**128.7**	**970.0**	**3 599.1**	**2 761.8**	**6 272.3**	**174.9**	**1 360.2**	**1 440.2**
	Type of organization:													
	Multiunit companies, total	111	101	100.4	1 854.4	58.2	119.9	917.5	3 451.2	2 671.6	6 038.6	166.7	1 313.6	1 388.6
	Corp. ownership or control	111	101	100.4	1 854.4	58.2	119.9	917.5	3 451.2	2 671.6	6 038.6	166.7	1 313.6	1 388.6
	Single unit companies, total	158	76	5.8	85.0	4.1	8.8	52.5	147.8	90.2	233.6	8.2	46.6	51.7
	Corp. ownership or control	149	74	5.7	83.6	4.1	8.6	51.5	145.7	89.3	230.7	8.0	45.9	51.0
	Noncorporate ownership	9	2	0.1	1.4	0.1	0.1	1.0	2.1	0.8	2.9	0.2	0.6	0.6
	Legal form of organization:													
	Corporate	260	175	106.1	1 938.0	62.3	128.6	969.0	3 597.0	2 761.0	6 269.3	174.7	1 359.6	1 439.6
	Noncorporate, total	9	2	0.1	1.4	0.1	0.1	1.0	2.1	0.8	2.9	0.2	0.6	0.6
	Individual	5	1	0.1	0.9	(Z)	0.1	0.6	1.3	0.6	1.9	(D)	0.4	0.4
	Partnership	4	1	(Z)	0.5	(Z)	(Z)	0.4	0.8	0.3	1.0	(D)	0.2	0.2
3728	**Aircraft Equipment, N.E.C.**	**728**	**298**	**102.0**	**1 705.2**	**58.7**	**113.7**	**828.3**	**2 998.4**	**1 747.7**	**4 760.6**	**131.1**	**1 255.2**	**1 243.1**
	Type of organization:													
	Multiunit companies, total	182	161	91.5	1 556.1	51.3	98.7	735.8	2 731.4	1 600.9	4 354.6	117.1	1 169.0	1 147.7
	Corp. ownership or control	181	160	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	546	137	10.5	149.1	7.4	15.0	92.4	267.0	146.8	406.0	13.9	86.2	95.4
	Corp. ownership or control	469	134	10.2	143.8	7.2	14.5	88.8	256.7	142.9	391.6	12.2	82.5	92.0
	Noncorporate ownership	77	3	0.3	5.3	0.2	0.5	3.7	10.4	3.9	14.4	1.7	3.6	3.4
	Legal form of organization:													
	Corporate	650	294	101.6	1 698.9	58.4	113.1	823.8	2 986.5	1 743.4	4 744.1	129.4	1 251.1	1 239.3
	Noncorporate, total	78	4	0.4	6.3	0.3	0.6	4.4	11.9	4.3	16.4	1.7	4.1	3.8
	Individual	55	–	0.1	1.7	0.1	0.1	1.0	3.7	1.9	5.6	0.1	1.6	1.7
	Partnership	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	9	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3731	**Ship Building and Repairing**	**605**	**314**	**176.4**	**2 494.0**	**139.9**	**277.2**	**1 807.4**	**[4]3 825.0**	**2 670.1**	**[4]6 495.1**	**161.3**	**1 098.5**	**1 072.5**
	Type of organization:													
	Multiunit companies, total	168	139	151.9	2 166.8	118.9	235.5	1 554.9	[4]3 288.7	2 248.7	[4]5 537.4	132.7	968.6	910.0
	Corp. ownership or control	166	138	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	437	175	24.5	327.2	21.0	41.7	252.5	[4]536.3	421.4	[4]957.7	28.5	129.9	162.5
	Corp. ownership or control	382	168	23.8	317.9	20.5	40.6	245.3	[4]520.9	410.2	[4]931.1	26.1	123.1	149.3
	Noncorporate ownership	55	7	0.7	9.3	0.6	1.1	7.2	[4]15.4	11.3	[4]26.6	2.4	6.8	13.2
	Legal form of organization:													
	Corporate	548	306	175.2	2 477.5	138.9	275.5	1 794.9	[4]3 795.7	2 641.2	[4]6 436.9	157.9	1 089.9	1 058.1
	Noncorporate, total	57	8	1.2	16.6	1.0	1.7	12.6	[4]29.3	28.9	[4]58.2	3.3	8.7	14.4
	Individual	31	1	0.1	1.4	0.1	0.2	1.0	[4]2.6	2.0	[4]4.6	0.3	0.5	0.6
	Partnership	17	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	9	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
37	**TRANSPORTATION EQUIPMENT—Con.**													
3732	**Boat Building and Repairing**	**2 190**	**422**	**43.8**	**445.8**	**35.6**	**68.4**	**324.7**	**856.3**	**984.7**	**1 822.6**	**42.3**	**306.3**	**338.0**
	Type of organization:													
	Multiunit companies, total	162	121	19.3	201.1	15.2	29.9	143.7	384.6	466.5	846.9	19.3	156.1	162.7
	Corp. ownership or control	162	121	19.3	201.1	15.2	29.9	143.7	384.6	466.5	846.9	19.3	156.1	162.7
	Single unit companies, total	2 028	301	24.5	244.7	20.4	38.5	180.9	471.8	518.3	975.8	23.1	150.2	175.3
	Corp. ownership or control	1 419	287	22.5	225.5	18.6	35.3	166.0	431.1	473.7	891.5	21.3	133.5	156.9
	Noncorporate ownership	609	14	2.0	19.2	1.8	3.2	14.9	40.7	44.6	84.2	1.8	16.7	18.5
	Legal form of organization:													
	Corporate	1 581	408	41.8	426.6	33.8	65.2	309.7	815.7	940.2	1 738.4	40.6	289.6	319.6
	Noncorporate, total	609	14	2.0	19.2	1.8	3.2	14.9	40.7	44.6	84.2	1.8	16.7	18.5
	Individual	449	11	1.5	14.5	1.4	2.5	11.4	31.9	35.6	66.5	1.3	13.5	15.2
	Partnership	119	1	0.3	3.4	0.3	0.5	2.6	6.4	6.4	12.8	0.3	2.3	2.4
	Other and unknown	41	2	0.1	1.3	0.1	0.2	1.0	2.4	2.6	5.0	0.1	1.0	0.9
3743	**Railroad Equipment**	**201**	**118**	**56.3**	**888.6**	**42.6**	**79.4**	**619.9**	**1 882.8**	**2 386.2**	**4 278.3**	**80.4**	**822.8**	**850.6**
	Type of organization:													
	Multiunit companies, total	114	83	53.3	847.9	40.4	75.2	594.1	1 801.5	2 298.6	4 110.7	75.6	793.4	817.2
	Corp. ownership or control	114	83	53.3	847.9	40.4	75.2	594.1	1 801.5	2 298.6	4 110.7	75.6	793.4	817.2
	Single unit companies, total	87	35	3.0	40.7	2.3	4.1	25.8	81.2	87.6	167.6	4.8	29.4	33.4
	Corp. ownership or control	78	34	2.9	39.8	2.2	4.0	25.1	79.9	86.4	165.0	4.8	28.9	32.9
	Noncorporate ownership	9	1	0.1	0.9	0.1	0.1	0.7	1.4	1.2	2.6	0.1	0.5	0.5
	Legal form of organization:													
	Corporate	192	117	56 2	887.7	42.5	79.3	619.2	1 881.4	2 385.0	4 275.6	80.4	822.3	850.1
	Noncorporate, total	9	1	0.1	0.9	0.1	0.1	0.7	1.4	1.2	2.6	0.1	0.5	0.5
	Individual	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3751	**Motorcycles, Bicycles, and Parts**	**350**	**63**	**15.6**	**168.9**	**13.3**	**24.6**	**129.9**	**369.8**	**660.1**	**1 007.6**	**24.1**	**182.1**	**226.5**
	Type of organization:													
	Multiunit companies, total	34	23	12.3	136.3	10.7	19.9	108.4	305.3	576.6	861.7	19.8	153.8	195.4
	Corp. ownership or control	34	23	12.3	136.3	10.7	19.9	108.4	305.3	576.6	861.7	19.8	153.8	195.4
	Single unit companies, total	316	40	3.3	32.5	2.6	4.7	21.5	64.5	83.6	146.0	4.3	28.2	31.1
	Corp. ownership or control	234	40	3.1	30.7	2.5	4.5	20.2	61.2	77.9	137.1	4.1	26.1	28.9
	Noncorporate ownership	82	–	0.2	1.8	0.2	0.3	1.3	3.2	5.6	8.8	0.2	2.1	2.1
	Legal form of organization:													
	Corporate	268	63	15.4	167.0	13.1	24.3	128.5	366.6	654.5	998.8	23.9	179.9	224.3
	Noncorporate, total	82	–	0.2	1.8	0.2	0.3	1.3	3.2	5.6	8.8	0.2	2.1	2.1
	Individual	54	–	0.1	1.3	0.1	0.2	0.9	2.2	3.9	6.1	0.1	1.5	1.5
	Partnership	20	–	(Z)	0.5	(Z)	0.1	0.4	0.9	1.5	2.4	(D)	0.6	0.6
	Other and unknown	8	–	(Z)	0.1	(Z)	(Z)	0.1	0.1	0.2	0.4	(D)	0.1	0.1
3761	**Guided Missiles and Space Vehicles**	**40**	**37**	**94.0**	**1 931.5**	**35.2**	**67.0**	**603.8**	**3 564.8**	**1 691.3**	**5 314.4**	**125.6**	**653.0**	**600.2**
	Type of organization:													
	Multiunit companies, total	37	36	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	37	36	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corporate	40	37	94.0	1 931.5	35.2	67.0	603.8	3 564.8	1 691.3	5 314.4	125.6	653.0	600.2
	Legal form of organization:													
3764	**Space Propulsion Units and Parts**	**27**	**24**	**18.6**	**356.6**	**7.1**	**14.9**	**111.5**	**620.7**	**316.3**	**945.5**	**25.3**	**175.0**	**167.5**
	Type of organization:													
	Multiunit companies, total	23	23	18.5	354.8	7.0	14.8	110.5	618.2	315.4	942.0	25.2	174.6	167.1
	Corp. ownership or control	23	23	18.5	354.8	7.0	14.8	110.5	618.2	315.4	942.0	25.2	174.6	167.1
	Single unit companies, total	4	1	0.1	1.8	0.1	0.1	1.0	2.5	1.0	3.5	0.1	0.4	0.4
	Corp. ownership or control	4	1	0.1	1.8	0.1	0.1	1.0	2.5	1.0	3.5	0.1	0.4	0.4
	Corporate	27	24	18.6	356.6	7.1	14.9	111.5	620 7	316.3	945.5	25.3	175.0	167.5
	Legal form of organization:													
3769	**Space Vehicle Equipment, N.E.C.**	**42**	**25**	**7.2**	**139.2**	**3.9**	**8.3**	**55.3**	**236.3**	**110.1**	**339.4**	**13.3**	**22.1**	**29.8**
	Type of organization:													
	Multiunit companies, total	17	14	6.4	125.0	3.3	7.1	47.4	214.6	95.3	304.6	(D)	16.7	22.4
	Corp. ownership or control	17	14	6.4	125.0	3.3	7.1	47.4	214.6	95.3	304.6	(D)	16.7	22.4
	Single unit companies, total	25	11	0.9	14.2	0.6	1.2	7.9	21.8	14.8	34.8	(D)	5.4	7.4
	Corp. ownership or control	21	11	0.9	14.1	0.6	1.2	7.9	21.6	14.7	34.5	(D)	5.4	7.4
	Noncorporate ownership	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(D)	(Z)	(Z)
	Legal form of organization:													
	Corporate	38	25	7.2	139.1	3.9	8.3	55.2	236.1	110.0	339.1	(D)	22.0	29.8
	Noncorporate, total	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.2	0.1	0.3	(D)	(Z)	(Z)
	Individual	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
37	**TRANSPORTATION EQUIPMENT—Con.**													
3792	**Travel Trailers and Campers**	**861**	**266**	**26.3**	**275.7**	**21.8**	**40.7**	**197.1**	**510.3**	**1 068.4**	**1 582.4**	**31.0**	**196.0**	**193.6**
	Type of organization:													
	Multiunit companies, total	162	129	16.3	178.8	13.4	25.5	130.0	331.1	709.2	1 049.1	18.0	141.8	130.3
	Corp. ownership or control	161	128	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	699	137	10.1	96.9	8.4	15.2	67.1	179.1	359.2	533.3	13.0	54.2	63.3
	Corp. ownership or control	485	130	9.3	90.0	7.7	13.9	62.0	166.3	329.3	491.0	6.7	50.1	58.4
	Noncorporate ownership	214	7	0.8	6.9	0.7	1.2	5.0	12.9	29.9	42.3	6.3	4.1	4.8
	Legal form of organization:													
	Corporate	646	258	25.4	267.9	21.0	39.3	191.5	496.4	1 035.6	1 535.9	24.7	190.5	188.0
	Noncorporate, total	215	8	0.9	7.7	0.8	1.4	5.6	13.9	32.8	46.5	6.3	5.5	5.6
	Individual	137	4	0.5	3.8	0.4	0.7	2.9	7.0	17.6	24.6	(D)	2.3	2.4
	Partnership	41	2	0.2	1.4	0.1	0.2	1.0	2.7	5.8	8.4	(D)	1.4	1.3
	Other and unknown	37	2	0.3	2.5	0.2	0.5	1.7	4.2	9.4	13.5	0.7	1.9	1.9
3795	**Tanks and Tank Components**	**24**	**18**	**12.4**	**208.5**	**10.0**	**19.8**	**156.2**	**437.6**	**590.0**	**934.2**	**13.2**	**187.9**	**287.8**
	Type of organization:													
	Multiunit companies, total	11	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	11	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	13	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	12	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	23	17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3799	**Transportation Equipment, N.E.C.**	**429**	**109**	**10.3**	**106.6**	**7.4**	**13.3**	**62.6**	**232.7**	**384.9**	**620.9**	**9.8**	**108.5**	**109.4**
	Type of organization:													
	Multiunit companies, total	67	44	5.8	61.7	3.9	7.0	34.8	141.0	255.3	395.6	4.3	66.0	69.3
	Corp. ownership or control	67	44	5.8	61.7	3.9	7.0	34.8	141.0	255.3	395.6	4.3	66.0	69.3
	Single unit companies, total	362	65	4.5	44.9	3.5	6.3	27.8	91.7	129.6	225.3	5.5	42.4	40.2
	Corp. ownership or control	265	64	4.2	42.3	3.3	6.0	26.3	86.1	122.2	212.3	5.3	40.2	37.8
	Noncorporate ownership	97	1	0.3	2.6	0.2	0.4	1.6	5.5	7.4	13.0	0.2	2.3	2.3
	Legal form of organization:													
	Corporate	332	108	10.0	104.1	7.2	12.9	61.1	227.1	377.4	607.9	9.6	106.2	107.1
	Noncorporate, total	97	1	0.3	2.6	0.2	0.4	1.6	5.5	7.4	13.0	0.2	2.3	2.3
	Individual	66	–	0.2	1.4	0.1	0.2	0.9	3.5	4.1	7.6	0.1	1.2	1.3
	Partnership	20	–	0.1	0.7	0.1	0.1	0.4	1.5	2.1	3.6	0.1	0.7	0.7
	Other and unknown	11	1	(Z)	0.4	(Z)	0.1	0.3	0.6	1.2	1.8	(Z)	0.4	0.4
38	**INSTRUMENTS AND RELATED PRODUCTS**	**7 481**	**2 538**	**559.1**	**7 520.4**	**347.2**	**677.9**	**3 743.2**	**18 762.0**	**10 503.9**	**28 897.8**	**938.9**	**5 311.1**	**5 810.6**
	Type of organization:													
	Multiunit companies, total	1 831	1 363	463.1	6 399.9	283.4	556.7	3 166.2	16 376.7	9 084.3	25 138.9	821.9	4 625.9	5 057.0
	Corp. ownership or control	1 824	1 360	462.3	6 392.0	282.8	555.5	3 161.8	16 364.3	9 073.6	25 116.5	(D)	4 623.4	5 053.8
	Noncorporate ownership	7	3	0.9	8.0	0.6	1.2	4.4	12.5	10.7	22.5	(D)	2.4	3.2
	Single unit companies, total	5 650	1 175	95.9	1 120.5	63.8	121.2	577.0	2 385.3	1 419.6	3 758.9	116.9	685.3	753.6
	Corp. ownership or control	4 814	1 138	92.8	1 086.6	61.4	117.0	558.3	2 305.7	1 374.8	3 635.3	112.4	663.0	730.0
	Noncorporate ownership	836	37	3.2	33.8	2.4	4.2	18.7	79.5	44.8	123.6	4.5	22.2	23.5
	Legal form of organization:													
	Corporate	6 638	2 498	555.1	7 478.6	344.2	672.5	3 720.1	18 670.0	10 448.4	28 751.8	931.7	5 286.4	5 783.9
	Noncorporate, total	843	40	4.0	41.8	3.0	5.4	23.1	92.0	55.5	146.0	7.1	24.7	26.7
	Individual	586	16	1.7	19.0	1.3	2.2	10.2	43.7	24.4	68.0	2.0	13.1	13.4
	Partnership	214	16	1.2	11.7	0.9	1.7	6.8	27.2	15.3	42.0	(D)	7.1	7.8
	Other and unknown	43	8	1.1	11.2	0.8	1.5	6.1	21.1	15.8	36.0	(D)	4.5	5.5
3811	**Engineering and Scientific Instruments**	**786**	**279**	**42.3**	**584.4**	**24.7**	**48.7**	**280.7**	**1 287.2**	**681.4**	**1 926.7**	**57.4**	**421.4**	**470.1**
	Type of organization:													
	Multiunit companies, total	184	141	32.1	453.8	18.6	36.8	217.3	1 011.1	524.3	1 500.5	45.0	337.4	377.4
	Corp. ownership or control	184	141	32.1	453.8	18.6	36.8	217.3	1 011.1	524.3	1 500.5	45.0	337.4	377.4
	Single unit companies, total	602	138	10.1	130.6	6.2	11.9	63.4	276.0	157.1	426.3	12.4	84.0	92.7
	Corp. ownership or control	537	134	9.9	127.1	6.0	11.6	61.7	268.4	153.0	414.5	12.1	81.2	90.0
	Noncorporate ownership	65	4	0.3	3.5	0.2	0.3	1.6	7.6	4.1	11.8	0.3	2.7	2.7
	Legal form of organization:													
	Corporate	721	275	42.0	580.8	24.6	48.4	279.1	1 279.5	677.3	1 915.0	57.1	418.6	467.4
	Noncorporate, total	65	4	0.3	3.5	0.2	0.3	1.6	7.6	4.1	11.8	0.3	2.7	2.7
	Individual	45	1	0.1	1.4	0.1	0.1	0.7	3.5	1.8	5.3	0.1	1.3	1.3
	Partnership	14	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3822	**Environmental Controls**	**201**	**91**	**39.0**	**450.3**	**30.6**	**57.9**	**315.6**	**859.6**	**529.4**	**1 358.7**	**47.7**	**250.7**	**285.9**
	Type of organization:													
	Multiunit companies, total	52	45	35.4	413.9	27.9	52.7	293.4	783.9	488.7	1 244.3	45.4	231.0	263.7
	Corp. ownership or control	52	45	35.4	413.9	27.9	52.7	293.4	783.9	488.7	1 244.3	45.4	231.0	263.7
	Single unit companies, total	149	46	3.6	36.4	2.7	5.2	22.2	75.7	40.7	114.5	2.2	19.7	22.1
	Corp. ownership or control	135	45	3.5	35.6	2.6	5.0	21.6	71.6	39.4	109.2	2.2	18.7	21.0
	Noncorporate ownership	14	1	0.1	0.8	0.1	0.2	0.6	4.1	1.3	5.3	0.1	1.0	1.1

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
38	**INSTRUMENTS AND RELATED PRODUCTS**—Con.													
3822	**Environmental Controls**—Con.													
	Legal form of organization:													
	Corporate	187	90	38.9	449.5	30.5	57.7	315.0	855.5	528.1	1 353.5	47.6	249.7	284.8
	Noncorporate, total	14	1	0.1	0.8	0.1	0.2	0.6	4.1	1.3	5.3	0.1	1.0	1.1
	Individual	10	–	(Z)	0.5	(Z)	0.1	0.4	1.2	0.5	1.7	(Z)	0.5	0.6
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3823	**Process Control Instruments**	**426**	**207**	**46.5**	**664.8**	**23.4**	**47.0**	**265.9**	**1 399.4**	**657.1**	**2 022.0**	**52.1**	**507.8**	**555.9**
	Type of organization:													
	Multiunit companies, total	141	109	38.8	564.3	19.0	38.7	222.5	1 186.8	552.1	1 707.7	43.9	445.6	488.3
	Corp. ownership or control	141	109	38.8	564.3	19.0	38.7	222.5	1 186.8	552.1	1 707.7	43.9	445.6	488.3
	Single unit companies, total	285	98	7.7	100.6	4.3	8.4	43.4	212.5	105.0	314.3	8.2	62.1	67.5
	Corp. ownership or control	255	96	7.6	98.5	4.2	8.2	42.7	208.7	103.2	308.7	7.9	61.2	66.4
	Noncorporate ownership	30	2	0.1	2.1	0.1	0.2	0.7	3.8	1.8	5.6	0.3	0.9	1.1
	Legal form of organization:													
	Corporate	396	205	46.4	662.7	23.3	46.9	265.2	1 395.5	655.3	2 016.4	51.8	506.9	554.7
	Noncorporate, total	30	2	0.1	2.1	0.1	0.2	0.7	3.8	1.8	5.6	0.3	0.9	1.1
	Individual	22	1	0.1	1.7	0.1	0.1	0.6	3.1	1.4	4.5	0.2	0.7	0.9
	Partnership	7	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3824	**Fluid Meters and Counting Devices**	**111**	**62**	**15.9**	**197.6**	**11.2**	**22.5**	**118.0**	**429.0**	**231.3**	**650.4**	**19.9**	**136.7**	**148.8**
	Type of organization:													
	Multiunit companies, total	43	38	14.1	177.8	9.9	20.1	106.6	391.4	206.4	588.5	18.3	124.3	135.3
	Corp. ownership or control	43	38	14.1	177.8	9.9	20.1	106.6	391.4	206.4	588.5	18.3	124.3	135.3
	Single unit companies, total	68	24	1.8	19.8	1.2	2.4	11.4	37.7	25.0	61.9	1.6	12.4	13.6
	Corp. ownership or control	65	23	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	108	61	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3825	**Instruments to Measure Electricity**	**671**	**279**	**66.5**	**889.1**	**40.4**	**78.3**	**414.5**	**1 807.7**	**1 026.8**	**2 761.0**	**99.1**	**580.1**	**668.9**
	Type of organization:													
	Multiunit companies, total	181	151	54.0	736.5	33.0	63.9	346.3	1 483.9	869.5	2 288.4	83.6	484.6	560.3
	Corp. ownership or control	181	151	54.0	736.5	33.0	63.9	346.3	1 483.9	869.5	2 288.4	83.6	484.6	560.3
	Single unit companies, total	490	128	12.4	152.6	7.4	14.5	68.3	323.8	157.3	472.6	15.5	95.5	108.6
	Corp. ownership or control	434	127	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	56	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	615	278	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	56	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	42	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	11	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
3829	**Measuring and Controlling Devices, N.E.C.**	**670**	**210**	**32.3**	**464.0**	**15.8**	**31.8**	**174.5**	**746.6**	**405.8**	**1 118.1**	**49.3**	**277.0**	**320.0**
	Type of organization:													
	Multiunit companies, total	129	92	24.2	363.2	10.6	21.8	124.4	550.6	295.0	816.4	38.4	218.2	254.3
	Corp. ownership or control	129	92	24.2	363.2	10.6	21.8	124.4	550.6	295.0	816.4	38.4	218.2	254.3
	Single unit companies, total	541	118	8.1	100.8	5.2	10.0	50.0	196.0	110.8	301.7	10.9	58.9	65.7
	Corp. ownership or control	484	116	7.8	98.2	5.0	9.6	48.2	190.1	107.8	293.0	10.8	57.6	64.2
	Noncorporate ownership	57	2	0.3	2.6	0.2	0.4	1.8	5.9	3.0	8.7	0.1	1.3	1.5
	Legal form of organization:													
	Corporate	613	208	32.0	461.4	15.6	31.4	172.7	740.7	402.8	1 109.4	49.2	275.7	318.5
	Noncorporate, total	57	2	0.3	2.6	0.2	0.4	1.8	5.9	3.0	8.7	0.1	1.3	1.5
	Individual	34	–	0.1	0.7	(Z)	0.1	0.3	2.3	1.4	3.6	0.1	0.8	0.8
	Partnership	21	2	0.2	1.9	0.2	0.3	1.4	3.6	1.6	5.1	0.1	0.6	0.7
	Other and unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
3832	**Optical Instruments and Lenses**	**545**	**199**	**30.0**	**421.2**	**16.9**	**33.6**	**188.0**	**897.4**	**455.2**	**1 330.4**	**51.3**	**271.8**	**302.9**
	Type of organization:													
	Multiunit companies, total	127	103	23.2	334.3	12.8	26.0	147.9	713.4	354.6	1 049.1	39.6	221.0	246.1
	Corp. ownership or control	127	103	23.2	334.3	12.8	26.0	147.9	713.4	354.6	1 049.1	39.6	221.0	246.1
	Single unit companies, total	418	96	6.8	86.9	4.0	7.6	40.1	184.1	100.6	281.3	11.7	50.8	56.9
	Corp. ownership or control	355	90	6.6	84.1	3.8	7.3	38.5	177.7	96.7	271.0	11.4	48.8	55.0
	Noncorporate ownership	63	6	0.3	2.8	0.2	0.3	1.6	6.3	3.9	10.3	0.2	2.0	1.9
	Legal form of organization:													
	Corporate	482	193	29.7	418.4	16.7	33.3	186.4	891.1	451.3	1 320.1	51.0	269.9	301.1
	Noncorporate, total	63	6	0.3	2.8	0.2	0.3	1.6	6.3	3.9	10.3	0.2	2.0	1.9
	Individual	43	4	0.2	1.6	0.1	0.2	0.8	4.0	2.6	6.6	0.2	1.1	1.0
	Partnership	19	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
38	**INSTRUMENTS AND RELATED PRODUCTS**—Con.													
3841	**Surgical and Medical Instruments**	**651**	**238**	**43.2**	**491.4**	**29.2**	**57.5**	**261.4**	**1 208.8**	**648.8**	**1 833.1**	**87.2**	**322.5**	**360.7**
	Type of organization:													
	Multiunit companies, total	179	139	33.5	385.3	22.5	44.9	205.8	984.3	508.8	1 473.1	75.8	261.6	292.3
	Corp. ownership or control	179	139	33.5	385.3	22.5	44.9	205.8	984.3	508.8	1 473.1	75.8	261.6	292.3
	Single unit companies, total	472	99	9.8	106.1	6.7	12.6	55.6	224.5	140.1	360.0	11.4	60.9	68.4
	Corp. ownership or control	436	94	9.5	103.2	6.5	12.2	53.9	219.1	136.9	351.2	11.2	58.9	66.4
	Noncorporate ownership	36	5	0.3	2.9	0.2	0.3	1.7	5.5	3.2	8.8	0.2	2.1	2.0
	Legal form of organization:													
	Corporate	615	233	43.0	488.5	29.1	57.1	259.7	1 203.4	645.6	1 824.3	87.0	320.5	358.8
	Noncorporate, total	36	5	0.3	2.9	0.2	0.3	1.7	5.5	3.2	8.8	0.2	2.1	2.0
	Individual	28	5	0.2	2.7	0.2	0.3	1.6	5.1	2.9	8.1	(D)	1.9	1.8
	Partnership	7	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.3	0.7	(D)	0.2	0.2
	Other and unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
3842	**Surgical Appliances and Supplies**	**1 154**	**322**	**53.9**	**624.1**	**36.8**	**70.5**	**345.6**	**1 594.5**	**1 039.6**	**2 597.3**	**68.6**	**454.7**	**503.7**
	Type of organization:													
	Multiunit companies, total	302	186	42.5	513.0	28.2	55.0	278.5	1 369.6	878.5	2 212.4	56.6	391.7	437.1
	Corp. ownership or control	299	186	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	852	136	11.4	111.1	8.7	15.6	67.0	224.9	161.1	384.9	12.1	63.0	66.6
	Corp. ownership or control	679	133	10.9	106.0	8.3	14.9	64.0	213.9	154.1	367.0	11.5	59.9	63.3
	Noncorporate ownership	173	3	0.5	5.1	0.4	0.7	3.0	11.0	7.0	17.8	0.6	3.1	3.3
	Legal form of organization:													
	Corporate	978	319	53.4	618.8	36.4	69.8	342.4	1 583.3	1 032.5	2 579.0	68.1	451.5	500.3
	Noncorporate, total	176	3	0.5	5.3	0.4	0.7	3.1	11.3	7.1	18.3	0.6	3.2	3.4
	Individual	129	1	0.3	3.2	0.2	0.4	1.8	6.7	4.5	11.2	0.4	2.0	2.1
	Partnership	39	1	0.1	1.6	0.1	0.2	0.9	3.5	2.0	5.5	0.2	0.9	0.9
	Other and unknown	8	1	0.1	0.6	0.1	0.1	0.4	1.1	0.6	1.6	(Z)	0.3	0.4
3843	**Dental Equipment and Supplies**	**550**	**119**	**16.3**	**203.3**	**10.7**	**21.2**	**104.8**	**458.6**	**339.7**	**786.7**	**16.2**	**164.3**	**174.1**
	Type of organization:													
	Multiunit companies, total	108	68	12.3	156.7	7.7	15.8	79.4	363.7	281.7	636.6	12.2	139.9	146.0
	Corp. ownership or control	108	68	12.3	156.7	7.7	15.8	79.4	363.7	281.7	636.6	12.2	139.9	146.0
	Single unit companies, total	442	51	4.0	46.6	3.0	5.5	25.4	94.9	58.0	150.0	4.0	24.5	28.1
	Corp. ownership or control	332	50	3.8	44.3	2.8	5.2	24.1	89.1	55.1	141.5	3.8	23.0	26.5
	Noncorporate ownership	110	1	0.2	2.3	0.2	0.3	1.3	5.7	2.9	8.6	0.3	1.5	1.6
	Legal form of organization:													
	Corporate	440	118	16.1	201.0	10.5	20.9	103.5	452.8	336.8	778.1	16.0	162.8	172.5
	Noncorporate, total	110	1	0.2	2.3	0.2	0.3	1.3	5.7	2.9	8.6	0.3	1.5	1.6
	Individual	79	1	0.2	1.6	0.1	0.2	1.0	4.0	2.0	6.0	0.2	1.0	1.1
	Partnership	27	–	0.1	0.6	(Z)	0.1	0.3	1.6	0.9	2.4	0.1	0.4	0.5
	Other and unknown	4	–	(Z)	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.2	(Z)	(Z)	(Z)
3851	**Ophthalmic Goods**	**634**	**155**	**30.0**	**314.1**	**21.7**	**43.1**	**188.4**	**656.2**	**331.1**	**971.8**	**44.1**	**224.6**	**244.9**
	Type of organization:													
	Multiunit companies, total	110	73	22.3	239.6	15.9	32.0	142.8	502.9	244.4	735.1	34.8	180.0	196.3
	Corp. ownership or control	107	70	21.5	231.9	15.3	30.8	138.6	491.0	234.0	713.5	(D)	177.7	193.3
	Noncorporate ownership	3	3	0.8	7.7	0.6	1.2	4.2	11.9	10.4	21.6	(D)	2.3	3.1
	Single unit companies, total	524	82	7.6	74.4	5.8	11.1	45.6	153.3	86.7	236.7	9.3	44.6	48.5
	Corp. ownership or control	416	76	7.2	70.0	5.5	10.5	43.1	143.4	81.6	221.9	8.5	42.3	45.9
	Noncorporate ownership	108	6	0.5	4.4	0.4	0.6	2.5	9.9	5.1	14.8	0.9	2.3	2.6
	Legal form of organization:													
	Corporate	523	146	28.7	302.0	20.7	41.3	181.6	634.4	315.6	935.4	40.7	220.0	239.2
	Noncorporate, total	111	9	1.3	12.1	1.0	1.8	6.8	21.8	15.5	36.4	3.5	4.6	5.7
	Individual	78	1	0.2	2.2	0.2	0.3	1.3	4.9	2.3	7.2	(D)	1.4	1.4
	Partnership	27	5	0.2	2.2	0.2	0.3	1.2	4.7	2.7	7.2	0.6	0.8	1.1
	Other and unknown	6	3	0.8	7.8	0.6	1.2	4.3	12.2	10.5	21.9	(D)	2.4	3.1
3861	**Photographic Equipment and Supplies**	**780**	**265**	**111.7**	**1 899.6**	**61.7**	**119.4**	**886.5**	**6 732.4**	**3 245.3**	**9 946.9**	**322.7**	**1 428.2**	**1 503.0**
	Type of organization:													
	Multiunit companies, total	206	157	103.4	1 787.7	56.6	109.8	829.1	6 441.8	3 071.1	9 485.9	307.7	1 354.2	1 425.0
	Corp. ownership or control	205	157	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	574	108	8.3	111.9	5.1	9.6	57.4	290.6	174.1	461.1	15.0	74.1	78.0
	Corp. ownership or control	502	105	8.0	108.3	5.0	9.3	55.5	278.5	168.0	443.0	13.8	71.8	75.3
	Noncorporate ownership	72	3	0.3	3.6	0.2	0.3	1.8	12.2	6.1	18.1	1.2	2.3	2.6
	Legal form of organization:													
	Corporate	707	262	111.4	1 895.9	61.5	119.1	884.6	6 720.0	3 239.0	9 928.4	321.5	1 425.9	1 500.3
	Noncorporate, total	73	3	0.3	3.7	0.2	0.3	1.9	12.4	6.2	18.5	1.3	2.4	2.7
	Individual	48	–	0.1	1.4	0.1	0.1	0.7	4.9	2.3	7.1	0.2	1.0	1.0
	Partnership	19	1	0.1	0.9	0.1	0.1	0.6	2.7	1.7	4.4	(D)	0.7	0.7
	Other and unknown	6	2	0.1	1.3	(Z)	0.1	0.6	4.9	2.2	6.9	(D)	0.7	1.0
3873	**Watches, Clocks, and Watchcases**	**302**	**112**	**31.5**	**316.6**	**24.0**	**46.3**	**199.4**	**684.5**	**912.4**	**1 594.7**	**23.2**	**271.2**	**271.7**
	Type of organization:													
	Multiunit companies, total	69	61	27.3	273.9	20.6	39.3	172.1	593.3	809.3	1 400.8	20.7	236.5	234.9
	Corp. ownership or control	69	61	27.3	273.9	20.6	39.3	172.1	593.3	809.3	1 400.8	20.7	236.5	234.9
	Single unit companies, total	233	51	4.3	42.7	3.4	6.9	27.2	91.2	103.1	193.9	2.6	34.8	36.8
	Corp. ownership or control	184	49	4.1	41.0	3.2	6.6	26.2	87.6	98.6	185.9	2.4	33.0	35.1
	Noncorporate ownership	49	2	0.2	1.7	0.2	0.3	1.1	3.6	4.4	8.0	0.2	1.7	1.7

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
38	**INSTRUMENTS AND RELATED PRODUCTS**—Con.													
3873	**Watches, Clocks, and Watchcases**—Con.													
	Legal form of organization:													
	Corporate	253	110	31.3	314.9	23.9	46.0	198.3	680.9	907.9	1 586.7	23.0	269.5	270.1
	Noncorporate, total	49	2	0.2	1.7	0.2	0.3	1.1	3.6	4.4	8.0	0.2	1.7	1.7
	Individual	26	–	0.1	0.5	(Z)	0.1	0.3	1.1	1.2	2.2	(Z)	0.4	0.4
	Partnership	19	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
39	**MISCELLANEOUS MANUFACTURING INDUSTRIES**	**17 259**	**3 794**	**440.7**	**4 406.4**	**338.7**	**626.7**	**2 745.3**	**10 291.0**	**9 061.4**	**19 150.7**	**473.6**	**3 309.0**	**3 614.2**
	Type of organization:													
	Multiunit companies, total	1 769	1 279	239.1	2 519.6	180.2	344.3	1 568.1	6 351.4	5 439.1	11 657.0	322.3	2 203.9	2 407.2
	Corp. ownership or control	1 767	1 278	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	15 490	2 515	201.6	1 886.8	158.5	282.3	1 177.2	3 939.7	3 622.3	7 493.7	151.3	1 105.1	1 207.0
	Corp. ownership or control	11 115	2 395	187.3	1 762.2	146.5	262.7	1 098.1	3 651.2	3 364.7	6 951.1	141.6	1 022.2	1 116.5
	Noncorporate ownership	4 375	120	14.3	124.6	12.0	19.6	79.1	288.5	257.6	542.6	9.7	82.9	90.5
	Legal form of organization:													
	Corporate	12 882	3 673	426.3	4 281.5	326.6	607.0	2 666.0	10 001.5	8 803.2	18 606.5	463.9	3 225.8	3 523.5
	Noncorporate, total	4 377	121	14.3	124.9	12.1	19.7	79.3	289.6	258.2	544.2	9.7	83.2	90.8
	Individual	3 113	56	8.4	74.0	7.2	11.5	46.6	166.6	144.6	309.2	5.6	49.0	54.1
	Partnership	1 030	47	4.4	39.5	3.7	6.2	25.7	96.1	89.9	184.7	(D)	25.5	28.1
	Other and unknown	234	18	1.5	11.4	1.2	2.0	7.0	26.9	23.7	50.3	(D)	8.6	8.6
3911	**Jewelry, Precious Metal**	**2 206**	**405**	**42.1**	**432.0**	**29.2**	**53.3**	**241.4**	**979.8**	**1 154.9**	**2 107.0**	**25.6**	**437.4**	**489.8**
	Type of organization:													
	Multiunit companies, total	135	93	16.2	177.8	10.5	20.2	92.4	439.9	486.6	921.2	12.8	236.6	255.9
	Corp. ownership or control	135	93	16.2	177.8	10.5	20.2	92.4	439.9	486.6	921.2	12.8	236.6	255.9
	Single unit companies, total	2 071	312	25.9	254.2	18.7	33.1	148.9	539.9	668.3	1 185.8	12.8	200.9	233.9
	Corp. ownership or control	1 427	295	23.7	234.5	16.9	30.3	136.8	493.6	614.5	1 085.4	11.8	182.6	214.6
	Noncorporate ownership	644	17	2.1	19.8	1.8	2.8	12.2	46.3	53.8	100.4	1.0	18.3	19.3
	Legal form of organization:													
	Corporate	1 562	388	40.0	412.2	27.4	50.5	229.2	933.6	1 101.1	2 006.7	24.6	419.1	470.5
	Noncorporate, total	644	17	2.1	19.8	1.8	2.8	12.2	46.3	53.8	100.4	1.0	18.3	19.3
	Individual	448	5	1.0	9.9	0.9	1.3	5.8	21.8	25.6	47.1	0.5	9.9	10.3
	Partnership	160	10	1.0	8.4	0.8	1.3	5.6	20.4	23.8	45.0	0.3	7.0	7.4
	Other and unknown	36	2	0.1	1.5	0.1	0.1	0.8	4.1	4.4	8.3	0.2	1.4	1.6
3914	**Silverware and Plated Ware**	**258**	**67**	**10.8**	**119.8**	**8.3**	**15.7**	**80.2**	**255.1**	**205.4**	**457.0**	**8.0**	**136.8**	**142.8**
	Type of organization:													
	Multiunit companies, total	38	34	8.7	98.0	6.6	12.4	65.0	214.2	172.6	383.8	7.2	119.2	125.0
	Corp. ownership or control	38	34	8.7	98.0	6.6	12.4	65.0	214.2	172.6	383.8	7.2	119.2	125.0
	Single unit companies, total	220	33	2.2	21.7	1.7	3.3	15.2	40.9	32.8	73.2	0.8	17.6	17.9
	Corp. ownership or control	156	31	2.0	20.2	1.6	3.1	14.0	37.3	30.0	66.9	0.7	16.3	16.5
	Noncorporate ownership	64	2	0.1	1.5	0.1	0.2	1.2	3.6	2.8	6.3	0.1	1.3	1.4
	Legal form of organization:													
	Corporate	194	65	10.7	118.3	8.2	15.5	79.0	251.5	202.6	450.7	7.9	135.5	141.4
	Noncorporate, total	64	2	0.1	1.5	0.1	0.2	1.2	3.6	2.8	6.3	0.1	1.3	1.4
	Individual	43	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	16	2	0.1	1.0	0.1	0.1	0.8	2.3	1.7	3.9	(Z)	0.5	0.6
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3915	**Jewelers' Materials and Lapidary Work**	**654**	**92**	**8.3**	**85.9**	**6.8**	**12.2**	**51.3**	**213.6**	**491.1**	**685.2**	**5.9**	**96.5**	**119.9**
	Type of organization:													
	Multiunit companies, total	39	23	2.6	27.7	2.1	3.9	16.5	79.5	174.1	237.4	1.9	36.0	53.6
	Corp. ownership or control	39	23	2.6	27.7	2.1	3.9	16.5	79.5	174.1	237.4	1.9	36.0	53.6
	Single unit companies, total	615	69	5.7	58.1	4.7	8.2	34.8	134.0	317.1	447.8	4.0	60.6	66.3
	Corp. ownership or control	443	66	5.3	54.0	4.3	7.6	32.4	122.0	293.9	413.4	3.6	56.9	61.7
	Noncorporate ownership	172	3	0.4	4.2	0.4	0.6	2.5	12.0	23.2	34.4	0.4	3.7	4.6
	Legal form of organization:													
	Corporate	482	89	7.9	81.7	6.4	11.5	48.8	201.6	467.9	650.9	5.5	92.8	115.3
	Noncorporate, total	172	3	0.4	4.2	0.4	0.6	2.5	12.0	23.2	34.4	0.4	3.7	4.6
	Individual	133	2	0.3	2.9	0.3	0.4	1.7	8.3	17.3	24.8	0.3	2.5	3.3
	Partnership	36	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3931	**Musical Instruments**	**450**	**127**	**25.2**	**252.7**	**20.6**	**38.2**	**178.2**	**488.2**	**428.9**	**924.9**	**13.8**	**245.4**	**243.2**
	Type of organization:													
	Multiunit companies, total	84	69	18.9	189.2	15.4	28.7	133.2	366.1	343.1	717.9	10.1	200.2	195.9
	Corp. ownership or control	84	69	18.9	189.2	15.4	28.7	133.2	366.1	343.1	717.9	10.1	200.2	195.9
	Single unit companies, total	366	58	6.3	63.4	5.1	9.5	45.0	122.1	85.7	207.0	3.7	45.2	47.3
	Corp. ownership or control	245	56	6.0	60.5	4.8	9.0	42.7	116.2	80.1	195.7	3.6	42.6	44.2
	Noncorporate ownership	121	2	0.3	3.0	0.3	0.5	2.3	5.9	5.7	11.3	0.1	2.6	3.1
	Legal form of organization:													
	Corporate	329	125	24.9	249.7	20.3	37.7	176.0	482.3	423.2	913.6	13.7	242.8	240.1
	Noncorporate, total	121	2	0.3	3.0	0.3	0.5	2.3	5.9	5.7	11.3	0.1	2.6	3.1
	Individual	93	2	0.3	2.7	0.3	0.5	2.1	5.2	5.1	10.0	0.1	2.3	2.9
	Partnership	24	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
39	**MISCELLANEOUS MANUFACTURING INDUSTRIES—Con.**													
3942	**Dolls**	**231**	**88**	**9.1**	**65.3**	**8.0**	**13.3**	**43.5**	**181.6**	**171.6**	**340.2**	**6.4**	**46.6**	**62.5**
	Type of organization:													
	Multiunit companies, total	30	26	4.0	31.6	3.3	6.1	19.8	105.6	96.8	190.5	3.8	27.2	40.5
	Corp. ownership or control	30	26	4.0	31.6	3.3	6.1	19.8	105.6	96.8	190.5	3.8	27.2	40.5
	Single unit companies, total	201	62	5.1	33.7	4.6	7.2	23.7	76.0	74.8	149.6	2.6	19.4	22.0
	Corp. ownership or control	148	56	4.8	31.7	4.3	6.7	22.3	71.2	67.8	138.1	2.2	17.9	20.4
	Noncorporate ownership	53	6	0.3	2.0	0.3	0.5	1.4	4.7	6.9	11.5	0.3	1.5	1.6
	Legal form of organization:													
	Corporate	178	82	8.8	63.3	7.7	12.9	42.1	176.9	164.6	328.7	6.1	45.0	60.9
	Noncorporate, total	53	6	0.3	2.0	0.3	0.5	1.4	4.7	6.9	11.5	0.3	1.5	1.6
	Individual	36	4	0.2	1.2	0.2	0.3	0.8	2.8	2.4	5.0	0.2	0.6	0.9
	Partnership	12	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3944	**Games, Toys, and Children's Vehicles**	**801**	**251**	**53.1**	**520.6**	**39.2**	**73.2**	**295.0**	**1 544.6**	**1 205.6**	**2 719.7**	**78.5**	**383.3**	**437.7**
	Type of organization:													
	Multiunit companies, total	136	118	41.0	412.9	29.7	55.5	229.7	1 272.9	986.2	2 232.6	66.1	311.3	361.0
	Corp. ownership or control	136	118	41.0	412.9	29.7	55.5	229.7	1 272.9	986.2	2 232.6	66.1	311.3	361.0
	Single unit companies, total	665	133	12.1	107.7	9.6	17.7	65.3	271.7	219.4	487.1	12.4	72.0	76.7
	Corp. ownership or control	498	127	11.6	103.6	9.1	16.9	62.7	259.6	210.0	465.7	12.0	69.1	73.7
	Noncorporate ownership	167	6	0.5	4.1	0.4	0.8	2.6	12.0	9.4	21.4	0.4	2.9	3.0
	Legal form of organization:													
	Corporate	634	245	52.6	516.5	38.8	72.4	292.4	1 532.5	1 196.2	2 698.3	78.1	380.4	434.7
	Noncorporate, total	167	6	0.5	4.1	0.4	0.8	2.6	12.0	9.4	21.4	0.4	2.9	3.0
	Individual	115	3	0.3	2.6	0.3	0.5	1.7	6.1	5.1	11.2	0.2	1.5	1.6
	Partnership	40	2	0.1	1.0	0.1	0.2	0.7	4.7	3.4	8.0	0.1	1.0	1.0
	Other and unknown	12	1	0.1	0.5	(Z)	0.1	0.3	1.3	0.9	2.2	0.1	0.4	0.3
3949	**Sporting and Athletic Goods, N.E.C.**	**1 878**	**496**	**57.2**	**525.8**	**46.1**	**85.9**	**358.6**	**1 273.6**	**1 182.0**	**2 425.1**	**62.7**	**546.1**	**579.1**
	Type of organization:													
	Multiunit companies, total	282	212	35.1	340.9	27.8	53.8	234.9	832.7	775.4	1 590.4	40.1	392.0	408.0
	Corp. ownership or control	282	212	35.1	340.9	27.8	53.8	234.9	832.7	775.4	1 590.4	40.1	392.0	408.0
	Single unit companies, total	1 596	284	22.1	185.0	18.3	32.2	123.6	440.9	406.6	834.7	22.6	154.2	171.1
	Corp. ownership or control	1 219	276	21.0	175.8	17.3	30.5	117.3	419.5	387.0	793.8	21.3	144.7	161.7
	Noncorporate ownership	377	8	1.1	9.2	1.0	1.6	6.4	21.4	19.6	40.9	1.3	9.4	9.4
	Legal form of organization:													
	Corporate	1 501	488	56.1	516.7	45.1	84.3	352.2	1 252.2	1 162.4	2 384.2	61.4	536.7	569.7
	Noncorporate, total	377	8	1.1	9.2	1.0	1.6	6.4	21.4	19.6	40.9	1.3	9.4	9.4
	Individual	267	4	0.7	5.7	0.6	1.0	4.0	14.2	12.0	26.2	0.8	6.1	6.1
	Partnership	81	3	0.3	2.6	0.3	0.4	1.8	5.4	5.6	10.9	0.3	2.4	2.5
	Other and unknown	29	1	0.1	0.8	0.1	0.2	0.6	1.7	2.1	3.7	0.2	0.8	0.8
3951	**Pens and Mechanical Pencils**	**141**	**78**	**13.2**	**135.6**	**10.4**	**20.6**	**92.9**	**419.8**	**257.4**	**669.8**	**32.8**	**108.6**	**123.1**
	Type of organization:													
	Multiunit companies, total	38	33	9.4	105.1	7.4	15.0	72.7	349.8	197.3	540.7	29.8	90.1	101.8
	Corp. ownership or control	38	33	9.4	105.1	7.4	15.0	72.7	349.8	197.3	540.7	29.8	90.1	101.8
	Single unit companies, total	103	45	3.8	30.5	3.0	5.5	20.2	70.0	60.1	129.2	3.0	18.6	21.3
	Corp. ownership or control	93	44	3.7	29.8	2.9	5.4	19.7	68.3	58.6	126.2	3.0	18.3	20.7
	Noncorporate ownership	10	1	0.1	0.6	0.1	0.1	0.5	1.7	1.5	3.0	0.1	0.3	0.5
	Legal form of organization:													
	Corporate	131	77	13.1	134.9	10.4	20.5	92.3	418.1	255.9	666.8	32.8	108.3	122.5
	Noncorporate, total	10	1	0.1	0.6	0.1	0.1	0.5	1.7	1.5	3.0	0.1	0.3	0.5
	Individual	7	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Partnership	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3952	**Lead Pencils and Art Goods**	**134**	**46**	**6.6**	**63.1**	**4.7**	**9.2**	**37.6**	**145.5**	**134.0**	**275.9**	**10.8**	**64.2**	**70.9**
	Type of organization:													
	Multiunit companies, total	23	18	4.9	47.8	3.4	6.7	28.5	114.1	93.7	204.9	9.4	51.3	56.7
	Corp. ownership or control	23	18	4.9	47.8	3.4	6.7	28.5	114.1	93.7	204.9	9.4	51.3	56.7
	Single unit companies, total	111	28	1.7	15.3	1.3	2.5	9.2	31.4	40.3	71.0	1.4	12.9	14.2
	Corp. ownership or control	85	25	1.6	14.4	1.2	2.3	8.6	29.4	38.4	67.0	1.3	12.2	13.5
	Noncorporate ownership	26	3	0.1	0.9	0.1	0.2	0.6	2.0	1.9	4.0	0.1	0.7	0.7
	Legal form of organization:													
	Corporate	108	43	6.5	62.2	4.6	9.1	37.0	143.5	132.1	271.9	10.7	63.5	70.2
	Noncorporate, total	26	3	0.1	0.9	0.1	0.2	0.6	2.0	1.9	4.0	0.1	0.7	0.7
	Individual	19	2	0.1	0.6	0.1	0.1	0.4	1.3	1.2	2.5	0.1	0.6	0.6
	Partnership	6	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3953	**Marking Devices**	**612**	**86**	**7.4**	**78.7**	**4.7**	**9.1**	**39.6**	**160.0**	**90.3**	**248.7**	**5.5**	**30.8**	**34.3**
	Type of organization:													
	Multiunit companies, total	61	37	3.1	35.2	2.0	3.9	17.4	78.4	45.1	122.7	3.2	18.5	20.9
	Corp. ownership or control	61	37	3.1	35.2	2.0	3.9	17.4	78.4	45.1	122.7	3.2	18.5	20.9
	Single unit companies, total	551	49	4.3	43.5	2.7	5.2	22.2	81.5	45.2	126.0	2.3	12.3	13.4
	Corp. ownership or control	350	47	3.8	38.6	2.4	4.6	19.7	71.0	38.4	108.6	2.1	10.2	11.3
	Noncorporate ownership	201	2	0.5	4.9	0.4	0.6	2.4	10.5	6.8	17.3	0.3	2.1	2.1

See footnotes at end of table.

Table 2. **Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977**—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
39	**MISCELLANEOUS MANUFACTURING INDUSTRIES**—Con.													
3953	**Marking Devices**—Con.													
	Legal form of organization:													
	Corporate	411	84	6.8	73.8	4.3	8.4	37.2	149.4	83.5	231.3	5.2	28.8	32.2
	Noncorporate, total	201	2	0.5	4.9	0.4	0.6	2.4	10.5	6.8	17.3	0.3	2.1	2.1
	Individual	157	1	0.4	3.7	0.3	0.5	1.8	7.8	5.4	13.2	0.2	1.6	1.7
	Partnership	38	1	0.1	1.1	0.1	0.1	0.5	2.4	1.2	3.6	0.1	0.4	0.4
	Other and unknown	6	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.2	0.6	(Z)	0.1	0.1
3955	**Carbon Paper and Inked Ribbons**	**100**	**51**	**4.6**	**53.7**	**3.4**	**6.9**	**33.1**	**142.4**	**205.4**	**344.0**	**6.2**	**44.7**	**47.8**
	Type of organization:													
	Multiunit companies, total	43	32	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	43	32	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	57	19	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	47	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	90	50	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	10	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	4	–	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.2	(D)	(Z)	(Z)
	Partnership	4	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	2	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3961	**Costume Jewelry**	**847**	**236**	**25.0**	**215.9**	**20.8**	**36.1**	**136.1**	**485.1**	**338.9**	**816.6**	**17.6**	**110.6**	**119.6**
	Type of organization:													
	Multiunit companies, total	54	35	8.7	89.0	7.1	13.1	55.2	220.9	133.1	351.5	6.8	60.3	62.6
	Corp. ownership or control	54	35	8.7	89.0	7.1	13.1	55.2	220.9	133.1	351.5	6.8	60.3	62.6
	Single unit companies, total	793	201	16.3	126.9	13.7	23.0	80.9	264.2	205.8	465.2	10.8	50.3	57.0
	Corp. ownership or control	585	192	15.5	121.3	13.0	21.8	77.0	250.0	195.5	440.8	10.4	47.4	54.1
	Noncorporate ownership	208	9	0.9	5.7	0.7	1.2	3.9	14.2	10.3	24.4	0.4	2.8	2.9
	Legal form of organization:													
	Corporate	639	227	24.2	210.2	20.0	34.9	132.1	470.9	328.6	792.2	17.2	107.7	116.7
	Noncorporate, total	208	9	0.9	5.7	0.7	1.2	3.9	14.2	10.3	24.4	0.4	2.8	2.9
	Individual	149	5	0.5	3.6	0.5	0.8	2.4	9.4	6.2	15.6	0.1	2.1	2.2
	Partnership	45	4	0.3	1.9	0.3	0.4	1.4	4.4	3.6	8.0	0.3	0.7	0.7
	Other and unknown	14	–	(Z)	0.2	(Z)	(Z)	0.1	0.4	0.4	0.8	(Z)	(Z)	(Z)
3962	**Artificial Flowers**	**233**	**67**	**5.0**	**38.2**	**4.2**	**7.1**	**25.2**	**91.5**	**89.9**	**r180.2**	**3.0**	**27.2**	**29.5**
	Type of organization:													
	Multiunit companies, total	32	23	2.2	16.4	1.8	3.1	11.2	46.1	39.7	r86.7	2.0	14.6	13.5
	Corp. ownership or control	31	22	(D)	(D)	(D)	(D)	(D)	(D)	(D)	–	(D)	(D)	(D)
	Noncorporate ownership	1	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	201	44	2.8	21.7	2.3	4.0	14.0	45.4	50.2	r93.4	0.9	12.6	16.0
	Corp. ownership or control	134	43	2.6	19.8	2.1	3.6	12.7	38.7	40.9	r78.8	0.8	11.2	13.1
	Noncorporate ownership	67	1	0.2	2.0	0.2	0.3	1.3	6.8	9.4	r14.6	0.1	1.4	2.9
	Legal form of organization:													
	Corporate	165	65	4.7	35.9	3.9	6.7	23.7	83.7	79.9	r163.9	2.8	25.6	26.4
	Noncorporate, total	68	2	0.3	2.3	0.3	0.4	1.5	7.8	9.9	r16.2	0.1	1.6	3.1
	Individual	53	1	0.2	1.4	0.2	0.3	1.0	2.9	2.9	r5.8	(Z)	0.9	0.8
	Partnership	12	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	3	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3963	**Buttons**	**159**	**47**	**3.2**	**30.8**	**2.6**	**4.7**	**20.0**	**50.0**	**43.1**	**95.2**	**1.4**	**17.6**	**13.9**
	Type of organization:													
	Multiunit companies, total	27	22	1.5	15.2	1.2	2.2	9.5	25.1	25.1	50.3	0.7	8.9	8.9
	Corp. ownership or control	27	22	1.5	15.2	1.2	2.2	9.5	25.1	25.1	50.3	0.7	8.9	8.9
	Single unit companies, total	132	25	1.7	15.6	1.5	2.6	10.5	24.9	18.0	44.9	0.7	8.6	5.0
	Corp. ownership or control	92	23	1.6	14.5	1.3	2.4	9.8	23.0	15.9	40.8	0.7	8.2	4.5
	Noncorporate ownership	40	2	0.1	1.1	0.1	0.2	0.7	1.9	2.1	4.1	(Z)	0.5	0.4
	Legal form of organization:													
	Corporate	119	45	3.1	29.7	2.5	4.5	19.3	48.1	41.0	91.2	1.4	17.1	13.4
	Noncorporate, total	40	2	0.1	1.1	0.1	0.2	0.7	1.9	2.1	4.1	(Z)	0.5	0.4
	Individual	25	–	0.1	0.5	0.1	0.1	0.4	1.0	1.0	2.0	(Z)	0.3	0.3
	Partnership	10	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	5	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3964	**Needles, Pins, and Fasteners**	**275**	**117**	**17.7**	**165.6**	**14.0**	**27.5**	**111.8**	**375.4**	**302.8**	**674.2**	**22.0**	**105.8**	**111.6**
	Type of organization:													
	Multiunit companies, total	61	53	12.3	119.0	9.6	19.1	79.9	276.1	222.0	496.2	15.5	84.0	87.0
	Corp. ownership or control	61	53	12.3	119.0	9.6	19.1	79.9	276.1	222.0	496.2	15.5	84.0	87.0
	Single unit companies, total	214	64	5.4	46.7	4.4	8.4	31.9	99.3	80.7	178.0	6.6	21.8	24.6
	Corp. ownership or control	182	64	5.3	45.9	4.3	8.2	31.4	97.2	79.1	174.3	6.5	21.2	24.1
	Noncorporate ownership	32	–	0.1	0.8	0.1	0.1	0.5	2.1	1.6	3.8	0.1	0.5	0.5
	Legal form of organization:													
	Corporate	243	117	17.6	164.9	13.9	27.3	111.3	373.3	301.1	670.5	21.9	105.3	111.1
	Noncorporate, total	32	–	0.1	0.8	0.1	0.1	0.5	2.1	1.6	3.8	0.1	0.5	0.5
	Individual	20	–	(Z)	0.4	(Z)	0.1	0.2	1.0	0.7	1.8	(Z)	0.3	0.3
	Partnership	12	–	0.1	0.4	(Z)	0.1	0.3	1.1	0.9	2.0	(Z)	0.3	0.3

See footnotes at end of table.

Table 2. Selected Statistics for Operating Manufacturing Establishments, by Type of Operation and Legal Form of Organization, for Major Industry Groups and Industries: 1977—Con.

[For explanation of terms, see appendix A]

1977 code	Item	Establishments[1]		All employees		Production workers			Value added by manufacture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures[2] (million dollars)	Inventories end of—	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Worker-hours (millions)	Wages (million dollars)					1976	1977
39	**MISCELLANEOUS MANUFACTURING INDUSTRIES**—Con.													
3991	**Brooms and Brushes**	**409**	**153**	**16.5**	**163.8**	**12.7**	**24.0**	**101.1**	**353.6**	**326.7**	**673.1**	**15.7**	**119.9**	**129.9**
	Type of organization:													
	Multiunit companies, total	71	63	9.4	99.5	7.1	14.0	61.3	224.3	201.2	419.6	9.4	82.8	89.3
	Corp. ownership or control	71	63	9.4	99.5	7.1	14.0	61.3	224.3	201.2	419.6	9.4	82.8	89.3
	Single unit companies, total	338	90	7.1	64.3	5.6	10.0	39.8	129.4	125.5	253.4	6.3	37.1	40.7
	Corp. ownership or control	248	84	6.6	60.4	5.2	9.4	37.3	120.3	117.3	236.1	6.0	34.4	37.9
	Noncorporate ownership	90	6	0.5	3.8	0.4	0.7	2.5	9.1	8.2	17.3	0.3	2.7	2.8
	Legal form of organization:													
	Corporate	319	147	16.1	159.9	12.3	23.3	98.5	344.5	318.5	655.7	15.4	117.2	127.2
	Noncorporate, total	90	6	0.5	3.8	0.4	0.7	2.5	9.1	8.2	17.3	0.3	2.7	2.8
	Individual	64	3	0.2	1.8	0.2	0.3	1.3	4.1	3.9	8.1	0.1	1.2	1.2
	Partnership	22	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	4	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3993	**Signs and Advertising Displays**	**3 468**	**627**	**49.7**	**566.6**	**36.8**	**69.2**	**343.1**	**1 060.9**	**689.2**	**1 738.7**	**43.0**	**190.0**	**210.8**
	Type of organization:													
	Multiunit companies, total	248	157	14.3	171.7	10.1	19.9	100.9	334.4	221.6	549.9	16.9	74.0	84.4
	Corp. ownership or control	248	157	14.3	171.7	10.1	19.9	100.9	334.4	221.6	549.9	16.9	74.0	84.4
	Single unit companies, total	3 220	470	35.4	395.0	26.6	49.3	242.2	726.6	467.6	1 188.8	26.2	116.0	126.5
	Corp. ownership or control	2 244	450	32.4	364.5	24.2	45.1	222.9	662.9	430.7	1 088.6	23.9	104.7	114.7
	Noncorporate ownership	976	20	3.0	30.4	2.5	4.2	19.3	63.6	36.9	100.2	2.3	11.3	11.8
	Legal form of organization:													
	Corporate	2 492	607	46.7	536.2	34.3	65.0	323.8	997.3	652.3	1 638.5	40.8	178.8	199.1
	Noncorporate, total	976	20	3.0	30.4	2.5	4.2	19.3	63.6	36.9	100.2	2.3	11.3	11.8
	Individual	756	11	2.0	20.5	1.7	2.8	12.9	43.1	25.6	68.3	1.7	7.5	8.1
	Partnership	186	9	0.9	8.6	0.7	1.2	5.5	18.1	10.1	28.2	0.5	3.4	3.3
	Other and unknown	34	–	0.1	1.3	0.1	0.2	0.9	2.5	1.3	3.7	0.1	0.3	0.4
3995	**Burial Caskets**	**406**	**133**	**12.0**	**129.7**	**9.3**	**17.8**	**79.7**	**264.2**	**244.1**	**505.9**	**16.3**	**78.2**	**81.8**
	Type of organization:													
	Multiunit companies, total	69	45	6.0	71.0	4.6	8.7	42.5	160.0	128.8	287.2	12.3	45.7	47.4
	Corp. ownership or control	69	45	6.0	71.0	4.6	8.7	42.5	160.0	128.8	287.2	12.3	45.7	47.4
	Single unit companies, total	337	88	6.0	58.7	4.7	9.0	37.2	104.2	115.3	218.7	4.1	32.6	34.5
	Corp. ownership or control	261	85	5.6	55.3	4.4	8.5	35.0	97.6	107.8	204.5	3.7	30.2	32.1
	Noncorporate ownership	76	3	0.4	3.4	0.3	0.6	2.3	6.6	7.6	14.2	0.3	2.4	2.4
	Legal form of organization:													
	Corporate	330	130	11.6	126.3	9.0	17.2	77.4	257.6	236.6	491.8	16.0	75.9	79.4
	Noncorporate, total	76	3	0.4	3.4	0.3	0.6	2.3	6.6	7.6	14.2	0.3	2.4	2.4
	Individual	52	–	0.2	1.5	0.1	0.2	0.9	2.7	3.1	5.8	0.1	1.1	1.0
	Partnership	23	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other and unknown	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3996	**Hard Surface Floor Coverings**	**21**	**13**	**6.4**	**93.5**	**5.0**	**10.4**	**68.6**	**321.3**	**291.9**	**607.2**	**16.9**	**76.2**	**84.9**
	Type of organization:													
	Multiunit companies, total	9	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	9	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	12	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corp. ownership or control	11	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Legal form of organization:													
	Corporate	20	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate, total	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Individual	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3999	**Manufacturing Industries, N.E.C.**	**3 976**	**614**	**67.3**	**669.1**	**52.0**	**92.3**	**408.5**	**1 484.7**	**1 208.1**	**2 662.0**	**81.3**	**442.9**	**481.1**
	Type of organization:													
	Multiunit companies, total	289	178	31.4	343.9	23.4	43.1	206.8	791.7	659.5	1 425.9	53.0	241.6	274.3
	Corp. ownership or control	288	178	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Noncorporate ownership	1	–	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Single unit companies, total	3 687	436	35.9	325.2	28.6	49.3	201.7	693.0	548.6	1 236.1	28.3	201.3	206.7
	Corp. ownership or control	2 647	408	32.6	298.4	25.8	44.9	185.4	630.2	500.2	1 125.2	26.2	183.1	186.0
	Noncorporate ownership	1 040	28	3.3	26.8	2.8	4.3	16.3	62.8	48.4	110.9	2.1	18.2	20.7
	Legal form of organization:													
	Corporate	2 935	586	64.0	642.2	49.2	88.0	392.2	1 421.9	1 159.7	2 551.1	79.2	424.8	460.4
	Noncorporate, total	1 041	28	3.3	26.8	2.8	4.3	16.3	62.8	48.4	110.9	2.1	18.2	20.7
	Individual	671	13	1.7	14.4	1.5	2.3	8.8	33.1	25.4	58.4	1.1	9.7	12.0
	Partnership	300	6	0.8	7.7	0.7	1.1	4.7	18.2	14.6	32.8	0.6	5.0	5.2
	Other and unknown	70	9	0.7	4.7	0.6	0.9	2.7	11.5	8.3	19.8	0.5	3.4	3.5
	ADMINISTRATIVE AND AUXILIARY	**9 171**	**4 856**	**1 074.2**	**21 981.2**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
	Type of organization:													
	Multiunit companies, total	9 171	4 856	1 074.2	21 981.2	–	–	–	–	–	–	–	–	–
	Corp. ownership or control	9 093	4 815	1 068.8	21 893.8	–	–	–	–	–	–	–	–	–
	Noncorporate ownership	78	41	5.4	87.4	–	–	–	–	–	–	–	–	–
	Corporate	9 093	4 815	1 068.8	21 893.8	–	–	–	–	–	–	–	–	–
	Legal form of organization:													
	Noncorporate, total	78	41	5.4	87.4	–	–	–	–	–	–	–	–	–
	Other and unknown	78	41	5.4	87.4	–	–	–	–	–	–	–	–	–

– Represents zero. (D) Withheld to avoid disclosing operations of individual companies. ʳ Revised by 3 percent or more from figure published in final industry reports. Data for other items for this industry have also been revised. (Z) Less than 50 thousand dollars or hours; under 50 employees.

[1]All data are based on reports for individual manufacturing establishments and not on a company basis. Each establishment of multiestablishment companies is classified by its primary industrial activity. For this reason the statistics presented in this table cannot be compared directly with tabulations in which the whole corporation is the reporting unit and the entire company is classified in one industry--for example, the "Statistics of Income, Corporation Income Tax Returns," compiled by the Bureau of Internal Revenue, U.S. Treasury Department. Establishments were classified as part of a multiunit company when the company operated two establishments or more, of which at least one was a manufacturing establishment.

[2]Includes expenditures for plants in operation and for plants under construction but not yet in operation.

[3]Establishments in this industry reported value of production rather than value of shipments. Consequently, the formula for computing adjusted value added by manufacture was modified to include only changes in work-in-process inventories between the beginning and end of the year.

[4]Establishments in this industry reported value of work done instead of value of shipments. Consequently, the formula for computing value added by manufacture was not adjusted for any inventory change between the beginning and end of the year. It does not include value added by resales.

Water Use in Manufacturing

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EXPLANATORY TEXT

SUMMARY OF FINDINGS

While manufacturing industries are important users of water in the United States, the utilization by such establishments is highly concentrated. According to the 1978 survey, establishments with an annual water intake of 20 million gallons of water or more accounted for about 95 percent of water withdrawn for manufacturing purposes. These plants, however, represent only about 3 percent of the total number of manufacturing establishments and employ approximately 34 percent of the total number of persons engaged in manufacturing within the major groups covered in this survey. (See table A.)

Approximately 84 percent of the 13.0 trillion gallons consumed by manufacturing establishments in 1978 was accounted for by four SIC major industry groups; namely, Major Group 33, Primary Metal Industries; Major Group 28, Chemicals and Allied Products; Major Group 26, Paper and Allied Products; and Major Group 29, Petroleum and Coal Products. Even within these major groups, specific industries accounted for the major share, blast furnaces and steel mills consumed about 21 percent of the total manufacturing consumption of water, and manufacturers of industrial organic chemicals used about 17 percent of the total. About 76 percent of industrial water was consumed by establishments located in six water use regions; namely, the Great Lakes, the Ohio River, the Middle Atlantic, the Texas Gulf, the Lower Mississippi, and the South Atlantic.

While the quantity of water intake by manufacturing establishments is relatively large, the quantities actually consumed in process, by evaporation, etc., is only about 10 percent of the withdrawals. Data on net use, as defined above, may be calculated in the tables shown in this report by subtracting water discharged from water intake. Gross water use, as shown in the tables, reflects recirculation or reuse of the water in the same establishments and partially reflects water management.

GENERAL

This report presents statistics on the use of water by manufacturing establishments for 1978 with selected comparable historical data.

Information on industrial water use by manufacturing establishments was first collected and published by the Bureau of the Census in the 1953 Annual Survey of Manufactures. In the 1954 Census of Manufactures, as in the 1963 census, information on water use was collected from all manufacturing establishments employing six people or more, except for establishments in the printing and publishing and apparel industries. The latter establishments are relatively small water users and/or operate primarily in rented quarters where water is usually furnished by the landlord.

Information was not collected in the 1958 Census of Manufactures. However, a special post-census survey was taken in 1959 which included all establishments reporting water use of 20 million gallons or more in 1954, as well as all companies having at least one establishment with 250 employees or more in the 1958 Census of Manufactures. In industries known to be extensive water users, all establishments with 100 employees or more were included.

Detailed information on water utilization was collected and published in a post-census survey for all manufacturing establishments using 20 million gallons of water or more annually for 1968, 1973, and 1978.

SCOPE AND COVERAGE OF SURVEY

In the 1977 Census of Manufactures, the standard census forms submitted by all establishments employing 10 people or more contained a check-type question on water consumption in terms of broad-size ranges of gallons used. Approximately 16,200 establishments indicated the use of 20 million gallons or more of water in 1977. These "large" water users were included in the mailing of the special water use survey for 1978. Of that number, 9,605 reported detailed information.

Most of the other 6,595 establishments indicated that water use in 1977 was less than 20 million gallons and are, therefore, excluded from this study. All data for water use exclude government-owned establishments operated by private contractors for the account of the Atomic Energy Commission. The 1958 through 1978 figures include data for establishments located in Alaska and Hawaii. The 1954 figures exclude those establishments.

Information from the check-type question on water use on the 1977 Census of Manufactures forms has been used to calculate coverage measures shown in tables A and B. The question requested respondents to identify a water-intake range which consisted of six possible choices:

1. Under 1 million gallons.
2. 1-9 million gallons.
3. 10-19 million gallons.
4. 20-49 million gallons.
5. 50-99 million gallons.
6. 100 million gallons or more.

Value for industry group and State intake levels were derived by combining the reported data from the 1978 Survey of Water Use with estimates of water intake for those establishments not reporting in the 1978 subject survey. Establishments falling in the latter category were assigned the mid-point of the above ranges which they selected on their

1977 census forms. These values were combined with the 1978 reported data and tabulated to the major industry group and State level to form the universe estimates. The measure of water intake coverage shown in tables A and B consist of the comparison of these universe estimates with the data reported in the 1978 Survey of Water Use.

In using this coverage measure, the data user should note the assumption made that water use was consistent between 1977 and 1978.

PRESENTATION OF DATA

The arrangement of the data is by industry, water use region, and State. The boundaries for States are political, while those for water use regions are combinations of counties without regard for State lines. These regions, which center around river basins, were developed in consultations with the Federal agencies having responsibility for water development or use and with representatives of private industry, and they approximate the major drainage systems in the country. Descriptions of the water use regions are included in appendix I. It was not possible to follow the exact definitions because water use regions sometimes split counties. For technical reasons, county lines were followed in this survey for purposes of tabulating water use region data. The areas included are shown in a series of maps appearing in this report. The industry classifications used are based on the 1972 edition of the Standard Industrial Classification (SIC) Manual. (See Introduction.)

Totals for water use have been provided for the SIC industry classifications at the 2-, 3-, and 4-digit levels. Differences in manufacturing processes are not as great at the SIC 4-digit level as at the higher order 2- and 3-digit levels. Accordingly, the water use statistics are most meaningful when examined on a 4-digit SIC basis and related to the processes, products, employment data, etc., at that level. The aggregations at the 3-digit, and especially at the 2-digit levels, represent totals for industries which differ widely in processes used, materials fabricated, or products produced. Thus, for example, the water consumption use for SIC Major Group 26, Paper and Allied Products, will differ in the Columbia-North Pacific water use region from that in California-South Pacific water use region because of industrial composition as well as geography or other factors.

Table A. **Comparison of Statistics for All Manufacturing Establishments With Those Establishments Reporting Water Intake of 20 Million Gallons or More by Major Industry Groups: 1978**

SIC code	Major industry group	Establishments			Water intake			Employment			Value added by manufacture		
			Establishments reporting water intake of 20 million gallons or more			For establishments reporting water intake of 20 million gallons or more			In establishments reporting water intake of 20 million gallons or more			For establishments reporting water intake of 20 million gallons or more	
		Total[1] (number)	Number	Percent of total	Total[2] (billion gallons)	Quantity (billion gallons)	Percent of total	Total[1] (1,000)	Number (1,000)	Percent of total	Total[1] (million dollars)	Value (million dollars)	Percent of total
	All industries.....	359,928	[3]9,605	3	13,679.0	12,991.7	95	[3]19,590.1	6,635.8	34	585,165.6	273,548.7	47
20	Food and kindred products.....	26,656	2,208	8	830.1	739.6	89	1,520.0	662.6	44	56,062.6	28,201.6	50
21	Tobacco products.....	228	21	9	5.2	4.5	87	60.6	41.6	69	4,334.1	3,852.4	89
22	Textile mill products.....	7,202	690	10	187.2	162.9	87	875.7	391.6	45	16,104.5	7,643.2	47
24	Lumber and wood products.....	37,302	269	1	226.7	156.9	69	692.4	75.4	11	16,222.8	2,418.7	15
25	Furniture and fixtures.....	10,235	59	1	42.7	24.0	56	463.8	48.7	11	8,921.7	1,109.8	12
26	Paper and allied products.....	6,545	551	8	1,985.8	1,963.1	99	628.7	235.2	37	22,170.9	10,176.2	46
28	Chemicals and allied products.	12,173	1,238	10	4,363.7	4,325.5	99	880.2	541.1	61	56,720.6	39,122.9	69
29	Petroleum and coal products...	2,206	263	12	1,180.6	1,172.5	99	146.8	97.2	66	16,377.6	12,750.7	78
30	Rubber. miscellaneous plastics products.....	11,943	458	4	232.3	187.0	80	721.3	256.4	36	19,740.0	8,370.7	42
31	Leather and leather products..	3,075	52	2	16.3	8.5	52	242.5	15.2	6	3,718.8	354.4	10
32	Stone, clay, glass products...	17,744	592	3	257.3	206.6	80	613.7	222.8	36	19,129.6	8,144.9	43
33	Primary metal industries.....	7,375	779	11	3,414.7	3,392.1	99	1,113.6	732.6	66	37,568.2	26,619.4	71
34	Fabricated metal products.....	33,712	682	2	160.8	90.0	56	1,555.7	393.7	25	45,511.5	13,319.7	29
35	Machinery, except electrical..	48,200	507	1	237.5	164.5	69	2,083.3	654.8	31	67,222.5	24,995.5	37
36	Electric, electronic equipment	14,973	561	4	149.5	116.0	78	1,723.1	772.4	45	50,365.7	25,494.8	51
37	Transportation equipment.....	10,176	445	4	261.2	234.5	90	1,768.2	1,223.4	69	64,291.1	49,994.0	78
38	Instruments, related products.	7,481	148	2	50.0	35.5	71	559.1	223.1	40	18,762.0	9,600.1	51
39	Miscellaneous manufacturing industries.....	17,259	82	2	34.4	7.7	22	440.7	48.0	11	10,291.0	1,379.7	13

[1]Source: 1977 Census of Manufactures.

[2]Values for total industry group and State intake levels were derived by combining the 1978 reported data with estimates of water intake for those establishments not reporting in the 1978 subject survey. In the 1977 Census of Manufactures, respondents were requested to identify a range out of six alternatives which included their level of water intake for 1977. All establishments not included in the 1978 survey were assigned the mid-point value of the range which they selected on their 1977 census forms. These estimates were combined with the reported data from the 1978 survey and tabulated to the industry group and State levels. In comparing these total industry group and State level estimates with the data reported in the 1978 Water Use Survey, the data user should be aware of the assumption made that water use was consistent between 1978 and 1977.

[3]Includes data for establishments classified in Major Industry Group 23, Apparel and Other Textile Products; Major Industry Group 27, Printing and Publishing; and administrative and auxiliary establishments for all major groups.

Table B. **Comparison of Statistics for All Manufacturing Establishments With Those Establishments Reporting Water Intake of 20 Million Gallons or More by States: 1978**

State	Establishments			Water intake			Employment			Value added by manufacture		
		Establishments reporting water intake of 20 million gallons or more			For establishments reporting water intake of 20 million gallons or more			In establishments reporting water intake of 20 million gallons or more			For establishments reporting water intake of 20 million gallons or more	
	Total[1] (number)	Number	Percent of total	Total[2] (billion gallons)	Quantity (billion gallons)	Percent of total	Total[1] (1,000)	Number (1,000)	Percent of total	Total[1] (million dollars)	Value (million dollars)	Percent of total
United States	359,928	[3]9,605	3	13,679.0	12,991.7	95	[3]19,590.1	6,635.8	34	585,165.6	273,548.7	47
Alabama	5,863	199	3	306.4	294.2	96	341.0	115.9	34	8,405.9	3,615.8	43
Alaska	429	15	3	(D)	(D)	(X)	11.4	2.6	23	504.2	212.4	42
Arizona	2,892	51	2	26.2	21.5	82	110.9	46.8	42	3,332.9	1,810.1	54
Arkansas	3,595	129	4	81.3	73.7	91	197.1	61.0	31	4,881.6	1,914.5	39
California	45,289	659	1	388.4	307.6	79	1,751.5	463.8	26	54,862.4	19,234.6	35
Colorado	3,948	66	2	72.7	65.6	90	152.5	49.4	32	4,471.8	1,915.5	43
Connecticut	6,485	172	3	99.4	87.7	88	412.1	160.7	39	10,933.9	5,273.9	48
Delaware	619	42	7	170.8	169.3	99	66.5	26.5	40	1,595.7	1,106.1	69
District of Columbia	555	1		(D)	(D)	(X)	18.6	.9	5	610.2	32.7	5
Florida	12,399	149	1	241.6	221.1	92	358.0	76.2	21	9,255.1	2,807.5	30
Georgia	8,623	295	3	288.3	271.2	94	484.7	153.7	32	12,548.7	5,277.5	42
Hawaii	949	28	3	112.7	111.4	99	25.0	7.7	31	785.5	395.6	50
Idaho	1,495	52	3	35.7	32.6	91	51.6	15.5	30	1,430.0	595.3	42
Illinois	19,517	604	3	471.7	430.9	91	1,286.2	432.9	34	40,279.1	18,581.6	46
Indiana	8,061	356	4	652.3	634.8	97	705.9	349.9	50	22,717.6	13,692.3	60
Iowa	3,783	169	4	155.1	147.3	95	240.3	115.9	48	8,684.4	5,150.3	59
Kansas	3,270	98	3	43.9	37.0	84	168.1	64.3	38	5,337.8	2,651.2	50
Kentucky	3,548	159	5	147.9	139.9	95	277.5	106.5	39	9,545.7	5,300.8	57
Louisiana	4,276	188	4	1,288.9	1,280.2	99	194.8	76.5	39	9,418.3	5,966.0	63
Maine	2,157	55	3	141.3	137.1	97	102.8	30.0	29	2,343.0	931.5	40
Maryland	3,937	122	3	379.1	371.8	98	243.2	96.5	40	7,115.6	3,798.6	53
Massachusetts	11,133	247	2	173.1	152.4	88	613.4	175.3	29	16,348.6	5,928.9	36
Michigan	15,627	447	3	904.8	874.3	97	1,115.9	511.1	46	37,566.0	22,863.1	61
Minnesota	6,637	188	3	173.8	160.9	93	331.7	92.7	28	9,605.2	3,281.1	34
Mississippi	3,289	107	3	106.7	99.3	93	219.4	69.9	32	5,619.3	2,653.1	47
Missouri	7,354	190	3	64.4	50.7	79	433.0	143.7	33	13,041.9	6,425.4	49
Montana	1,169	25	2	34.3	32.2	94	23.8	6.6	28	847.3	305.5	36
Nebraska	1,965	80	4	32.1	28.7	89	87.7	31.3	36	2,867.1	1,186.6	41
Nevada	729	17	2	20.1	18.9	94	15.0	2.7	18	495.2	111.2	22
New Hampshire	1,825	51	3	28.8	26.2	91	95.3	21.1	22	2,174.7	602.1	28
New Jersey	15,696	382	2	362.2	331.5	92	778.3	197.6	25	22,852.8	9,511.9	42
New Mexico	1,323	18	1	7.4	4.8	65	29.0	7.0	24	733.5	230.0	31
New York	36,578	463	1	525.7	469.7	89	1,509.9	388.3	26	44,289.8	17,783.9	40
North Carolina	9,954	361	4	209.4	187.0	89	765.3	250.6	33	18,230.6	8,779.2	48
North Dakota	571	7	1	(D)	(D)	(X)	13.8	2.3	17	473.3	137.0	29
Ohio	17,354	630	4	620.4	584.7	94	1,331.2	547.3	41	43,054.7	22,614.3	53
Oklahoma	3,818	80	2	161.3	153.5	95	164.4	35.6	22	4,662.3	1,842.3	40
Oregon	5,716	164	3	147.3	135.5	92	202.4	59.3	29	6,138.0	2,005.4	33
Pennsylvania	18,735	602	3	1,226.1	1,190.1	97	1,329.2	456.2	34	36,016.9	17,166.6	48
Rhode Island	3,107	55	2	25.3	19.1	76	125.0	26.6	21	2,736.6	635.8	23
South Carolina	4,229	274	6	425.4	416.4	98	374.2	177.7	47	8,186.1	4,578.7	56
South Dakota	740	11	1	(D)	(D)	(X)	22.5	5.0	22	611.6	143.6	23
Tennessee	6,487	233	4	380.1	366.6	96	489.8	151.8	31	12,663.4	5,678.7	45
Texas	18,107	446	2	1,432.6	1,395.7	97	886.4	275.5	31	33,150.3	16,932.5	51
Utah	1,748	40	2	62.2	58.7	94	70.2	19.6	28	1,974.0	774.4	39
Vermont	1,030	25	2	7.8	5.8	74	41.5	15.9	38	1,050.1	469.8	45
Virginia	5,519	177	3	258.2	247.3	96	395.2	141.8	36	10,882.0	5,318.9	49
Washington	6,723	174	3	436.1	424.4	97	265.0	104.3	39	8,955.0	4,412.5	49
West Virginia	1,857	73	4	460.5	456.9	99	117.0	55.1	47	3,880.2	2,437.5	63
Wisconsin	8,678	414	5	219.9	202.7	92	535.0	208.7	39	16,606.0	8,234.5	50
Wyoming	505	15	3	11.7	10.7	91	8.5	2.1	25	380.8	240.4	63

(D) Withheld to avoid disclosing operations of individual companies. (X) Not applicable.

[1]Source: 1977 Census of Manufactures.

[2]Values for total industry group and State intake levels were derived by combining the 1978 reported data with estimates of water intake for those establishments not reporting in the 1978 subject survey. In the 1977 Census of Manufactures, respondents were requested to identify a range out of six alternatives which included their level of water intake for 1977. All establishments not included in the 1978 survey were assigned the mid-point value of the range which they selected on their 1977 census forms. These estimates were combined with the reported data from the 1978 survey and tabulated to the industry group and State levels. In comparing these total industry group and State level estimates with the data reported in the 1978 Water Use Survey, the data user should be aware of the assumption made that water use was consistent between 1978 and 1977.

[3]Includes data for administrative and auxiliary establishments.

Table 1a. Summary Water Use Statistics for Major Industry Groups: 1978, 1973, 1968, 1964, 1959, and 1954

(For explanation of terms, see appendix A)

SIC code	Industry group and year	Establishments reporting water intake of 20 million gallons or more (number)	Gross water used[1]					Water discharged			Capital expenditures for the abatement of water pollutants (million dollars)	Annual operating costs for the abatement of water pollutants (million dollars)
			Total gross water used		Water intake		Water recirculated and reused (billion gallons)	Total (billion gallons)	Untreated (billion gallons)	Treated (billion gallons)		
			Quantity (billion gallons)	Percent of all manufacturing	Quantity (billion gallons)	Percent of all manufacturing						
	All industries...[2]1978..	9,605	44,494	100.0	12,992	100.0	34,199	11,682	6,973	4,709	1,249	2,119
	[2]1973..	10,668	43,413	100.0	15,024	100.0	(3)	14,144	7,987	6,156	511	866
	[2]1968..	9,402	35,701	100.0	15,467	100.0	(NA)	14,276	9,923	4,353	(NA)	(NA)
	[2]1964..	8,925	29,857	100.0	14,007	100.0	(NA)	13,111	9,300	3,811	(NA)	(NA)
	[4]1959..	6,560	26,257	100.0	12,131	100.0	(NA)	11,445	8,779	2,666	(NA)	(NA)
	[4]1954..	6,762	21,042	100.0	11,570	100.0	(NA)	10,789	9,416	1,373	(NA)	(NA)
20	Food and kindred products.....1978..	2,208	1,390	2.8	740	5.7	1,026	649	407	243	113	129
	1973..	2,556	1,580	3.6	804	5.4	(3)	745	498	247	34	39
	1968..	2,345	1,346	3.8	811	5.3	(NA)	753	568	185	(NA)	(NA)
	1964..	2,405	1,191	4.0	760	5.4	(NA)	688	530	158	(NA)	(NA)
	1959..	618	1,298	5.0	624	5.2	(NA)	571	497	74	(NA)	(NA)
	1954..	1,728	1,318	6.3	616	5.3	(NA)	550	512	38	(NA)	(NA)
21	Tobacco products.....1978..	21	38	.1	5	(Z)	34	3	2	1	(D)	2
	1973..	18	100	.2	5	(Z)	(3)	4	(D)	(D)	(D)	1
	1968..	24	77	.2	6	(Z)	(NA)	5	5	(Z)	(NA)	(NA)
	1964..	18	64	.2	3	(Z)	(NA)	2	2	(Z)	(NA)	(NA)
	1959..	43	44	.2	3	(Z)	(NA)	2	2	(Z)	(NA)	(NA)
	1954..	19	11	.1	3	(Z)	(NA)	2	2	-	(NA)	(NA)
22	Textile mill products.1978..	690	386	.8	163	1.3	258	147	91	57	18	24
	1973..	788	426	1.0	178	1.2	(3)	160	91	69	11	34
	1968..	684	328	.9	154	1.0	(NA)	136	82	54	(NA)	(NA)
	1964..	603	269	.9	148	1.1	(NA)	135	100	35	(NA)	(NA)
	1959..	378	182	.7	135	1.1	(NA)	120	103	17	(NA)	(NA)
	1954..	431	211	1.0	184	1.6	(NA)	147	134	13	(NA)	(NA)
24	Lumber and wood products.....1978..	269	368	.7	157	1.2	269	112	62	50	14	9
	1973..	238	265	.6	160	1.1	(3)	123	85	38	2	5
	1968..	188	205	.6	101	.7	(NA)	93	74	19	(NA)	(NA)
	1964..	186	217	.7	151	1.1	(NA)	123	89	34	(NA)	(NA)
	1959..	75	184	.7	140	1.2	(NA)	126	95	31	(NA)	(NA)
	1954..	196	160	.8	133	1.2	(NA)	109	108	1	(NA)	(NA)
25	Furniture and fixtures.....1978..	59	26	.1	24	.2	3	24	23	1	1	1
	1973..	63	9	(Z)	6	(Z)	(3)	6	(D)	(D)	(D)	(Z)
	1968..	55	6	(Z)	4	(Z)	(NA)	4	4	(Z)	(NA)	(NA)
	1964..	45	4	(Z)	3	(Z)	(NA)	3	3	(Z)	(NA)	(NA)
	1959..	31	4	(Z)	3	(Z)	(NA)	2	2	(Z)	(NA)	(NA)
	1954..	35	B	(Z)	7	.1	(NA)	4	4	(Z)	(NA)	(NA)
26	Paper and allied products.....1978..	551	10,401	23.4	1,963	15.1	9,216	1,765	573	1,192	177	291
	1973..	703	8,127	18.7	2,415	16.1	(3)	2,301	1,051	1,250	110	108
	1968..	619	6,522	18.3	2,252	14.6	(NA)	2,078	1,163	915	(NA)	(NA)
	1964..	634	5,491	18.4	2,064	14.7	(NA)	1,942	1,235	707	(NA)	(NA)
	1959..	282	6,046	23.0	1,937	16.0	(NA)	1,824	1,061	763	(NA)	(NA)
	1954..	758	4,242	20.2	1,786	15.4	(NA)	1,620	1,419	201	(NA)	(NA)
28	Chemicals and allied products.....1978..	1,238	12,494	28.1	4,326	33.3	8,731	3,910	2,943	967	409	734
	1973..	1,343	11,099	25.6	4,176	27.8	(3)	3,911	2,334	1,578	157	253
	1968..	1,125	9,416	26.4	4,476	28.9	(NA)	4,175	3,501	674	(NA)	(NA)
	1964..	1,062	7,726	25.9	3,899	27.8	(NA)	3,688	3,099	589	(NA)	(NA)
	1959..	434	5,225	20.0	3,240	26.7	(NA)	3,061	2,562	499	(NA)	(NA)
	1954..	775	4,293	20.4	2,685	23.2	(NA)	2,550	2,218	332	(NA)	(NA)
29	Petroleum and coal products.....1978..	263	8,187	18.4	1,173	9.0	7,109	964	383	581	94	296
	1973..	278	8,158	18.8	1,283	8.5	(3)	1,159	465	694	59	144
	1968..	260	7,290	20.4	1,435	9.3	(NA)	1,217	299	918	(NA)	(NA)
	1964..	268	6,161	20.6	1,398	10.0	(NA)	1,317	311	1,006	(NA)	(NA)
	1959..	142	5,780	22.0	1,319	10.9	(NA)	1,204	548	656	(NA)	(NA)
	1954..	304	4,152	19.7	1,245	10.8	(NA)	1,134	676	458	(NA)	(NA)
30	Rubber, miscellaneous plastics products[5]...1978..	458	632	1.3	187	1.4	516	168	116	52	5	19
	1973..	437	443	1.0	154	1.0	(3)	143	116	27	6	9

See footnotes at end of table.

Table 1a. **Summary Water Use Statistics for Major Industry Groups: 1978, 1973, 1968, 1964, 1959, and 1954**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and year	Establishments reporting water intake of 20 million gallons or more (number)	Gross water used[1]					Water discharged			Capital expenditures for the abatement of water pollutants (million dollars)	Annual operating costs for the abatement of water pollutants (million dollars)
			Total gross water used		Water intake		Water recirculated and reused (billion gallons)	Total (billion gallons)	Untreated (billion gallons)	Treated (billion gallons)		
			Quantity (billion gallons)	Percent of all manufacturing	Quantity (billion gallons)	Percent of all manufacturing						
31	Leather and leather products											
	1978	52	10	(Z)	9	.1	2	8	5	4	6	5
	1973	61	10	(Z)	8	.1	(3)	8	5	3	1	2
	1968	92	20	.1	16	.1	(NA)	15	5	10	(NA)	(NA)
	1964	85	14	.1	14	.1	(NA)	12	10	2	(NA)	(NA)
	1959	26	14	.1	12	.1	(NA)	12	10	2	(NA)	(NA)
	1954	68	22	.1	20	.2	(NA)	18	14	4	(NA)	(NA)
32	Stone, clay, glass products											
	1978	592	419	.8	207	1.6	267	182	139	43	30	24
	1973	647	475	1.1	219	1.5	(3)	192	158	34	5	8
	1968	586	413	1.2	251	1.6	(NA)	218	182	36	(NA)	(NA)
	1964	555	389	1.3	249	1.8	(NA)	218	177	41	(NA)	(NA)
	1959	231	412	1.6	251	2.1	(NA)	264	253	11	(NA)	(NA)
	1954	288	575	2.7	279	2.4	(NA)	254	227	27	(NA)	(NA)
33	Primary metal industries											
	1978	779	6,479	14.6	3,392	26.1	3,474	3,132	1,783	1,350	213	331
	1973	905	8,842	20.4	4,941	32.9	(3)	4,757	2,702	2,055	61	106
	1968	841	7,780	21.8	5,005	32.4	(NA)	4,696	3,265	1,431	(NA)	(NA)
	1964	785	6,702	22.5	4,600	32.9	(NA)	4,312	3,153	1,159	(NA)	(NA)
	1959	852	5,673	21.6	3,702	30.5	(NA)	3,551	3,015	536	(NA)	(NA)
	1954	593	4,947	23.5	3,842	33.2	(NA)	3,682	3,412	270	(NA)	(NA)
34	Fabricated metal products[5]											
	1978	682	259	.5	90	.7	196	86	61	25	26	41
	1973	790	268	.6	107	.7	(3)	101	74	27	11	67
35	Machinery, except electrical											
	1978	507	394	.8	165	1.3	254	159	121	38	29	40
	1973	556	438	1.0	171	1.1	(3)	165	124	41	11	10
	1968	471	338	1.0	189	1.2	(NA)	181	156	25	(NA)	(NA)
	1964	400	274	.9	158	1.1	(NA)	150	138	12	(NA)	(NA)
	1959	514	251	1.0	171	1.4	(NA)	165	134	31	(NA)	(NA)
	1954	326	153	.7	114	1.0	(NA)	116	113	3	(NA)	(NA)
36	Electric, electronic equipment											
	1978	561	425	.9	116	.9	366	112	82	30	25	50
	1973	644	1,043	2.4	104	.7	(3)	97	66	31	18	25
	1968	562	370	1.0	127	.8	(NA)	118	90	28	(NA)	(NA)
	1964	470	274	.9	102	.7	(NA)	88	73	15	(NA)	(NA)
	1959	567	159	.6	93	.8	(NA)	88	81	7	(NA)	(NA)
	1954	207	130	.6	114	.9	(NA)	90	85	5	(NA)	(NA)
37	Transportation equipment											
	1978	445	2,435	4.9	235	1.8	2,358	220	162	58	70	101
	1973	413	1,967	4.5	242	1.6	(3)	227	184	43	18	43
	1968	392	911	2.6	313	2.0	(NA)	293	270	23	(NA)	(NA)
	1964	417	602	2.0	242	1.7	(NA)	233	209	24	(NA)	(NA)
	1959	1,285	522	2.0	260	2.2	(NA)	229	207	22	(NA)	(NA)
	1954	312	325	1.6	231	2.0	(NA)	215	206	9	(NA)	(NA)
38	Instruments, related products											
	1978	148	133	.3	36	.3	109	33	17	16	9	19
	1973	137	135	.3	37	.3	(3)	35	18	16	4	11
	1968	107	118	.3	38	.3	(NA)	36	23	13	(NA)	(NA)
	1964	98	76	.3	29	.2	(NA)	26	17	9	(NA)	(NA)
	1959	153	60	.2	23	.2	(NA)	22	15	7	(NA)	(NA)
	1954	62	54	.3	19	.2	(NA)	18	-	(Z)	(NA)	(NA)
39	Miscellaneous manufacturing industries											
	1978	82	18	(Z)	8	.1	12	7	5	2	5	3
	1973	91	26	.1	12	.1	(3)	12	9	3	1	2
	1968	97	24	.1	14	.1	(NA)	13	13	(Z)	(NA)	(NA)
	1964	76	22	.1	13	.1	(NA)	12	12	(Z)	(NA)	(NA)
	1959	248	20	.1	14	.1	(NA)	13	12	1	(NA)	(NA)
	1954	178	24	.1	21	.2	(NA)	21	15	6	(NA)	(NA)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. (Z) Less than 500 million gallons; less than 500 thousand dollars; less than .05 percent.

[1]Total gross water used is equal to the sum of water intake and water recirculated and reused less evaporation and consumption.

[2]Excludes establishments classified in Major Industry Group 23, Apparel and Other Textile Products, and Major Industry Group 27, Printing and Publishing.

[3]For 1973, data for recirculated and reused water was not collected but were derived from gross water used and water intake. The derived recirculated and reused water data are not directly comparable to 1978 data and therefore, are not presented.

[4]Includes establishments classified in Major Industry Group 23, Apparel and Other Textile Products, and Major Industry Group 27, Printing and Publishing. In 1959, such establishments had total water intake of 23 billion gallons, gross water use of 58 billion gallons, and water discharge of 22 billion gallons.

[5]In 1972, major industry groups 30 and 34 were redefined. Data for previous periods are not comparable with those for 1973 and 1978, and have, therefore, been suppressed.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	ALL INDUSTRIES, TOTAL[1]	9 605	44 494.1	100	12 991.7	100	34 199.2	11 682.2	6 973.0	4 709.2	1 248 706	2 118 699
20	FOOD AND KINDRED PRODUCTS	2 208	1 389.9	3	739.6	6	1 026.1	649.2	406.5	242.9	112 686	129 222
201	MEAT PRODUCTS	476	138.6	(Z)	112.5	1	44.6	104.9	52.5	52.4	25 274	27 232
2011	MEATPACKING PLANTS	218	94.8	(Z)	77.5	1	30.4	72.5	41.1	31.4	13 826	14 277
2013	SAUSAGES AND OTHER PREPARED MEATS	60	10.9	(Z)	5.2	(Z)	6.3	4.5	(D)	(D)	(D)	3 027
2016	POULTRY DRESSING PLANTS	181	31.0	(Z)	28.1	(Z)	7.7	26.2	8.0	18.2	9 893	(D)
2017	POULTRY AND EGG PROCESSING	17	1.9	(Z)	1.7	(Z)	.2	1.7	(D)	(D)	(D)	(D)
202	DAIRY PRODUCTS	428	55.6	(Z)	42.2	(Z)	39.8	35.9	30.9	5.0	12 101	6 888
2021	CREAMERY BUTTER	11	(S)	(Z)	1.4	(Z)	(D)	1.4	(D)	(D)	(D)	(D)
2022	CHEESE, NATURAL AND PROCESSED	62	7.5	(Z)	5.9	(Z)	4.0	5.5	4.7	.8	3 005	1 975
2023	CONDENSED AND EVAPORATED MILK	70	13.5	(Z)	11.8	(Z)	9.2	12.0	10.3	1.7	4 415	2 464
2024	ICE CREAM AND FROZEN DESSERTS	31	4.2	(Z)	2.0	(Z)	(D)	1.4	(D)	(D)	(D)	(D)
2026	FLUID MILK	254	29.2	(Z)	21.1	(Z)	23.4	15.5	13.2	2.3	4 626	2 324
203	PRESERVED FRUITS AND VEGETABLES	435	227.9	1	112.7	1	145.7	100.7	59.2	41.5	21 716	27 597
2032	CANNED SPECIALTIES	48	20.3	(Z)	17.2	(Z)	3.9	13.3	7.3	6.0	1 667	5 519
2033	CANNED FRUITS AND VEGETABLES	221	101.9	(Z)	43.1	(Z)	66.1	38.8	23.8	15.0	(D)	8 674
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	20	11.0	(Z)	4.0	(Z)	7.0	3.8	2.1	1.7	1 256	1 117
2035	PICKLES, SAUCES, SALAD DRESSINGS	27	6.6	(Z)	2.7	(Z)	4.6	2.3	1.2	1.1	1 605	2 510
2037	FROZEN FRUITS AND VEGETABLES	86	81.2	(Z)	40.1	(Z)	62.3	37.9	22.4	15.5	5 369	8 629
2038	FROZEN SPECIALTIES	33	6.9	(Z)	5.7	(Z)	1.9	4.6	2.5	2.1	(D)	1 148
204	GRAIN MILL PRODUCTS	86	137.4	(Z)	88.5	1	155.4	82.2	60.5	21.7	9 068	16 284
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	14	1.9	(Z)	.8	(Z)	1.5	.6	(D)	(D)	(D)	267
2043	CEREAL BREAKFAST FOODS	15	11.4	(Z)	5.1	(Z)	6.5	4.7	2.8	1.9	339	516
2044	RICE MILLING	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
2045	BLENDED AND PREPARED FLOUR	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2046	WET CORN MILLING	19	117.8	(Z)	78.8	1	144.4	73.8	54.8	18.9	7 978	14 154
2047	DOG, CAT, AND OTHER PET FOOD	22	3.7	(Z)	2.2	(Z)	1.6	1.8	1.1	.7	301	(D)
2048	PREPARED FEEDS, NEC	10	2.1	(Z)	1.3	(Z)	1.1	.9	(D)	(D)	(D)	426
205	BAKERY PRODUCTS	60	(D)	(X)	4.6	(Z)	4.8	3.5	3.2	.4	23	521
2051	BREAD, CAKE, AND RELATED PRODUCTS	43	(D)	(X)	2.7	(Z)	.7	2.1	1.9	.2	(D)	326
2052	COOKIES AND CRACKERS	17	3.6	(Z)	1.9	(Z)	4.1	1.5	1.3	.2	(D)	195
206	SUGAR, CONFECTIONERY PRODUCTS	137	340.5	1	207.1	2	224.6	175.3	86.1	89.3	9 286	13 731
2061	RAW CANE SUGAR	33	189.6	(Z)	118.4	1	118.7	94.1	26.6	67.6	(D)	5 538
2062	CANE SUGAR REFINING	18	(D)	(X)	56.0	(Z)	26.6	53.8	45.3	8.5	1 518	2 313
2063	BEET SUGAR	39	75.1	(Z)	21.3	(Z)	64.1	16.7	4.1	12.6	561	3 306
2065	CONFECTIONERY PRODUCTS	32	12.5	(Z)	(D)	(X)	8.3	(D)	4.0	(D)	(D)	(D)
2066	CHOCOLATE AND COCOA PRODUCTS	11	7.1	(Z)	6.2	(Z)	(D)	6.1	(D)	(D)	(D)	771
2067	CHEWING GUM	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
207	FATS AND OILS	129	137.5	(Z)	43.6	(Z)	129.0	37.0	23.7	13.3	8 448	11 367
2074	COTTONSEED OIL MILLS	11	2.8	(Z)	(D)	(X)	1.3	(D)	(D)	(D)	(D)	(D)
2075	SOYBEAN OIL MILLS	58	75.3	(Z)	20.9	(Z)	82.7	15.7	9.6	6.1	2 390	4 592
2076	VEGETABLE OIL MILLS, NEC	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
2077	ANIMAL AND MARINE FATS AND OILS	18	(D)	(X)	3.2	(Z)	(D)	4.6	3.8	(D)	1 398	1 447
2079	SHORTENING AND COOKING OILS	40	57.2	(Z)	17.4	(Z)	43.3	14.9	8.7	6.2	4 560	5 168
208	BEVERAGES	292	(D)	(X)	105.0	1	244.5	88.0	74.6	13.4	23 101	20 370
2082	MALT BEVERAGES	71	242.5	1	73.4	1	214.2	63.0	52.9	10.0	21 458	16 814
2083	MALT	20	(D)	(X)	7.9	(Z)	14.7	6.9	5.2	1.7	(D)	343
2084	WINES, BRANDY, AND BRANDY SPIRITS	17	2.0	(Z)	2.0	(Z)	.4	1.7	1.3	.4	(D)	(D)
2085	DISTILLED LIQUOR, EXCEPT BRANDY	24	12.1	(Z)	9.0	(Z)	5.5	7.8	7.1	.6	302	1 125
2086	BOTTLED AND CANNED SOFT DRINKS	134	(S)	(X)	8.2	(Z)	.8	4.6	4.1	.5	596	1 304
2087	FLAVORING EXTRACTS, SIRUPS, NEC	26	(S)	(Z)	4.4	(Z)	8.9	4.1	4.0	.1	(D)	(D)
209	MISC. FOODS, KINDRED PRODUCTS	165	57.6	(Z)	23.5	(Z)	37.8	21.9	15.8	6.1	3 669	5 232
2091	CANNED AND CURED SEAFOODS	13	(S)	(X)	4.2	(Z)	(D)	4.2	2.8	1.3	1 510	1 399
2092	FRESH OR FROZEN PACKAGED FISH	31	3.1	(Z)	2.6	(Z)	.9	2.3	.6	1.8	(D)	(D)
2095	ROASTED COFFEE	10	(D)	(X)	(D)	(X)	20.9	1.4	(D)	(D)	(D)	(D)
2097	MANUFACTURED ICE	13	1.7	(Z)	1.7	(Z)	(D)	(D)	1.4	(D)	-	-
2098	MACARONI AND SPAGHETTI	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2099	FOOD PREPARATIONS, NEC	94	27.2	(Z)	13.3	(Z)	15.8	12.5	9.8	2.8	1 305	2 126
21	TOBACCO PRODUCTS	21	37.8	(Z)	4.5	(Z)	34.2	3.3	2.2	1.1	(D)	1 687
2111	CIGARETTES	12	29.4	(Z)	3.2	(Z)	26.7	2.2	2.1	(Z)	(D)	(D)
2121	CIGARS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
2141	TOBACCO STEMMING AND REDRYING	8	(D)	(X)	(D)	(X)	7.5	(D)	(D)	1.1	(D)	(D)
22	TEXTILE MILL PRODUCTS	690	386.1	1	162.9	1	257.8	147.4	90.5	56.9	17 695	23 762
2211	WEAVING MILLS, COTTON	82	96.5	(Z)	18.2	(Z)	85.3	14.4	9.2	5.2	374	2 458
2221	WEAV'G MILLS, MANMADE FIBER, SILK	144	109.8	(Z)	30.0	(Z)	84.8	25.7	19.7	6.0	1 995	3 227
2231	WEAVING AND FINISHING MILLS, WOOL	21	3.9	(Z)	3.9	(Z)	(D)	3.9	(D)	(D)	(D)	1 116
2241	NARROW FABRIC MILLS	7	.4	(Z)	.4	(Z)	(D)	.4	(D)	(D)	(D)	(D)
225	KNITTING MILLS	124	26.2	(Z)	20.9	(Z)	8.0	20.1	9.1	11.0	3 083	2 744
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	11	1.0	(Z)	(D)	(X)	.5	(D)	.4	(D)	(D)	(D)
2252	HOSIERY, NEC	18	(D)	(X)	.9	(Z)	.1	(D)	(D)	(D)	(D)	(D)
2253	KNIT OUTERWEAR MILLS	13	1.7	(Z)	1.5	(Z)	(D)	1.5	(D)	(D)	(D)	(D)
2254	KNIT UNDERWEAR MILLS	12	1.6	(Z)	(D)	(X)	(D)	1.5	(D)	(D)	(D)	(D)
2257	CIRCULAR KNIT FABRIC MILLS	53	17.4	(Z)	12.8	(Z)	5.7	12.9	5.0	7.9	764	1 754
2258	WARP KNIT FABRIC MILLS	16	4.1	(Z)	3.5	(Z)	1.3	3.1	.6	2.5	(D)	831
2259	KNITTING MILLS, NEC	1	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	-	(D)
226	TEXTILE FINISHING, EXCEPT WOOL	139	53.0	(Z)	50.8	(Z)	15.4	47.2	24.3	23.0	7 003	9 973
2261	FINISHING PLANTS, COTTON	34	(S)	(X)	11.9	(Z)	1.4	10.9	6.5	4.5	1 151	2 534
2262	FINISH. PLTS, MANMADE FIBER, SILK	74	36.0	(Z)	34.4	(Z)	11.5	31.9	15.0	16.9	5 408	6 644
2269	FINISHING PLANTS, NEC	31	6.0	(Z)	4.5	(Z)	2.5	4.4	2.7	1.6	444	795

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and Industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
22	TEXTILE MILL PRODUCTS--CON.											
227	FLOOR COVERING MILLS	57	37.6	(Z)	22.4	(Z)	18.3	21.1	17.9	3.2	1 600	2 021
2271	WOVEN CARPETS AND RUGS	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2272	TUFTED CARPETS AND RUGS	54	23.5	(Z)	22.0	(Z)	4.5	20.8	17.6	3.2	1 600	(D)
2279	CARPETS AND RUGS, NEC	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	(D)
228	YARN AND THREAD MILLS	67	46.0	(Z)	8.8	(Z)	37.7	7.5	3.5	4.1	(D)	1 032
2281	YARN MILLS, EXCEPT WOOL	41	(S)	(X)	5.3	(Z)	33.9	4.5	2.6	1.9	(D)	373
2282	THROWING AND WINDING MILLS	16	(D)	(X)	(D)	(X)	1.7	1.2	.6	.6	(D)	(D)
2283	WOOL YARN MILLS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	(D)	(D)
2284	THREAD MILLS	9	4.0	(Z)	2.0	(Z)	2.0	(D)	(D)	1.6	(D)	427
229	MISCELLANEOUS TEXTILE GOODS	49	12.8	(Z)	7.6	(Z)	7.8	7.1	5.5	1.6	224	1 167
2291	FELT GOODS, EXC. WOVEN FELT, HATS	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
2292	LACE GOODS	2	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	(D)	(D)
2293	PADDINGS AND UPHOLSTERY FILLING	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2294	PROCESSED TEXTILE WASTE	3	.1	(Z)	.1	(Z)	-	.1	(D)	(D)	-	(D)
2295	COATED FABRICS, NOT RUBBERIZED	11	4.6	(Z)	3.9	(Z)	2.0	3.7	3.6	.1	(D)	259
2296	TIRE CORD AND FABRIC	7	3.2	(Z)	.4	(Z)	2.8	.3	(D)	(D)	-	239
2297	NONWOVEN FABRICS	15	4.2	(Z)	2.5	(Z)	2.6	2.3	1.1	1.2	(D)	471
2298	CORDAGE AND TWINE	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2299	TEXTILE GOODS, NEC	5	.4	(Z)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	269	368.2	1	156.9	1	268.7	112.1	61.8	50.3	14 364	8 558
2411	LOGGING CAMPS, LOG CONTRACTORS	6	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
242	SAWMILLS AND PLANING MILLS	140	311.9	1	122.4	1	240.3	82.9	46.2	36.7	1 244	1 720
2421	SAWMILLS, PLANING MILLS, GENERAL	138	(D)	(X)	(D)	(X)	240.3	(D)	(D)	36.7	1 244	1 720
2426	HARDWOOD DIMENSION AND FLOORING	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	77	22.1	(Z)	13.8	(Z)	12.3	10.6	8.6	1.9	(D)	1 898
2431	MILLWORK	3	.3	(Z)	(D)	(X)	(D)	(D)	.1	(D)	-	(D)
2434	WOOD KITCHEN CABINETS	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	-
2435	HARDWOOD VENEER AND PLYWOOD	8	(D)	(X)	2.0	(Z)	(D)	1.5	(D)	(D)	(D)	(D)
2436	SOFTWOOD VENEER AND PLYWOOD	65	21.3	(Z)	11.5	(Z)	11.9	8.8	7.2	1.6	(D)	1 860
244	WOOD CONTAINERS	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
2441	NAILED WOOD BOXES AND SHOOK	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2449	WOOD CONTAINERS, NEC	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
245	WOOD BUILDINGS AND MOBILE HOMES	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	(D)
2452	PREFABRICATED WOOD BUILDINGS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	(D)
249	MISCELLANEOUS WOOD PRODUCTS	43	22.9	(Z)	10.1	(Z)	15.1	7.9	3.0	5.0	11 303	4 340
2491	WOOD PRESERVING	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
2492	PARTICLEBOARD	11	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
2499	WOOD PRODUCTS, NEC	29	21.3	(Z)	9.4	(Z)	14.2	7.5	2.8	4.7	(D)	4 104
25	FURNITURE AND FIXTURES	59	25.8	(Z)	24.0	(Z)	2.7	23.8	23.3	.5	664	512
251	HOUSEHOLD FURNITURE	32	9.9	(Z)	(D)	(X)	.7	9.5	9.4	.1	(D)	232
2511	WOOD HOUSEHOLD FURNITURE	19	(D)	(X)	(D)	(X)	.4	(D)	8.5	(D)	(D)	(D)
2512	UPHOLSTERED HOUSEHOLD FURNITURE	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
2514	METAL HOUSEHOLD FURNITURE	9	.6	(Z)	.5	(Z)	(D)	.5	(D)	(D)	-	(D)
2517	WOOD TV AND RADIO CABINETS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
2519	HOUSEHOLD FURNITURE, NEC	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
252	OFFICE FURNITURE	6	1.9	(Z)	.6	(Z)	1.3	.6	(D)	(D)	(D)	(D)
2522	METAL OFFICE FURNITURE	6	1.9	(Z)	.6	(Z)	1.3	.6	(D)	(D)	(D)	(D)
2531	PUBLIC BLDG., RELATED FURNITURE	6	(D)	(X)	(D)	(X)	(D)	(D)	12.6	(D)	(D)	(D)
254	PARTITIONS AND FIXTURES	12	.9	(Z)	.8	(Z)	.3	.7	(D)	(D)	(D)	(D)
2542	METAL PARTITIONS AND FIXTURES	12	.9	(Z)	.8	(Z)	.3	.7	(D)	(D)	(D)	(D)
259	MISC. FURNITURE AND FIXTURES	3	(D)	(X)	(D)	(X)	(D)	(D)	.2	(D)	(D)	(D)
2591	DRAPERY HARDWARE, BLINDS, SHADES	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
2599	FURNITURE AND FIXTURES, NEC	1	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	551	10 400.7	23	1 963.1	15	9 216.4	1 765.1	572.8	1 192.3	177 398	291 462
2611	PULPMILLS	32	814.1	2	287.3	2	832.7	268.2	52.3	215.9	28 079	54 361
2621	PAPERMILLS, EXCEPT BUILDING PAPER	220	6 377.5	14	878.1	7	5 874.8	826.6	244.3	582.3	85 721	142 030
2631	PAPERBOARD MILLS	148	2 911.3	7	609.8	5	2 379.2	533.1	174.4	358.7	58 265	83 454
264	MISC. CONVERTED PAPER PRODUCTS	95	140.3	(Z)	79.3	1	78.3	74.7	43.4	31.2	4 659	7 302
2641	PAPER COATING AND GLAZING	35	6.2	(Z)	5.3	(Z)	1.5	5.0	4.4	.6	460	310
2642	ENVELOPES	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
2643	BAGS, EXCEPT TEXTILE BAGS	22	20.4	(Z)	10.0	(Z)	10.6	9.8	(D)	(D)	(D)	(D)
2645	DIE-CUT PAPER AND BOARD	4	(D)	(X)	(D)	(X)	(D)	.1	.1	-	-	-
2646	PRESSED AND MOLDED PULP GOODS	12	(D)	(X)	(D)	(X)	11.6	(D)	31.6	(D)	1 020	(D)
2647	SANITARY PAPER PRODUCTS	16	76.2	(Z)	24.7	(Z)	51.8	25.8	2.9	22.9	1 582	3 760
2648	STATIONERY PRODUCTS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
2649	CONVERTED PAPER PRODUCTS, NEC	4	2.0	(Z)	.5	(Z)	(D)	.5	(D)	(D)	(D)	(D)
265	PAPERBOARD CONTAINERS AND BOXES	27	12.2	(Z)	(D)	(X)	3.2	9.7	(D)	(D)	(D)	(D)
2651	FOLDING PAPERBOARD BOXES	8	(D)	(X)	(D)	(X)	.6	(D)	(D)	-	-	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	11	(D)	(X)	.7	(Z)	1.3	.4	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
26	PAPER AND ALLIED PRODUCTS--CON.											
265	PAPERBOARD CONTAINERS AND BOXES--CON.											
2654	SANITARY FOOD CONTAINERS	8	(D)	(X)	(D)	(X)	1.4	(D)	(D)	(D)	-	(D)
2661	BUILDING PAPER AND BOARD MILLS	29	145.5	(Z)	(D)	(X)	48.3	(D)	48.8	(D)	(D)	4 134
28	CHEMICALS AND ALLIED PRODUCTS.	1 238	12 494.4	28	4 325.5	33	8 731.0	3 910.3	2 942.9	967.4	408 641	734 227
281	INDUSTRIAL INORGANIC CHEMICALS	270	2 278.7	5	964.6	7	1 408.7	855.3	556.3	299.0	75 411	110 048
2812	ALKALIES AND CHLORINE.	23	342.8	1	175.8	1	183.7	177.0	47.4	129.6	23 268	10 535
2813	INDUSTRIAL GASES	54	(D)	(X)	(D)	(X)	600.7	(D)	(D)	.2	(D)	475
2816	INORGANIC PIGMENTS	30	(D)	(X)	(D)	(X)	64.2	(D)	(D)	47.3	(D)	29 659
2819	INDUSTRIAL INORGANIC CHEM., NEC.	163	1 165.7	3	653.8	5	560.1	595.9	474.0	121.9	44 777	69 379
282	PLASTICS MATERIALS, SYNTHETICS	199	1 930.1	4	481.6	4	1 481.0	454.9	344.8	110.1	71 029	127 851
2821	PLASTICS MATERIALS AND RESINS.	132	794.7	2	150.7	1	653.4	139.1	111.9	27.2	37 908	67 295
2822	SYNTHETIC RUBBER	19	312.3	1	33.2	(Z)	280.7	29.0	(D)	(D)	(D)	11 058
2823	CELLULOSIC MANMADE FIBERS.	7	186.9	1	109.0	1	88.6	103.9	(D)	(D)	(D)	17 918
2824	ORGANIC FIBERS, NONCELLULOSIC.	41	636.2	1	188.7	1	458.3	182.9	146.6	36.3	12 520	31 580
283	DRUGS.	112	240.7	1	90.1	1	160.0	87.2	58.1	28.8	6 645	25 175
2831	BIOLOGICAL PRODUCTS.	8	(D)	(X)	.3	(Z)	2.5	.3	(D)	(D)	-	(D)
2833	MEDICINALS AND BOTANICALS.	22	(D)	(X)	55.2	(Z)	72.9	52.2	(D)	(D)	2 422	16 033
2834	PHARMACEUTICAL PREPARATIONS.	82	111.5	(Z)	34.6	(Z)	84.6	34.7	26.2	8.2	4 223	(D)
284	SOAPS, CLEANERS, TOILET GOODS.	97	(D)	(X)	(D)	(X)	49.0	(D)	20.4	(D)	(D)	(D)
2841	SOAP AND OTHER DETERGENTS.	40	39.2	(Z)	17.5	(Z)	23.0	16.8	13.5	3.3	2 333	3 053
2842	POLISHES AND SANITATION GOODS.	10	(D)	(X)	1.5	(Z)	6.3	(D)	1.2	(D)	(D)	(D)
2843	SURFACE ACTIVE AGENTS.	19	28.4	(Z)	15.0	(Z)	13.5	14.3	4.3	9.9	(D)	2 576
2844	TOILET PREPARATIONS.	28	7.7	(Z)	(D)	(X)	6.2	1.6	1.4	.2	1 909	1 561
2851	PAINTS AND ALLIED PRODUCTS	35	(D)	(X)	(D)	(X)	2.9	(D)	111.8	(D)	(D)	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	279	5 715.5	13	2 150.6	17	3 879.4	1 996.3	1 573.4	422.9	159 587	354 372
2861	GUM AND WOOD CHEMICALS	6	(D)	(X)	(D)	(X)	17.1	(D)	(D)	(D)	(D)	(D)
2865	CYCLIC CRUDES AND INTERMEDIATES.	76	(D)	(X)	(D)	(X)	279.2	(D)	(D)	(D)	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	197	5 184.1	12	1 909.9	15	3 583.0	1 764.9	1 402.6	362.4	125 486	268 664
287	AGRICULTURAL CHEMICALS	109	1 877.7	4	301.6	2	1 652.9	233.3	158.4	74.9	79 207	95 028
2873	NITROGENOUS FERTILIZERS.	58	1 211.7	3	87.4	1	1 134.2	58.9	36.7	22.2	37 709	30 928
2874	PHOSPHATIC FERTILIZERS	36	538.4	1	190.7	1	400.8	158.4	113.5	44.9	21 240	(D)
2875	FERTILIZERS, MIXING ONLY	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
2879	AGRICULTURAL CHEMICALS, NEC.	13	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	38 806
289	MISCELLANEOUS CHEMICAL PRODUCTS.	137	254.8	1	188.7	1	97.0	137.3	119.8	17.5	9 380	10 657
2891	ADHESIVES AND SEALANTS	23	(D)	(X)	4.1	(Z)	2.8	3.9	3.9	.1	231	752
2892	EXPLOSIVES	19	40.2	(Z)	(D)	(X)	(D)	(D)	(D)	(D)	2 571	3 387
2893	PRINTING INK	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
2895	CARBON BLACK	28	6.3	(Z)	4.4	(Z)	3.1	1.4	.7	.7	443	(D)
2899	CHEMICAL PREPARATIONS, NEC	66	202.2	(Z)	140.9	1	89.3	93.9	80.6	13.3	6 135	6 003
29	PETROLEUM AND COAL PRODUCTS.	263	8 186.9	18	1 172.5	9	7 108.9	963.7	382.9	580.8	93 514	296 350
2911	PETROLEUM REFINING	198	8 151.2	18	1 149.4	9	7 094.8	955.3	378.1	577.2	92 433	294 851
295	PAVING AND ROOFING MATERIALS	45	32.7	(Z)	21.6	(Z)	12.6	7.9	4.5	3.4	667	633
2951	PAVING MIXTURES AND BLOCKS	15	(D)	(X)	(D)	(X)	.6	2.7	(D)	(D)	(D)	128
2952	ASPHALT FELTS AND COATINGS	30	(D)	(X)	(D)	(X)	12.0	5.2	(D)	(D)	(D)	505
299	MISC. PETROLEUM, COAL PRODUCTS	20	3.0	(Z)	1.6	(Z)	1.5	.6	.4	.2	414	866
2992	LUBRICATING OILS AND GREASES	8	1.2	(Z)	.4	(Z)	.8	.3	(D)	(D)	(D)	565
2999	PETROLEUM AND COAL PRODUCTS, NEC	12	1.8	(Z)	1.2	(Z)	.7	.2	(D)	(D)	(D)	301
30	RUBBER, MISC. PLASTICS PROD.	458	632.3	1	187.0	1	515.5	167.5	116.0	51.5	5 001	18 576
3011	TIRES AND INNER TUBES.	58	407.9	1	41.5	(Z)	366.4	38.7	15.5	23.1	506	6 091
3021	RUBBER AND PLASTICS FOOTWEAR	6	(D)	(X)	(D)	(X)	(D)	(D)	2.0	(D)	(D)	(D)
3031	RECLAIMED RUBBER	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3041	RUBBER, PLASTICS HOSE AND BELTING.	26	20.0	(Z)	10.2	(Z)	18.5	9.0	(D)	(D)	(D)	407
3069	FABRICATED RUBBER PRODUCTS, NEC.	104	28.6	(Z)	18.9	(Z)	11.8	17.7	16.3	1.5	1 242	1 824
3079	MISCELLANEOUS PLASTICS PRODUCTS.	262	173.5	(Z)	114.1	1	117.4	99.9	77.5	22.4	2 430	10 107
31	LEATHER AND LEATHER PRODUCTS	52	9.7	(Z)	8.5	(Z)	1.9	8.2	4.5	3.7	6 239	5 222
3111	LEATHER TANNING AND FINISHING.	48	(S)	(X)	6.4	(Z)	(D)	6.2	2.5	3.7	6 203	5 182
314	FOOTWEAR, EXCEPT RUBBER.	3	(D)	(X)	(D)	(X)	-	(D)	(D)	-	(D)	(D)
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC.	2	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	(D)	(D)
3161	LUGGAGE.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	(D)	(D)

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
32	STONE, CLAY, GLASS PRODUCTS. .	592	419.2	1	206.6	2	266.8	182.0	139.4	42.6	30 159	24 082
3211	FLAT GLASS	20	52.0	(Z)	(D)	(X)	30.9	(D)	17.1	(D)	(D)	533
322	GLASS, PRESSED OR BLOWN.	124	121.4	(Z)	15.6	(Z)	110.4	13.6	7.6	6.0	3 975	6 272
3221	GLASS CONTAINERS	81	33.2	(Z)	8.1	(Z)	27.5	7.2	4.5	2.6	1 435	1 570
3229	PRESSED AND BLOWN GLASS, NEC . . .	43	88.3	(Z)	7.5	(Z)	82.9	6.4	3.0	3.4	2 540	4 702
3231	PRODUCTS OF PURCHASED GLASS. . . .	17	2.1	(Z)	1.6	(Z)	.6	1.6	1.3	.3	1 507	296
3241	CEMENT, HYDRAULIC.	123	105.3	(Z)	85.4	1	44.4	74.6	63.1	11.5	3 003	1 762
325	STRUCTURAL CLAY PRODUCTS	15	3.9	(Z)	1.2	(Z)	(D)	.8	.6	.1	(D)	(D)
3251	BRICK AND STRUCTURAL CLAY TILE . .	3	(D)	(X)	.1	(Z)	(D)	(D)	(D)	-	-	(D)
3253	CERAMIC WALL AND FLOOR TILE. . . .	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3255	CLAY REFRACTORIES.	5	(D)	(X)	.8	(Z)	(D)	.6	(D)	(D)	(D)	(D)
3259	STRUCTURAL CLAY PRODUCTS, NEC. . .	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
326	POTTERY AND RELATED PRODUCTS . .	27	4.6	(Z)	2.0	(Z)	2.8	1.7	1.1	.6	407	917
3261	VITREOUS PLUMBING FIXTURES	11	(D)	(X)	.9	(Z)	2.7	.9	.6	.3	(D)	383
3262	VITREOUS CHINA FOOD UTENSILS . . .	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3263	FINE EARTHENWARE FOOD UTENSILS . .	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3264	PORCELAIN ELECTRICAL SUPPLIES. . .	7	.5	(Z)	.5	(Z)	(D)	.3	.2	.1	(D)	188
327	CONCRETE, GYPSUM, PLASTER PRODS.	129	40.3	(Z)	34.1	(Z)	25.5	27.5	21.2	6.3	2 729	1 699
3271	CONCRETE BLOCK AND BRICK	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
3272	CONCRETE PRODUCTS, NEC	11	(D)	(X)	(D)	(X)	(D)	.5	(D)	(D)	(D)	165
3273	READY-MIXED CONCRETE	53	23.8	(Z)	22.2	(Z)	5.3	21.6	18.7	2.9	1 007	634
3274	LIME	25	12.5	(Z)	7.5	(Z)	19.5	4.6	1.6	3.0	(D)	(D)
3275	GYPSUM PRODUCTS.	39	2.1	(Z)	2.5	(Z)	(D)	(D)	.6	(D)	(D)	(D)
3281	CUT STONE AND STONE PRODUCTS . . .	5	.7	(Z)	(D)	(X)	(D)	(D)	-	(D)	-	(D)
329	MISC. NONMETALLIC MINERAL PRODS.	132	88.8	(Z)	45.8	(Z)	48.8	40.6	27.3	13.3	17 420	12 528
3291	ABRASIVE PRODUCTS.	20	6.5	(Z)	3.9	(Z)	2.8	3.5	2.9	.6	452	1 357
3292	ASBESTOS PRODUCTS.	21	12.8	(Z)	3.1	(Z)	10.8	2.3	1.3	1.0	888	604
3293	GASKETS, PACKING, SEALING DEVICES.	11	(D)	(X)	(D)	(X)	(D)	(D)	.3	(D)	(D)	(D)
3295	MINERALS, GROUND OR TREATED. . . .	21	24.8	(Z)	22.5	(Z)	4.8	22.0	18.1	3.9	(D)	2 351
3296	MINERAL WOOL	42	34.8	(Z)	8.3	(Z)	28.1	5.5	4.1	1.3	12 441	7 592
3297	NONCLAY REFRACTORIES	7	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	10	3.5	(Z)	2.9	(Z)	.7	2.5	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	779	6 479.0	15	3 392.1	26	3 474.0	3 132.4	1 782.6	1 349.8	213 006	331 256
331	BLAST FURNACE, BASIC STEEL PROD.	249	4 689.8	11	2 839.5	22	2 183.8	2 649.7	1 452.0	1 197.7	181 064	265 140
3312	BLAST FURNACES AND STEEL MILLS . .	149	4 573.5	10	2 782.8	21	2 111.0	2 594.6	1 408.7	1 185.8	177 814	255 849
3313	ELECTROMETALLURGICAL PRODUCTS. . .	9	55.2	(Z)	(D)	(X)	31.2	(D)	31.5	(D)	(D)	1 365
3315	STEEL WIRE AND RELATED PRODUCTS. .	34	6.0	(Z)	(D)	(X)	4.1	(D)	1.5	(D)	691	2 228
3316	COLD FINISHING OF STEEL SHAPES . .	30	36.9	(Z)	13.8	(Z)	24.2	13.6	8.6	5.0	872	3 947
3317	STEEL PIPE AND TUBES	27	18.1	(Z)	5.3	(Z)	13.3	5.0	1.6	3.3	(D)	1 751
332	IRON AND STEEL FOUNDRIES	197	178.6	(Z)	66.3	1	139.9	53.9	32.1	21.8	10 898	19 868
3321	GRAY IRON FOUNDRIES.	127	138.1	(Z)	51.9	(Z)	110.9	39.8	25.2	14.5	10 286	16 776
3322	MALLEABLE IRON FOUNDRIES	15	(D)	(X)	7.2	(Z)	3.2	7.1	1.7	5.4	(D)	.9
3324	STEEL INVESTMENT FOUNDRIES	7	(D)	(X)	(D)	(X)	.9	(D)	.6	(D)	(D)	(D)
3325	STEEL FOUNDRIES, NEC	48	28.8	(Z)	(D)	(X)	25.0	(D)	4.6	(D)	(D)	(D)
333	PRIMARY NONFERROUS METALS. . . .	81	776.7	2	391.1	3	395.6	339.6	252.2	87.4	9 795	24 161
3331	PRIMARY COPPER	24	138.5	(Z)	29.3	(Z)	110.1	22.0	14.2	7.8	793	4 292
3332	PRIMARY LEAD	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3333	PRIMARY ZINC	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3334	PRIMARY ALUMINUM	30	382.3	1	200.5	2	186.5	193.3	159.3	34.0	3 182	10 356
3339	PRIMARY NONFERROUS METALS, NEC . .	17	196.3	(Z)	(D)	(X)	71.1	(D)	49.5	(D)	1 396	6 324
3341	SECONDARY NONFERROUS METALS. . . .	21	9.1	(Z)	1.6	(Z)	7.8	1.1	(D)	(D)	(D)	675
335	NONFERROUS ROLLING AND DRAWING .	167	800.1	2	87.1	1	728.1	82.1	41.5	40.6	6 889	18 440
3351	COPPER ROLLING AND DRAWING	39	57.5	(Z)	26.7	(Z)	36.2	24.0	16.2	7.9	1 327	4 640
3353	ALUMINUM SHEET, PLATE, AND FOIL. .	23	136.8	(Z)	36.1	(Z)	101.1	34.8	12.0	22.7	2 304	6 553
3354	ALUMINUM EXTRUDED PRODUCTS	29	15.6	(Z)	(D)	(X)	(D)	(D)	(D)	(D)	1 287	1 916
3355	ALUMINUM ROLLING AND DRAWING, NEC.	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3356	NONFERROUS ROLLING & DRAWING, NEC.	19	26.1	(Z)	6.8	(Z)	21.1	6.4	2.2	4.2	1 659	3 689
3357	NONFERROUS WIREDRAW'G, INSULATING.	52	(D)	(X)	10.5	(Z)	556.0	10.1	8.6	1.5	(D)	(D)
336	NONFERROUS FOUNDRIES	32	19.8	(Z)	3.9	(Z)	16.6	3.7	2.6	1.0	(D)	2 497
3361	ALUMINUM FOUNDRIES	19	15.5	(Z)	2.1	(Z)	14.0	1.9	1.3	.5	1 272	1 732
3362	BRASS, BRONZE, COPPER FOUNDRIES. .	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	-
3369	NONFERROUS FOUNDRIES, NEC.	10	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	765
339	MISC. PRIMARY METAL PRODUCTS . .	32	4.9	(Z)	2.5	(Z)	2.3	2.4	(D)	(D)	973	475
3398	METAL HEAT TREATING.	23	1.7	(Z)	1.3	(Z)	.6	1.2	1.0	.2	(D)	304
3399	PRIMARY METAL PRODUCTS, NEC. . . .	9	(S)	(X)	1.2	(Z)	1.7	1.2	(D)	(D)	(D)	171
34	FABRICATED METAL PRODUCTS. . .	682	258.9	1	90.0	1	196.0	86.2	61.1	25.1	25 859	40 977
341	METAL CANS, SHIPPING CONTAINERS.	57	18.2	(Z)	4.1	(Z)	15.4	4.0	2.3	1.7	(D)	2 053
3411	METAL CANS	50	17.7	(Z)	3.8	(Z)	15.0	3.7	(D)	(D)	(D)	(D)
3412	METAL BARRELS, DRUMS, AND PAILS. .	7	.5	(Z)	.3	(Z)	.3	.3	(D)	(D)	(D)	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE.	74	42.9	(Z)	19.6	(Z)	29.9	19.3	16.6	2.7	3 635	6 835
3421	CUTLERY.	4	(D)	(X)	(D)	(X)	(D)	(D)	10.5	(D)	(D)	(D)
3423	HAND AND EDGE TOOLS, NEC	24	3.7	(Z)	2.8	(Z)	3.5	2.8	2.5	.3	746	764
3425	HANDSAWS AND SAW BLADES.	5	(D)	(X)	(D)	(X)	(D)	(D)	.5	(D)	(D)	(D)
3429	HARDWARE, NEC.	41	23.9	(Z)	5.6	(Z)	22.1	5.4	3.1	2.3	2 800	5 740
343	PLUMBING, HEATING, EXCEPT ELEC .	29	9.5	(Z)	2.8	(Z)	7.1	2.1	1.1	1.0	(D)	2 000
3431	METAL SANITARY WARE.	7	(D)	(X)	.8	(Z)	5.5	.7	(D)	(D)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS.	13	(D)	(X)	.8	(Z)	.7	.8	.3	.5	216	1 253
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	9	1.9	(Z)	1.2	(Z)	1.0	.6	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Estab-lish-ments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manu-fac-turing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manu-fac-turing	Gross water used: Water re-circula-ted and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expendi-tures for the abatement of water pollut-ants (thousand gallons)	Annual operating costs for the abatement of water pollut-ants (thousand gallons)
34	FABRICATED METAL PRODUCTS--CON.											
348	FABRICATED STRUC. METAL PRODS.	62	16.7	(Z)	8.5	(Z)	12.4	8.2	6.7	1.5	835	3 790
3441	FABRICATED STRUCTURAL METAL.	4	(D)	(X)	(D)	(X)	(D)	(D)	3.4	(D)	(D)	(D)
3442	METAL DOORS, SASH, AND TRIM.	13	1.2	(Z)	.6	(Z)	.6	.6	.3	.3	(D)	594
3443	FABRICATED PLATEWORK, BOILER SHOP.	25	9.4	(Z)	3.1	(Z)	9.7	3.0	2.0	1.0	(D)	2 446
3444	SHEET METALWORK.	10	1.1	(Z)	.6	(Z)	1.1	.6	.5	.1	-	384
3446	ARCHITECTURAL METALWORK.	4	.2	(Z)	.2	(Z)	(D)	.2	(D)	(D)	-	(D)
3448	PREFABRICATED METAL BUILDINGS.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3449	MISCELLANEOUS METALWORK.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC.	42	7.5	(Z)	4.1	(Z)	5.1	3.8	2.7	1.1	1 611	3 441
3451	SCREW MACHINE PRODUCTS	2	(D)	(X)	(D)	(X)	(D)	(D)	.1	(D)	-	(D)
3452	BOLTS, NUTS, RIVETS, AND WASHERS	40	(D)	(X)	(D)	(X)	(D)	(D)	2.6	(D)	1 611	(D)
346	METAL FORGINGS AND STAMPINGS	135	112.1	(Z)	15.4	(Z)	101.9	14.6	10.6	4.0	4 915	6 499
3462	IRON AND STEEL FORGINGS.	35	17.9	(Z)	3.9	(Z)	13.7	3.6	2.7	1.0	1 576	1 186
3463	NONFERROUS FORGINGS.	6	(D)	(X)	(D)	(X)	(D)	(D)	1.3	(D)	(D)	.4
3465	AUTOMOTIVE STAMPINGS	48	86.4	(Z)	6.0	(Z)	82.5	5.5	4.0	1.5	2 356	3 784
3466	CROWNS AND CLOSURES.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
3469	METAL STAMPINGS, NEC	42	5.7	(Z)	3.6	(Z)	4.3	3.5	(D)	(D)	(D)	1 148
347	METAL SERVICES, NEC.	140	11.3	(Z)	10.8	(Z)	3.1	10.4	3.6	6.8	7 891	7 584
3471	PLATING AND POLISHING.	121	9.3	(Z)	9.3	(Z)	2.5	9.0	2.8	6.1	7 821	6 960
3479	METAL COATING AND ALLIED SERVICES.	19	2.0	(Z)	1.5	(Z)	.6	1.5	.7	.7	70	624
348	ORDNANCE AND ACCESSORIES, NEC.	41	15.5	(Z)	9.6	(Z)	9.8	9.0	5.5	3.5	5 271	4 215
3482	SMALL ARMS AMMUNITION.	8	1.1	(Z)	1.4	(Z)	(D)	1.3	(D)	(D)	39	1 209
3483	AMMUNITION, EXC. SMALL ARMS, NEC	17	7.7	(Z)	4.0	(Z)	5.3	3.9	1.9	1.9	(D)	1 588
3484	SMALL ARMS	7	2.0	(Z)	1.6	(Z)	(D)	1.5	(D)	(D)	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	9	4.6	(Z)	2.6	(Z)	3.5	2.4	1.9	.5	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS.	102	25.2	(Z)	15.2	(Z)	11.4	14.7	12.0	2.7	931	4 560
3493	STEEL SPRINGS, EXCEPT WIRE	5	(D)	(X)	(D)	(X)	(D)	.8	(D)	(D)	-	(D)
3494	VALVES AND PIPE FITTINGS	47	12.0	(Z)	10.7	(Z)	2.2	10.6	8.8	1.8	355	2 747
3495	WIRE SPRINGS	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3496	MISC. FABRICATED WIRE PRODUCTS	18	8.0	(Z)	2.2	(Z)	5.8	1.6	1.4	.3	(D)	665
3497	METAL FOIL AND LEAF.	7	2.0	(Z)	.4	(Z)	(D)	.4	(D)	(D)	(D)	(D)
3498	FABRICATED PIPE AND FITTINGS	7	.4	(Z)	.3	(Z)	(D)	(D)	.3	(D)	(D)	(D)
3499	FABRICATED METAL PRODUCTS, NEC	15	2.3	(Z)	1.1	(Z)	1.3	.8	.6	.2	(D)	312
35	MACHINERY, EXCEPT ELECTRICAL	507	393.8	1	164.5	1	253.8	158.5	120.5	38.1	28 832	40 437
351	ENGINES AND TURBINES	47	66.8	(Z)	38.0	(Z)	29.7	36.7	28.0	8.9	7 279	7 588
3511	TURBINES, TURBINE GENERATOR SETS	13	39.4	(Z)	32.4	(Z)	7.2	(D)	14.4	(D)	(D)	606
3519	INTERNAL COMBUSTION ENGINES, NEC	34	27.4	(Z)	5.5	(Z)	22.5	(D)	3.4	(D)	(D)	6 982
352	FARM AND GARDEN MACHINERY.	51	55.1	(Z)	46.2	(Z)	13.3	45.6	32.6	13.0	1 904	2 896
3523	FARM MACHINERY AND EQUIPMENT	43	54.6	(Z)	45.7	(Z)	(D)	45.1	(D)	(D)	(D)	2 862
3524	LAWN AND GARDEN EQUIPMENT.	8	.6	(Z)	.5	(Z)	(D)	.5	(D)	(D)	(D)	34
353	CONSTRUCTION, RELATED MACHINERY.	73	104.0	(Z)	16.6	(Z)	87.2	15.8	9.0	6.7	2 918	6 526
3531	CONSTRUCTION MACHINERY	40	83.2	(Z)	14.4	(Z)	69.9	13.8	(D)	(D)	(D)	5 786
3532	MINING MACHINERY	6	.5	(Z)	.3	(Z)	.2	.3	.3	-	(D)	(D)
3533	OILFIELD MACHINERY	11	(D)	(X)	1.1	(Z)	7.7	.9	.4	.5	(D)	373
3534	ELEVATORS AND MOVING STAIRWAYS	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
3535	CONVEYORS AND CONVEYING EQUIPMENT.	3	.1	(Z)	.1	(Z)	-	(D)	(D)	-	-	(D)
3536	HOISTS, CRANES, AND MONORAILS.	3	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS	9	(D)	(X)	.5	(Z)	9.4	.5	(D)	(D)	-	256
354	METALWORKING MACHINERY	64	13.2	(Z)	9.3	(Z)	6.5	8.3	7.6	.8	625	1 254
3541	MACHINE TOOLS, METAL-CUTTING	19	4.0	(Z)	3.1	(Z)	2.1	2.7	2.5	.2	(D)	135
3542	MACHINE TOOLS, METAL-FORMING	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC	6	1.8	(Z)	1.7	(Z)	(D)	1.7	1.7	-	-	(D)
3545	MACHINE TOOL ACCESSORIES	18	4.0	(Z)	2.3	(Z)	2.0	2.2	(D)	(D)	(D)	(D)
3546	POWER DRIVEN HANDTOOLS	16	2.5	(Z)	1.6	(Z)	1.5	1.2	.7	.5	(D)	888
3547	ROLLING MILL MACHINERY	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	-
355	SPECIAL INDUSTRY MACHINERY	24	11.2	(Z)	8.9	(Z)	7.4	8.9	8.7	.2	(D)	(D)
3551	FOOD PRODUCTS MACHINERY.	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3552	TEXTILE MACHINERY.	4	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	-	(D)
3554	PAPER INDUSTRIES MACHINERY	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
3555	PRINTING TRADES MACHINERY.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC.	12	10.0	(Z)	(D)	(X)	5.5	(D)	7.8	(D)	(D)	(D)
356	GENERAL INDUSTRIAL MACHINERY	101	61.3	(Z)	10.9	(Z)	53.0	9.7	7.5	2.2	1 049	3 067
3561	PUMPS AND PUMPING EQUIPMENT.	21	2.7	(Z)	1.9	(Z)	2.7	1.8	1.8	(Z)	379	341
3562	BALL AND ROLLER BEARINGS	26	42.1	(Z)	3.6	(Z)	38.2	2.6	1.4	1.2	(D)	(D)
3563	AIR AND GAS COMPRESSORS.	13	8.9	(Z)	1.7	(Z)	7.5	1.6	1.3	.4	(D)	305
3564	BLOWERS AND FANS	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3566	SPEED CHANGERS, DRIVES, AND GEARS.	9	2.7	(Z)	.7	(Z)	2.1	.7	(D)	(D)	-	(D)
3567	INDUSTRIAL FURNACES AND OVENS.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3568	POWER TRANSMISSION EQUIPMENT, NEC.	22	3.9	(Z)	2.4	(Z)	1.9	2.3	1.9	.4	(D)	1 017
3569	GENERAL INDUSTRIAL MACHINERY, NEC.	6	.3	(Z)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
357	OFFICE AND COMPUTING MACHINES.	55	36.9	(Z)	20.1	(Z)	21.9	19.7	18.2	1.4	2 510	5 357
3573	ELECTRONIC COMPUTING EQUIPMENT	37	22.4	(Z)	17.4	(Z)	5.5	17.2	16.4	.8	2 322	3 421
3574	CALCULATING, ACCOUNTING MACHINES	5	(D)	(X)	(D)	(X)	(D)	(D)	.7	(D)	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	12	(D)	(X)	1.6	(Z)	(D)	1.3	(D)	(D)	(D)	(D)
358	REFRIGERATION AND SERVICE MACH	68	33.0	(Z)	11.9	(Z)	24.7	11.5	6.9	4.6	7 923	5 004
3581	AUTOMATIC MERCHANDISING MACHINES	3	(D)	(X)	.1	(Z)	(D)	.1	(D)	(D)	-	(D)
3582	COMMERCIAL LAUNDRY EQUIPMENT	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	57	31.9	(Z)	11.4	(Z)	24.1	11.0	6.4	4.6	(D)	4 916
3586	MEASURING AND DISPENSING PUMPS	5	.4	(Z)	.3	(Z)	(D)	.3	(D)	(D)	-	(D)
3589	SERVICE INDUSTRY MACHINERY, NEC.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	(D)	(D)

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
35	MACHINERY, EXCEPT ELECTRICAL--CON.											
359	MISC. MACHINERY, EXC. ELEC . . .	24	12.3	(Z)	2.5	(Z)	10.3	2.3	2.0	.3	(D)	(D)
3592	CARBURETORS, PISTONS, RINGS, ETC .	19	11.9	(Z)	2.3	(Z)	(D)	2.1	(D)	(D)	(D)	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	5	.4	(Z)	.2	(Z)	(D)	.2	(D)	(D)	-	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	561	425.4	1	116.0	1	366.1	111.9	81.5	30.4	25 358	50 283
361	ELECTRIC DISTRIBUTING EQUIPMENT.	47	19.4	(Z)	5.3	(Z)	15.0	5.0	3.0	2.0	(D)	3 365
3612	TRANSFORMERS	22	9.0	(Z)	2.7	(Z)	6.7	2.7	(D)	(D)	(D)	(D)
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	25	10.4	(Z)	2.6	(Z)	8.4	2.3	(D)	(D)	275	(D)
362	ELECTRICAL INDUSTRIAL APPARATUS.	71	19.0	(Z)	9.7	(Z)	10.4	8.9	7.0	1.9	1 024	3 155
3621	MOTORS AND GENERATORS.	29	6.4	(Z)	3.9	(Z)	2.7	3.8	(D)	(D)	(D)	1 313
3622	INDUSTRIAL CONTROLS.	20	2.7	(Z)	1.7	(Z)	1.1	1.6	1.4	.2	(D)	443
3623	WELDING APPARATUS, ELECTRIC. . . .	5	.9	(Z)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
3624	CARBON AND GRAPHITE PRODUCTS . . .	13	8.3	(Z)	3.6	(Z)	5.5	3.0	2.4	.6	(D)	362
3629	ELEC. INDUSTRIAL APPARATUS, NEC. .	4	.6	(Z)	.2	(Z)	(D)	.2	(D)	(D)	(D)	(D)
363	HOUSEHOLD APPLIANCES	75	36.0	(Z)	17.3	(Z)	21.8	16.6	10.5	6.2	3 484	5 991
3631	HOUSEHOLD COOKING EQUIPMENT. . . .	19	4.6	(Z)	4.6	(Z)	1.5	4.3	3.4	.9	158	1 407
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	11	16.3	(Z)	6.1	(Z)	10.2	5.9	2.4	3.5	(D)	1 471
3633	HOUSEHOLD LAUNDRY EQUIPMENT. . . .	10	8.2	(Z)	2.3	(Z)	6.5	2.2	1.4	.9	(D)	1 168
3634	ELECTRIC HOUSEWARES AND FANS . . .	16	2.5	(Z)	1.8	(Z)	1.4	1.7	1.5	.2	484	744
3635	HOUSEHOLD VACUUM CLEANERS.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3636	SEWING MACHINES.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3639	HOUSEHOLD APPLIANCES, NEC.	11	2.6	(Z)	1.9	(Z)	(D)	1.9	1.4	.5	(D)	476
364	ELEC. LIGHTING, WIRING EQUIP . .	58	29.2	(Z)	11.6	(Z)	19.9	11.9	10.3	1.5	1 866	2 633
3641	ELECTRIC LAMPS	15	1.3	(Z)	1.0	(Z)	.3	1.0	(D)	(D)	(D)	132
3643	CURRENT-CARRYING WIRING DEVICES. .	11	(D)	(X)	7.2	(Z)	10.3	(D)	7.5	(D)	(D)	304
3644	NONCURRENT-CARRYING WIRING DEVICES.	16	2.2	(Z)	1.6	(Z)	.8	1.6	.7	.9	1 201	927
3645	RESIDENTIAL LIGHTING FIXTURES. . .	4	(D)	(X)	.1	(Z)	(D)	.1	(D)	(D)	(D)	(D)
3646	COMMERCIAL LIGHTING FIXTURES . . .	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3647	VEHICULAR LIGHTING EQUIPMENT . . .	4	(D)	(X)	(D)	(X)	(D)	(D)	.7	(D)	(D)	(D)
3648	LIGHTING EQUIPMENT, NEC.	5	(D)	(X)	.5	(Z)	1.3	.5	(D)	(D)	(D)	(D)
365	RADIO, TV RECEIVING EQUIPMENT. .	20	10.6	(Z)	2.1	(Z)	8.7	1.8	1.2	.6	(D)	1 860
3651	RADIO AND TV RECEIVING SETS. . . .	11	(D)	(X)	1.4	(Z)	6.3	1.4	(D)	(D)	(D)	(D)
3652	PHONO. RECORDS, PRERECORDED TAPE .	9	(D)	(X)	.7	(Z)	2.4	.4	(D)	(D)	(D)	(D)
366	COMMUNICATION EQUIPMENT.	90	125.0	(Z)	14.3	(Z)	116.1	13.3	9.3	4.0	1 589	9 743
3661	TELEPHONE AND TELEGRAPH APPARATUS.	24	(D)	(X)	(D)	(X)	49.6	(D)	3.3	(D)	(D)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP .	66	(D)	(X)	(D)	(X)	66.5	(D)	5.9	(D)	(D)	(D)
367	ELECTRONIC COMPONENTS, ACCESS. .	131	118.9	(Z)	23.1	(Z)	101.5	22.2	11.3	10.9	8 860	16 631
3671	ELECTRON TUBES, RECEIVING TYPE . .	23	23.8	(Z)	4.0	(Z)	20.8	3.7	2.6	1.0	385	2 332
3674	SEMICONDUCTORS, RELATED DEVICES. .	45	65.6	(Z)	10.8	(Z)	56.8	10.6	3.8	6.8	3 935	9 279
3675	ELECTRONIC CAPACITORS.	10	(S)	(X)	2.7	(Z)	.4	2.6	(D)	(D)	(D)	259
3676	ELECTRONIC RESISTORS	10	1.8	(Z)	.5	(Z)	1.4	.5	(D)	(D)	(D)	(D)
3678	ELECTRONIC CONNECTORS.	9	(S)	(X)	1.1	(Z)	.1	1.1	.8	.4	(D)	(D)
3679	ELECTRONIC COMPONENTS, NEC	34	24.5	(Z)	4.0	(Z)	22.0	3.8	1.7	2.1	3 642	4 371
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	69	67.3	(Z)	32.6	(Z)	72.6	32.2	28.9	3.3	6 895	6 905
3691	STORAGE BATTERIES.	37	11.7	(Z)	2.3	(Z)	10.4	2.0	.6	1.4	(D)	(D)
3692	PRIMARY BATTERIES, DRY AND WET . .	4	(D)	(X)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
3693	X-RAY APPARATUS AND TUBES.	6	.8	(Z)	.6	(Z)	(D)	.6	(D)	(D)	(D)	258
3694	ENGINE ELECTRICAL EQUIPMENT. . . .	17	53.5	(Z)	(D)	(X)	61.2	(D)	27.3	(D)	(D)	2 324
3699	ELECTRICAL EQUIP., SUPPLIES, NEC .	5	(D)	(X)	(D)	(X)	(D)	(D)	.2	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	445	2 435.0	5	234.5	2	2 358.1	219.8	161.6	58.2	69 475	100 465
371	MOTOR VEHICLES AND EQUIPMENT . .	256	(D)	(X)	169.8	1	2 156.3	158.3	123.2	35.1	52 071	79 435
3711	MOTOR VEHICLES AND CAR BODIES. . .	65	(D)	(X)	29.5	(Z)	1 653.2	28.1	15.2	11.5	(D)	26 137
3713	TRUCK AND BUS BODIES	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3714	MOTOR VEHICLE PARTS, ACCESSORIES .	186	595.1	1	139.9	1	502.9	131.3	107.8	23.5	31 243	53 184
3715	TRUCK TRAILERS	2	(D)	(X)	(D)	(X)	-	(D)	(D)	-	(D)	(D)
3716	MOTOR HOMES.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	-
372	AIRCRAFT AND PARTS	98	102.1	(Z)	38.7	(Z)	111.3	37.4	19.3	18.1	4 814	13 242
3721	AIRCRAFT	30	40.0	(Z)	10.4	(Z)	34.7	10.1	4.6	5.5	2 316	5 666
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	37	37.6	(Z)	22.2	(Z)	62.7	21.5	9.6	11.9	942	4 671
3728	AIRCRAFT EQUIPMENT, NEC.	31	24.5	(Z)	6.2	(Z)	13.9	5.8	5.1	.8	1 556	2 905
373	SHIP, BOAT BUILDING, REPAIRING .	29	20.2	(Z)	14.7	(Z)	42.8	14.5	(D)	(D)	1 785	1 162
3731	SHIP BUILDING AND REPAIRING. . . .	28	(D)	(X)	(D)	(X)	(D)	(D)	12.2	(D)	(D)	(D)
3732	BOAT BUILDING AND REPAIRING. . . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3743	RAILROAD EQUIPMENT	19	(D)	(X)	3.9	(Z)	22.8	3.7	2.9	.8	(D)	2 977
3751	MOTORCYCLES, BICYCLES, AND PARTS .	6	1.5	(Z)	1.6	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES.	30	22.5	(Z)	4.9	(Z)	22.4	3.8	2.5	1.4	(D)	2 114
3761	GUIDED MISSILES, SPACE VEHICLES. .	17	8.8	(Z)	2.5	(Z)	(D)	1.9	1.1	.8	(D)	1 514
3764	SPACE PROPULSION UNITS AND PARTS .	11	(D)	(X)	(D)	(X)	12.4	(D)	(D)	.6	85	600
3769	SPACE VEHICLE EQUIPMENT, NEC . . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
379	MISC. TRANSPORTATION EQUIPMENT .	7	2.4	(Z)	.8	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
3792	TRAVEL TRAILERS AND CAMPERS. . . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3795	TANKS AND TANK COMPONENTS.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3799	TRANSPORTATION EQUIPMENT, NEC. . .	2	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	148	133.1	(Z)	35.5	(Z)	108.7	33.1	17.3	15.8	9 482	18 528
3811	ENGINEERING, SCIENTIFIC INSTRU . .	12	1.3	(Z)	.7	(Z)	1.1	.6	.4	.1	(D)	128

See footnotes at end of table.

Table 1b. Summary Water Use Statistics for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
38	INSTRUMENTS, RELATED PRODUCTS--CON.											
382	MEASURING, CONTROLLING DEVICES	49	14.5	(Z)	5.4	(Z)	10.8	5.1	3.5	1.6	1 284	4 079
3822	ENVIRONMENTAL CONTROLS	11	2.0	(Z)	1.9	(Z)	.7	1.8	1.0	.8	(D)	1 304
3823	PROCESS CONTROL INSTRUMENTS	7	.5	(Z)	.5	(Z)	.8	.5	(D)	(D)	(D)	(D)
3824	FLUID METERS AND COUNTING DEVICES	12	1.1	(Z)	1.0	(Z)	(D)	1.0	(D)	(D)	(D)	(D)
3825	INSTRU. TO MEASURE ELECTRICITY	13	10.6	(Z)	1.8	(Z)	8.8	1.6	1.0	.6	972	2 283
3829	MEASURING, CONTROLLING DEVICES, NEC	6	.3	(Z)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	7	.8	(Z)	(D)	(X)	(D)	.5	(D)	(D)	-	(D)
384	MEDICAL INSTRUMENTS, SUPPLIES	31	2.5	(Z)	2.3	(Z)	.9	2.1	1.6	.5	(D)	747
3841	SURGICAL AND MEDICAL INSTRUMENTS	11	(D)	(X)	(D)	(X)	.1	(D)	.5	(D)	(D)	(D)
3842	SURGICAL APPLIANCES AND SUPPLIES	17	1.8	(Z)	1.6	(Z)	.8	1.5	1.1	.4	(D)	618
3843	DENTAL EQUIPMENT AND SUPPLIES	3	(D)	(X)	(D)	(X)	-	(D)	.1	(D)	(D)	(D)
3851	OPHTHALMIC GOODS	8	.9	(Z)	(D)	(X)	(D)	(D)	5.2	(D)	(D)	186
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	32	112.4	(Z)	20.1	(Z)	94.8	18.4	(D)	(D)	7 386	13 033
3873	WATCHES, CLOCKS, AND WATCHCASES	9	.8	(Z)	.6	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTURING INDUSTRIES	82	18.1	(Z)	7.7	(Z)	12.2	7.1	5.2	2.0	4 719	3 078
391	JEWELRY, SILVER AND PLATED WARE	10	.7	(Z)	.7	(Z)	(D)	.7	.5	.2	1 075	759
3911	JEWELRY, PRECIOUS METAL	3	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	(D)	(D)
3914	SILVERWARE AND PLATED WARE	6	.5	(Z)	.5	(Z)	(D)	.5	.3	.2	(D)	619
3915	JEWELERS' MATS., LAPIDARY WORK	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
3931	MUSICAL INSTRUMENTS	4	.2	(Z)	.2	(Z)	(D)	.2	(D)	(D)	-	-
394	TOYS AND SPORTING GOODS	19	2.7	(Z)	1.6	(Z)	1.6	1.5	1.3	.2	(D)	(D)
3944	GAMES, TOYS, CHILDREN'S VEHICLES	9	2.0	(Z)	1.0	(Z)	1.4	1.0	(D)	(D)	(D)	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC	10	.7	(Z)	.6	(Z)	.2	.6	(D)	(D)	(D)	(D)
395	PENS, OFFICE AND ART GOODS	8	1.5	(Z)	.8	(Z)	.7	.8	(D)	(D)	-	(D)
3951	PENS AND MECHNICAL PENCILS	5	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
3952	LEAD PENCILS AND ART GOODS	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
396	COSTUME JEWELRY AND NOTIONS	21	1.3	(Z)	1.2	(Z)	.3	1.2	.7	.5	(D)	889
3961	COSTUME JEWELRY	5	(D)	(X)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
3964	NEEDLES, PINS, AND FASTENERS	16	(D)	(X)	.9	(Z)	(D)	.9	(D)	(D)	(D)	(D)
399	MISCELLANEOUS MANUFACTURES	20	11.8	(Z)	3.3	(Z)	9.4	2.8	2.1	.7	1 227	761
3991	BROOMS AND BRUSHES	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	(D)	(D)
3995	BURIAL CASKETS	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
3996	HARD SURFACE FLOOR COVERINGS	6	(D)	(X)	1.6	(Z)	8.5	1.1	(D)	(D)	(D)	382
3999	MANUFACTURING INDUSTRIES, NEC	10	2.2	(Z)	1.4	(Z)	.8	1.5	(D)	(D)	(D)	(D)

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries whether or not separate figures are shown for individual industries within the group.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (S) Data is inconsistent with other reported data and, therefore, is being withheld. Suppressed values for gross water used may be estimated from data shown for water intake and recirculated water. (X) Not applicable. (Z) Less than 50 million gallons or under .5 percent.

[1]All industries, except those in Major Industry Group 23, Apparel and Other Textile Products, and Major Industry Group 27, Printing and Publishing, were candidates for inclusion in this survey. Specific 4-digit industries in other major industry groups not listed in this table had no establishments with use of 20 million gallons of water or more in 1978.

Table 1c. Summary Water Use Statistics for States: 1978

(For explanation of terms, see appendix A)

States	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
UNITED STATES, TOTAL	9 605	44 494.1	100	12 991.7	100	34 199.2	11 682.2	6 973.0	4 709.2	1 248 706	2 118 699
ALABAMA	199	1 284.3	3	294.2	2	1 009.5	280.1	129.0	151.1	51 262	52 586
ALASKA	15	(D)	(X)	(D)	(X)	125.1	(D)	12.8	(D)	7 653	13 524
ARIZONA	51	175.2	(Z)	21.5	(Z)	155.1	13.5	11.1	2.3	6 612	4 812
ARKANSAS	129	284.1	1	73.7	1	220.3	66.3	8.3	58.0	7 723	16 462
CALIFORNIA	659	1 263.1	3	307.6	2	1 041.1	242.8	137.1	105.7	36 381	124 060
COLORADO	66	151.1	(Z)	65.6	1	127.1	58.9	26.2	32.7	6 673	7 518
CONNECTICUT	172	695.5	2	87.7	1	622.6	85.4	52.2	33.2	12 510	18 093
DELAWARE	42	259.8	1	169.3	1	91.9	167.2	69.4	97.8	10 334	23 351
DISTRICT OF COLUMBIA	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
FLORIDA	149	897.2	2	221.1	2	757.2	182.2	105.3	76.9	27 998	43 581
GEORGIA	295	1 013.2	2	271.2	2	792.8	231.1	92.9	138.2	38 775	35 574
HAWAII	28	157.0	(Z)	111.4	1	82.1	88.1	24.1	64.0	(D)	4 896
IDAHO	52	140.8	(Z)	32.6	(Z)	111.8	35.1	22.6	12.4	3 051	5 287
ILLINOIS	604	1 463.6	3	430.9	3	1 163.7	367.5	252.7	114.8	43 850	90 790
INDIANA	356	1 367.3	3	634.8	5	782.9	598.7	360.6	238.1	66 274	108 848
IOWA	169	267.2	1	147.3	1	229.6	138.4	93.8	44.6	15 697	27 372
KANSAS	98	282.3	1	37.0	(Z)	250.6	30.7	16.6	14.0	13 678	14 486
KENTUCKY	159	387.3	1	139.9	1	288.6	131.7	89.3	42.4	9 913	25 541
LOUISIANA	188	3 595.1	8	1 280.2	2	2 650.4	1 224.7	975.1	249.6	110 605	158 326
MAINE	55	149.7	(Z)	137.1	1	116.8	106.9	24.2	82.7	5 683	21 055
MARYLAND	122	499.6	1	371.8	3	138.1	318.4	(D)	(D)	17 710	32 769
MASSACHUSETTS	247	235.5	1	152.4	1	159.2	147.9	123.2	24.7	11 717	25 139
MICHIGAN	447	2 157.9	5	874.3	7	1 318.8	797.8	423.0	374.8	92 490	145 738
MINNESOTA	188	281.0	1	160.9	1	127.4	111.3	87.8	23.5	24 139	10 708
MISSISSIPPI	107	375.6	1	99.3	1	463.7	92.2	28.1	64.0	14 456	32 026
MISSOURI	190	244.4	1	50.7	(Z)	209.9	42.9	29.9	13.0	19 551	23 705
MONTANA	25	87.0	(Z)	32.2	(Z)	65.5	26.8	15.1	11.7	411	6 905
NEBRASKA	80	395.5	1	28.7	(Z)	368.6	26.3	10.9	15.4	3 545	3 568
NEVADA	17	22.8	(Z)	18.9	(Z)	7.2	5.5	(D)	(D)	311	639
NEW HAMPSHIRE	51	(D)	(X)	26.2	(Z)	(D)	26.1	9.2	17.0	8 852	7 936
NEW JERSEY	382	652.1	1	331.5	3	375.3	323.9	218.1	105.9	41 085	87 763
NEW MEXICO	18	47.5	(Z)	4.8	(Z)	47.1	2.5	1.6	.9	384	555
NEW YORK	463	900.9	2	469.7	4	469.4	447.3	264.3	183.0	52 494	91 194
NORTH CAROLINA	361	963.1	2	187.0	1	811.3	162.4	54.4	108.0	19 725	34 039
NORTH DAKOTA	7	(D)	(X)	(D)	(X)	(D)	1.1	(D)	(D)	(D)	(D)
OHIO	630	1 880.5	4	584.7	5	1 576.5	501.7	306.9	194.8	63 747	129 099
OKLAHOMA	80	1 508.5	3	153.5	1	1 437.2	81.2	12.9	68.3	6 556	17 905
OREGON	164	392.8	1	135.5	1	275.0	135.2	58.1	77.1	9 649	20 953
PENNSYLVANIA	602	4 517.9	10	1 190.1	9	3 533.2	1 141.3	696.1	445.2	118 012	126 556
RHODE ISLAND	55	25.3	(Z)	19.1	(Z)	13.5	18.7	16.4	2.4	1 410	3 591
SOUTH CAROLINA	274	1 069.7	2	416.4	3	735.4	404.9	315.6	89.3	22 890	35 973
SOUTH DAKOTA	11	1.8	(Z)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
TENNESSEE	233	1 444.4	3	366.6	3	1 082.3	347.4	257.4	90.0	32 119	55 834
TEXAS	446	8 620.2	19	1 395.7	11	7 337.5	1 155.6	793.9	361.7	80 060	226 922
UTAH	40	239.7	(Z)	58.7	(Z)	183.4	18.0	7.5	10.5	595	3 057
VERMONT	25	14.2	(Z)	5.8	(Z)	8.9	5.4	1.7	3.8	(D)	2 181
VIRGINIA	177	846.1	2	247.3	2	649.6	236.9	175.8	61.1	31 347	47 951
WASHINGTON	174	1 082.3	2	424.4	3	698.5	398.5	199.8	198.7	45 545	35 888
WEST VIRGINIA	73	649.8	1	456.9	4	197.4	436.0	206.0	230.0	22 884	62 132
WISCONSIN	414	523.2	1	202.7	2	382.9	185.9	99.5	86.4	25 055	49 019
WYOMING	15	93.1	(Z)	10.7	(Z)	83.2	5.1	1.4	3.7	1 428	843

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (X) Not applicable. (Z) Less than 50 million gallons or under .5 percent.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating cost for the abatement of water pollutants (thousand dollars)
	UNITED STATES, TOTAL	9 605	44 494.1	100	12 991.7	100	34 199.2	11 682.2	6 973.0	4 709.2	1 248 706	2 118 699
	NEW ENGLAND	589	(D)	(X)	424.6	3	980.1	386.7	215.0	161.5	40 205	76 355
20	FOOD AND KINDRED PRODUCTS	43	21.0	(Z)	10.7	(Z)	15.9	8.5	7.3	1.3	1 044	1 829
21	TOBACCO PRODUCTS	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	-
22	TEXTILE MILL PRODUCTS	61	(S)	(Z)	18.6	(Z)	2.3	18.4	14.8	3.6	7 592	2 169
24	LUMBER AND WOOD PRODUCTS	2	(D)	(X)	(D)	(X)	-	(D)	.1	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	76	314.2	1	209.5	2	235.8	178.4	65.4	113.0	7 363	28 890
28	CHEMICALS AND ALLIED PRODUCTS	43	(D)	(X)	55.3	(Z)	35.4	52.7	30.9	21.9	7 941	13 560
29	PETROLEUM AND COAL PRODUCTS	4	.5	(Z)	.3	(Z)	(D)	.2	(D)	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	42	16.5	(Z)	10.0	(Z)	11.7	9.9	9.7	.3	(D)	518
31	LEATHER AND LEATHER PRODUCTS	9	2.6	(Z)	2.6	(Z)	(D)	2.6	(D)	(D)	(D)	755
32	STONE, CLAY, GLASS PRODUCTS	16	8.8	(Z)	3.2	(Z)	6.0	2.8	2.1	.8	209	643
33	PRIMARY METAL INDUSTRIES	54	(D)	(X)	24.3	(Z)	546.4	23.9	21.7	2.2	788	3 420
34	FABRICATED METAL PRODUCTS	60	20.7	(Z)	16.9	(Z)	6.7	16.8	15.1	1.7	4 579	3 253
35	MACHINERY, EXCEPT ELECTRICAL	48	23.0	(Z)	22.1	(Z)	13.0	21.6	21.1	.5	(D)	8 504
36	ELECTRIC, ELECTRONIC EQUIP	47	24.2	(Z)	11.4	(Z)	15.1	11.7	9.3	2.3	(D)	3 366
37	TRANSPORTATION EQUIPMENT	31	61.1	(Z)	29.4	(Z)	79.4	29.1	17.7	11.5	1 465	4 347
38	INSTRUMENTS, RELATED PRODUCTS	28	12.6	(Z)	8.3	(Z)	10.7	8.1	6.8	1.4	1 315	4 040
39	MISC. MANUFACTUR'G INDUSTRIES	24	2.1	(Z)	1.8	(Z)	.9	1.7	1.0	.7	1 704	990
	MIDDLE ATLANTIC	1 296	5 589.1	13	1 618.7	12	4 259.1	1 504.9	788.2	716.6	163 087	290 579
20	FOOD AND KINDRED PRODUCTS	271	117.9	(Z)	69.5	1	73.7	63.6	45.6	18.0	17 753	18 888
21	TOBACCO PRODUCTS	7	(D)	(X)	1.4	(Z)	10.0	1.2	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	77	(S)	(Z)	13.3	(Z)	2.6	11.9	5.3	6.6	268	1 880
24	LUMBER AND WOOD PRODUCTS	6	1.3	(Z)	.7	(Z)	.8	.2	(D)	(D)	(D)	397
25	FURNITURE AND FIXTURES	4	(D)	(X)	(D)	(X)	(D)	(D)	1.1	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	91	(D)	(X)	159.3	1	2 719.6	145.5	89.2	56.3	14 903	25 515
28	CHEMICALS AND ALLIED PRODUCTS	247	1 021.8	2	491.6	4	625.7	443.2	309.4	133.8	54 432	135 858
29	PETROLEUM AND COAL PRODUCTS	20	596.4	1	271.0	2	321.6	261.3	78.7	182.6	19 287	36 912
30	RUBBER, MISC. PLASTICS PROD.	85	49.0	(Z)	25.0	(Z)	32.3	22.2	17.3	4.9	838	1 286
31	LEATHER AND LEATHER PRODUCTS	9	1.0	(Z)	.9	(Z)	(D)	.9	.4	.5	2 222	1 211
32	STONE, CLAY, GLASS PRODUCTS	92	46.0	(Z)	26.4	(Z)	28.9	26.6	16.7	9.9	5 600	4 462
33	PRIMARY METAL INDUSTRIES	91	621.7	1	(D)	(X)	196.9	(D)	169.4	(D)	27 242	30 708
34	FABRICATED METAL PRODUCTS	65	19.5	(Z)	10.5	(Z)	9.3	9.6	7.0	2.5	742	4 098
35	MACHINERY, EXCEPT ELECTRICAL	51	41.9	(Z)	26.0	(Z)	18.1	25.4	23.8	1.7	1 100	2 606
36	ELECTRIC, ELECTRONIC EQUIP	94	53.7	(Z)	17.1	(Z)	41.4	16.2	10.5	5.7	8 817	16 853
37	TRANSPORTATION EQUIPMENT	44	144.9	(Z)	15.7	(Z)	162.3	15.3	8.8	6.5	2 352	5 738
38	INSTRUMENTS, RELATED PRODUCTS	29	9.3	(Z)	4.7	(Z)	7.2	4.7	3.4	1.2	211	1 872
39	MISC. MANUFACTUR'G INDUSTRIES	13	(D)	(X)	2.0	(Z)	8.6	1.5	1.3	.2	(D)	724
	SOUTH ATLANTIC	1 302	5 621.3	13	1 369.2	11	4 529.7	1 234.6	644.2	590.3	153 860	213 838
20	FOOD AND KINDRED PRODUCTS	246	124.8	(Z)	54.3	(Z)	96.2	45.3	24.1	21.2	19 618	13 221
21	TOBACCO PRODUCTS	9	24.0	(Z)	2.6	(Z)	21.7	1.6	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	459	325.1	1	117.8	1	231.3	105.3	62.3	43.0	7 155	17 090
24	LUMBER AND WOOD PRODUCTS	38	14.3	(Z)	9.2	(Z)	5.6	2.0	1.0	1.0	1 500	1 783
25	FURNITURE AND FIXTURES	16	(D)	(X)	(D)	(X)	.3	(D)	13.2	(D)	(D)	44
26	PAPER AND ALLIED PRODUCTS	64	2 235.3	5	514.4	4	1 740.7	480.5	126.7	353.7	30 177	58 774
28	CHEMICALS AND ALLIED PRODUCTS	140	1 943.2	4	480.4	4	1 587.4	437.2	342.7	94.5	65 757	87 436
29	PETROLEUM AND COAL PRODUCTS	12	83.8	(Z)	6.1	(Z)	80.4	3.0	.2	2.8	122	(D)

See footnotes at end of table.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	SOUTH ATLANTIC--CON.											
30	RUBBER, MISC. PLASTICS PROD. .	41	335.9	1	26.3	(Z)	347.8	18.0	11.0	7.0	867	3 143
32	STONE, CLAY, GLASS PRODUCTS. .	63	79.9	(Z)	15.5	(Z)	72.1	9.7	3.4	6.3	6 829	2 875
33	PRIMARY METAL INDUSTRIES . . .	42	298.2	1	63.9	(Z)	233.0	54.5	7.8	46.7	10 892	12 050
34	FABRICATED METAL PRODUCTS. . .	42	21.2	(Z)	5.4	(Z)	17.1	5.3	2.3	3.0	1 998	3 443
35	MACHINERY, EXCEPT ELECTRICAL .	32	41.1	(Z)	16.5	(Z)	25.0	(D)	8.9	(D)	(D)	1 237
36	ELECTRIC, ELECTRONIC EQUIP . .	49	23.9	(Z)	9.1	(Z)	16.8	8.9	7.1	1.9	2 517	3 528
37	TRANSPORTATION EQUIPMENT . . .	26	54.4	(Z)	32.6	(Z)	53.1	32.4	30.8	1.6	3 584	1 887
38	INSTRUMENTS, RELATED PRODUCTS.	13	1.9	(Z)	(D)	(X)	1.1	.9	.6	.4	(D)	320
39	MISC. MANUFACTUR'G INDUSTRIES.	10	(D)	(X)	(D)	(X)	.1	(D)	(D)	(D)	(D)	(D)
	GREAT LAKES.	1 770	5 664.0	13	2 513.7	19	3 428.8	2 298.4	1 368.3	930.1	237 469	410 677
20	FOOD AND KINDRED PRODUCTS. . .	343	(D)	(X)	104.9	1	97.6	98.1	74.8	23.4	11 846	21 205
22	TEXTILE MILL PRODUCTS.	7	.7	(Z)	.7	(Z)	(D)	.6	(D)	(D)	-	(D)
24	LUMBER AND WOOD PRODUCTS . . .	7	(D)	(X)	2.8	(Z)	5.0	2.7	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	13	2.2	(Z)	1.2	(Z)	1.5	(D)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	107	700.2	2	219.7	2	514.0	197.6	63.5	134.2	19 324	38 139
28	CHEMICALS AND ALLIED PRODUCTS.	185	824.3	2	476.5	4	388.6	422.3	303.9	118.3	54 436	68 624
29	PETROLEUM AND COAL PRODUCTS. .	36	519.7	1	154.3	1	380.1	134.1	26.7	107.4	9 995	20 252
30	RUBBER, MISC. PLASTICS PROD. .	96	63.5	(Z)	49.7	(Z)	19.5	45.9	22.9	22.9	513	4 262
31	LEATHER AND LEATHER PRODUCTS .	19	2.6	(Z)	2.6	(Z)	(D)	(D)	(D)	1.6	2 552	2 080
32	STONE, CLAY, GLASS PRODUCTS. .	88	68.1	(Z)	55.1	(Z)	16.5	53.2	46.3	6.9	3 156	4 106
33	PRIMARY METAL INDUSTRIES . . .	214	2 121.6	5	1 297.1	10	946.3	1 202.9	741.8	461.1	70 570	150 025
34	FABRICATED METAL PRODUCTS. . .	220	117.7	(Z)	22.9	(Z)	106.6	21.2	13.3	7.9	5 342	12 992
35	MACHINERY, EXCEPT ELECTRICAL .	134	83.0	(Z)	20.4	(Z)	67.2	18.7	13.9	4.8	8 713	11 909
36	ELECTRIC, ELECTRONIC EQUIP . .	119	98.2	(Z)	16.9	(Z)	86.2	16.2	12.9	3.3	3 138	6 474
37	TRANSPORTATION EQUIPMENT . . .	145	(D)	(X)	71.6	1	725.5	65.4	40.2	25.1	(D)	60 897
38	INSTRUMENTS, RELATED PRODUCTS.	26	(D)	(X)	15.6	(Z)	71.7	14.3	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	11	1.7	(Z)	1.4	(Z)	.3	1.4	(D)	(D)	(D)	(D)
	OHIO	1 080	3 756.2	8	1 717.3	13	2 324.4	1 642.2	967.1	675.0	166 848	263 563
20	FOOD AND KINDRED PRODUCTS. . .	170	112.7	(Z)	31.3	(Z)	90.1	25.6	17.8	7.9	5 717	6 776
21	TOBACCO PRODUCTS	4	(D)	(Z)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
22	TEXTILE MILL PRODUCTS.	13	2.2	(Z)	2.0	(Z)	.3	1.8	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS . . .	7	.6	(Z)	.3	(Z)	(D)	.3	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	10	.9	(Z)	.8	(Z)	.3	.8	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	43	525.8	1	52.7	(Z)	558.2	53.1	16.3	36.8	7 058	13 620
28	CHEMICALS AND ALLIED PRODUCTS.	139	959.1	2	485.2	4	487.1	476.3	252.5	223.8	40 238	100 989
29	PETROLEUM AND COAL PRODUCTS. .	30	323.7	1	31.3	(Z)	294.7	21.2	6.7	14.6	4 482	14 780
30	RUBBER, MISC. PLASTICS PROD. .	75	41.0	(Z)	22.8	(Z)	26.5	22.5	17.0	5.5	1 203	2 280
31	LEATHER AND LEATHER PRODUCTS .	3	(D)	(X)	(D)	(X)	-	(D)	(D)	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	98	69.3	(Z)	27.5	(Z)	43.9	21.5	15.7	5.8	4 348	5 117
33	PRIMARY METAL INDUSTRIES . . .	156	1 448.4	3	971.6	7	576.7	931.8	572.8	359.1	82 984	85 955
34	FABRICATED METAL PRODUCTS. . .	106	39.0	(Z)	9.5	(Z)	30.4	9.5	6.7	2.8	2 858	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	71	66.9	(Z)	14.5	(Z)	59.5	13.1	9.2	3.9	3 808	3 669
36	ELECTRIC, ELECTRONIC EQUIP . .	77	63.9	(Z)	40.9	(Z)	61.0	40.3	32.1	8.2	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	60	97.4	(Z)	24.4	(Z)	92.0	22.4	16.7	5.7	9 886	13 238
38	INSTRUMENTS, RELATED PRODUCTS.	11	1.2	(Z)	1.1	(Z)	.4	.9	.6	.3	(D)	834
39	MISC. MANUFACTUR'G INDUSTRIES.	7	1.2	(Z)	.5	(Z)	(D)	.5	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978 —Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	TENNESSEE.	233	1 517.2	3	428.0	3	1 099.0	409.6	281.4	128.2	38 729	55 051
20	FOOD AND KINDRED PRODUCTS. . .	31	10.2	(Z)	6.4	(Z)	4.7	5.5	3.8	1.7	904	675
22	TEXTILE MILL PRODUCTS.	38	6.1	(Z)	5.3	(Z)	3.1	4.8	3.5	1.3	611	714
24	LUMBER AND WOOD PRODUCTS . . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS. . .	15	437.2	1	80.0	1	357.5	77.3	14.0	63.3	(D)	9 790
28	CHEMICALS AND ALLIED PRODUCTS.	41	653.2	1	302.1	2	352.9	293.3	241.8	51.4	19 243	36 374
30	RUBBER, MISC. PLASTICS PROD. .	17	15.1	(Z)	8.6	(Z)	6.7	7.9	7.1	.8	(D)	292
31	LEATHER AND LEATHER PRODUCTS .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	17	5.9	(Z)	2.6	(Z)	4.2	2.0	1.2	.8	(D)	591
33	PRIMARY METAL INDUSTRIES . . .	23	78.5	(Z)	9.5	(Z)	69.4	8.6	3.6	5.0	1 905	3 169
34	FABRICATED METAL PRODUCTS. . .	7	(D)	(X)	.7	(Z)	(D)	.6	.5	.2	(D)	520
35	MACHINERY, EXCEPT ELECTRICAL .	6	.8	(Z)	.4	(Z)	(D)	.4	.2	.2	(D)	213
36	ELECTRIC, ELECTRONIC EQUIP . .	15	5.3	(Z)	2.0	(Z)	3.8	1.5	.8	.7	152	912
37	TRANSPORTATION EQUIPMENT . . .	8	(D)	(X)	(D)	(X)	284.3	(D)	4.6	(D)	703	610
38	INSTRUMENTS, RELATED PRODUCTS.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	4	.2	(Z)	.2	(Z)	-	(D)	(D)	(D)	(D)	(D)
	UPPER MISSISSIPPI.	731	1 291.2	3	530.2	4	998.2	426.4	277.6	148.7	74 459	94 084
20	FOOD AND KINDRED PRODUCTS. . .	255	219.8	(Z)	112.5	1	246.7	101.0	71.4	29.6	19 602	20 412
22	TEXTILE MILL PRODUCTS.	4	.6	(Z)	.6	(Z)	(D)	.6	(D)	(D)	-	(D)
24	LUMBER AND WOOD PRODUCTS . . .	4	(D)	(X)	1.0	(Z)	-	(D)	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	42	362.0	1	169.4	1	194.6	114.3	80.8	33.4	13 554	17 092
28	CHEMICALS AND ALLIED PRODUCTS.	70	159.1	(Z)	67.3	1	97.1	58.6	21.3	37.4	17 226	20 998
29	PETROLEUM AND COAL PRODUCTS. .	5	211.5	(Z)	8.7	(Z)	203.6	5.9	(D)	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	33	31.6	(Z)	20.9	(Z)	13.3	19.9	17.9	2.0	(D)	1 498
31	LEATHER AND LEATHER PRODUCTS .	3	(D)	(X)	(D)	(X)	-	(D)	.4	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	40	27.3	(Z)	18.7	(Z)	14.0	17.9	13.3	4.6	201	902
33	PRIMARY METAL INDUSTRIES . . .	59	144.0	(Z)	68.2	1	145.9	46.5	27.9	18.6	11 672	12 872
34	FABRICATED METAL PRODUCTS. . .	62	7.4	(Z)	6.7	(Z)	4.0	6.4	4.7	1.7	858	2 911
35	MACHINERY, EXCEPT ELECTRICAL .	75	79.4	(Z)	44.2	(Z)	40.1	43.4	31.3	12.1	(D)	8 699
36	ELECTRIC, ELECTRONIC EQUIP . .	40	4.9	(Z)	4.1	(Z)	2.1	3.8	2.8	1.1	1 975	1 509
37	TRANSPORTATION EQUIPMENT . . .	25	40.4	(Z)	5.5	(Z)	36.1	5.1	3.3	1.8	680	3 188
38	INSTRUMENTS, RELATED PRODUCTS.	7	1.0	(Z)	.9	(Z)	(D)	.9	(D)	(D)	-	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	4	1.0	(Z)	1.0	(Z)	(D)	1.0	(D)	(D)	-	(D)
	LOWER MISSISSIPPI.	338	3 888.6	9	1 405.6	11	2 986.8	1 342.2	1 031.0	311.3	131 621	196 528
20	FOOD AND KINDRED PRODUCTS. . .	78	49.3	(Z)	34.4	(Z)	44.0	32.1	22.1	9.9	(D)	5 694
22	TEXTILE MILL PRODUCTS.	7	(D)	(X)	1.5	(Z)	(D)	1.4	.7	.6	(D)	157
24	LUMBER AND WOOD PRODUCTS . . .	25	7.8	(Z)	6.7	(Z)	3.6	2.3	(D)	(D)	320	428
25	FURNITURE AND FIXTURES	4	.5	(Z)	.4	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	26	298.6	1	135.1	1	357.3	127.5	10.9	116.1	12 182	16 436
28	CHEMICALS AND ALLIED PRODUCTS.	84	2 342.3	5	801.5	6	1 782.7	768.4	700.2	68.2	92 611	113 585
29	PETROLEUM AND COAL PRODUCTS. .	23	916.0	2	235.3	2	712.3	221.0	(D)	(D)	14 865	52 425
30	RUBBER, MISC. PLASTICS PROD. .	13	13.6	(Z)	6.8	(Z)	10.2	6.7	(D)	(D)	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	11	15.4	(Z)	2.9	(Z)	13.3	2.1	1.1	.9	(D)	772
33	PRIMARY METAL INDUSTRIES . . .	15	(D)	(X)	(D)	(X)	41.5	(D)	145.6	(D)	525	2 677
34	FABRICATED METAL PRODUCTS. . .	23	4.0	(Z)	2.7	(Z)	1.3	2.7	1.2	1.5	655	1 562

See footnotes at end of table.

Table 1d. **Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	LOWER MISSISSIPPI--CON.											
35	MACHINERY, EXCEPT ELECTRICAL .	8	1.4	(Z)	.9	(Z)	.6	.9	(D)	(D)	(D)	252
36	ELECTRIC, ELECTRONIC EQUIP . .	9	(D)	(X)	.5	(Z)	(D)	.5	.3	.2	(D)	232
37	TRANSPORTATION EQUIPMENT . . .	9	(D)	(X)	(D)	(X)	-	(D)	25.6	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	-
	SOURIS - RED - RAINY	13	(D)	(X)	(D)	(X)	16.2	(D)	5.8	(D)	(D)	(D)
20	FOOD AND KINDRED PRODUCTS. . .	9	.9	(Z)	.9	(Z)	(D)	.9	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS . . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	1	(D)	(X)	(D)	(X)	-	(D)	-	(D)	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
	MISSOURI	316	1 688.0	4	161.5	1	1 583.3	127.5	81.1	46.4	20 326	34 690
20	FOOD AND KINDRED PRODUCTS. . .	149	92.4	(Z)	73.7	1	62.9	68.2	46.9	21.4	3 521	(D)
22	TEXTILE MILL PRODUCTS.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	-
25	FURNITURE AND FIXTURES	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	5	(D)	(X)	.5	(Z)	(D)	.4	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	32	464.1	1	15.7	(Z)	449.1	12.7	4.7	8.0	3 778	9 277
29	PETROLEUM AND COAL PRODUCTS. .	17	1 013.8	2	43.5	(Z)	977.5	20.9	12.7	8.2	4 181	5 634
30	RUBBER, MISC. PLASTICS PROD. .	12	21.6	(Z)	4.4	(Z)	17.2	4.1	2.8	1.3	(D)	2 406
31	LEATHER AND LEATHER PRODUCTS .	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	19	8.5	(Z)	(D)	(X)	4.4	(D)	3.3	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	10	17.3	(Z)	2.0	(Z)	16.2	1.3	(D)	(D)	(D)	814
34	FABRICATED METAL PRODUCTS. . .	12	2.4	(Z)	2.3	(Z)	.7	2.2	1.7	.6	(D)	353
35	MACHINERY, EXCEPT ELECTRICAL .	18	(D)	(X)	(D)	(X)	1.0	(D)	5.2	(D)	(D)	128
36	ELECTRIC, ELECTRONIC EQUIP . .	17	13.5	(Z)	1.6	(Z)	12.5	1.5	.8	.7	571	1 956
37	TRANSPORTATION EQUIPMENT . . .	11	(D)	(X)	2.5	(Z)	29.1	2.2	1.4	.8	(D)	1 200
38	INSTRUMENTS, RELATED PRODUCTS.	7	1.0	(Z)	.8	(Z)	(D)	.7	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
	ARKANSAS, WHITE AND RED.	300	2 463.2	6	322.1	2	2 239.1	218.2	49.8	168.4	30 991	46 050
20	FOOD AND KINDRED PRODUCTS. . .	84	28.2	(Z)	16.0	(Z)	12.8	12.1	4.0	8.1	3 674	5 424
22	TEXTILE MILL PRODUCTS.	3	.3	(Z)	.3	(Z)	(D)	(D)	(D)	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS . . .	5	(D)	(X)	(D)	(X)	161.0	(D)	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	11	826.7	2	36.5	(Z)	859.2	27.5	5.7	21.7	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	45	188.1	(Z)	33.1	(Z)	158.4	26.7	13.0	13.7	11 571	8 642
29	PETROLEUM AND COAL PRODUCTS. .	27	969.9	2	136.2	1	837.2	(D)	.2	(D)	6 351	17 194
30	RUBBER, MISC. PLASTICS PROD. .	16	20.1	(Z)	1.9	(Z)	18.0	1.7	.6	1.1	240	276
32	STONE, CLAY, GLASS PRODUCTS. .	25	18.7	(Z)	5.5	(Z)	29.2	3.0	2.6	.4	(D)	585
33	PRIMARY METAL INDUSTRIES . . .	20	164.7	(Z)	75.7	1	89.7	71.5	(D)	(D)	1 890	3 549
34	FABRICATED METAL PRODUCTS. . .	13	2.5	(Z)	1.5	(Z)	3.2	1.2	.5	.7	(D)	535
35	MACHINERY, EXCEPT ELECTRICAL .	13	8.2	(Z)	6.3	(Z)	2.5	6.1	(D)	(D)	571	619
36	ELECTRIC, ELECTRONIC EQUIP . .	16	(D)	(X)	1.7	(Z)	64.1	1.3	.8	.5	(D)	1 444
37	TRANSPORTATION EQUIPMENT . . .	13	3.9	(Z)	1.6	(Z)	3.2	1.4	1.1	.3	(D)	1 062
38	INSTRUMENTS, RELATED PRODUCTS.	5	.5	(Z)	.5	(Z)	(D)	.4	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
	TEXAS GULF	386	8 079.6	18	1 247.5	10	6 935.1	1 025.5	774.8	250.7	66 951	214 769
20	FOOD AND KINDRED PRODUCTS. . .	94	32.8	(Z)	16.6	(Z)	19.0	14.5	10.9	3.6	5 217	3 777

See footnotes at end of table.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	TEXAS GULF--CON.											
22	TEXTILE MILL PRODUCTS.	6	1.4	(Z)	1.3	(Z)	(D)	1.2	(D)	(D)	(D)	282
24	LUMBER AND WOOD PRODUCTS . . .	15	3.3	(Z)	2.0	(Z)	2.0	1.3	.8	.5	(D)	(D)
25	FURNITURE AND FIXTURES	1	(D)	(X)	(D)	(X)	-	(D)	-	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS. . .	6	565.0	1	51.0	(Z)	574.0	47.3	13.6	33.7	788	14 063
28	CHEMICALS AND ALLIED PRODUCTS.	101	3 361.3	8	853.8	7	2 523.6	684.8	572.1	112.8	30 045	112 241
29	PETROLEUM AND COAL PRODUCTS. .	34	2 820.6	6	193.2	1	2 643.6	159.3	112.4	46.9	25 081	69 810
30	RUBBER, MISC. PLASTICS PROD. .	10	7.0	(Z)	4.0	(Z)	3.5	2.4	(D)	(D)	(D)	348
32	STONE, CLAY, GLASS PRODUCTS. .	36	8.7	(Z)	5.5	(Z)	5.7	1.6	.8	.8	1 687	955
33	PRIMARY METAL INDUSTRIES . . .	14	422.0	1	(D)	(X)	322.7	(D)	50.5	(D)	1 357	9 253
34	FABRICATED METAL PRODUCTS. . .	21	12.1	(Z)	7.2	(Z)	5.0	7.1	6.6	.6	359	912
35	MACHINERY, EXCEPT ELECTRICAL .	20	14.0	(Z)	1.4	(Z)	12.8	1.2	.6	.7	(D)	652
36	ELECTRIC, ELECTRONIC EQUIP . .	13	5.3	(Z)	2.8	(Z)	2.7	2.6	(D)	(D)	594	837
37	TRANSPORTATION EQUIPMENT . . .	13	(D)	(X)	5.7	(Z)	(D)	5.6	4.9	.7	(D)	846
38	INSTRUMENTS, RELATED PRODUCTS.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
	RIO GRANDE	28	128.3	(Z)	(D)	(X)	67.1	(D)	2.3	(D)	3 119	1 527
20	FOOD AND KINDRED PRODUCTS. . .	11	(S)	(Z)	1.1	(Z)	5.3	1.0	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	3	(D)	(X)	1.6	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	-	-	(D)
	UPPER COLORADO	11	(D)	(X)	(D)	(X)	124.2	(D)	.3	(D)	265	567
20	FOOD AND KINDRED PRODUCTS. . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	2	(D)	(X)	(D)	(X)	(D)	(D)	-	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	2	(D)	(X)	(D)	(X)	(D)	(D)	-	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	1	(D)	(X)	(D)	(X)	-	(D)	-	(D)	-	(D)
	LOWER COLORADO	67	223.8	1	26.3	(Z)	199.4	15.7	11.7	3.9	6 941	5 604
20	FOOD AND KINDRED PRODUCTS. . .	10	4.3	(Z)	1.8	(Z)	2.5	1.6	(D)	(D)	(D)	103
22	TEXTILE MILL PRODUCTS.	1	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	-	(D)
24	LUMBER AND WOOD PRODUCTS . . .	5	(D)	(X)	.6	(Z)	(D)	(D)	.4	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS. . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	7	(D)	(X)	1.2	(Z)	18.9	(D)	.4	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	1	(D)	(X)	(D)	(X)	(D)	-	-	-	-	(D)
30	RUBBER, MISC. PLASTICS PROD. .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	11	2.1	(Z)	1.7	(Z)	.7	.6	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	15	117.4	(Z)	12.5	(Z)	105.5	5.4	3.5	1.8	(D)	2 367
34	FABRICATED METAL PRODUCTS. . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	3	(D)	(X)	.6	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	7	(D)	(X)	(D)	(X)	41.7	(D)	.8	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	LOWER COLORADO--CON.											
38	INSTRUMENTS, RELATED PRODUCTS.	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
	GREAT BASIN.	42	138.5	(Z)	64.9	5	78.7	12.8	7.9	4.9	573	2 845
20	FOOD AND KINDRED PRODUCTS. . .	15	(S)	(Z)	2.4	(Z)	.4	1.5	1.1	.5	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	4	47.5	(Z)	2.1	(Z)	45.4	.9	(D)	(D)	(D)	1 414
30	RUBBER, MISC. PLASTICS PROD. .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	8	(D)	(X)	(D)	(X)	1.9	.3	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	4	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	1	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
37	TRANSPORTATION EQUIPMENT . . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
	COLUMBIA - NORTH PACIFIC	393	1 651.2	4	605.0	5	1 103.6	577.7	280.8	296.9	58 257	66 644
20	FOOD AND KINDRED PRODUCTS. . .	133	79.3	(Z)	36.7	(Z)	59.7	34.6	17.0	17.6	4 242	5 610
22	TEXTILE MILL PRODUCTS.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	-	(D)
24	LUMBER AND WOOD PRODUCTS . . .	111	128.7	(Z)	89.4	1	51.8	80.3	51.3	29.1	1 491	2 436
26	PAPER AND ALLIED PRODUCTS. . .	37	999.1	2	243.4	2	770.8	228.1	40.2	187.9	46 547	36 860
28	CHEMICALS AND ALLIED PRODUCTS.	25	223.8	1	161.8	1	62.3	152.5	142.7	9.8	2 265	7 688
29	PETROLEUM AND COAL PRODUCTS. .	6	(D)	(X)	5.5	(Z)	(D)	3.5	(D)	(D)	332	5 688
30	RUBBER, MISC. PLASTICS PROD. .	3	(D)	(X)	.1	(Z)	(D)	(D)	(D)	-	-	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	17	11.0	(Z)	5.9	(Z)	6.8	19.8	16.9	3.0	(D)	137
33	PRIMARY METAL INDUSTRIES . . .	31	71.7	(Z)	57.3	(Z)	16.2	54.1	9.0	45.0	1 363	6 652
34	FABRICATED METAL PRODUCTS. . .	6	.8	(Z)	.7	(Z)	(D)	.7	(D)	(D)	(D)	244
35	MACHINERY, EXCEPT ELECTRICAL .	5	(D)	(X)	.2	(Z)	(D)	.2	.2	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	13	(D)	(X)	3.1	(Z)	(D)	2.9	(D)	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
	CALIFORNIA - SOUTH PACIFIC . . .	667	1 263.3	3	310.3	2	1 041.2	245.0	138.8	106.2	36 450	201 058
20	FOOD AND KINDRED PRODUCTS. . .	233	151.6	(Z)	56.5	(Z)	113.3	48.3	35.5	12.8	7 317	12 899
22	TEXTILE MILL PRODUCTS.	10	(S)	(Z)	1.2	(Z)	(D)	.9	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS . . .	39	(S)	(Z)	37.4	(Z)	26.5	16.0	4.7	11.3	(D)	296
25	FURNITURE AND FIXTURES	2	(D)	(X)	(D)	(X)	-	(D)	(D)	(D)	-	-
26	PAPER AND ALLIED PRODUCTS. . .	23	225.2	1	39.0	(Z)	186.4	38.1	23.9	14.2	1 142	11 106
28	CHEMICALS AND ALLIED PRODUCTS.	67	142.8	(Z)	26.1	(Z)	122.8	13.9	(D)	(D)	8 384	15 808
29	PETROLEUM AND COAL PRODUCTS. .	35	508.0	1	80.6	1	434.7	69.1	26.3	42.8	3 623	60 781
30	RUBBER, MISC. PLASTICS PROD. .	12	14.0	(Z)	6.1	(Z)	7.9	(D)	5.7	(D)	48	189
31	LEATHER AND LEATHER PRODUCTS .	3	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	46	37.6	(Z)	21.0	(Z)	19.2	16.7	15.1	1.6	(D)	924
33	PRIMARY METAL INDUSTRIES . . .	25	32.2	(Z)	17.8	(Z)	35.4	13.1	(D)	(D)	(D)	7 442
34	FABRICATED METAL PRODUCTS. . .	43	9.8	(Z)	2.9	(Z)	7.6	2.7	1.1	1.7	4 073	3 261
35	MACHINERY, EXCEPT ELECTRICAL .	20	11.9	(Z)	2.0	(Z)	10.2	1.8	1.4	.4	476	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	52	19.4	(Z)	5.5	(Z)	15.0	5.3	2.5	2.8	1 966	2 863
37	TRANSPORTATION EQUIPMENT . . .	42	65.9	(Z)	6.4	(Z)	59.2	5.2	3.6	1.6	4 478	6 508
38	INSTRUMENTS, RELATED PRODUCTS.	13	3.3	(Z)	.8	(Z)	2.5	.7	.5	.2	(D)	(D)
39	MISC. MANUFACTURING INDUSTRIES.	2	(D)	(X)	(D)	(X)	(D)	(D)	(Z)	(D)	-	(D)
	ALASKA	15	(D)	(X)	(D)	(X)	125.1	(D)	12.8	(D)	7 653	13 524
20	FOOD AND KINDRED PRODUCTS. . .	9	1.3	(Z)	1.3	(Z)	(D)	1.3	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	2	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 1d. Summary Water Use Statistics for Water Use Regions and Major Industry Groups: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Gross water used: Total gross water used: Quantity (billion gallons)	Gross water used: Total gross water used: Percent of all manufacturing	Gross water used: Water intake: Quantity (billion gallons)	Gross water used: Water intake: Percent of all manufacturing	Gross water used: Water recirculated and reused (billion gallons)	Water discharged: Total (billion gallons)	Water discharged: Untreated (billion gallons)	Water discharged: Treated (billion gallons)	Capital expenditures for the abatement of water pollutants (thousand dollars)	Annual operating costs for the abatement of water pollutants (thousand dollars)
	ALASKA--CON.											
28	CHEMICALS AND ALLIED PRODUCTS.	2	(D)	(x)	(D)	(x)	(D)	(D)	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	2	(D)	(x)	(D)	(x)	(D)	(D)	(D)	(D)	(D)	(D)
	HAWAII	28	157.0	(z)	111.4	1	82.1	88.1	24.1	64.0	(D)	4 896
20	FOOD AND KINDRED PRODUCTS. . .	23	153.8	(z)	108.5	1	80.6	85.5	22.0	63.5	(D)	4 115
29	PETROLEUM AND COAL PRODUCTS. .	2	(D)	(x)	(D)	(x)	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	2	(D)	(x)	(D)	(x)	(D)	(D)	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	1	(D)	(x)	(D)	(x)	(D)	(D)	(D)	(D)	-	-

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (S) Data is inconsistent with other reported data and therefore, is being withheld. Suppressed values for gross water used may be estimated from data shown for water intake and recirculated water. (Z) Less than 50 million gallons or under .5 percent.

[1]See appendix H for maps and appendix I for definitions.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	ALL INDUSTRIES, TOTAL	9 605	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9	10 975.9	988.7	1 027.1
20	FOOD AND KINDRED PRODUCTS	2 208	739.6	230.4	170.6	288.4	34.3	15.8	683.3	44.9	11.4
201	MEAT PRODUCTS	476	112.5	54.9	2.5	54.7	-	.4	(D)	(D)	-
2011	MEATPACKING PLANTS	218	77.5	30.8	2.5	43.8	-	.4	(D)	(D)	-
2013	SAUSAGES AND OTHER PREPARED MEATS	60	5.2	4.0	-	1.2	-	-	5.2	-	-
2016	POULTRY DRESSING PLANTS	181	28.1	19.0	-	9.1	-	-	28.1	-	-
2017	POULTRY AND EGG PROCESSING	17	1.7	1.1	-	.7	-	-	1.7	-	-
202	DAIRY PRODUCTS	428	42.2	19.9	4.5	17.1	(D)	(D)	(D)	(D)	-
2021	CREAMERY BUTTER	11	1.4	.2	-	(D)	-	(D)	1.4	-	-
2022	CHEESE, NATURAL AND PROCESSED	62	5.9	2.2	(D)	2.1	(D)	.1	(D)	(D)	-
2023	CONDENSED AND EVAPORATED MILK	70	11.8	2.4	2.8	6.1	-	.4	(D)	(D)	-
2024	ICE CREAM AND FROZEN DESSERTS	31	2.0	1.1	-	.9	-	-	2.0	-	-
2026	FLUID MILK	254	21.1	14.0	(D)	(D)	-	-	21.1	-	-
203	PRESERVED FRUITS AND VEGETABLES	435	112.7	45.4	4.8	62.4	-	.1	111.7	(D)	(D)
2032	CANNED SPECIALTIES	48	17.2	(D)	(D)	6.5	-	-	(D)	(D)	-
2033	CANNED FRUITS AND VEGETABLES	221	43.1	23.7	(D)	18.9	-	(D)	(D)	-	(D)
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	20	4.0	.9	-	3.1	-	-	(D)	(D)	-
2035	PICKLES, SAUCES, SALAD DRESSINGS	27	2.7	2.3	-	.4	-	-	2.7	-	-
2037	FROZEN FRUITS AND VEGETABLES	86	40.1	(D)	(D)	30.9	-	.1	(D)	(D)	-
2038	FROZEN SPECIALTIES	33	5.7	(D)	-	2.7	-	(D)	5.7	-	-
204	GRAIN MILL PRODUCTS	86	88.5	(D)	47.1	19.1	-	(D)	(D)	-	(D)
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	14	.8	.6	-	.2	-	-	.8	-	-
2043	CEREAL BREAKFAST FOODS	15	5.1	1.5	(D)	(D)	-	-	5.1	-	-
2044	RICE MILLING	5	(D)	.3	-	(D)	-	-	(D)	-	-
2046	WET CORN MILLING	19	78.8	11.2	(D)	13.9	-	(D)	(D)	-	(D)
2047	DOG, CAT, AND OTHER PET FOOD	22	2.2	1.6	-	.6	-	-	2.2	-	-
2048	PREPARED FEEDS, NEC	10	1.3	.4	-	.9	-	-	1.3	-	-
205	BAKERY PRODUCTS	60	4.6	3.6	(D)	(D)	-	-	4.6	-	-
2051	BREAD, CAKE, AND RELATED PRODUCTS	43	2.7	2.6	(D)	(D)	-	-	2.7	-	-
2052	COOKIES AND CRACKERS	17	1.9	1.0	-	.9	-	-	1.9	-	-
206	SUGAR, CONFECTIONERY PRODUCTS	137	207.1	14.2	76.0	80.4	28.9	7.7	160.5	(D)	(D)
2061	RAW CANE SUGAR	33	118.4	3.3	48.3	64.3	(D)	(D)	104.6	13.9	-
2062	CANE SUGAR REFINING	18	56.0	(D)	16.1	2.8	(D)	(D)	(D)	26.6	(D)
2063	BEET SUGAR	39	21.3	2.4	9.7	8.4	-	.8	(D)	(D)	-
2065	CONFECTIONERY PRODUCTS	32	(D)	3.8	-	(D)	-	-	(D)	-	(D)
2066	CHOCOLATE AND COCOA PRODUCTS	11	6.2	(D)	(D)	3.7	-	-	6.2	-	-
207	FATS AND OILS	129	43.6	18.0	5.4	18.3	(D)	(D)	41.0	(D)	(D)
2074	COTTONSEED OIL MILLS	11	(D)	(D)	-	1.8	-	-	(D)	-	-
2075	SOYBEAN OIL MILLS	58	20.9	6.0	(D)	11.5	-	-	20.9	-	-
2077	ANIMAL AND MARINE FATS AND OILS	18	3.2	(D)	(D)	.3	(D)	(D)	1.3	(D)	(D)
2079	SHORTENING AND COOKING OILS	40	17.4	11.3	(D)	4.6	-	-	(D)	(D)	-
208	BEVERAGES	292	105.0	46.9	29.9	27.9	(D)	(D)	(D)	(D)	-
2082	MALT BEVERAGES	71	73.4	35.4	(D)	12.0	-	(D)	(D)	(D)	-
2083	MALT	20	7.9	(D)	(D)	7.0	-	-	7.9	-	-
2084	WINES, BRANDY, AND BRANDY SPIRITS	17	2.0	(D)	(D)	1.5	-	-	2.0	-	-
2085	DISTILLED LIQUOR, EXCEPT BRANDY	24	9.0	(D)	2.7	4.6	-	(D)	(D)	(D)	-
2086	BOTTLED AND CANNED SOFT DRINKS	134	8.2	7.8	-	.4	-	-	8.2	-	-
2087	FLAVORING EXTRACTS, SIRUPS, NEC	26	4.4	1.2	(D)	2.3	(D)	-	(D)	(D)	-
209	MISC. FOODS, KINDRED PRODUCTS	165	23.5	(D)	(D)	(D)	3.5	(D)	19.9	(D)	(D)
2091	CANNED AND CURED SEAFOODS	13	4.2	1.4	(D)	.1	(D)	(D)	1.5	(D)	(D)
2092	FRESH OR FROZEN PACKAGED FISH	31	2.6	1.3	-	(D)	(D)	-	1.7	(D)	(D)
2095	ROASTED COFFEE	10	(D)	(D)	-	.8	-	-	(D)	(D)	-
2097	MANUFACTURED ICE	13	1.7	.1	-	1.6	-	-	1.7	-	-
2098	MACARONI AND SPAGHETTI	4	(D)	(D)	-	-	-	-	(D)	-	-
2099	FOOD PREPARATIONS, NEC	94	13.3	8.3	(D)	(D)	-	-	13.3	-	-
21	TOBACCO PRODUCTS	21	4.5	3.3	(D)	(D)	-	-	4.5	-	-
2111	CIGARETTES	12	3.2	3.2	-	-	-	-	3.2	-	-
2141	TOBACCO STEMMING AND REDRYING	8	(D)	.1	(D)	(D)	-	-	(D)	-	-
22	TEXTILE MILL PRODUCTS	690	162.9	87.6	59.0	15.7	(D)	(D)	161.2	1.7	-
2211	WEAVING MILLS, COTTON	82	18.2	(D)	12.0	.8	-	(D)	(D)	(D)	-
2221	WEAVING MILLS, MANMADE FIBER, SILK	144	30.0	18.3	8.8	2.6	(D)	(D)	(D)	(D)	-
2231	WEAVING AND FINISHING MILLS, WOOL	21	3.9	.8	2.7	(D)	-	(D)	(D)	(D)	-
2241	NARROW FABRIC MILLS	7	.4	(D)	-	(D)	-	-	.4	-	-
225	KNITTING MILLS	124	20.9	17.1	(D)	2.3	-	(D)	(D)	(D)	-
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	11	(D)	.5	-	(D)	-	-	(D)	-	-
2252	HOSIERY, NEC	18	.9	(D)	-	(D)	-	-	.9	-	-
2253	KNIT OUTERWEAR MILLS	13	1.5	1.2	(D)	(D)	-	-	1.5	-	-
2254	KNIT UNDERWEAR MILLS	12	(D)	(D)	(D)	-	-	-	(D)	-	-
2257	CIRCULAR KNIT FABRIC MILLS	53	12.8	(D)	(D)	1.7	-	-	(D)	(D)	-
2258	WARP KNIT FABRIC MILLS	16	3.5	2.6	(D)	(D)	-	(D)	3.5	-	-
226	TEXTILE FINISHING, EXCEPT WOOL	139	50.8	18.3	26.1	(D)	-	(D)	(D)	(D)	-
2261	FINISHING PLANTS, COTTON	34	11.9	2.0	8.7	1.3	-	-	(D)	(D)	-
2262	FINISH. PLTS, MANMADE FIBER, SILK	74	34.4	13.1	(D)	3.8	-	(D)	(D)	(D)	-
2269	FINISHING PLANTS, NEC	31	4.5	3.3	(D)	(D)	-	-	4.5	-	-
227	FLOOR COVERING MILLS	57	22.4	19.2	1.7	1.5	-	-	22.4	-	-
2272	TUFTED CARPETS AND RUGS	54	22.0	19.1	1.7	1.3	-	-	22.0	-	-
228	YARN AND THREAD MILLS	67	8.8	5.6	(D)	(D)	-	(D)	8.8	-	-
2281	YARN MILLS, EXCEPT WOOL	41	5.3	3.3	(D)	.6	-	(D)	5.3	-	-

See footnotes at end of table.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
22	TEXTILE MILL PRODUCTS--CON.										
228	YARN AND THREAD MILLS--CON.										
2282	THROWING AND WINDING MILLS	16	(D)	(D)	-	(D)	-	-	(D)	-	-
2284	THREAD MILLS	9	2.0	(D)	(D)	-	-	-	2.0	-	-
229	MISCELLANEOUS TEXTILE GOODS.	49	7.6	2.6	4.0	(D)	-	(D)	7.6	-	-
2294	PROCESSED TEXTILE WASTE.	3	.1	.1	(D)	(D)	-	-	.1	-	-
2295	COATED FABRICS, NOT RUBBERIZED	11	3.9	.8	(D)	(D)	-	(D)	3.9	-	-
2296	TIRE CORD AND FABRIC	7	.4	.2	(D)	(D)	-	-	.4	-	-
2297	NONWOVEN FABRICS	15	2.5	1.0	(D)	(D)	-	-	2.5	-	-
2298	CORDAGE AND TWINE.	3	(D)	(D)	-	-	-	-	(D)	-	-
2299	TEXTILE GOODS, NEC	5	.3	(D)	(D)	(D)	-	-	.3	-	-
24	LUMBER AND WOOD PRODUCTS	269	156.9	39.3	86.5	11.7	9.4	10.0	146.9	(D)	(D)
242	SAWMILLS AND PLANING MILLS	140	122.4	33.8	63.9	(D)	(D)	8.7	113.1	(D)	(D)
2421	SAWMILLS, PLANING MILLS, GENERAL	138	(D)	(D)	63.9	(D)	(D)	8.7	113.1	(D)	(D)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	77	13.8	2.4	6.8	3.8	(D)	(D)	(D)	(D)	-
2431	MILLWORK	3	(D)	(Z)	(D)	(D)	-	-	(D)	-	-
2435	HARDWOOD VENEER AND PLYWOOD.	8	2.0	.4	(D)	(D)	(D)	-	2.0	-	-
2436	SOFTWOOD VENEER AND PLYWOOD.	65	11.5	2.0	6.5	(D)	-	(D)	(D)	(D)	-
249	MISCELLANEOUS WOOD PRODUCTS.	43	10.1	2.9	5.6	(D)	(D)	(D)	(D)	(D)	(D)
2492	PARTICLEBOARD.	11	(D)	.2	.3	(D)	-	-	(D)	-	-
2499	WOOD PRODUCTS, NEC	29	9.4	2.6	5.3	(D)	(D)	(D)	8.9	(D)	(D)
25	FURNITURE AND FIXTURES	59	24.0	22.5	(D)	(D)	-	(Z)	24.0	-	-
2514	METAL HOUSEHOLD FURNITURE.	9	.5	(D)	-	(D)	-	-	.5	-	-
252	OFFICE FURNITURE	6	.6	(D)	-	(D)	-	-	.6	-	-
2522	METAL OFFICE FURNITURE	6	.6	(D)	-	(D)	-	-	.6	-	-
254	PARTITIONS AND FIXTURES.	12	.8	(D)	-	(D)	-	-	.8	-	-
2542	METAL PARTITIONS AND FIXTURES.	12	.8	(D)	-	(D)	-	-	.8	-	-
26	PAPER AND ALLIED PRODUCTS.	551	1 963.1	276.5	1 222.8	360.3	77.0	26.9	1 872.9	65.0	25.2
2611	PULPMILLS.	32	287.3	43.2	119.7	108.7	(D)	(D)	261.3	(D)	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER.	220	878.1	73.0	666.6	121.3	(D)	(D)	865.5	(D)	(D)
2631	PAPERBOARD MILLS	148	609.8	46.8	383.0	113.3	47.5	19.5	562.5	(D)	(D)
264	MISC. CONVERTED PAPER PRODUCTS	95	79.3	13.7	(D)	(D)	(D)	(D)	75.0	(D)	(D)
2641	PAPER COATING AND GLAZING.	35	5.3	1.5	(D)	3.3	-	(D)	(D)	(D)	-
2643	BAGS, EXCEPT TEXTILE BAGS.	22	10.0	5.2	(D)	.7	(D)	-	(D)	(D)	(D)
2647	SANITARY PAPER PRODUCTS.	16	24.7	.4	16.1	7.9	(D)	(D)	24.7	-	-
2649	CONVERTED PAPER PRODUCTS, NEC.	4	.5	.2	(D)	(D)	-	-	.5	-	-
265	PAPERBOARD CONTAINERS AND BOXES.	27	(D)	(D)	(D)	(D)	-	-	(D)	-	-
2653	CORRUGATED AND SOLID FIBER BOXES	11	.7	.2	(D)	(D)	-	-	.7	-	-
2654	SANITARY FOOD CONTAINERS	8	(D)	.3	-	(D)	-	-	(D)	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	1 238	4 325.5	727.1	2 250.5	365.6	781.5	200.8	3 424.7	181.5	719.4
281	INDUSTRIAL INORGANIC CHEMICALS	270	964.6	125.6	559.2	65.5	91.3	123.0	822.9	54.5	87.2
2812	ALKALIES AND CHLORINE.	23	175.8	4.5	151.5	10.1	(D)	-	140.8	(D)	(D)
2816	INORGANIC PIGMENTS	30	(D)	10.3	25.4	9.5	(D)	(D)	48.6	(D)	(D)
2819	INDUSTRIAL INORGANIC CHEM., NEC.	163	653.8	108.4	365.2	44.7	(D)	(D)	612.7	22.3	18.8
282	PLASTICS MATERIALS, SYNTHETICS	199	481.6	54.8	287.3	61.0	66.1	12.3	433.3	(D)	(D)
2821	PLASTICS MATERIALS AND RESINS.	132	150.7	22.1	44.4	33.3	(D)	(D)	102.4	(D)	(D)
2822	SYNTHETIC RUBBER	19	33.2	(D)	(D)	(D)	-	(D)	33.1	(D)	(D)
2823	CELLULOSIC MANMADE FIBERS.	7	109.0	(D)	(D)	(D)	-	-	109.0	-	-
2824	ORGANIC FIBERS, NONCELLULOSIC.	41	188.7	5.6	150.7	13.4	(D)	(D)	188.7	-	-
283	DRUGS.	112	90.1	15.2	(D)	28.8	(D)	1.2	(D)	-	(D)
2831	BIOLOGICAL PRODUCTS.	8	.3	.3	-	.1	-	-	.3	-	-
2833	MEDICINALS AND BOTANICALS.	22	55.2	4.5	(D)	12.1	(D)	(D)	(D)	-	(D)
2834	PHARMACEUTICAL PREPARATIONS.	82	34.6	10.4	(D)	16.6	-	(D)	(D)	-	(D)
284	SOAPS, CLEANERS, TOILET GOODS.	97	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.7
2841	SOAP AND OTHER DETERGENTS.	40	17.5	6.4	(D)	2.1	6.7	(D)	(D)	(D)	6.7
2842	POLISHES AND SANITATION GOODS.	10	1.5	(D)	-	(D)	-	-	1.5	-	-
2843	SURFACE ACTIVE AGENTS.	19	15.0	10.8	(D)	(D)	(D)	-	(D)	(D)	-
2844	TOILET PREPARATIONS.	28	(D)	(D)	-	.7	-	(D)	(D)	-	-
286	INDUSTRIAL ORGANIC CHEMICALS	279	2 150.6	290.9	1 187.2	66.6	562.2	43.6	1 533.5	95.7	521.4
2865	CYCLIC CRUDES AND INTERMEDIATES.	76	(D)	124.4	32.3	8.6	(D)	(D)	(D)	(D)	-
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	197	1 909.9	164.6	1 154.8	57.1	(D)	(D)	(D)	(D)	521.4
287	AGRICULTURAL CHEMICALS	109	301.6	(D)	141.2	117.9	(D)	20.0	262.0	(D)	(D)
2873	NITROGENOUS FERTILIZERS.	58	87.4	10.2	(D)	34.6	-	(D)	80.5	(D)	(D)
2874	PHOSPHATIC FERTILIZERS	36	190.7	2.6	91.7	67.5	(D)	(D)	(D)	10.6	(D)
2879	AGRICULTURAL CHEMICALS, NEC.	13	(D)	(D)	(D)	9.6	-	-	(D)	-	-
289	MISCELLANEOUS CHEMICAL PRODUCTS.	137	188.7	97.1	61.2	20.9	(D)	(D)	176.4	(D)	(D)
2891	ADHESIVES AND SEALANTS	23	4.1	.8	(D)	.5	(D)	-	4.1	-	-
2895	CARBON BLACK	28	4.4	.7	(D)	3.0	-	(D)	(D)	(D)	-
2899	CHEMICAL PREPARATIONS, NEC	66	140.9	94.5	22.8	14.2	(D)	(D)	(D)	3.3	(D)
29	PETROLEUM AND COAL PRODUCTS.	263	1 172.5	231.6	449.6	90.2	360.7	40.7	693.2	382.3	97.0
2911	PETROLEUM REFINING	198	1 149.4	223.7	448.8	76.0	360.4	40.5	670.4	382.0	97.0

See footnotes at end of table.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
29	PETROLEUM AND COAL PRODUCTS--CON.										
295	PAVING AND ROOFING MATERIALS	45	21.6	7.1	(D)	13.8	(D)	(D)	(D)	(D)	-
2952	ASPHALT FELTS AND COATINGS	30	(D)	7.0	(D)	1.6	(D)	(D)	(D)	(D)	-
299	MISC. PETROLEUM, COAL PRODUCTS	20	1.6	.9	(D)	(D)	-	(D)	(D)	(D)	-
2992	LUBRICATING OILS AND GREASES	8	.4	.3	(D)	(D)	-	-	.4	-	-
2999	PETROLEUM AND COAL PRODUCTS, NEC	12	1.2	.6	(D)	(D)	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	458	187.0	74.6	49.2	61.2	(D)	(D)	182.7	4.3	-
3011	TIRES AND INNER TUBES	58	41.5	(D)	19.0	12.5	-	(D)	41.5	-	-
3021	RUBBER AND PLASTICS FOOTWEAR	6	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-
3041	RUBBER, PLASTICS HOSE AND BELTING	26	10.2	2.1	(D)	(D)	-	-	(D)	(D)	-
3069	FABRICATED RUBBER PRODUCTS, NEC.	104	18.9	11.7	4.0	3.1	(D)	(D)	(D)	(D)	-
3079	MISCELLANEOUS PLASTICS PRODUCTS.	262	114.1	51.1	19.1	42.4	-	.9	112.3	1.8	-
31	LEATHER AND LEATHER PRODUCTS	52	8.5	5.7	1.4	1.4	-	-	(D)	(D)	-
3111	LEATHER TANNING AND FINISHING.	48	6.4	3.6	1.4	1.4	-	-	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS.	592	206.6	42.1	96.6	44.5	19.0	4.4	183.6	5.4	17.7
322	GLASS, PRESSED OR BLOWN.	124	15.6	10.7	(D)	4.3	-	(D)	(D)	(D)	-
3221	GLASS CONTAINERS	81	8.1	5.4	(D)	2.3	-	(D)	(D)	(D)	-
3229	PRESSED AND BLOWN GLASS, NEC	43	7.5	5.4	(D)	2.0	-	(D)	7.5	-	-
3231	PRODUCTS OF PURCHASED GLASS.	17	1.6	1.0	(D)	(D)	-	(D)	1.6	-	-
3241	CEMENT, HYDRAULIC.	123	85.4	3.1	63.3	15.7	(D)	(D)	82.5	2.9	-
325	STRUCTURAL CLAY PRODUCTS	15	1.2	(D)	(D)	(D)	-	-	1.2	-	-
3251	BRICK AND STRUCTURAL CLAY TILE	3	.1	(D)	(D)	-	-	-	.1	-	-
3253	CERAMIC WALL AND FLOOR TILE.	3	(D)	(D)	-	(D)	-	-	(D)	-	-
3255	CLAY REFRACTORIES.	5	.8	.2	(D)	(D)	-	-	.8	-	-
3259	STRUCTURAL CLAY PRODUCTS, NEC.	4	(D)	(D)	-	-	-	-	(D)	-	-
326	POTTERY AND RELATED PRODUCTS	27	2.0	1.3	(D)	(D)	-	-	(D)	(D)	-
3261	VITREOUS PLUMBING FIXTURES	11	.9	(D)	(D)	.6	-	-	(D)	(D)	-
3262	VITREOUS CHINA FOOD UTENSILS	5	(D)	(D)	-	(D)	-	-	(D)	-	-
3263	FINE EARTHENWARE FOOD UTENSILS	4	(D)	(D)	-	-	-	-	(D)	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES.	7	.5	.5	-	-	-	-	.5	-	-
327	CONCRETE, GYPSUM, PLASTER PRODS.	129	34.1	14.2	7.5	10.8	(D)	(D)	32.9	(D)	(D)
3272	CONCRETE PRODUCTS, NEC	11	(D)	.1	-	.6	-	-	(D)	-	-
3273	READY-MIXED CONCRETE	53	22.2	12.7	(D)	6.0	(D)	-	21.0	(D)	(D)
3274	LIME	25	7.5	.1	3.9	2.4	-	1.2	(D)	(D)	-
3275	GYPSUM PRODUCTS.	39	2.5	1.3	(D)	.7	-	(D)	(D)	(D)	-
3281	CUT STONE AND STONE PRODUCTS	5	(D)	(D)	(D)	(D)	-	-	(D)	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	132	45.8	7.6	8.1	11.1	(D)	(D)	27.3	(D)	(D)
3291	ABRASIVE PRODUCTS.	20	3.9	1.7	(D)	(D)	-	(D)	(D)	(D)	-
3292	ASBESTOS PRODUCTS.	21	3.1	1.2	(D)	(D)	-	-	3.1	-	-
3295	MINERALS, GROUND OR TREATED.	21	22.5	.4	3.4	3.2	(D)	(D)	7.2	(D)	(D)
3296	MINERAL WOOL	42	8.3	3.7	(D)	3.1	-	(D)	(D)	(D)	-
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	10	2.9	.2	(D)	(D)	-	(D)	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	779	3 392.1	170.4	2 375.4	210.8	309.3	326.3	2 989.5	283.7	118.8
331	BLAST FURNACE, BASIC STEEL PROD.	249	2 839.5	94.6	2 235.8	150.8	(D)	(D)	2 564.0	(D)	(D)
3312	BLAST FURNACES AND STEEL MILLS	149	2 782.8	85.3	2 200.7	145.3	(D)	(D)	2 507.4	(D)	(D)
3315	STEEL WIRE AND RELATED PRODUCTS.	34	(D)	2.4	(D)	.5	-	-	(D)	(D)	-
3316	COLD FINISHING OF STEEL SHAPES	30	13.8	4.4	(D)	2.6	-	(D)	13.8	-	-
3317	STEEL PIPE AND TUBES	27	5.3	2.4	(D)	1.0	-	(D)	(D)	(D)	-
332	IRON AND STEEL FOUNDRIES	197	66.3	31.6	30.7	(D)	-	(D)	(D)	(D)	-
3321	GRAY IRON FOUNDRIES.	127	51.9	23.8	25.8	(D)	-	(D)	51.9	-	-
3322	MALLEABLE IRON FOUNDRIES	15	7.2	2.6	(D)	(D)	-	-	7.2	-	-
3325	STEEL FOUNDRIES, NEC	48	(D)	4.7	(D)	.9	-	(D)	(D)	(D)	-
333	PRIMARY NONFERROUS METALS.	81	391.1	(D)	63.0	35.8	(D)	193.1	265.7	(D)	(D)
3331	PRIMARY COPPER	24	29.3	3.1	4.9	14.5	(D)	(D)	(D)	6.8	(D)
3334	PRIMARY ALUMINUM	30	200.5	(D)	27.5	16.2	-	(D)	(D)	(D)	-
3341	SECONDARY NONFERROUS METALS.	21	1.6	(D)	-	(D)	-	(D)	1.6	-	-
335	NONFERROUS ROLLING AND DRAWING	167	87.1	22.8	(D)	(D)	-	(D)	86.1	1.0	-
3351	COPPER ROLLING AND DRAWING	39	26.7	8.3	13.1	(D)	-	(D)	(D)	(D)	-
3353	ALUMINUM SHEET, PLATE, AND FOIL.	23	36.1	3.3	(D)	7.2	-	(D)	36.1	-	-
3354	ALUMINUM EXTRUDED PRODUCTS	29	(D)	3.0	-	(D)	-	(D)	(D)	-	-
3356	NONFERROUS ROLLING & DRAWING, NEC.	19	6.8	1.8	4.0	1.0	-	-	6.8	-	-
3357	NONFERROUS WIREDRAWING, INSULATING.	52	10.5	6.4	(D)	(D)	-	-	(D)	(D)	-
336	NONFERROUS FOUNDRIES	32	3.9	2.6	(D)	.5	-	(D)	3.9	-	-
3361	ALUMINUM FOUNDRIES	19	2.1	1.7	(D)	(D)	-	(D)	2.1	-	-
3362	BRASS, BRONZE, COPPER FOUNDRIES.	3	(D)	(D)	-	(D)	-	-	(D)	-	-
3369	NONFERROUS FOUNDRIES, NEC.	10	(D)	(D)	(D)	.3	-	-	(D)	-	-
339	MISC. PRIMARY METAL PRODUCTS	32	2.5	1.4	-	(D)	-	(D)	(D)	(D)	-
3398	METAL HEAT TREATING.	23	1.3	.9	-	(D)	-	(D)	1.3	-	-
3399	PRIMARY METAL PRODUCTS, NEC.	9	1.2	.5	-	(D)	-	(D)	(D)	(D)	-

See footnotes at end of table.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
34	FABRICATED METAL PRODUCTS	682	90.0	63.4	2.7	13.5	(D)	(D)	78.9	(D)	(D)
341	METAL CANS, SHIPPING CONTAINERS	57	4.1	3.7	(D)	(D)	-	(D)	(D)	(D)	-
3411	METAL CANS	50	3.8	(D)	(D)	(D)	-	-	(D)	(D)	-
3412	METAL BARRELS, DRUMS, AND PAILS	7	.3	(D)	-	-	-	(D)	.3	-	-
342	CUTLERY, HANDTOOLS AND HARDWARE	74	19.6	8.0	(D)	1.4	(D)	-	9.4	(D)	(D)
3423	HAND AND EDGE TOOLS, NEC	24	2.8	(D)	-	(D)	-	-	2.8	-	-
3425	HANDSAWS AND SAW BLADES	5	(D)	(D)	-	(D)	-	-	(D)	-	-
3429	HARDWARE, NEC	41	5.6	4.9	(D)	(D)	-	-	(D)	(D)	-
343	PLUMBING, HEATING, EXCEPT ELEC	29	2.8	(D)	(D)	.4	-	-	(D)	(D)	-
3431	METAL SANITARY WARE	7	.8	.5	(D)	(D)	-	-	.8	-	-
3432	PLUMBING FITTINGS AND BRASS GOODS	13	.8	(D)	-	(D)	-	-	.8	-	-
3433	HEATING EQUIPMENT, EXC. ELECTRIC	9	1.2	.7	(D)	(D)	-	-	(D)	(D)	-
344	FABRICATED STRUC. METAL PRODS	62	8.5	7.5	(D)	.8	-	(D)	(D)	(D)	-
3442	METAL DOORS, SASH, AND TRIM	13	.6	(D)	-	(D)	-	-	.6	-	-
3443	FABRICATED PLATEWORK, BOILER SHOP	25	3.1	2.5	(D)	(D)	-	(D)	(D)	(D)	-
3444	SHEET METALWORK	10	.6	.6	-	-	-	-	.6	-	-
3446	ARCHITECTURAL METALWORK	4	.2	.2	-	-	-	-	.2	-	-
3448	PREFABRICATED METAL BUILDINGS	4	(D)	(D)	-	-	-	-	(D)	-	-
345	SCREW MACHINE PROD., BOLTS, ETC	42	4.1	(D)	-	(D)	-	-	4.1	-	-
3452	BOLTS, NUTS, RIVETS, AND WASHERS	40	(D)	(D)	-	(D)	-	-	(D)	-	-
346	METAL FORGINGS AND STAMPINGS	135	15.4	12.3	(D)	2.0	-	(D)	(D)	(D)	-
3462	IRON AND STEEL FORGINGS	35	3.9	2.6	(D)	.9	-	(D)	(D)	(D)	-
3463	NONFERROUS FORGINGS	6	(D)	(D)	(D)	-	-	-	(D)	-	-
3465	AUTOMOTIVE STAMPINGS	48	6.0	5.1	(D)	(D)	-	-	6.0	-	-
3466	CROWNS AND CLOSURES	4	(D)	(D)	-	(D)	-	-	(D)	-	-
3469	METAL STAMPINGS, NEC	42	3.6	2.9	(D)	(D)	-	-	3.6	-	-
347	METAL SERVICES, NEC	140	10.8	8.5	(D)	2.0	-	(D)	10.8	-	-
3471	PLATING AND POLISHING	121	9.3	7.8	(D)	(D)	-	-	9.3	-	-
3479	METAL COATING AND ALLIED SERVICES	19	1.5	.7	(D)	(D)	-	(D)	1.5	-	-
348	ORDNANCE AND ACCESSORIES, NEC	41	9.6	5.1	(D)	(D)	-	-	(D)	(D)	-
3482	SMALL ARMS AMMUNITION	8	1.4	(D)	(D)	.9	-	-	1.4	-	-
3483	AMMUNITION, EXC. SMALL ARMS, NEC	17	4.0	(D)	(D)	1.6	-	-	(D)	(D)	-
3484	SMALL ARMS	7	1.6	(D)	-	(D)	-	-	(D)	(D)	-
3489	ORDNANCE AND ACCESSORIES NEC	9	2.6	(D)	-	(D)	-	-	2.6	-	-
349	MISC. FABRICATED METAL PRODUCTS	102	15.2	13.4	-	(D)	-	(D)	(D)	(D)	-
3493	STEEL SPRINGS, EXCEPT WIRE	5	(D)	.3	-	(D)	-	-	(D)	-	-
3494	VALVES AND PIPE FITTINGS	47	10.7	9.6	-	(D)	-	(D)	(D)	(D)	-
3495	WIRE SPRINGS	3	(D)	(D)	-	-	-	-	(D)	-	-
3496	MISC. FABRICATED WIRE PRODUCTS	18	2.2	(D)	-	(D)	-	-	2.2	-	-
3497	METAL FOIL AND LEAF	7	.4	(D)	-	(D)	-	-	.4	-	-
3498	FABRICATED PIPE AND FITTINGS	7	.3	.3	-	-	-	-	.3	-	-
3499	FABRICATED METAL PRODUCTS, NEC	15	1.1	.7	-	.4	-	-	1.1	-	-
35	MACHINERY, EXCEPT ELECTRICAL	507	164.5	81.1	40.1	20.5	(D)	(D)	148.0	(D)	(D)
351	ENGINES AND TURBINES	47	38.0	6.0	15.3	.7	(D)	(D)	27.6	(D)	(D)
3511	TURBINES, TURBINE GENERATOR SETS	13	32.4	2.4	(D)	(D)	(D)	(D)	(D)	-	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	34	5.5	3.6	(D)	(D)	-	-	(D)	(D)	-
352	FARM AND GARDEN MACHINERY	51	46.2	30.9	(D)	(D)	-	-	46.2	-	-
3523	FARM MACHINERY AND EQUIPMENT	43	45.7	(D)	(D)	(D)	-	-	45.7	-	-
3524	LAWN AND GARDEN EQUIPMENT	8	.5	(D)	-	(D)	-	-	.5	-	-
353	CONSTRUCTION, RELATED MACHINERY	73	16.6	4.0	(D)	5.0	-	(D)	(D)	(D)	-
3531	CONSTRUCTION MACHINERY	40	14.4	(D)	(D)	4.5	-	-	(D)	(D)	-
3532	MINING MACHINERY	6	.3	(D)	-	(D)	-	-	.3	-	-
3533	OILFIELD MACHINERY	11	1.1	.6	-	.3	-	(D)	(D)	(D)	-
3535	CONVEYORS AND CONVEYING EQUIPMENT	3	.1	(D)	-	(D)	-	-	.1	-	-
3536	HOISTS, CRANES, AND MONORAILS	3	(D)	(D)	-	-	-	-	(D)	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS	9	.5	(D)	-	(D)	-	-	.5	-	-
354	METALWORKING MACHINERY	64	9.3	6.6	(D)	2.2	-	(D)	(D)	(D)	-
3541	MACHINE TOOLS, METAL-CUTTING	19	3.1	(D)	-	1.7	-	(D)	(D)	(D)	-
3542	MACHINE TOOLS, METAL-FORMING	4	(D)	(D)	-	(D)	-	-	(D)	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC	6	1.7	(D)	(D)	-	-	-	1.7	-	-
3545	MACHINE TOOL ACCESSORIES	18	2.3	2.2	(D)	(D)	-	-	2.3	-	-
3546	POWER DRIVEN HANDTOOLS	16	1.6	.9	(D)	(D)	-	-	(D)	(D)	-
355	SPECIAL INDUSTRY MACHINERY	24	8.9	3.1	(D)	(D)	-	(D)	(D)	(D)	-
3551	FOOD PRODUCTS MACHINERY	3	(D)	(D)	-	(D)	-	-	(D)	-	-
3552	TEXTILE MACHINERY	4	(D)	(D)	(D)	(D)	-	(D)	(D)	-	-
356	GENERAL INDUSTRIAL MACHINERY	101	10.9	6.4	(D)	4.2	-	(D)	10.7	(D)	(D)
3561	PUMPS AND PUMPING EQUIPMENT	21	1.9	1.0	-	(D)	-	(D)	1.9	-	-
3562	BALL AND ROLLER BEARINGS	26	3.6	(D)	(D)	1.3	-	-	3.4	(D)	(D)
3563	AIR AND GAS COMPRESSORS	13	1.7	1.2	-	.4	-	-	(D)	(D)	-
3566	SPEED CHANGERS, DRIVES, AND GEARS	9	.7	.6	(D)	(D)	-	-	(D)	(D)	-
3568	POWER TRANSMISSION EQUIPMENT, NEC	22	2.4	1.1	-	1.2	-	(D)	2.4	-	-
3569	GENERAL INDUSTRIAL MACHINERY, NEC	6	.3	(D)	-	(D)	-	-	.3	-	-
357	OFFICE AND COMPUTING MACHINES	55	20.1	12.2	(D)	1.6	-	(D)	(D)	(D)	-
3573	ELECTRONIC COMPUTING EQUIPMENT	37	17.4	10.3	(D)	.7	-	(D)	17.4	-	-
3574	CALCULATING, ACCOUNTING MACHINES	5	(D)	(D)	-	(D)	-	-	(D)	(D)	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC	12	1.6	(D)	-	(D)	-	-	1.6	-	-
358	REFRIGERATION AND SERVICE MACH	68	11.9	9.9	-	2.0	-	-	11.9	-	-
3581	AUTOMATIC MERCHANDISING MACHINES	3	.1	(D)	-	(D)	-	-	.1	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	57	11.4	9.5	-	2.0	-	-	11.4	-	-
3586	MEASURING AND DISPENSING PUMPS	5	.3	(D)	-	(D)	-	-	.3	-	-

See footnotes at end of table.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry and group industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
35	MACHINERY, EXCEPT ELECTRICAL--CON.										
359	MISC. MACHINERY, EXC. ELEC	24	2.5	2.1	-	.4	-	-	2.5	-	-
3592	CARBURETORS, PISTONS, RINGS, ETC	19	2.3	1.9	-	.4	-	-	2.3	-	-
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	5	.2	.2	-	-	-	-	.2	-	-
36	ELECTRIC, ELECTRONIC EQUIP	561	116.0	90.1	3.3	20.0	(D)	(D)	108.4	(D)	(D)
361	ELECTRIC DISTRIBUTING EQUIPMENT.	47	5.3	4.9	-	.4	-	-	(D)	(D)	-
3612	TRANSFORMERS	22	2.7	(D)	-	(D)	-	-	2.7	-	-
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	25	2.6	(D)	-	(D)	-	-	(D)	(D)	-
362	ELECTRICAL INDUSTRIAL APPARATUS.	71	9.7	7.7	-	(D)	-	(D)	9.7	-	-
3621	MOTORS AND GENERATORS.	29	3.9	2.1	-	(D)	-	(D)	3.9	-	-
3622	INDUSTRIAL CONTROLS.	20	1.7	(D)	-	(D)	-	-	1.7	-	-
3623	WELDING APPARATUS, ELECTRIC.	5	.3	(D)	-	(D)	-	-	.3	-	-
3624	CARBON AND GRAPHITE PRODUCTS	13	3.6	(D)	-	(D)	-	-	3.6	-	-
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	4	.2	(D)	-	(D)	-	-	.2	-	-
363	HOUSEHOLD APPLIANCES	75	17.3	12.7	-	(D)	-	(D)	(D)	-	(D)
3631	HOUSEHOLD COOKING EQUIPMENT.	19	4.6	4.3	-	.3	-	-	4.6	-	-
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	11	6.1	(D)	-	(D)	-	-	6.1	-	-
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	10	2.3	(D)	-	(D)	-	-	2.3	-	-
3634	ELECTRIC HOUSEWARES AND FANS	16	1.8	(D)	-	(D)	-	-	1.8	-	-
3635	HOUSEHOLD VACUUM CLEANERS.	4	(D)	.4	-	-	-	-	(D)	-	-
3639	HOUSEHOLD APPLIANCES, NEC.	11	1.9	(D)	-	-	-	(D)	(D)	-	(D)
364	ELEC. LIGHTING, WIRING EQUIP	58	11.6	(D)	(D)	6.8	-	-	(D)	(D)	-
3641	ELECTRIC LAMPS	15	1.0	(D)	-	(D)	-	-	1.0	-	-
3643	CURRENT-CARRYING WIRING DEVICES.	11	7.2	1.0	(D)	(D)	-	-	(D)	(D)	-
3644	NONCURRENT-CARRYING WIR'G DEVICES.	16	1.6	1.2	-	.4	-	-	1.6	-	-
3645	RESIDENTIAL LIGHTING FIXTURES.	4	.1	.1	-	-	-	-	.1	-	-
3646	COMMERCIAL LIGHTING FIXTURES	3	(D)	(D)	-	-	-	-	(D)	-	-
3648	LIGHTING EQUIPMENT, NEC.	5	.5	.5	-	-	-	-	.5	-	-
365	RADIO, TV RECEIVING EQUIPMENT.	20	2.1	(D)	-	(D)	-	-	2.1	-	-
3651	RADIO AND TV RECEIVING SETS.	11	1.4	(D)	-	(D)	-	-	1.4	-	-
3652	PHONO. RECORDS, PRERECORDED TAPE	9	.7	(D)	-	(D)	-	-	.7	-	-
366	COMMUNICATION EQUIPMENT.	90	14.3	10.1	(D)	2.6	(D)	-	12.8	(D)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	66	(D)	5.4	(D)	2.0	(D)	-	(D)	(D)	-
367	ELECTRONIC COMPONENTS, ACCESS.	131	23.1	17.5	(D)	3.8	-	(D)	(D)	(D)	-
3671	ELECTRON TUBES, RECEIVING TYPE	23	4.0	3.1	(D)	(D)	-	(D)	4.0	-	-
3674	SEMICONDUCTORS, RELATED DEVICES.	45	10.8	9.1	(D)	(D)	-	-	(D)	(D)	-
3675	ELECTRONIC CAPACITORS.	10	2.7	.9	(D)	(D)	-	-	2.7	-	-
3676	ELECTRONIC RESISTORS	10	.5	(D)	-	(D)	-	-	.5	-	-
3678	ELECTRONIC CONNECTORS.	9	1.1	(D)	-	(D)	-	-	1.1	-	-
3679	ELECTRONIC COMPONENTS, NEC	34	4.0	3.3	-	.7	-	-	4.0	-	-
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	69	32.6	31.1	(D)	(D)	-	-	32.6	-	-
3691	STORAGE BATTERIES.	37	2.3	(D)	-	(D)	-	-	2.3	-	-
3692	PRIMARY BATTERIES, DRY AND WET	4	.3	.2	(D)	(D)	-	-	.3	-	-
3693	X-RAY APPARATUS AND TUBES.	6	.6	(D)	-	(D)	-	-	.6	-	-
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	5	(D)	(D)	-	(D)	-	-	(D)	-	-
37	TRANSPORTATION EQUIPMENT	445	234.5	165.9	32.5	21.6	11.9	2.5	222.3	4.5	7.7
371	MOTOR VEHICLES AND EQUIPMENT	256	169.8	133.4	(D)	11.2	-	(D)	169.8	-	-
3711	MOTOR VEHICLES AND CAR BODIES.	65	29.5	27.6	(D)	(D)	-	-	29.5	-	-
3714	MOTOR VEHICLE PARTS, ACCESSORIES	186	139.9	105.4	24.5	(D)	-	(D)	139.9	-	-
372	AIRCRAFT AND PARTS	98	38.7	18.9	(D)	8.9	(D)	1.6	(D)	(D)	(D)
3721	AIRCRAFT	30	10.4	(D)	-	(D)	-	-	(D)	(D)	-
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	37	22.2	6.4	5.4	5.1	(D)	(D)	(D)	-	(D)
3728	AIRCRAFT EQUIPMENT, NEC.	31	6.2	(D)	(D)	.4	-	(D)	6.2	-	-
373	SHIP, BOAT BUILDING, REPAIRING	29	14.7	4.4	(D)	1.1	(D)	(D)	6.4	(D)	(D)
3731	SHIP BUILDING AND REPAIRING.	28	(D)	4.4	(D)	1.0	(D)	(D)	6.3	(D)	(D)
3743	RAILROAD EQUIPMENT	19	3.9	(D)	(D)	(D)	-	-	3.9	-	-
3751	MOTORCYCLES, BICYCLES, AND PARTS	6	1.6	(D)	-	(D)	-	-	1.6	-	-
376	GUIDED MISSILES, SPACE VEHICLES.	30	4.9	3.4	(D)	(D)	-	-	(D)	(D)	-
3761	GUIDED MISSILES, SPACE VEHICLES.	17	2.5	2.3	(D)	(D)	-	-	2.5	-	-
3764	SPACE PROPULSION UNITS AND PARTS	11	(D)	.6	(D)	(D)	-	-	(D)	(D)	-
379	MISC. TRANSPORTATION EQUIPMENT	7	.8	.8	-	-	-	-	.8	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	148	35.5	13.5	17.5	(D)	-	(D)	35.5	-	-
3811	ENGINEERING, SCIENTIFIC INSTRU	12	.7	(D)	-	(D)	-	(D)	.7	-	-
382	MEASURING, CONTROLLING DEVICES	49	5.4	4.4	(D)	(D)	-	-	5.4	-	-
3822	ENVIRONMENTAL CONTROLS	11	1.9	1.5	-	(D)	-	-	1.9	-	-
3823	PROCESS CONTROL INSTRUMENTS.	7	.5	.3	-	(D)	-	-	.5	-	-
3824	FLUID METERS AND COUNTING DEVICES.	12	1.0	1.0	-	(D)	-	-	1.0	-	-
3825	INSTRU. TO MEASURE ELECTRICITY	13	1.8	1.4	(D)	(D)	-	-	1.8	-	-
3829	MEASUR'G, CONTROL'G DEVICES, NEC	6	.3	.2	-	(D)	-	-	.3	-	-
3832	OPTICAL INSTRUMENTS AND LENSES	7	(D)	(D)	-	(D)	-	-	(D)	-	-
384	MEDICAL INSTRUMENTS, SUPPLIES.	31	2.3	2.2	(D)	(D)	-	-	2.3	-	-
3841	SURGICAL AND MEDICAL INSTRUMENTS	11	(D)	(D)	-	(D)	-	-	(D)	-	-
3842	SURGICAL APPLIANCES AND SUPPLIES	17	1.6	(D)	(D)	(D)	-	-	1.6	-	-

See footnotes at end of table.

Table 2a. Water Intake, by Source and by Kind, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
38	INSTRUMENTS, RELATED PRODUCTS--CON.										
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	32	20.1	4.4	(D)	2.7	-	(D)	20.1	-	-
3873	WATCHES, CLOCKS, AND WATCHCASES	9	.6	.3	(D)	(D)	-	-	.6	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	82	7.7	5.3	.4	2.0	-	-	(D)	(D)	-
391	JEWELRY, SILVER AND PLATED WARE	10	.7	(D)	(D)	-	-	-	(D)	(D)	-
3911	JEWELRY, PRECIOUS METAL	3	(D)	(D)	-	-	-	-	(D)	-	-
3914	SILVERWARE AND PLATED WARE	6	.5	(D)	(D)	-	-	-	(D)	(D)	-
3931	MUSICAL INSTRUMENTS	4	.2	(D)	-	(D)	-	-	.2	-	-
394	TOYS AND SPORTING GOODS	19	1.6	1.2	(D)	(D)	-	-	1.6	-	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	9	1.0	.7	-	.3	-	-	1.0	-	-
3949	SPORTING AND ATHLETIC GOODS, NEC	10	.6	.5	(D)	(D)	-	-	.6	-	-
395	PENS, OFFICE AND ART GOODS	8	.8	(D)	-	(D)	-	-	.8	-	-
3951	PENS AND MECHNICAL PENCILS	5	(D)	(D)	-	(D)	-	-	(D)	-	-
396	COSTUME JEWELRY AND NOTIONS	21	1.2	1.1	(D)	(D)	-	-	(D)	(D)	-
3961	COSTUME JEWELRY	5	.3	(D)	-	(D)	-	-	.3	-	-
3964	NEEDLES, PINS, AND FASTENERS	16	.9	(D)	(D)	(D)	-	-	(D)	(D)	-
399	MISCELLANEOUS MANUFACTURES	20	3.3	1.9	(D)	(D)	-	-	3.3	-	-
3996	HARD SURFACE FLOOR COVERINGS	6	1.6	(D)	-	(D)	-	-	1.6	-	-
3999	MANUFACTURING INDUSTRIES, NEC	10	1.4	(D)	(D)	(D)	-	-	1.4	-	-

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries, whether or not separate figures are shown for individual industries in the group. Industries omitted from table have a water intake level of less than .05, or have data withheld to avoid disclosure.

-Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (Z) Less than 50 million gallons.

Table 2b. Water Intake, by Source and by Kind, for States: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

State	Establishments (number)	Water intake by source						Water intake by kind		
		Total	Public water system	Company system			Other	Fresh	Brackish	Salt
				Surface	Ground	Tidewater				
UNITED STATES, TOTAL	9 605	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9	10 975.9	988.7	1 027.1
ALABAMA	199	294.2	72.7	201.5	16.2	(D)	(D)	289.3	4.9	-
ARIZONA	51	21.5	4.4	(D)	15.2	-	(D)	20.2	1.3	-
ARKANSAS	129	73.7	(D)	29.8	35.2	-	(D)	(D)	-	(D)
CALIFORNIA	659	307.6	118.4	12.7	69.4	99.6	7.5	206.2	17.1	84.2
COLORADO	66	65.6	12.1	47.7	5.3	-	.4	(D)	(D)	-
CONNECTICUT	172	87.7	22.8	25.6	6.3	(D)	(D)	55.3	(D)	(D)
DELAWARE	42	169.3	5.7	17.1	5.5	(D)	(D)	(D)	135.5	(D)
FLORIDA	149	221.1	19.9	25.5	141.2	(D)	(D)	172.3	(D)	(D)
GEORGIA	295	271.2	56.0	75.8	103.9	(D)	(D)	238.8	(D)	(D)
HAWAII	28	111.4	1.7	42.5	65.9	(D)	(D)	94.8	(D)	(D)
IDAHO	52	32.6	(D)	17.0	14.8	-	(D)	32.6	-	-
ILLINOIS	604	430.9	85.4	254.6	64.6	-	26.5	428.2	2.7	-
INDIANA	356	634.8	33.3	561.7	37.0	-	2.8	(D)	(D)	-
IOWA	169	147.3	(D)	73.1	47.7	-	(D)	147.0	(D)	(D)
KANSAS	98	37.0	11.3	7.0	18.2	(D)	(D)	33.8	3.2	-
KENTUCKY	159	139.9	51.0	65.0	22.8	(D)	(D)	(D)	(D)	-
LOUISIANA	188	1 280.2	(D)	986.2	104.1	(D)	180.1	1 118.0	161.0	1.2
MAINE	55	137.1	5.6	125.0	(D)	3.3	(D)	133.4	(D)	(D)
MARYLAND	122	371.8	18.4	39.7	(D)	265.4	(D)	(D)	219.0	(D)
MASSACHUSETTS	247	152.4	41.2	69.4	12.7	28.7	.4	110.2	14.3	27.9
MICHIGAN	447	874.3	278.2	544.3	51.4	-	.5	871.9	(D)	(D)
MINNESOTA	188	160.9	100.1	34.8	25.3	(D)	(D)	160.9	-	-
MISSISSIPPI	107	99.3	(D)	30.7	47.0	(D)	(D)	87.7	(D)	(D)
MISSOURI	190	50.7	24.9	6.7	14.2	-	4.9	(D)	(D)	-
MONTANA	25	32.2	1.4	23.8	(D)	-	(D)	(D)	(D)	-
NEBRASKA	80	28.7	13.0	(D)	11.9	-	(D)	(D)	(D)	-
NEVADA	17	18.9	9.0	(D)	5.6	-	(D)	15.1	(D)	(D)
NEW HAMPSHIRE	51	26.2	2.0	23.5	.7	-	-	26.2	-	-
NEW JERSEY	382	331.5	145.7	35.4	35.2	113.6	1.5	221.7	47.2	62.6
NEW MEXICO	18	4.8	1.1	-	3.8	-	-	(D)	(D)	-
NEW YORK	463	469.7	105.9	261.7	27.0	10.2	65.1	435.4	(D)	(D)
NORTH CAROLINA	361	187.0	46.4	115.1	13.2	(D)	(D)	(D)	(D)	-
OHIO	630	584.7	106.4	374.9	73.9	(D)	(D)	582.3	(D)	(D)
OKLAHOMA	80	153.5	140.8	9.0	(D)	-	(D)	(D)	(D)	-
OREGON	164	135.5	11.3	99.5	11.1	(D)	(D)	127.5	(D)	(D)
PENNSYLVANIA	602	1 190.1	67.7	897.1	160.8	31.7	32.9	1 147.0	(D)	(D)
RHODE ISLAND	55	19.1	9.6	2.9	(D)	-	(D)	(D)	(D)	-
SOUTH CAROLINA	274	416.4	45.0	357.8	11.5	(D)	(D)	414.5	1.9	-
TENNESSEE	233	366.6	58.4	278.2	29.4	-	.5	(D)	(D)	-
TEXAS	446	1 395.7	349.3	194.4	70.2	763.6	18.3	580.1	178.3	637.3
UTAH	40	58.7	5.8	(D)	12.2	-	(D)	15.8	(D)	(D)
VERMONT	25	5.8	1.2	3.1	(D)	-	(D)	5.8	-	-
VIRGINIA	177	247.3	18.0	161.3	35.0	31.6	1.3	213.7	(D)	(D)
WASHINGTON	174	424.4	77.8	160.8	48.6	(D)	(D)	401.3	14.6	8.6
WEST VIRGINIA	73	456.9	37.5	399.1	(D)	-	(D)	(D)	(D)	-
WISCONSIN	414	202.7	57.8	123.8	(D)	(D)	.5	197.5	5.3	-
WYOMING	15	10.7	3.2	6.9	(D)	-	(D)	(D)	(D)	-

Note: States for which all data would be withheld to avoid disclosure have been omitted from the table.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

Table 2c. Water Intake, by Source and by Kind, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	UNITED STATES, TOTAL	9 605	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9	10 975.9	988.7	1 027.1
	NEW ENGLAND	589	424.6	81.6	247.2	27.3	63.9	4.9	346.3	16.8	61.5
20	FOOD AND KINDRED PRODUCTS	43	10.7	5.9	(D)	2.1	(D)	-	6.9	(D)	(D)
22	TEXTILE MILL PRODUCTS	61	18.6	10.4	7.3	(D)	-	(D)	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	76	209.5	6.1	198.5	(D)	-	(D)	209.5	-	-
28	CHEMICALS AND ALLIED PRODUCTS	43	55.3	10.4	(D)	5.1	36.2	(D)	(D)	(D)	34.6
29	PETROLEUM AND COAL PRODUCTS	4	.3	(D)	(D)	(D)	-	-	.3	-	-
30	RUBBER, MISC. PLASTICS PROD	42	10.0	3.0	5.4	(D)	-	(D)	(D)	(D)	-
31	LEATHER AND LEATHER PRODUCTS	9	2.6	2.2	(D)	(D)	-	-	2.6	-	-
32	STONE, CLAY, GLASS PRODUCTS	16	3.2	1.4	(D)	.8	-	(D)	3.2	-	-
33	PRIMARY METAL INDUSTRIES	54	24.3	5.8	12.1	5.4	(D)	(D)	23.7	(D)	(D)
34	FABRICATED METAL PRODUCTS	60	16.9	5.6	(D)	.6	(D)	(D)	6.7	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	48	22.1	6.2	(D)	.2	(D)	(D)	6.7	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	47	11.4	4.4	(D)	6.0	-	(D)	(D)	(D)	-
37	TRANSPORTATION EQUIPMENT	31	29.4	15.0	6.8	2.6	(D)	(D)	24.6	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	28	8.3	3.8	4.4	.1	-	-	8.3	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	24	1.8	(D)	(D)	(D)	-	-	(D)	(D)	-
	MIDDLE ATLANTIC	1 296	1 618.7	251.6	491.9	228.2	595.3	51.6	1 061.8	416.3	140.6
20	FOOD AND KINDRED PRODUCTS	271	69.5	23.0	(D)	19.7	19.8	(D)	52.3	(D)	(D)
21	TOBACCO PRODUCTS	7	1.4	(D)	(D)	(D)	-	-	1.4	-	-
22	TEXTILE MILL PRODUCTS	77	13.3	9.2	2.2	(D)	-	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	6	.7	(D)	(D)	.4	-	-	.7	-	-
26	PAPER AND ALLIED PRODUCTS	91	159.3	6.8	119.5	17.2	(D)	(D)	(D)	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS	247	491.6	147.4	159.1	31.3	152.8	1.3	344.0	61.2	86.4
29	PETROLEUM AND COAL PRODUCTS	20	271.0	(D)	85.6	3.7	177.4	(D)	113.9	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	85	25.0	7.0	(D)	11.6	(D)	-	(D)	(D)	-
31	LEATHER AND LEATHER PRODUCTS	9	.9	.5	(D)	(D)	-	-	.9	-	-
32	STONE, CLAY, GLASS PRODUCTS	92	26.4	4.1	8.8	8.8	(D)	(D)	23.4	(D)	(D)
34	FABRICATED METAL PRODUCTS	65	10.5	8.8	(D)	(D)	-	(D)	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	51	26.0	3.3	(D)	2.9	(D)	(D)	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	94	17.1	10.9	(D)	3.7	(D)	(D)	15.6	(D)	(D)
37	TRANSPORTATION EQUIPMENT	44	15.7	6.1	(D)	3.3	5.7	(D)	10.0	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	29	4.7	1.7	(D)	2.7	-	(D)	4.7	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	13	2.0	1.0	(D)	(D)	-	-	(D)	(D)	-
	SOUTH ATLANTIC	1 302	1 369.2	235.6	707.1	324.9	74.0	27.8	1 262.3	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	246	54.3	22.6	(D)	27.3	-	(D)	(D)	(D)	-
21	TOBACCO PRODUCTS	9	2.6	(D)	-	(D)	-	-	2.6	-	-
22	TEXTILE MILL PRODUCTS	459	117.8	60.1	46.3	11.5	(D)	(D)	116.8	1.1	-
24	LUMBER AND WOOD PRODUCTS	38	9.2	3.9	.6	.9	-	3.9	8.9	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	64	514.4	27.2	281.4	150.8	51.9	3.2	462.5	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	140	480.4	15.6	314.7	114.9	(D)	(D)	441.8	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	12	6.1	3.9	-	(D)	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	41	26.3	10.5	12.5	(D)	-	(D)	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	63	15.5	4.6	2.2	5.5	(D)	(D)	11.8	(D)	(D)
33	PRIMARY METAL INDUSTRIES	42	63.9	19.9	38.4	(D)	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	42	5.4	3.7	-	1.7	-	-	5.4	-	-
35	MACHINERY, EXCEPT ELECTRICAL	32	16.5	9.6	(D)	(D)	-	-	16.5	-	-
36	ELECTRIC, ELECTRONIC EQUIP	49	9.1	6.8	(D)	(D)	-	-	(D)	(D)	-

See footnotes at end table.

Table 2c. Water Intake, by Source and by Kind, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	SOUTH ATLANTIC--CON.										
37	TRANSPORTATION EQUIPMENT	26	32.6	30.0	(D)	(D)	(D)	-	(D)	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS	13	(D)	(D)	-	(D)	-	-	(D)	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	10	(D)	(D)	-	(D)	-	-	(D)	-	-
	GREAT LAKES	1 770	2 513.7	531.7	1 800.4	106.0	(D)	(D)	2 480.9	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	343	104.9	53.1	27.0	24.5	-	.3	(D)	(D)	-
22	TEXTILE MILL PRODUCTS	7	.7	(D)	-	(D)	-	-	.7	-	-
24	LUMBER AND WOOD PRODUCTS	7	2.8	.6	(D)	(D)	(D)	(D)	2.8	-	-
25	FURNITURE AND FIXTURES	13	1.2	(D)	-	(D)	-	-	1.2	-	-
26	PAPER AND ALLIED PRODUCTS	107	219.7	48.7	149.4	(D)	-	(D)	(D)	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS	185	476.5	245.0	176.1	20.6	-	34.9	449.5	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	36	154.3	5.6	124.0	12.5	(D)	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	96	49.7	19.2	19.1	11.4	-	-	(D)	(D)	-
31	LEATHER AND LEATHER PRODUCTS	19	2.6	1.9	(D)	(D)	-	-	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	88	55.1	5.5	47.1	(D)	-	(D)	53.5	(D)	(D)
33	PRIMARY METAL INDUSTRIES	214	1 297.1	51.9	1 216.2	(D)	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	220	22.9	20.5	(D)	1.4	-	(D)	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	134	20.4	14.2	1.5	4.5	-	-	20.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	119	16.9	14.1	(D)	(D)	-	-	16.9	-	-
37	TRANSPORTATION EQUIPMENT	145	71.6	45.1	23.2	3.3	-	-	71.6	-	-
38	INSTRUMENTS, RELATED PRODUCTS	26	15.6	3.4	(D)	(D)	-	-	15.6	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	11	1.4	1.1	(D)	(D)	-	-	1.4	-	-
	OHIO	1 080	1 717.3	189.3	1 318.4	159.0	-	50.6	1 671.4	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	170	31.3	17.3	(D)	10.0	-	(D)	(D)	(D)	-
21	TOBACCO PRODUCTS	4	(D)	(D)	-	-	-	-	(D)	-	-
22	TEXTILE MILL PRODUCTS	13	2.0	1.3	(D)	(D)	-	-	2.0	-	-
24	LUMBER AND WOOD PRODUCTS	7	.3	.2	(D)	(D)	-	-	.3	-	-
25	FURNITURE AND FIXTURES	10	.8	(D)	-	(D)	-	-	.8	-	-
26	PAPER AND ALLIED PRODUCTS	43	52.7	(D)	25.5	23.7	-	(D)	52.7	-	-
28	CHEMICALS AND ALLIED PRODUCTS	139	485.2	(D)	387.7	51.2	-	(D)	(D)	(D)	-
29	PETROLEUM AND COAL PRODUCTS	30	31.3	6.4	12.6	12.3	-	-	31.3	-	-
30	RUBBER, MISC. PLASTICS PROD.	75	22.8	12.5	(D)	7.8	-	(D)	(D)	(D)	-
31	LEATHER AND LEATHER PRODUCTS	3	(D)	(D)	(D)	(D)	-	-	(D)	-	-
32	STONE, CLAY, GLASS PRODUCTS	98	27.5	9.0	14.5	(D)	-	(D)	27.2	(D)	(D)
33	PRIMARY METAL INDUSTRIES	156	971.6	28.5	870.6	29.0	-	43.5	929.8	41.8	-
34	FABRICATED METAL PRODUCTS	106	9.5	6.8	(D)	(D)	-	-	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	71	14.5	10.1	(D)	(D)	-	(D)	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	77	40.9	36.5	(D)	(D)	-	-	40.9	-	-
37	TRANSPORTATION EQUIPMENT	60	24.4	13.1	(D)	9.3	-	(D)	24.4	-	-
38	INSTRUMENTS, RELATED PRODUCTS	11	1.1	(D)	-	(D)	-	-	1.1	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	7	.5	.5	-	-	-	-	.5	-	-
	TENNESSEE	233	428.0	39.4	381.7	4.2	(D)	(D)	(D)	(D)	-
20	FOOD AND KINDRED PRODUCTS	31	6.4	4.5	-	(D)	-	(D)	6.4	-	-
22	TEXTILE MILL PRODUCTS	38	5.3	2.3	(D)	(D)	-	-	5.3	-	-
26	PAPER AND ALLIED PRODUCTS	15	80.0	1.4	78.4	(D)	-	(D)	80.0	-	-
28	CHEMICALS AND ALLIED PRODUCTS	41	302.1	8.3	292.9	(D)	(D)	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	17	8.6	5.4	(D)	(D)	-	-	8.6	-	-
32	STONE, CLAY, GLASS PRODUCTS	17	2.6	.6	1.7	(D)	-	(D)	2.6	-	-

See footnotes at end of table.

Table 2c. Water Intake, by Source and by Kind, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	TENNESSEE--CON.										
33	PRIMARY METAL INDUSTRIES	23	9.5	4.5	3.4	(D)	-	(D)	9.5	-	-
34	FABRICATED METAL PRODUCTS	7	.7	.6	(D)	(D)	-	-	.7	-	-
35	MACHINERY, EXCEPT ELECTRICAL	6	.4	.4	(D)	-	-	-	.4	-	-
36	ELECTRIC, ELECTRONIC EQUIP	15	2.0	(D)	-	(D)	-	-	2.0	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	4	.2	(D)	-	-	-	-	.2	-	-
	UPPER MISSISSIPPI	731	530.2	182.2	209.2	113.6	(D)	(D)	523.6	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	255	112.5	28.1	39.6	37.7	(D)	(D)	(D)	-	(D)
22	TEXTILE MILL PRODUCTS	4	.6	(D)	-	(D)	-	-	.6	-	-
24	LUMBER AND WOOD PRODUCTS	4	1.0	.7	(D)	(D)	-	-	1.0	-	-
25	FURNITURE AND FIXTURES	3	(D)	(D)	-	-	-	-	(D)	-	-
26	PAPER AND ALLIED PRODUCTS	42	169.4	94.4	63.9	(D)	-	(D)	(D)	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS	70	67.3	9.3	36.0	(D)	-	(D)	(D)	(D)	-
29	PETROLEUM AND COAL PRODUCTS	5	8.7	(D)	-	(D)	-	-	8.7	-	-
30	RUBBER, MISC. PLASTICS PROD.	33	20.9	(D)	(D)	12.8	-	-	20.9	-	-
32	STONE, CLAY, GLASS PRODUCTS	40	18.7	1.8	13.6	(D)	-	(D)	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	59	68.2	7.0	37.1	(D)	-	(D)	68.2	-	-
34	FABRICATED METAL PRODUCTS	62	6.7	3.9	(D)	(D)	-	-	6.7	-	-
35	MACHINERY, EXCEPT ELECTRICAL	75	44.2	18.5	18.5	7.2	-	-	44.2	-	-
36	ELECTRIC, ELECTRONIC EQUIP	40	4.1	3.2	-	.9	-	-	4.1	-	-
37	TRANSPORTATION EQUIPMENT	25	5.5	5.2	(D)	(D)	-	(D)	5.5	-	-
38	INSTRUMENTS, RELATED PRODUCTS	7	.9	.4	-	.5	-	-	.9	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	4	1.0	(D)	-	(D)	-	-	1.0	-	-
	LOWER MISSISSIPPI	338	1 405.6	37.4	1 007.9	179.4	(D)	(D)	1 241.6	161.0	3.0
20	FOOD AND KINDRED PRODUCTS	78	34.4	4.5	16.5	12.7	(D)	(D)	33.5	(D)	(D)
22	TEXTILE MILL PRODUCTS	7	1.5	.6	-	.8	-	-	1.5	-	-
24	LUMBER AND WOOD PRODUCTS	25	6.7	(D)	4.9	1.3	-	(D)	6.7	-	-
25	FURNITURE AND FIXTURES	4	.4	(D)	-	(D)	-	-	.4	-	-
26	PAPER AND ALLIED PRODUCTS	26	135.1	.3	59.1	75.7	-	-	135.1	-	-
28	CHEMICALS AND ALLIED PRODUCTS	84	801.5	(D)	723.3	56.3	(D)	19.8	787.6	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	23	235.3	(D)	202.0	19.5	-	(D)	86.4	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	13	6.8	(D)	-	6.2	-	(D)	6.8	-	-
32	STONE, CLAY, GLASS PRODUCTS	11	2.9	.3	-	2.6	-	-	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	23	2.7	1.1	-	1.6	-	(D)	2.7	-	-
35	MACHINERY, EXCEPT ELECTRICAL	8	.9	(D)	-	(D)	-	-	.9	-	-
36	ELECTRIC, ELECTRONIC EQUIP	9	.5	(D)	-	(D)	-	-	.5	-	-
	SOURIS - RED - RAINY										
20	FOOD AND KINDRED PRODUCTS	9	.9	.7	-	.2	-	-	.9	-	-
	MISSOURI	316	161.5	44.1	47.7	45.9	-	23.7	159.1	2.4	-
20	FOOD AND KINDRED PRODUCTS	149	73.7	20.0	27.1	25.4	-	1.1	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	5	.5	(D)	-	(D)	-	-	.5	-	-
28	CHEMICALS AND ALLIED PRODUCTS	32	15.7	2.5	(D)	10.2	-	(D)	(D)	(D)	-
29	PETROLEUM AND COAL PRODUCTS	17	43.5	3.1	17.2	(D)	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	12	4.4	1.0	-	3.4	-	-	4.4	-	-
33	PRIMARY METAL INDUSTRIES	10	2.0	.4	(D)	(D)	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	12	2.3	(D)	-	(D)	-	-	2.3	-	-
36	ELECTRIC, ELECTRONIC EQUIP	17	1.6	(D)	-	(D)	-	-	1.6	-	-
37	TRANSPORTATION EQUIPMENT	11	2.5	1.8	(D)	(D)	-	-	2.5	-	-
38	INSTRUMENTS, RELATED PRODUCTS	7	.8	(D)	-	(D)	-	-	.8	-	-

See footnotes at end of table.

Table 2c. Water Intake, by Source and by Kind, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	ARKANSAS, WHITE AND RED	300	322.1	175.0	101.5	34.0	(D)	(D)	314.2	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	84	16.0	11.8	(D)	3.8	-	(D)	(D)	(D)	-
22	TEXTILE MILL PRODUCTS	3	.3	(D)	-	(D)	-	-	.3	-	-
26	PAPER AND ALLIED PRODUCTS	11	36.5	2.1	(D)	(D)	-	(D)	36.5	-	-
28	CHEMICALS AND ALLIED PRODUCTS	45	33.1	7.2	8.5	16.7	(D)	(D)	26.6	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	27	136.2	124.7	(D)	8.2	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	16	1.9	1.1	-	(D)	-	(D)	1.9	-	-
32	STONE, CLAY, GLASS PRODUCTS	25	5.5	1.1	3.0	1.5	-	-	5.5	-	-
33	PRIMARY METAL INDUSTRIES	20	75.7	12.3	(D)	(D)	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	13	1.5	.4	(D)	(D)	-	-	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	13	6.3	(D)	-	(D)	-	-	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	16	1.7	1.7	-	-	-	-	1.7	-	-
37	TRANSPORTATION EQUIPMENT	13	1.6	(D)	-	(D)	-	-	1.6	-	-
38	INSTRUMENTS, RELATED PRODUCTS	5	.5	(D)	-	-	-	-	.5	-	-
	TEXAS GULF	386	1 247.5	333.6	150.1	58.0	698.2	7.7	497.6	177.9	571.9
20	FOOD AND KINDRED PRODUCTS	94	16.6	9.3	-	(D)	-	(D)	(D)	(D)	-
22	TEXTILE MILL PRODUCTS	6	1.3	.7	(D)	(D)	-	-	1.3	-	-
24	LUMBER AND WOOD PRODUCTS	15	2.0	.3	.8	1.0	-	-	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	6	51.0	(D)	(D)	28.0	-	-	51.0	-	-
28	CHEMICALS AND ALLIED PRODUCTS	101	853.8	227.1	122.1	11.3	492.6	.7	316.0	48.7	489.2
29	PETROLEUM AND COAL PRODUCTS	34	193.2	61.1	7.5	6.6	116.9	1.2	76.9	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	10	4.0	.7	(D)	2.0	-	(D)	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	36	5.5	(D)	.4	3.6	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	21	7.2	7.0	-	(D)	-	(D)	7.2	-	-
35	MACHINERY, EXCEPT ELECTRICAL	20	1.4	1.1	-	(D)	-	(D)	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	13	2.8	(D)	-	(D)	-	-	2.8	-	-
37	TRANSPORTATION EQUIPMENT	13	5.7	4.8	(D)	(D)	-	(D)	(D)	(D)	-
	RIO GRANDE										
20	FOOD AND KINDRED PRODUCTS	11	1.1	(D)	-	.5	-	(D)	1.1	-	-
29	PETROLEUM AND COAL PRODUCTS	3	1.6	(D)	-	(D)	-	-	(D)	(D)	-
	LOWER COLORADO	67	26.3	4.8	(D)	17.6	-	(D)	24.9	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	10	1.8	(D)	-	(D)	-	-	1.8	-	-
24	LUMBER AND WOOD PRODUCTS	5	.6	(D)	(D)	(D)	-	-	.6	-	-
28	CHEMICALS AND ALLIED PRODUCTS	7	1.2	(D)	(D)	(D)	-	(D)	1.2	-	-
32	STONE, CLAY, GLASS PRODUCTS	11	1.7	.1	-	1.7	-	-	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	15	12.5	(D)	(D)	8.4	-	(D)	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	3	.6	(D)	-	-	-	-	.6	-	-
	GREAT BASIN	42	64.9	11.0	(D)	14.3	-	(D)	18.2	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	15	2.4	(D)	(D)	.9	-	-	(D)	(D)	-
29	PETROLEUM AND COAL PRODUCTS	4	2.1	(D)	-	(D)	-	-	(D)	(D)	-
	COLUMBIA - NORTH PACIFIC	393	605.0	88.2	281.7	75.5	19.7	140.2	573.8	15.4	15.9
20	FOOD AND KINDRED PRODUCTS	133	36.7	9.5	1.7	25.2	(D)	(D)	36.4	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	111	89.4	8.2	63.0	3.5	(D)	(D)	80.1	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	37	243.4	56.0	167.0	14.9	(D)	(D)	226.6	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	25	161.8	2.0	(D)	13.4	(D)	(D)	(D)	-	(D)
29	PETROLEUM AND COAL PRODUCTS	6	5.5	5.3	(D)	-	-	-	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	3	.1	(D)	-	(D)	-	-	.1	-	-

See footnotes at end of table.

Table 2c. Water Intake, by Source and by Kind, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments (no.)	Water intake by source						Water intake by kind		
			Total	Public water system	Company system			Other	Fresh	Brackish	Salt
					Surface	Ground	Tidewater				
	COLUMBIA - NORTH PACIFIC--CON.										
32	STONE, CLAY, GLASS PRODUCTS	17	5.9	(D)	3.6	1.5	-	(D)	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	31	57.3	2.2	23.8	16.6	(D)	(D)	55.8	(D)	(D)
34	FABRICATED METAL PRODUCTS	6	.7	(D)	-	(D)	-	-	.7	-	-
35	MACHINERY, EXCEPT ELECTRICAL	5	.2	(D)	-	(D)	-	-	.2	-	-
37	TRANSPORTATION EQUIPMENT	13	3.1	(D)	-	(D)	-	-	3.1	-	-
	CALIFORNIA - SOUTH PACIFIC	667	310.3	118.4	15.0	69.9	99.6	7.5	209.0	17.1	84.2
20	FOOD AND KINDRED PRODUCTS	233	56.5	17.2	-	29.3	(D)	(D)	46.4	(D)	(D)
22	TEXTILE MILL PRODUCTS	10	1.2	(D)	-	(D)	-	-	1.2	-	-
24	LUMBER AND WOOD PRODUCTS	39	37.4	20.4	13.3	3.4	(D)	(D)	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	23	39.0	17.3	(D)	9.3	(D)	(D)	33.7	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	67	26.1	7.8	(D)	5.3	13.0	(D)	11.2	2.1	12.8
29	PETROLEUM AND COAL PRODUCTS	35	80.6	14.2	(D)	11.9	(D)	.4	26.6	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	12	6.1	5.6	-	.5	-	-	6.1	-	-
31	LEATHER AND LEATHER PRODUCTS	3	(D)	(D)	-	-	-	-	(D)	-	-
32	STONE, CLAY, GLASS PRODUCTS	46	21.0	1.5	(D)	7.0	(D)	(D)	(D)	-	(D)
33	PRIMARY METAL INDUSTRIES	25	17.8	11.3	-	(D)	(D)	-	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	43	2.9	(D)	-	(D)	-	-	2.9	-	-
35	MACHINERY, EXCEPT ELECTRICAL	20	2.0	1.3	-	(D)	(D)	(D)	(D)	-	(D)
36	ELECTRIC, ELECTRONIC EQUIP	52	5.5	(D)	-	(D)	-	-	5.5	-	-
37	TRANSPORTATION EQUIPMENT	42	6.4	5.2	(D)	(D)	(D)	(D)	6.3	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	13	(D)	.7	-	(D)	-	(D)	(D)	-	-
	ALASKA										
20	FOOD AND KINDRED PRODUCTS	9	1.3	.5	(D)	(D)	(D)	-	(D)	-	(D)
	HAWAII	28	111.4	1.7	42.5	65.9	(D)	(D)	94.8	(D)	(D)
20	FOOD AND KINDRED PRODUCTS	23	108.5	.7	42.5	64.1	(D)	(D)	93.7	(D)	(D)

Note: Water use regions or major industry groups which have been omitted from table have water intake of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1]See appendix H for maps and appendix I for definitions.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	ALL INDUSTRIES, TOTAL	12 991.7	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
20	FOOD AND KINDRED PRODUCTS	739.6	260.4	63.9	12.5	272.2	26.3	36.1	68.2
201	MEAT PRODUCTS	112.4	66.1	1.0	1.7	26.4	6.0	6.4	4.8
2011	MEATPACKING PLANTS	77.5	40.7	.9	1.4	22.9	3.6	4.8	3.2
2013	SAUSAGES AND OTHER PREPARED MEATS	5.2	2.8	(D)	(D)	1.3	.4	.3	(D)
2016	POULTRY DRESSING PLANTS	28.1	22.0	.1	.1	1.4	2.0	1.1	1.3
2017	POULTRY AND EGG PROCESSING	1.7	.7	(D)	(D)	.7	.1	.2	(D)
202	DAIRY PRODUCTS	42.2	11.4	.2	.4	19.8	3.2	3.1	4.1
2021	CREAMERY BUTTER	1.4	.2	(D)	-	.9	(D)	.1	.1
2022	CHEESE, NATURAL AND PROCESSED	5.9	1.1	(D)	(D)	3.2	.3	.6	.5
2023	CONDENSED AND EVAPORATED MILK	11.8	2.3	(D)	.1	7.9	(D)	.6	.5
2024	ICE CREAM AND FROZEN DESSERTS	2.0	.8	(D)	(D)	.6	.3	.1	.2
2026	FLUID MILK	21.1	7.1	.1	.2	7.1	2.3	1.6	2.7
203	PRESERVED FRUITS AND VEGETABLES	112.7	68.0	.8	.2	28.1	2.4	7.0	5.9
2032	CANNED SPECIALTIES	17.2	11.2	(D)	.1	2.8	(D)	1.6	.9
2033	CANNED FRUITS AND VEGETABLES	43.1	28.0	.1	.1	9.2	1.1	3.1	1.3
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	4.0	2.9	-	(D)	.2	(D)	.3	.4
2035	PICKLES, SAUCES, SALAD DRESSINGS	2.7	1.2	-	(Z)	.7	.1	.2	.4
2037	FROZEN FRUITS AND VEGETABLES	40.1	21.6	(D)	(D)	13.5	.4	1.5	2.6
2038	FROZEN SPECIALTIES	5.7	3.2	(D)	(D)	1.6	.3	.2	.3
204	GRAIN MILL PRODUCTS	88.5	14.4	5.8	1.2	59.2	1.5	4.9	1.7
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	.8	.2	(D)	(D)	(D)	(Z)	.2	.1
2043	CEREAL BREAKFAST FOODS	5.1	1.5	(D)	.8	1.2	.6	.5	(D)
2044	RICE MILLING	(D)	(D)	-	(D)	(D)	(D)	(Z)	(D)
2046	WET CORN MILLING	78.8	11.6	(D)	.4	56.1	(D)	3.9	1.0
2047	DOG, CAT, AND OTHER PET FOOD	2.2	.6	(D)	(D)	.9	.2	.2	.2
2048	PREPARED FEEDS, NEC	1.3	(D)	-	(D)	.8	(D)	.1	.1
205	BAKERY PRODUCTS	4.6	1.6	(D)	(D)	1.1	.6	.4	.5
2051	BREAD, CAKE, AND RELATED PRODUCTS	2.7	1.4	(D)	(D)	.2	.4	.2	.4
2052	COOKIES AND CRACKERS	1.9	.2	(D)	(D)	.9	.2	.2	(Z)
206	SUGAR, CONFECTIONERY PRODUCTS	207.1	45.5	41.1	2.9	67.5	4.4	4.3	41.4
2061	RAW CANE SUGAR	118.4	14.2	39.9	(D)	20.0	3.5	(D)	39.3
2062	CANE SUGAR REFINING	56.0	24.5	(D)	.5	27.8	.2	1.7	(D)
2063	BEET SUGAR	21.3	6.2	-	(D)	13.3	.2	(D)	1.2
2065	CONFECTIONERY PRODUCTS	(D)	.5	(D)	2.1	.8	.3	.3	(D)
2066	CHOCOLATE AND COCOA PRODUCTS	6.2	.1	-	.1	5.6	.1	.3	(Z)
207	FATS AND OILS	43.6	4.2	(D)	(D)	27.4	4.2	5.7	1.4
2074	COTTONSEED OIL MILLS	(D)	.1	-	(D)	1.7	(Z)	.1	(D)
2075	SOYBEAN OIL MILLS	20.9	2.6	-	.1	15.6	.3	2.0	.3
2077	ANIMAL AND MARINE FATS AND OILS	3.2	.2	(D)	-	2.2	(Z)	.3	(D)
2079	SHORTENING AND COOKING OILS	17.4	1.3	(D)	(D)	7.8	4.0	3.3	.8
208	BEVERAGES	105.0	38.2	14.0	5.2	32.8	3.1	3.6	7.8
2082	MALT BEVERAGES	73.4	26.2	13.4	.9	23.2	.8	2.5	6.2
2083	MALT	7.9	3.0	-	4.0	.8	(Z)	(Z)	(Z)
2084	WINES, BRANDY, AND BRANDY SPIRITS	2.0	.6	-	(D)	.6	.3	.1	(D)
2085	DISTILLED LIQUOR, EXCEPT BRANDY	9.0	1.2	(D)	.2	6.5	.3	.6	(D)
2086	BOTTLED AND CANNED SOFT DRINKS	8.2	6.0	(Z)	.1	.2	1.0	.2	.7
2087	FLAVORING EXTRACTS, SIRUPS, NEC	4.4	1.2	(D)	(D)	1.5	.7	.2	.3
209	MISC. FOODS, KINDRED PRODUCTS	23.5	10.5	.1	.4	10.0	.8	.7	.7
2091	CANNED AND CURED SEAFOODS	4.2	1.7	-	(D)	2.4	.1	(D)	(D)
2092	FRESH OR FROZEN PACKAGED FISH	2.6	1.7	(D)	(D)	(D)	.2	(Z)	.1
2095	ROASTED COFFEE	(D)	.5	(D)	(Z)	.7	.1	.2	(D)
2097	MANUFACTURED ICE	1.7	(D)	-	-	1.5	(Z)	-	(D)
2098	MACARONI AND SPAGHETTI	(D)	(D)	-	(D)	(D)	(D)	(D)	-
2099	FOOD PREPARATIONS, NEC	13.3	6.5	(D)	.4	5.0	(D)	.4	.5
21	TOBACCO PRODUCTS	4.5	2.2	(D)	.5	1.0	.3	.3	(D)
2111	CIGARETTES	3.2	1.3	(D)	.4	.8	.3	.3	(D)
2141	TOBACCO STEMMING AND REDRYING	(D)	.9	-	(Z)	.2	(Z)	.1	(D)
22	TEXTILE MILL PRODUCTS	162.9	110.4	3.4	8.6	11.5	4.8	10.3	13.9
2211	WEAVING MILLS, COTTON	18.2	7.8	2.9	3.2	1.3	.8	1.1	1.0
2221	WEAV'G MILLS, MANMADE FIBER, SILK	30.0	13.7	(D)	2.2	1.8	(D)	1.3	9.4
2231	WEAVING AND FINISHING MILLS, WOOL	3.9	3.6	-	(D)	(D)	.1	.1	(D)
2241	NARROW FABRIC MILLS	.4	.3	-	(D)	(D)	(Z)	(Z)	(D)
225	KNITTING MILLS	20.9	15.2	(D)	1.2	1.1	.7	2.1	(D)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	(D)	.4	-	.1	(D)	(Z)	(Z)	(D)
2252	HOSIERY, NEC	.9	.6	-	(D)	(D)	(Z)	.1	-
2253	KNIT OUTERWEAR MILLS	1.5	1.2	-	(D)	(D)	(Z)	.2	(D)
2254	KNIT UNDERWEAR MILLS	(D)	1.0	-	(D)	(D)	.1	.1	(D)
2257	CIRCULAR KNIT FABRIC MILLS	12.8	9.2	(D)	1.0	.8	.4	1.4	(D)
2258	WARP KNIT FABRIC MILLS	3.5	2.8	(D)	(D)	.2	.1	.2	.1
226	TEXTILE FINISHING, EXCEPT WOOL	50.8	42.7	.1	.5	1.8	.7	3.2	1.7
2261	FINISHING PLANTS, COTTON	11.9	9.0	(D)	.1	.4	.2	1.1	(D)
2262	FINISH. PLTS, MANMADE FIBER, SILK	34.4	29.7	(D)	.3	1.4	.5	1.9	(D)
2269	FINISHING PLANTS, NEC	4.5	3.9	-	.1	.1	.1	.3	.1
227	FLOOR COVERING MILLS	22.4	19.0	-	.4	.5	.2	1.7	.7
2272	TUFTED CARPETS AND RUGS	22.0	18.8	-	.4	.4	.2	1.5	.7
228	YARN AND THREAD MILLS	8.8	5.6	(D)	.8	.7	.6	.5	(D)
2281	YARN MILLS, EXCEPT WOOL	5.3	3.0	(D)	.5	.5	.5	.5	(D)

See footnotes at end of table.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
22	TEXTILE MILL PRODUCTS--CON.								
228	YARN AND THREAD MILLS--CON.								
2282	THROWING AND WINDING MILLS	(D)	.9	-	.2	.1	.1	(Z)	(D)
2284	THREAD MILLS	2.0	1.6	(D)	.1	.1	(Z)	.1	(D)
229	MISCELLANEOUS TEXTILE GOODS.	7.6	2.5	-	.2	3.8	.5	.2	.2
2294	PROCESSED TEXTILE WASTE.	.1	(D)	-	(D)	(D)	(Z)	(Z)	(D)
2295	COATED FABRICS, NOT RUBBERIZED	3.9	.1	-	(D)	3.3	.2	.1	(D)
2296	TIRE CORD AND FABRIC	.4	(D)	-	.1	.1	.1	(Z)	(D)
2297	NONWOVEN FABRICS	2.5	1.8	-	(Z)	.3	.1	.1	.2
2298	CORDAGE AND TWINE.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
2299	TEXTILE GOODS, NEC	.3	.3	-	(D)	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	156.9	61.2	31.5	.2	25.0	4.0	13.4	21.3
242	SAWMILLS AND PLANING MILLS	122.4	48.6	28.4	(D)	14.5	(D)	10.1	18.4
2421	SAWMILLS, PLANING MILLS, GENERAL	(D)	48.6	28.4	(D)	14.5	(D)	10.1	18.4
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	13.8	3.5	(D)	(D)	5.5	.5	1.8	2.1
2431	MILLWORK	(D)	-	(D)	(D)	(D)	(Z)	.1	(D)
2435	HARDWOOD VENEER AND PLYWOOD.	2.0	1.4	-	-	(D)	.1	.3	(D)
2436	SOFTWOOD VENEER AND PLYWOOD.	11.5	2.1	(D)	(D)	5.3	.4	1.4	2.0
249	MISCELLANEOUS WOOD PRODUCTS.	10.1	3.6	(D)	(D)	2.1	1.0	1.0	.8
2492	PARTICLEBOARD.	(D)	.1	-	(D)	.2	(Z)	.2	(D)
2499	WOOD PRODUCTS, NEC	9.4	3.4	(D)	(Z)	1.8	1.0	.8	(D)
25	FURNITURE AND FIXTURES	24.0	4.9	(D)	(D)	(D)	2.5	3.1	(D)
2514	METAL HOUSEHOLD FURNITURE.	.5	.3	-	(D)	.1	(Z)	(Z)	(D)
252	OFFICE FURNITURE	.6	.4	-	(D)	.1	.1	(D)	(D)
2522	METAL OFFICE FURNITURE	.6	.4	-	(D)	.1	.1	(D)	(D)
254	PARTITIONS AND FIXTURES.	.8	.5	-	(D)	.1	.1	(D)	(Z)
2542	METAL PARTITIONS AND FIXTURES.	.8	.5	-	(D)	.1	.1	(D)	(Z)
26	PAPER AND ALLIED PRODUCTS.	1 963.1	1 186.7	370.4	22.6	237.1	25.0	87.1	34.0
2611	PULPMILLS.	287.3	206.6	(D)	2.4	38.3	(D)	10.0	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER.	878.1	534.2	184.4	13.6	102.4	(D)	27.5	(D)
2631	PAPERBOARD MILLS	609.8	345.4	125.0	5.6	86.0	4.2	27.8	15.7
264	MISC. CONVERTED PAPER PRODUCTS	79.3	31.9	32.5	.8	6.4	.9	1.5	.5
2641	PAPER COATING AND GLAZING.	5.3	1.2	(D)	.1	3.6	.2	.2	(D)
2643	BAGS, EXCEPT TEXTILE BAGS.	10.0	4.2	(D)	(D)	1.6	.2	.2	.1
2647	SANITARY PAPER PRODUCTS.	24.7	22.0	-	.3	.8	.3	1.0	.3
2649	CONVERTED PAPER PRODUCTS, NEC.	.5	.3	-	(D)	(Z)	.1	(Z)	(D)
265	PAPERBOARD CONTAINERS AND BOXES.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	.7	.4	-	(D)	.1	(Z)	.1	(D)
2654	SANITARY FOOD CONTAINERS	(D)	(Z)	-	(D)	.3	.1	.1	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	4 325.5	753.9	480.1	70.8	2 760.7	37.6	141.8	80.6
281	INDUSTRIAL INORGANIC CHEMICALS	964.6	146.3	88.4	4.7	665.1	5.1	42.2	12.8
2812	ALKALIES AND CHLORINE.	175.8	35.4	(D)	(D)	90.0	.8	4.0	1.7
2816	INORGANIC PIGMENTS	(D)	20.5	(D)	(D)	80.8	.3	2.5	6.5
2819	INDUSTRIAL INORGANIC CHEM., NEC.	653.8	90.3	41.4	4.0	474.9	4.0	35.5	3.7
282	PLASTICS MATERIALS, SYNTHETICS	481.6	75.0	45.6	43.1	277.1	3.5	18.3	18.9
2821	PLASTICS MATERIALS AND RESINS.	150.7	15.4	(D)	(D)	170.8	1.6	7.3	(D)
2822	SYNTHETIC RUBBER	33.2	7.2	-	.4	21.5	.3	2.2	1.6
2823	CELLULOSIC MANMADE FIBERS.	109.0	32.7	(D)	(D)	57.9	.3	3.5	(D)
2824	ORGANIC FIBERS, NONCELLULOSIC.	188.7	19.7	27.1	34.3	89.9	1.4	5.3	11.0
283	DRUGS.	90.1	10.0	1.9	2.1	69.4	2.2	3.5	1.2
2831	BIOLOGICAL PRODUCTS.	.3	.1	(D)	(Z)	.1	.1	(Z)	(D)
2833	MEDICINALS AND BOTANICALS.	55.2	4.9	(D)	.3	45.9	.2	2.0	(D)
2834	PHARMACEUTICAL PREPARATIONS.	34.6	5.0	(D)	1.8	23.4	1.9	1.4	(D)
284	SOAPS, CLEANERS, TOILET GOODS.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2841	SOAP AND OTHER DETERGENTS.	17.5	2.1	(D)	1.3	9.6	(D)	1.6	.6
2842	POLISHES AND SANITATION GOODS.	1.5	(D)	-	(D)	(D)	.2	(Z)	(D)
2843	SURFACE ACTIVE AGENTS.	15.0	2.2	-	(D)	5.9	.7	5.6	(D)
2844	TOILET PREPARATIONS.	(D)	.4	-	.4	.6	(D)	(D)	.2
286	INDUSTRIAL ORGANIC CHEMICALS	2 150.6	284.4	318.1	7.7	1 463.5	8.6	46.2	22.1
2865	CYCLIC CRUDES AND INTERMEDIATES.	(D)	136.1	(D)	(D)	88.4	1.7	6.6	2.5
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	1 909.9	147.8	(D)	(D)	1 372.9	6.8	39.6	19.5
287	AGRICULTURAL CHEMICALS	301.6	56.7	17.8	1.8	182.2	1.8	21.0	20.3
2873	NITROGENOUS FERTILIZERS.	87.4	5.0	(D)	(D)	60.9	.6	10.6	2.2
2874	PHOSPHATIC FERTILIZERS	190.7	46.2	(D)	1.2	106.2	(D)	9.5	17.7
2879	AGRICULTURAL CHEMICALS, NEC.	(D)	3.6	-	(D)	11.8	.3	1.0	.4
289	MISCELLANEOUS CHEMICAL PRODUCTS.	188.7	68.1	6.4	9.5	84.3	14.7	3.2	2.6
2891	ADHESIVES AND SEALANTS	4.1	1.2	(D)	(D)	1.9	(Z)	.1	.7
2895	CARBON BLACK	4.4	3.0	-	(D)	.7	.1	.3	(D)
2899	CHEMICAL PREPARATIONS, NEC	140.9	59.4	(D)	9.2	52.7	14.0	1.6	(D)
29	PETROLEUM AND COAL PRODUCTS.	1 172.5	60.8	85.4	2.7	825.6	6.2	164.3	27.5
2911	PETROLEUM REFINING	1 149.4	46.8	(D)	(D)	822.0	5.0	160.4	27.1

See footnotes at end of table.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
29	PETROLEUM AND COAL PRODUCTS--CON.								
295	PAVING AND ROOFING MATERIALS	21.6	13.0	(D)	(D)	3.3	1.2	3.7	(D)
2952	ASPHALT FELTS AND COATINGS	(D)	2.3	(D)	(D)	2.6	.5	3.7	(D)
299	MISC. PETROLEUM, COAL PRODUCTS	1.6	1.0	-	(D)	.3	(Z)	.2	(D)
2992	LUBRICATING OILS AND GREASES	.4	.1	-	(D)	.2	(Z)	(D)	(D)
2999	PETROLEUM AND COAL PRODUCTS, NEC	1.2	.9	-	(D)	.2	(Z)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	187.0	27.5	4.7	6.7	111.2	24.2	9.6	3.2
3011	TIRES AND INNER TUBES	41.5	4.6	(D)	(D)	27.2	2.2	4.1	1.4
3021	RUBBER AND PLASTICS FOOTWEAR	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3041	RUBBER, PLASTICS HOSE AND BELTING	10.2	(D)	-	1.5	5.7	.4	.6	(D)
3069	FABRICATED RUBBER PRODUCTS, NEC.	18.9	2.8	3.6	.7	7.8	1.0	2.3	.8
3079	MISCELLANEOUS PLASTICS PRODUCTS.	114.1	18.1	(D)	2.5	69.5	20.5	2.5	(D)
31	LEATHER AND LEATHER PRODUCTS	8.5	4.8	.2	(D)	(D)	2.1	.6	.6
3111	LEATHER TANNING AND FINISHING.	6.4	4.8	.2	(D)	(D)	.2	.6	.5
32	STONE, CLAY, GLASS PRODUCTS.	206.6	83.6	41.0	3.4	59.5	5.1	5.5	8.4
322	GLASS, PRESSED OR BLOWN.	15.6	6.0	-	.6	6.8	1.1	.5	.6
3221	GLASS CONTAINERS	8.1	2.4	-	.1	4.1	.7	.4	.4
3229	PRESSED AND BLOWN GLASS, NEC	7.5	3.6	-	.5	2.7	.4	.1	.2
3231	PRODUCTS OF PURCHASED GLASS.	1.6	.9	-	.2	.3	.1	(D)	(D)
3241	CEMENT, HYDRAULIC.	85.4	12.2	35.8	.7	31.4	1.2	.3	3.7
325	STRUCTURAL CLAY PRODUCTS	1.2	.5	(D)	(D)	(D)	(D)	(D)	.1
3251	BRICK AND STRUCTURAL CLAY TILE	.1	(D)	-	-	(D)	(D)	-	(D)
3253	CERAMIC WALL AND FLOOR TILE.	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3255	CLAY REFRACTORIES.	.8	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
3259	STRUCTURAL CLAY PRODUCTS, NEC.	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
326	POTTERY AND RELATED PRODUCTS	2.0	.7	(D)	.1	.7	.2	.1	(D)
3261	VITREOUS PLUMBING FIXTURES	.9	.2	(D)	(D)	.5	(Z)	(Z)	.1
3262	VITREOUS CHINA FOOD UTENSILS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3263	FINE EARTHENWARE FOOD UTENSILS	(D)	(D)	-	-	(D)	(D)	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES.	.5	.1	(D)	(D)	.1	.1	(D)	(Z)
327	CONCRETE, GYPSUM, PLASTER PRODS.	34.1	27.7	(D)	(D)	3.4	.4	.4	2.2
3272	CONCRETE PRODUCTS, NEC	(D)	.4	-	(D)	(D)	(Z)	.1	(D)
3273	READY-MIXED CONCRETE	22.2	20.9	-	(D)	(D)	(Z)	.2	1.0
3274	LIME	7.5	3.5	-	(D)	3.1	.1	(D)	.9
3275	GYPSUM PRODUCTS.	2.5	2.0	(D)	(D)	.2	.2	(D)	(D)
3281	CUT STONE AND STONE PRODUCTS	(D)	(D)	(D)	-	(D)	(D)	(D)	-
329	MISC. NONMETALLIC MINERAL PRODS.	45.8	31.6	(D)	(D)	8.8	1.6	1.6	1.6
3291	ABRASIVE PRODUCTS.	3.9	1.8	-	.3	1.5	.1	.1	.1
3292	ASBESTOS PRODUCTS.	3.1	1.7	-	(D)	.9	(D)	.2	.2
3295	MINERALS, GROUND OR TREATED.	22.5	19.2	-	(D)	1.8	.1	.3	(D)
3296	MINERAL WOOL	8.3	3.1	(D)	.1	3.0	1.1	.8	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	2.9	2.5	-	-	.3	(D)	.1	(D)
33	PRIMARY METAL INDUSTRIES	3 392.1	964.4	923.5	34.4	1 335.0	38.5	50.5	45.8
331	BLAST FURNACE, BASIC STEEL PROD.	2 839.5	806.8	697.2	24.6	1 221.3	23.6	46.5	19.5
3312	BLAST FURNACES AND STEEL MILLS	2 782.8	794.9	(D)	24.5	1 197.9	22.9	45.7	(D)
3315	STEEL WIRE AND RELATED PRODUCTS.	(D)	1.8	-	.1	.8	.2	.2	(D)
3316	COLD FINISHING OF STEEL SHAPES	13.8	6.9	(D)	(D)	6.0	.2	.3	.1
3317	STEEL PIPE AND TUBES	5.3	2.4	-	(D)	2.2	.2	.2	(D)
332	IRON AND STEEL FOUNDRIES	66.3	26.8	(D)	5.6	23.4	8.5	(D)	1.6
3321	GRAY IRON FOUNDRIES.	51.9	21.1	(D)	5.5	16.3	7.4	(D)	1.2
3322	MALLEABLE IRON FOUNDRIES	7.2	4.2	-	(D)	2.6	.3	(D)	(D)
3325	STEEL FOUNDRIES, NEC	(D)	1.3	(D)	(D)	4.1	.8	.1	(D)
333	PRIMARY NONFERROUS METALS.	391.1	89.0	220.4	2.1	52.9	3.7	2.4	20.6
3331	PRIMARY COPPER	29.3	10.4	(D)	.1	11.8	.6	(D)	3.3
3334	PRIMARY ALUMINUM	200.5	12.5	(D)	1.8	19.2	1.4	(D)	17.1
3341	SECONDARY NONFERROUS METALS.	1.6	.4	(D)	.1	.5	.2	(D)	.2
335	NONFERROUS ROLLING AND DRAWING	87.1	38.2	5.7	1.9	34.4	2.0	1.0	3.9
3351	COPPER ROLLING AND DRAWING	26.7	12.0	(D)	.2	7.0	.4	(D)	2.6
3353	ALUMINUM SHEET, PLATE, AND FOIL.	36.1	14.6	-	1.0	19.0	.6	.2	.7
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	2.4	-	.1	1.5	.2	(D)	(D)
3356	NONFERROUS ROLLING & DRAWING, NEC.	6.8	2.2	-	.2	3.6	.3	.2	.4
3357	NONFERROUS WIREDRAW'G, INSULATING.	10.5	5.0	(D)	.4	2.4	.5	.3	(D)
336	NONFERROUS FOUNDRIES	3.9	2.0	-	(D)	1.2	.4	.1	(D)
3361	ALUMINUM FOUNDRIES	2.1	(D)	-	(D)	.9	.3	(D)	(D)
3362	BRASS, BRONZE, COPPER FOUNDRIES.	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3369	NONFERROUS FOUNDRIES, NEC.	(D)	1.2	-	(D)	(D)	(D)	.1	(D)
339	MISC. PRIMARY METAL PRODUCTS	2.5	1.2	-	(D)	1.2	.1	(D)	(D)
3398	METAL HEAT TREATING.	1.3	.5	-	(D)	.7	(Z)	(D)	(D)
3399	PRIMARY METAL PRODUCTS, NEC.	1.2	.7	-	(D)	.5	(Z)	(D)	(D)

See footnotes at end of table.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
34	FABRICATED METAL PRODUCTS	90.0	32.6	3.7	3.3	27.8	16.5	3.6	2.3
341	METAL CANS, SHIPPING CONTAINERS	4.1	2.3	(D)	(D)	1.3	.2	.1	(D)
3411	METAL CANS	3.8	2.2	(D)	(D)	1.1	.2	.1	(Z)
3412	METAL BARRELS, DRUMS, AND PAILS	.3	.1	-	(D)	.2	(Z)	(Z)	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE	19.6	5.8	(D)	(D)	9.0	.8	.5	.1
3423	HAND AND EDGE TOOLS, NEC	2.8	(D)	(D)	(Z)	.6	.2	(D)	(D)
3425	HANDSAWS AND SAW BLADES	(D)	(D)	-	(D)	.4	(Z)	(D)	(D)
3429	HARDWARE, NEC	5.6	4.0	-	.1	.8	.5	.3	(Z)
343	PLUMBING, HEATING, EXCEPT ELEC	2.8	1.1	(D)	(D)	1.2	.2	.1	.1
3431	METAL SANITARY WARE	.8	.3	(D)	(D)	.3	(Z)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS	.8	.6	-	(Z)	.1	.1	(Z)	(Z)
3433	HEATING EQUIPMENT, EXC. ELECTRIC	1.2	.2	(D)	(D)	.7	.1	(D)	(D)
344	FABRICATED STRUC. METAL PRODS	8.5	1.7	(D)	(D)	1.9	4.1	.4	.2
3442	METAL DOORS, SASH, AND TRIM	.6	.3	-	(D)	.2	(D)	(D)	(D)
3443	FABRICATED PLATEWORK, BOILER SHOP	3.1	.6	(D)	.1	1.4	.4	.3	(D)
3444	SHEET METALWORK	.6	.4	-	(Z)	.2	(Z)	(Z)	-
3446	ARCHITECTURAL METALWORK	.2	(D)	-	(D)	(D)	.1	(D)	-
3448	PREFABRICATED METAL BUILDINGS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC	4.1	2.2	(D)	.1	1.3	.3	.1	(D)
3452	BOLTS, NUTS, RIVETS, AND WASHERS	(D)	2.1	(D)	.1	1.3	.3	.1	(D)
346	METAL FORGINGS AND STAMPINGS	15.4	5.2	(D)	.5	6.2	2.1	1.0	(D)
3462	IRON AND STEEL FORGINGS	3.9	.9	-	(Z)	2.1	.4	.5	(Z)
3463	NONFERROUS FORGINGS	(D)	(D)	(D)	(D)	.5	(D)	(D)	(D)
3465	AUTOMOTIVE STAMPINGS	6.0	1.7	-	.2	2.2	1.4	.3	.1
3466	CROWNS AND CLOSURES	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3469	METAL STAMPINGS, NEC	3.6	1.7	(D)	.2	(D)	.2	.1	.1
347	METAL SERVICES, NEC	10.8	9.1	(D)	(D)	1.0	.2	.2	(D)
3471	PLATING AND POLISHING	9.3	7.9	(D)	(D)	.8	.1	.2	(D)
3479	METAL COATING AND ALLIED SERVICES	1.5	1.2	(D)	(D)	.2	(Z)	(Z)	(D)
348	ORDNANCE AND ACCESSORIES, NEC	9.6	2.8	-	.9	2.5	1.3	.9	1.2
3482	SMALL ARMS AMMUNITION	1.4	.7	-	(D)	.3	.1	.1	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	4.0	.8	-	.2	1.0	.7	.5	.7
3484	SMALL ARMS	1.6	.6	-	(D)	.6	.2	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	2.6	.7	-	.5	.5	.3	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS	15.2	2.5	(D)	1.5	3.4	7.2	.3	(D)
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	(D)	-	-	.2	(D)	(D)	-
3494	VALVES AND PIPE FITTINGS	10.7	1.0	(D)	.5	2.2	6.7	.1	(D)
3495	WIRE SPRINGS	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3496	MISC. FABRICATED WIRE PRODUCTS	2.2	.5	-	.8	.4	.3	.1	(Z)
3497	METAL FOIL AND LEAF	.4	.3	-	(D)	.1	.1	(D)	(D)
3498	FABRICATED PIPE AND FITTINGS	.3	.2	(D)	(D)	(D)	(Z)	(D)	(D)
3499	FABRICATED METAL PRODUCTS, NEC	1.1	.4	-	.1	.4	.1	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	164.5	34.1	31.1	20.5	43.3	26.0	4.5	4.7
351	ENGINES AND TURBINES	38.0	2.4	(D)	5.4	18.5	1.1	.9	(D)
3511	TURBINES, TURBINE GENERATOR SETS	32.4	.3	(D)	5.0	16.7	.4	.6	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	5.5	2.1	(D)	.4	1.8	.7	.3	(D)
352	FARM AND GARDEN MACHINERY	46.2	15.9	12.0	2.0	6.8	6.7	.3	2.1
3523	FARM MACHINERY AND EQUIPMENT	45.7	15.6	(D)	(D)	6.7	6.6	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT	.5	.3	(D)	(D)	.1	.1	(D)	(D)
353	CONSTRUCTION, RELATED MACHINERY	16.6	3.5	(D)	1.2	4.2	1.7	(D)	.8
3531	CONSTRUCTION MACHINERY	14.4	3.1	(D)	1.0	3.6	1.1	(D)	.6
3532	MINING MACHINERY	.3	(D)	-	-	.1	.1	(Z)	(D)
3533	OILFIELD MACHINERY	1.1	.2	-	.1	.4	.4	(D)	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT	.1	(D)	-	(D)	(D)	(D)	-	-
3536	HOISTS, CRANES, AND MONORAILS	(D)	(D)	-	(D)	(D)	(D)	-	(D)
3537	INDUSTRIAL TRUCKS AND TRACTORS	.5	.1	-	(D)	.2	.1	(Z)	(D)
354	METALWORKING MACHINERY	9.3	1.3	(D)	1.9	2.4	3.0	.3	(D)
3541	MACHINE TOOLS, METAL-CUTTING	3.1	.4	-	1.6	.6	.3	(D)	(D)
3542	MACHINE TOOLS, METAL-FORMING	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3544	SPECIAL DIES, TOOLS, JIGS, ETC	1.7	(D)	-	(D)	(D)	(D)	(D)	-
3545	MACHINE TOOL ACCESSORIES	2.3	.1	(D)	.1	.5	1.6	.1	(D)
3546	POWER DRIVEN HANDTOOLS	1.6	.5	-	.2	.4	.2	(D)	(D)
355	SPECIAL INDUSTRY MACHINERY	8.9	.6	(D)	(D)	.7	1.3	(D)	(D)
3551	FOOD PRODUCTS MACHINERY	(D)	(D)	-	-	(D)	(D)	-	-
3552	TEXTILE MACHINERY	(D)	(D)	-	(D)	(D)	(D)	(D)	-
356	GENERAL INDUSTRIAL MACHINERY	10.9	2.4	.1	1.0	5.1	1.4	.4	.4
3561	PUMPS AND PUMPING EQUIPMENT	1.9	.3	(D)	(D)	1.1	.2	(D)	.1
3562	BALL AND ROLLER BEARINGS	3.6	1.0	-	.3	1.4	.4	.2	.1
3563	AIR AND GAS COMPRESSORS	1.7	.2	(D)	.2	.8	.3	.1	(D)
3566	SPEED CHANGERS, DRIVES, AND GEARS	.7	.1	(D)	.1	.4	.1	(Z)	(D)
3568	POWER TRANSMISSION EQUIPMENT, NEC	2.4	.6	-	.1	1.2	.3	(Z)	.1
3569	GENERAL INDUSTRIAL MACHINERY, NEC	.3	.2	(D)	(D)	.1	(Z)	(D)	(D)
357	OFFICE AND COMPUTING MACHINES	20.1	2.0	(D)	7.1	.6	9.3	.6	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT	17.4	1.1	-	6.9	(D)	8.9	(D)	.2
3574	CALCULATING, ACCOUNTING MACHINES	(D)	.3	(D)	(D)	(D)	.1	(D)	(D)
3579	OFFICE MACHINES, TYPEWRITERS, ETC	1.6	.6	(D)	(D)	.4	.2	.1	.1
358	REFRIGERATION AND SERVICE MACH	11.9	5.0	-	1.2	3.7	1.3	.7	.1
3581	AUTOMATIC MERCHANDISING MACHINES	.1	.1	-	-	(D)	(D)	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	11.4	4.7	-	(D)	3.6	1.2	(D)	(D)
3586	MEASURING AND DISPENSING PUMPS	.3	.1	-	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
35	MACHINERY, EXCEPT ELECTRICAL--CON.								
359	MISC. MACHINERY, EXC. ELEC	2.5	.7	(D)	(D)	1.1	.3	.1	(D)
3592	CARBURETORS, PISTONS, RINGS, ETC	2.3	.7	(D)	(D)	(D)	.2	(D)	(Z)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	.2	(Z)	(D)	(D)	(D)	.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	116.0	48.2	.9	10.2	28.1	20.6	3.4	4.3
361	ELECTRIC DISTRIBUTING EQUIPMENT.	5.3	1.5	-	.8	1.9	.7	.2	.1
3612	TRANSFORMERS	2.7	.4	-	.6	1.4	.2	.1	(Z)
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	2.6	1.0	-	.2	.6	.5	.1	.1
362	ELECTRICAL INDUSTRIAL APPARATUS.	9.7	2.8	-	.8	3.7	.9	.6	1.0
3621	MOTORS AND GENERATORS.	3.9	1.2	-	.4	1.2	.3	(Z)	.7
3622	INDUSTRIAL CONTROLS.	1.7	.6	-	.3	.6	.2	(D)	(D)
3623	WELDING APPARATUS, ELECTRIC.	.3	(D)	-	(D)	(D)	.1	(D)	(D)
3624	CARBON AND GRAPHITE PRODUCTS	3.6	.9	-	(D)	1.7	.2	.5	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	.2	(D)	-	(D)	(D)	(Z)	(D)	-
363	HOUSEHOLD APPLIANCES	17.3	7.3	(D)	.6	5.3	1.9	(D)	1.4
3631	HOUSEHOLD COOKING EQUIPMENT.	4.6	1.9	-	(D)	(D)	.9	.2	1.4
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	6.1	2.3	-	.4	2.8	.4	(D)	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	2.3	1.1	(D)	.1	.8	(D)	.1	(D)
3634	ELECTRIC HOUSEWARES AND FANS	1.8	1.0	-	(D)	.6	.2	.1	(D)
3635	HOUSEHOLD VACUUM CLEANERS.	(D)	.2	-	(D)	(D)	(D)	(D)	-
3639	HOUSEHOLD APPLIANCES, NEC.	1.9	.8	(D)	(D)	.9	.2	.1	(D)
364	ELEC. LIGHTING, WIRING EQUIP	11.6	2.3	(D)	(D)	7.2	.6	.3	.3
3641	ELECTRIC LAMPS	1.0	.2	(D)	.1	.5	.2	(D)	.1
3643	CURRENT-CARRYING WIRING DEVICES.	7.2	.4	(D)	.1	5.9	.2	(D)	-
3644	NONCURRENT-CARRYING WIR'G DEVICES.	1.6	.7	(D)	(D)	.5	.1	.1	(D)
3645	RESIDENTIAL LIGHTING FIXTURES.	.1	(D)	-	-	(D)	(D)	(D)	-
3646	COMMERCIAL LIGHTING FIXTURES	(D)	(D)	-	-	(D)	(D)	(D)	-
3648	LIGHTING EQUIPMENT, NEC.	.5	.2	-	(D)	.2	.1	(Z)	(D)
365	RADIO, TV RECEIVING EQUIPMENT.	2.1	.5	(D)	.1	.5	.6	.2	(D)
3651	RADIO AND TV RECEIVING SETS.	1.4	(D)	(D)	(D)	.3	.5	(D)	(Z)
3652	PHONO. RECORDS, PRERECORDED TAPE	.7	(D)	-	(D)	.3	.1	(D)	(D)
366	COMMUNICATION EQUIPMENT.	14.3	4.1	(D)	4.5	1.3	2.9	.6	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	(D)	2.1	(D)	3.4	.4	1.9	.2	(D)
367	ELECTRONIC COMPONENTS, ACCESS.	23.1	11.6	(D)	2.6	5.3	2.5	.5	(D)
3671	ELECTRON TUBES, RECEIVING TYPE	4.0	1.4	-	.6	1.4	.4	(Z)	.1
3674	SEMICONDUCTORS, RELATED DEVICES.	10.8	6.2	-	1.0	1.8	1.3	.1	.4
3675	ELECTRONIC CAPACITORS.	2.7	.8	-	.4	1.2	.1	.1	(Z)
3676	ELECTRONIC RESISTORS	.5	.1	-	(Z)	.2	.1	(D)	(D)
3678	ELECTRONIC CONNECTORS.	1.1	.5	-	.1	.2	.2	(D)	(D)
3679	ELECTRONIC COMPONENTS, NEC	4.0	2.5	(D)	.5	.5	.4	.1	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	32.6	18.0	(D)	(D)	2.7	10.7	(D)	.5
3691	STORAGE BATTERIES.	2.3	1.3	-	(Z)	.8	.2	.1	(Z)
3692	PRIMARY BATTERIES, DRY AND WET	.3	(D)	(D)	(D)	(D)	(D)	(D)	-
3693	X-RAY APPARATUS AND TUBES.	.6	(D)	-	(D)	.5	(Z)	(D)	(D)
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	(D)	.2	-	-	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT	234.5	73.3	9.6	10.9	61.5	33.5	7.7	37.6
371	MOTOR VEHICLES AND EQUIPMENT	169.8	56.6	9.2	3.8	38.3	24.7	5.7	31.5
3711	MOTOR VEHICLES AND CAR BODIES.	29.5	15.0	(D)	(D)	6.4	3.3	2.5	1.4
3714	MOTOR VEHICLE PARTS, ACCESSORIES	139.9	41.3	(D)	(D)	31.9	21.4	3.1	30.1
372	AIRCRAFT AND PARTS	38.7	9.1	(D)	5.8	16.8	3.9	(D)	2.0
3721	AIRCRAFT	10.4	2.4	-	3.6	1.9	2.0	.4	.2
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	22.2	4.3	(D)	1.8	12.9	1.1	(D)	1.7
3728	AIRCRAFT EQUIPMENT, NEC.	6.2	2.4	-	.4	2.0	.9	.2	.2
373	SHIP, BOAT BUILDING, REPAIRING	14.7	4.2	(D)	(D)	3.6	2.8	.3	3.6
3731	SHIP BUILDING AND REPAIRING.	(D)	4.1	(D)	(D)	3.6	2.8	.3	3.6
3743	RAILROAD EQUIPMENT	3.9	1.1	(D)	.1	1.2	.9	.2	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	1.6	(D)	-	(D)	(D)	.1	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES.	4.9	1.3	(D)	1.1	.8	1.0	.4	(D)
3761	GUIDED MISSILES, SPACE VEHICLES.	2.5	.8	(D)	.4	.3	.7	.1	(D)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	.3	-	.6	.4	.2	.3	(D)
379	MISC. TRANSPORTATION EQUIPMENT	.8	(D)	(D)	(D)	(D)	.1	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	35.5	15.3	4.2	3.9	7.2	2.5	1.5	.8
3811	ENGINEERING, SCIENTIFIC INSTRU	.7	.2	-	.1	.1	.2	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	5.4	1.9	(D)	.8	1.4	.8	(D)	.2
3822	ENVIRONMENTAL CONTROLS	1.9	.7	-	.4	.5	.2	(D)	(D)
3823	PROCESS CONTROL INSTRUMENTS.	.5	.1	(D)	(Z)	.1	.1	(D)	(D)
3824	FLUID METERS AND COUNTING DEVICES.	1.0	.3	-	(Z)	(D)	.1	.1	(D)
3825	INSTRU. TO MEASURE ELECTRICITY	1.8	.7	-	.3	.5	.2	(Z)	(Z)
3829	MEASUR'G, CONTROL'G DEVICES, NEC	.3	.1	(D)	(Z)	(D)	.1	(Z)	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	(D)	(D)	-	(D)	.1	(D)	(D)	-
384	MEDICAL INSTRUMENTS, SUPPLIES.	2.3	1.2	(D)	.2	.3	.4	(D)	.1
3841	SURGICAL AND MEDICAL INSTRUMENTS	(D)	.3	(D)	(Z)	.1	.1	(D)	(Z)
3842	SURGICAL APPLIANCES AND SUPPLIES	1.6	.9	(D)	.1	.2	.2	(D)	.1

See footnotes at end of table.

Table 3a. Water Intake, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry and industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
38	INSTRUMENTS, RELATED PRODUCTS--CON.								
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	20.1	11.0	(D)	2.4	3.6	.8	1.1	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES	.6	(D)	-	(D)	.3	(D)	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	7.7	2.7	(D)	.5	2.8	1.2	.3	(D)
391	JEWELRY, SILVER AND PLATED WARE	.7	.6	-	(D)	.1	(D)	(Z)	(D)
3911	JEWELRY, PRECIOUS METAL	(D)	(D)	-	(D)	(D)	(D)	-	(D)
3914	SILVERWARE AND PLATED WARE	.5	(D)	-	(D)	(D)	(Z)	(Z)	(D)
3931	MUSICAL INSTRUMENTS	.2	-	-	-	(D)	.1	(D)	(D)
394	TOYS AND SPORTING GOODS	1.6	(D)	-	(D)	1.0	.1	(D)	(D)
3944	GAMES, TOYS, CHILDREN'S VEHICLES	1.0	(D)	-	(Z)	.7	.1	(D)	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC	.6	.2	-	(D)	.2	(Z)	(Z)	(D)
395	PENS, OFFICE AND ART GOODS	.8	(D)	-	.3	.3	(D)	(D)	(D)
3951	PENS AND MECHNICAL PENCILS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS	1.2	.9	-	(D)	(D)	.1	.1	(D)
3961	COSTUME JEWELRY	.3	.1	-	(D)	(D)	(Z)	(D)	-
3964	NEEDLES, PINS, AND FASTENERS	.9	.7	-	(D)	(D)	(Z)	(D)	(D)
399	MISCELLANEOUS MANUFACTURES	3.3	.9	(D)	(D)	1.3	.8	.2	.1
3996	HARD SURFACE FLOOR COVERINGS	1.6	.6	-	(D)	.8	.1	.1	(D)
3999	MANUFACTURING INDUSTRIES, NEC	1.4	.2	(D)	.1	.3	.7	(Z)	(D)

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries whether or not separate figures are shown for individual industries in the group. Industries omitted from table have a water intake level of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (Z) Less than 50 million gallons.

Table 3b. Water Intake, by Purpose, for States: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

State	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
			Steam electric power generation	Air conditioning	Other			
UNITED STATES, TOTAL	12 991.7	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
ALABAMA	294.2	96.1	12.7	15.7	148.1	5.9	10.9	4.8
ARIZONA	21.5	13.7	1.2	.8	2.9	1.2	1.2	.6
ARKANSAS	73.7	55.0	(D)	(D)	6.9	1.6	4.9	1.1
CALIFORNIA	307.6	121.7	19.0	2.9	115.2	11.7	20.0	17.1
COLORADO	65.6	9.2	18.3	.3	28.6	5.0	1.8	2.3
CONNECTICUT	87.7	18.8	10.4	2.4	47.4	3.3	2.0	3.4
DELAWARE	169.3	9.1	(D)	1.7	98.3	(D)	(D)	.7
FLORIDA	221.1	79.8	35.1	2.9	61.5	10.0	10.4	21.4
GEORGIA	271.2	137.3	53.6	4.3	54.8	5.7	10.8	4.8
HAWAII	111.4	10.8	39.8	(Z)	16.7	3.5	1.6	39.0
IDAHO	32.6	12.7	(D)	(D)	11.3	.5	2.8	1.9
ILLINOIS	430.9	97.4	132.3	10.3	144.1	11.2	24.9	10.1
INDIANA	634.8	171.0	78.9	4.4	352.7	8.3	14.8	4.6
IOWA	147.3	28.2	16.0	4.0	88.0	3.8	3.8	3.5
KANSAS	37.0	8.5	1.5	.4	14.8	2.5	7.3	1.8
KENTUCKY	139.9	46.7	.1	1.0	63.5	20.0	4.9	3.5
LOUISIANA	1 280.2	148.2	256.2	6.8	809.8	5.0	27.8	26.1
MAINE	137.1	75.9	39.8	.7	13.6	.4	5.3	1.4
MARYLAND	371.8	65.8	93.4	2.2	198.5	2.3	5.2	4.0
MASSACHUSETTS	152.4	35.8	52.7	4.2	40.5	6.9	3.5	8.8
MICHIGAN	874.3	417.0	185.4	6.0	221.6	24.9	12.5	6.8
MINNESOTA	160.9	92.3	13.2	1.5	22.4	8.1	21.9	1.4
MISSISSIPPI	99.3	45.0	(D)	(D)	36.4	1.1	5.6	1.7
MISSOURI	50.7	17.4	.4	1.5	20.1	3.3	3.7	4.1
MONTANA	32.2	3.8	(D)	(D)	24.5	.2	1.1	2.3
NEBRASKA	28.7	8.3	(D)	1.1	13.9	2.6	1.3	(D)
NEVADA	18.9	15.7	(D)	(D)	1.8	.2	(D)	.8
NEW HAMPSHIRE	26.2	17.2	(D)	(D)	2.6	.2	.7	5.2
NEW JERSEY	331.5	158.6	9.3	5.7	132.8	4.9	9.7	10.2
NEW MEXICO	4.8	1.9	(D)	(D)	1.2	.1	.3	1.0
NEW YORK	469.7	149.4	13.2	20.6	248.5	16.5	12.4	9.1
NORTH CAROLINA	187.0	105.7	21.1	8.7	39.2	4.1	7.7	5.3
OHIO	584.7	151.3	130.6	6.5	240.3	16.8	27.0	12.4
OKLAHOMA	153.5	18.9	.5	.4	39.5	2.9	90.8	.6
OREGON	135.5	58.8	15.0	.4	32.2	2.2	7.6	19.4
PENNSYLVANIA	1 190.1	323.2	181.6	14.4	615.5	19.7	26.3	9.4
RHODE ISLAND	19.1	8.3	.8	.7	2.2	6.0	.8	.3
SOUTH CAROLINA	416.4	67.0	19.6	18.1	265.1	2.6	7.5	36.5
TENNESSEE	366.6	86.0	43.4	15.3	191.8	12.2	9.7	8.3
TEXAS	1 395.7	218.7	326.2	7.7	718.5	20.8	81.2	22.6
UTAH	58.7	44.2	(D)	.3	7.3	1.0	1.6	(D)
VERMONT	5.8	3.6	(D)	.2	.6	.2	.1	(D)
VIRGINIA	247.3	59.0	33.3	11.2	124.8	2.2	7.6	8.9
WASHINGTON	424.4	189.3	14.8	5.1	185.9	2.3	9.8	17.2
WEST VIRGINIA	456.9	107.4	67.6	7.7	248.2	2.9	19.3	3.8
WISCONSIN	202.7	93.9	37.8	3.2	46.6	8.3	7.6	4.8
WYOMING	10.7	2.1	(D)	(D)	5.7	(D)	2.3	(D)

Note: States for which all data would be withheld to avoid disclosure have been omitted from the table.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 3c. Water Intake, by Purpose, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	UNITED STATES, TOTAL	12 991.7	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
	NEW ENGLAND	424.6	157.4	103.8	8.2	106.7	16.9	12.4	19.3
20	FOOD AND KINDRED PRODUCTS	10.7	5.4	(D)	2.3	1.4	.5	.5	(D)
22	TEXTILE MILL PRODUCTS	18.6	6.7	(D)	(D)	3.1	.4	.4	7.8
26	PAPER AND ALLIED PRODUCTS	209.5	109.5	74.1	.9	11.9	.5	6.4	6.3
28	CHEMICALS AND ALLIED PRODUCTS	55.3	8.2	(D)	.5	42.3	(D)	1.6	.8
29	PETROLEUM AND COAL PRODUCTS	.3	.2	-	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	10.0	1.0	(D)	.1	8.4	.1	.2	(D)
31	LEATHER AND LEATHER PRODUCTS	2.6	.6	-	(D)	(D)	1.9	.1	(D)
32	STONE, CLAY, GLASS PRODUCTS	3.2	1.5	-	.1	1.2	.2	(D)	(D)
33	PRIMARY METAL INDUSTRIES	24.3	10.4	(D)	(D)	5.0	.4	.4	2.2
34	FABRICATED METAL PRODUCTS	16.9	3.5	(D)	(D)	8.9	.5	.3	.2
35	MACHINERY, EXCEPT ELECTRICAL	22.1	1.2	(D)	1.2	2.6	1.6	1.3	(D)
36	ELECTRIC, ELECTRONIC EQUIP	11.4	1.8	(D)	.8	7.1	.6	.3	(D)
37	TRANSPORTATION EQUIPMENT	29.4	4.8	(D)	1.3	12.0	9.4	(D)	.8
38	INSTRUMENTS, RELATED PRODUCTS	8.3	1.6	(D)	.5	2.2	.5	.1	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	1.8	.8	-	.1	.7	.1	(D)	(D)
	MIDDLE ATLANTIC	1 618.7	401.0	208.5	46.1	869.3	22.8	39.9	31.1
20	FOOD AND KINDRED PRODUCTS	69.5	33.8	.3	.7	24.9	2.6	3.3	3.6
21	TOBACCO PRODUCTS	1.4	.9	(D)	(D)	.2	(Z)	.1	(D)
22	TEXTILE MILL PRODUCTS	13.3	9.3	-	.9	.8	.5	1.5	.3
24	LUMBER AND WOOD PRODUCTS	.7	(Z)	(D)	(D)	(D)	.2	.2	(D)
26	PAPER AND ALLIED PRODUCTS	159.3	79.6	34.5	1.3	33.4	1.0	6.0	3.4
28	CHEMICALS AND ALLIED PRODUCTS	491.6	163.3	21.4	13.2	265.6	3.3	11.7	13.0
29	PETROLEUM AND COAL PRODUCTS	271.0	4.7	(D)	(D)	209.3	.7	7.8	3.3
30	RUBBER, MISC. PLASTICS PROD	25.0	7.2	(D)	(D)	13.7	1.8	1.3	.5
31	LEATHER AND LEATHER PRODUCTS	.9	.8	(D)	-	(D)	(Z)	(Z)	(D)
32	STONE, CLAY, GLASS PRODUCTS	26.4	10.3	(D)	(D)	10.6	.5	.5	1.6
34	FABRICATED METAL PRODUCTS	10.5	2.9	(D)	.2	2.5	4.3	.3	(D)
35	MACHINERY, EXCEPT ELECTRICAL	26.0	1.5	(D)	8.9	13.8	.9	.3	(D)
36	ELECTRIC, ELECTRONIC EQUIP	17.1	5.4	(D)	4.3	4.3	1.9	(D)	.7
37	TRANSPORTATION EQUIPMENT	15.7	4.2	(D)	2.5	4.2	1.3	(D)	2.7
38	INSTRUMENTS, RELATED PRODUCTS	4.7	1.0	(D)	2.0	1.1	.4	.2	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	2.0	.8	-	(Z)	1.0	.1	.1	(Z)
	SOUTH ATLANTIC	1 369.2	491.7	144.6	44.4	535.1	27.9	49.9	75.5
20	FOOD AND KINDRED PRODUCTS	54.3	25.2	.4	.4	18.1	2.3	3.3	4.6
21	TOBACCO PRODUCTS	2.6	1.0	(D)	.3	.7	.2	.2	(D)
22	TEXTILE MILL PRODUCTS	117.8	85.3	3.3	7.1	6.0	3.5	6.9	5.6
24	LUMBER AND WOOD PRODUCTS	9.2	3.5	(D)	(D)	4.2	.3	.7	.3
26	PAPER AND ALLIED PRODUCTS	514.4	283.3	116.2	9.9	74.8	2.9	18.7	8.5
28	CHEMICALS AND ALLIED PRODUCTS	480.4	56.8	20.7	17.1	346.7	2.5	13.1	23.6
29	PETROLEUM AND COAL PRODUCTS	6.1	1.0	-	(D)	3.0	.1	1.3	(D)
30	RUBBER, MISC. PLASTICS PROD	26.3	2.3	(D)	2.5	18.7	1.3	.8	(D)
32	STONE, CLAY, GLASS PRODUCTS	15.5	9.8	(D)	.4	4.1	.5	(D)	.6
33	PRIMARY METAL INDUSTRIES	63.9	13.9	(D)	(D)	41.0	1.5	2.1	1.3
34	FABRICATED METAL PRODUCTS	5.4	1.9	-	1.1	2.1	.3	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	16.5	.8	(D)	3.7	3.4	8.4	(Z)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	9.1	2.5	-	.7	2.9	1.3	.2	1.6

See footnotes at end of table.

Table 3c. Water Intake, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	SOUTH ATLANTIC --CON.								
37	TRANSPORTATION EQUIPMENT	32.6	1.3	(D)	.5	1.5	1.3	(D)	28.0
38	INSTRUMENTS, RELATED PRODUCTS	(D)	.6	-	.1	.2	.1	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	.4	-	(Z)	(Z)	.1	(D)	(D)
	GREAT LAKES	2 513.7	853.3	538.4	20.5	953.4	63.1	57.7	27.3
20	FOOD AND KINDRED PRODUCTS	104.9	42.0	3.4	1.8	43.9	2.9	5.1	5.8
22	TEXTILE MILL PRODUCTS	.7	.3	-	(D)	.1	(Z)	.1	(D)
24	LUMBER AND WOOD PRODUCTS	2.8	1.0	(D)	(D)	.6	.1	.2	(D)
25	FURNITURE AND FIXTURES	1.2	.7	-	(D)	.3	.1	(Z)	(D)
26	PAPER AND ALLIED PRODUCTS	219.7	113.7	51.1	2.1	30.5	9.4	6.0	1.8
28	CHEMICALS AND ALLIED PRODUCTS	476.5	218.8	20.3	11.3	191.4	17.0	14.4	3.3
29	PETROLEUM AND COAL PRODUCTS	154.3	24.4	(D)	(Z)	119.3	1.1	8.2	(D)
30	RUBBER, MISC. PLASTICS PROD	49.7	6.7	.5	2.1	32.5	5.2	2.5	.3
31	LEATHER AND LEATHER PRODUCTS	2.6	2.2	(D)	(D)	(Z)	.1	(Z)	.2
32	STONE, CLAY, GLASS PRODUCTS	55.1	8.3	(D)	.7	11.0	.8	.6	(D)
33	PRIMARY METAL INDUSTRIES	1 297.1	372.6	412.4	4.9	476.0	10.1	12.6	8.5
34	FABRICATED METAL PRODUCTS	22.9	10.9	.1	.5	6.8	2.5	1.3	.6
35	MACHINERY, EXCEPT ELECTRICAL	20.4	6.6	(D)	(D)	5.4	4.6	1.0	1.5
36	ELECTRIC, ELECTRONIC EQUIP	16.9	7.1	(D)	1.3	5.4	1.8	.7	(D)
37	TRANSPORTATION EQUIPMENT	71.6	27.7	.7	2.6	27.6	6.2	4.1	2.5
38	INSTRUMENTS, RELATED PRODUCTS	15.6	10.1	(D)	(D)	2.2	.7	1.0	.5
39	MISC. MANUFACTUR'G INDUSTRIES	1.4	.2	(D)	(D)	.3	.6	(Z)	.1
	OHIO	1 717.3	513.4	244.3	16.8	812.6	43.2	60.8	26.2
20	FOOD AND KINDRED PRODUCTS	31.3	10.5	.2	.4	11.8	1.3	2.6	3.0
21	TOBACCO PRODUCTS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	2.0	1.2	-	(Z)	.4	(D)	.2	(D)
24	LUMBER AND WOOD PRODUCTS	.3	.1	-	-	(D)	(Z)	.1	(D)
25	FURNITURE AND FIXTURES	.8	.2	-	(D)	.2	.2	(D)	(Z)
26	PAPER AND ALLIED PRODUCTS	52.7	33.1	10.5	.4	4.5	.3	3.6	.3
28	CHEMICALS AND ALLIED PRODUCTS	485.2	80.7	40.6	1.7	332.7	2.8	15.8	11.0
29	PETROLEUM AND COAL PRODUCTS	31.3	2.5	(D)	.1	17.1	.6	8.1	(D)
30	RUBBER, MISC. PLASTICS PROD	22.8	2.1	(D)	.2	10.3	8.5	1.4	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	(D)	-	(D)	(Z)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	27.5	10.8	-	1.2	13.9	.8	.5	.3
33	PRIMARY METAL INDUSTRIES	971.6	334.9	190.1	8.8	395.0	11.7	24.6	7.3
34	FABRICATED METAL PRODUCTS	9.5	3.9	(D)	(D)	3.0	1.1	.6	.4
35	MACHINERY, EXCEPT ELECTRICAL	14.5	3.8	(D)	1.4	6.2	1.5	1.2	(D)
36	ELECTRIC, ELECTRONIC EQUIP	40.9	21.3	(D)	1.1	5.3	12.1	.9	(D)
37	TRANSPORTATION EQUIPMENT	24.4	7.1	(D)	(D)	10.6	2.1	1.1	2.6
38	INSTRUMENTS, RELATED PRODUCTS	1.1	.4	-	(D)	.3	.1	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	.5	.3	-	(D)	.2	(Z)	(D)	(D)
	TENNESSEE	428.0	91.5	44.4	22.7	246.7	5.9	9.9	7.0
20	FOOD AND KINDRED PRODUCTS	6.4	3.7	-	(D)	1.0	.7	(D)	.7
22	TEXTILE MILL PRODUCTS	5.3	3.9	(D)	.2	.1	.2	.6	(D)
26	PAPER AND ALLIED PRODUCTS	80.0	43.4	(D)	(D)	11.0	.3	1.8	1.4
28	CHEMICALS AND ALLIED PRODUCTS	302.1	25.8	20.9	21.0	223.2	1.2	5.9	4.0
30	RUBBER, MISC. PLASTICS PROD	8.6	2.6	-	(D)	5.4	.3	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	2.6	.8	(D)	(D)	1.4	.1	(D)	(D)

See footnotes at end of table.

Table 3c. Water Intake, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	TENNESSEE--CON.								
33	PRIMARY METAL INDUSTRIES	9.5	3.5	(D)	.2	2.5	.3	(D)	.6
34	FABRICATED METAL PRODUCTS	.7	.1	-	(D)	.3	.1	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.4	(D)	-	(D)	.3	.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	2.0	.7	(D)	.1	.5	.3	.5	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	.2	(D)	-	(D)	(D)	(D)	(D)	(D)
	UPPER MISSISSIPPI	530.2	196.0	52.3	15.7	193.8	23.6	39.4	9.4
20	FOOD AND KINDRED PRODUCTS	112.5	29.5	6.9	2.0	64.4	1.6	5.7	2.1
22	TEXTILE MILL PRODUCTS	.6	.4	-	(D)	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	1.0	(D)	(D)	(D)	(D)	.7	(Z)	-
25	FURNITURE AND FIXTURES	(D)	(D)	-	(D)	(D)	(D)	-	-
26	PAPER AND ALLIED PRODUCTS	169.4	101.5	24.9	.9	11.3	7.5	22.0	1.2
28	CHEMICALS AND ALLIED PRODUCTS	67.3	6.9	(D)	(D)	53.7	.7	4.0	1.3
29	PETROLEUM AND COAL PRODUCTS	8.7	.2	-	(D)	5.2	.2	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	20.9	.8	(D)	.8	13.6	4.9	.5	(D)
32	STONE, CLAY, GLASS PRODUCTS	18.7	3.3	(D)	(D)	6.7	.3	2.3	.8
33	PRIMARY METAL INDUSTRIES	68.2	32.5	(D)	6.3	25.4	1.1	(D)	1.7
34	FABRICATED METAL PRODUCTS	6.7	3.4	(D)	.5	1.8	.5	.3	(D)
35	MACHINERY, EXCEPT ELECTRICAL	44.2	11.6	14.8	2.4	8.0	4.4	.4	1.7
36	ELECTRIC, ELECTRONIC EQUIP	4.1	1.8	(D)	.5	.9	.6	(D)	(Z)
37	TRANSPORTATION EQUIPMENT	5.5	2.4	-	.6	1.2	.9	.2	.2
38	INSTRUMENTS, RELATED PRODUCTS	.9	.3	-	.2	(D)	.2	(Z)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	1.0	(D)	-	(D)	(D)	.1	(D)	-
	LOWER MISSISSIPPI	1 405.6	216.9	274.9	7.7	831.7	13.5	33.7	26.9
20	FOOD AND KINDRED PRODUCTS	34.4	14.9	(D)	.3	14.9	(D)	1.9	1.1
22	TEXTILE MILL PRODUCTS	1.5	1.0	-	.1	(D)	.1	.2	(D)
24	LUMBER AND WOOD PRODUCTS	6.7	.3	(D)	(D)	.7	(Z)	.6	1.2
25	FURNITURE AND FIXTURES	.4	(D)	-	(D)	(D)	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	135.1	105.7	(D)	3.9	6.8	(D)	6.3	1.8
28	CHEMICALS AND ALLIED PRODUCTS	801.5	71.9	77.7	1.6	616.6	3.1	18.3	12.2
29	PETROLEUM AND COAL PRODUCTS	235.3	6.1	(D)	1.0	180.0	(D)	5.1	10.2
30	RUBBER, MISC. PLASTICS PROD.	6.8	1.9	-	(D)	4.4	.1	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	2.9	1.0	-	(D)	1.5	.1	.1	(D)
34	FABRICATED METAL PRODUCTS	2.7	1.3	-	(D)	1.0	.2	.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.9	.2	-	(D)	.5	.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.5	(D)	-	(D)	.2	(Z)	(D)	-
	SOURIS - RED - RAINY								
20	FOOD AND KINDRED PRODUCTS	.9	.5	-	(D)	.1	.1	.1	(D)
	MISSOURI	161.5	26.3	11.5	2.0	94.4	9.8	10.9	6.5
20	FOOD AND KINDRED PRODUCTS	73.7	13.1	9.7	.3	40.3	5.0	3.6	1.6
26	PAPER AND ALLIED PRODUCTS	.5	.4	(D)	-	(D)	(Z)	.1	-
28	CHEMICALS AND ALLIED PRODUCTS	15.7	1.3	(D)	(Z)	12.0	(D)	1.5	.5
29	PETROLEUM AND COAL PRODUCTS	43.5	1.1	(D)	(D)	35.7	.1	4.1	2.1
30	RUBBER, MISC. PLASTICS PROD.	4.4	1.3	-	(D)	1.0	.5	.3	(D)
33	PRIMARY METAL INDUSTRIES	2.0	.6	-	(D)	1.1	.1	(D)	(D)
34	FABRICATED METAL PRODUCTS	2.3	.8	-	.2	.5	(D)	.2	(D)
36	ELECTRIC, ELECTRONIC EQUIP	1.6	.7	-	.1	.4	.2	.1	.1
37	TRANSPORTATION EQUIPMENT	2.5	1.3	-	.2	.6	.2	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	.8	.2	(D)	(D)	(D)	.2	(D)	(D)

See footnotes at end of table.

Table 3c. Water Intake, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	ARKANSAS, WHITE AND RED	322.1	84.4	13.0	2.2	101.5	9.9	103.6	7.4
20	FOOD AND KINDRED PRODUCTS	16.0	10.5	(D)	(D)	2.5	1.2	1.3	.4
22	TEXTILE MILL PRODUCTS	.3	(D)	(D)	(D)	-	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS	36.5	27.3	-	(D)	(D)	.9	2.8	(D)
28	CHEMICALS AND ALLIED PRODUCTS	33.1	10.6	(D)	.3	14.2	(D)	5.3	.8
29	PETROLEUM AND COAL PRODUCTS	136.2	6.8	(D)	.1	35.4	1.3	92.0	(D)
30	RUBBER, MISC. PLASTICS PROD	1.9	.5	(D)	(Z)	.5	.1	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	5.5	1.9	-	.1	1.6	.3	.1	1.8
33	PRIMARY METAL INDUSTRIES	75.7	18.2	(D)	(D)	40.0	3.3	.6	(D)
34	FABRICATED METAL PRODUCTS	1.5	.3	-	(D)	(D)	.3	.2	.3
35	MACHINERY, EXCEPT ELECTRICAL	6.3	2.6	(D)	.5	.9	1.4	.1	(D)
36	ELECTRIC, ELECTRONIC EQUIP	1.7	.7	-	.1	.5	.2	(Z)	(Z)
37	TRANSPORTATION EQUIPMENT	1.6	.4	(D)	.1	.5	.3	(D)	.1
38	INSTRUMENTS, RELATED PRODUCTS	.5	(D)	-	(D)	(D)	.1	(D)	(D)
	TEXAS GULF	1 247.5	186.4	323.6	6.9	619.0	16.7	75.9	18.4
20	FOOD AND KINDRED PRODUCTS	16.6	7.0	.6	.1	5.7	.6	.9	1.1
22	TEXTILE MILL PRODUCTS	1.3	.9	-	(D)	(D)	(Z)	.1	-
24	LUMBER AND WOOD PRODUCTS	2.0	.6	(D)	(D)	.4	(Z)	.5	(D)
26	PAPER AND ALLIED PRODUCTS	51.0	44.6	(D)	1.5	.5	(D)	1.5	-
28	CHEMICALS AND ALLIED PRODUCTS	853.8	82.2	268.1	3.2	440.0	5.3	46.6	8.5
29	PETROLEUM AND COAL PRODUCTS	193.2	8.9	3.8	.9	145.8	1.4	24.7	7.8
30	RUBBER, MISC. PLASTICS PROD	4.0	.7	-	(D)	2.0	.8	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	5.5	3.9	(D)	(D)	1.1	.1	(D)	.1
34	FABRICATED METAL PRODUCTS	7.2	.6	-	(Z)	.2	6.2	(Z)	.1
35	MACHINERY, EXCEPT ELECTRICAL	1.4	.6	(D)	.1	(D)	.5	(Z)	(Z)
36	ELECTRIC, ELECTRONIC EQUIP	2.8	1.9	-	.3	.1	(D)	(D)	.1
37	TRANSPORTATION EQUIPMENT	5.7	4.7	(D)	(D)	.2	.5	.1	(Z)
	RIO GRANDE								
20	FOOD AND KINDRED PRODUCTS	1.1	.5	-	(D)	(D)	(Z)	.2	.2
29	PETROLEUM AND COAL PRODUCTS	1.6	(D)	-	(D)	(D)	(D)	(D)	(D)
	LOWER COLORADO	26.3	14.5	1.5	.9	5.1	1.4	1.5	1.4
20	FOOD AND KINDRED PRODUCTS	1.8	.4	(D)	(D)	.9	.1	.1	.3
24	LUMBER AND WOOD PRODUCTS	.6	(D)	(D)	-	(D)	(D)	.4	(D)
28	CHEMICALS AND ALLIED PRODUCTS	1.2	.4	-	(D)	.6	(Z)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	1.7	1.1	-	(D)	(D)	(Z)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	12.5	7.1	1.1	.3	2.5	.3	.5	.8
35	MACHINERY, EXCEPT ELECTRICAL	.6	(D)	-	(D)	(D)	(D)	-	(D)
	GREAT BASIN	64.9	55.5	(D)	(D)	5.7	.5	1.1	1.2
20	FOOD AND KINDRED PRODUCTS	2.4	1.5	-	-	.5	(D)	.2	(D)
29	PETROLEUM AND COAL PRODUCTS	2.1	(D)	-	(D)	1.4	(D)	.5	(D)
	COLUMBIA - NORTH PACIFIC	605.0	256.7	31.1	5.5	246.8	5.1	20.3	39.5
20	FOOD AND KINDRED PRODUCTS	36.7	21.7	(D)	3.8	6.3	(D)	1.5	1.9
24	LUMBER AND WOOD PRODUCTS	89.4	35.0	19.9	(D)	12.1	(D)	8.3	12.2
26	PAPER AND ALLIED PRODUCTS	243.4	173.8	4.4	.2	34.8	.7	7.9	7.8
28	CHEMICALS AND ALLIED PRODUCTS	161.8	4.7	(D)	(D)	148.4	.2	1.0	1.1
29	PETROLEUM AND COAL PRODUCTS	5.5	1.1	-	-	3.0	(D)	1.1	(D)
30	RUBBER, MISC. PLASTICS PROD	.1	-	-	-	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 3c. Water Intake, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
				Steam electric power generation	Air conditioning	Other			
	COLUMBIA - NORTH PACIFIC--CON.								
32	STONE, CLAY, GLASS PRODUCTS	5.9	3.0	-	-	2.8	.1	(D)	(D)
33	PRIMARY METAL INDUSTRIES	57.3	15.4	-	1.3	23.7	.5	.4	15.9
34	FABRICATED METAL PRODUCTS	.7	.5	-	(D)	.2	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.2	.1	-	(D)	(D)	.1	(D)	(D)
37	TRANSPORTATION EQUIPMENT	3.1	1.0	-	(D)	1.3	.6	(D)	(Z)
	CALIFORNIA - SOUTH PACIFIC	310.3	113.9	19.4	3.0	127.2	11.1	19.2	16.5
20	FOOD AND KINDRED PRODUCTS	56.5	28.3	.8	.1	18.0	2.1	4.0	2.5
22	TEXTILE MILL PRODUCTS	1.2	1.1	-	-	(D)	(Z)	.1	(D)
24	LUMBER AND WOOD PRODUCTS	37.4	12.0	4.9	(D)	1.2	(D)	1.4	6.7
26	PAPER AND ALLIED PRODUCTS	39.0	23.9	(D)	.2	3.3	(D)	1.3	1.0
28	CHEMICALS AND ALLIED PRODUCTS	26.1	15.8	(D)	.1	7.8	(D)	1.7	.5
29	PETROLEUM AND COAL PRODUCTS	80.6	3.6	(D)	(D)	67.6	.3	7.7	.7
30	RUBBER, MISC. PLASTICS PROD.	6.1	.1	(D)	.2	.5	.4	1.2	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	-	(D)	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	21.0	16.4	(D)	(D)	1.2	.4	.6	1.9
33	PRIMARY METAL INDUSTRIES	17.8	4.0	(D)	(D)	7.6	4.2	.9	1.1
34	FABRICATED METAL PRODUCTS	2.9	2.4	(D)	(Z)	.2	.2	(D)	(Z)
35	MACHINERY, EXCEPT ELECTRICAL	2.0	.5	-	.2	.1	.4	(Z)	.6
36	ELECTRIC, ELECTRONIC EQUIP	5.5	2.9	(D)	.5	.2	.8	(D)	.8
37	TRANSPORTATION EQUIPMENT	6.4	2.4	(D)	1.2	1.1	1.2	(D)	.4
38	INSTRUMENTS, RELATED PRODUCTS	.8	.4	-	.1	.1	.2	(Z)	(Z)
	ALASKA	-				-	-		
20	FOOD AND KINDRED PRODUCTS	1.3	(D)	-	-	(D)	(D)	(D)	(D)
	HAWAII	111.4	10.8	39.8	(Z)	16.7	3.5	1.6	39.0
20	FOOD AND KINDRED PRODUCTS	108.5	10.0	39.8	(D)	15.0	(D)	1.3	38.9

Note: Water use regions or major industry groups which have been omitted from table have water intake of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1]See appendix H for maps and appendix I for definitions.

Table 4a. Water Intake, by Source and Purpose, by Kind of Water, for Major Industry Groups: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Major industry group and kind of water	Water intake by source					
				Company system			
		Total	Public water system	Surface	Ground	Tidewater	Other
	ALL INDUSTRIES, TOTAL	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9
	FRESH	10 975.9	2 322.6	6 533.1	1 448.7	80.7	590.8
	BRACKISH	988.7	(D)	(D)	53.6	594.1	9.5
	SALT	1 027.1	(D)	(D)	30.4	956.1	36.5
20	FOOD AND KINDRED PRODUCTS	739.6	230.4	170.6	288.4	34.3	15.8
	FRESH	683.3	228.3	167.6	273.0	(D)	(D)
	BRACKISH	44.9	(D)	3.0	(D)	21.2	(D)
	SALT	11.4	(D)	-	(D)	(D)	(D)
21	TOBACCO PRODUCTS	4.5	3.3	(D)	(D)	-	-
	FRESH	4.5	3.3	(D)	(D)	-	-
	BRACKISH	-	-	-	-	-	-
	SALT	-	-	-	-	-	-
22	TEXTILE MILL PRODUCTS	162.9	87.6	59.0	15.7	(D)	(D)
	FRESH	161.2	87.6	57.3	15.7	(D)	(D)
	BRACKISH	1.7	-	1.7	(Z)	-	-
	SALT	-	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS	156.9	39.3	86.5	11.7	9.4	10.0
	FRESH	146.9	(D)	85.7	11.7	(D)	9.7
	BRACKISH	(D)	(D)	(D)	-	-	(D)
	SALT	(D)	-	(D)	-	(D)	(D)
25	FURNITURE AND FIXTURES	24.0	22.5	(D)	(D)	-	(Z)
	FRESH	24.0	22.5	(D)	(D)	-	(Z)
	BRACKISH	-	-	-	-	-	-
	SALT	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	1 963.1	276.5	1 222.8	360.3	77.0	26.9
	FRESH	1 872.9	(D)	(D)	359.3	(D)	26.2
	BRACKISH	65.0	(D)	(D)	2.4	43.8	(D)
	SALT	25.2	-	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	4 325.5	727.1	2 250.5	365.6	781.5	200.8
	FRESH	3 424.7	726.4	2 153.9	323.8	21.9	198.8
	BRACKISH	181.5	.7	(D)	12.5	72.0	(D)
	SALT	719.4	-	(D)	29.3	687.6	(D)
29	PETROLEUM AND COAL PRODUCTS	1 172.5	231.6	449.6	90.2	360.7	40.7
	FRESH	693.2	(D)	(D)	88.5	(D)	39.5
	BRACKISH	382.3	(D)	(D)	2.1	226.3	(D)
	SALT	97.0	-	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	187.0	74.6	49.2	61.2	(D)	(D)
	FRESH	182.7	(D)	(D)	59.5	(D)	(D)
	BRACKISH	4.3	-	(D)	1.7	-	(D)
	SALT	-	(D)	-	-	-	-
31	LEATHER AND LEATHER PRODUCTS	8.5	5.7	1.4	1.4	-	-
	FRESH	(D)	5.7	(D)	1.4	-	-
	BRACKISH	(D)	-	(D)	-	-	-
	SALT	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	206.6	42.1	96.6	44.5	19.0	4.4
	FRESH	183.6	(D)	94.6	41.4	(D)	4.4
	BRACKISH	5.4	(D)	2.1	(D)	(D)	(Z)
	SALT	17.7	-	-	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	3 392.1	170.4	2 375.4	210.8	309.3	326.3
	FRESH	2 989.5	(D)	2 328.8	199.6	(D)	289.8
	BRACKISH	283.7	(D)	46.5	11.2	(D)	(D)
	SALT	118.8	-	-	-	(D)	(D)
34	FABRICATED METAL PRODUCTS	90.0	63.4	2.7	13.5	(D)	(D)
	FRESH	78.9	(D)	(D)	13.5	-	(D)
	BRACKISH	(D)	(D)	(D)	(Z)	-	-
	SALT	(D)	-	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	164.5	81.1	40.1	20.5	(D)	(D)
	FRESH	148.0	(D)	(D)	(D)	(D)	6.7
	BRACKISH	(D)	(D)	(D)	(D)	-	(D)
	SALT	(D)	-	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	116.0	90.1	3.3	20.0	(D)	(D)
	FRESH	108.4	90.1	(D)	(D)	-	(D)
	BRACKISH	(D)	-	(D)	(D)	(D)	-
	SALT	(D)	-	-	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	234.5	165.9	32.5	21.6	11.9	2.5
	FRESH	222.3	(D)	(D)	(D)	-	2.5
	BRACKISH	4.5	(D)	(D)	(D)	(D)	-
	SALT	7.7	-	-	-	(D)	(Z)
38	INSTRUMENTS, RELATED PRODUCTS	35.5	13.5	17.5	(D)	-	(D)
	FRESH	35.5	13.5	17.5	(D)	-	(D)
	BRACKISH	-	-	-	-	-	-
	SALT	-	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	7.7	5.3	.4	2.0	-	-
	FRESH	(D)	5.3	(D)	2.0	-	-
	BRACKISH	(D)	-	(D)	-	-	-
	SALT	-	-	-	-	-	-

See footnotes at end of table.

Table 4a. Water Intake, by Source and Purpose, by Kind of Water, for Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Major industry group and kind of water	Water intake by purpose						
			Cooling and condensing					
		Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	ALL INDUSTRIES, TOTAL	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
	FRESH	3 541.7	1 565.4	203.3	4 510.0	275.6	540.0	340.0
	BRACKISH	73.6	212.4	5.0	686.2	(D)	(D)	6.7
	SALT	111.7	278.2	4.2	625.2	(D)	(D)	7.6
20	FOOD AND KINDRED PRODUCTS	260.4	63.9	12.5	272.2	26.3	36.1	68.2
	FRESH	245.0	51.1	(D)	246.7	(D)	35.9	67.9
	BRACKISH	14.4	12.8	(D)	(D)	(D)	.1	(D)
	SALT	1.0	-	(D)	(D)	-	-	(D)
21	TOBACCO PRODUCTS	2.2	(D)	.5	1.0	.3	.3	(D)
	FRESH	2.2	(D)	.5	1.0	.3	.3	(D)
	BRACKISH	-	-	-	-	-	-	-
	SALT	-	-	-	-	-	-	-
22	TEXTILE MILL PRODUCTS	110.4	3.4	8.6	11.5	4.8	10.3	13.9
	FRESH	109.6	3.4	(D)	(D)	(D)	(D)	13.9
	BRACKISH	.8	-	(D)	(D)	(D)	(D)	-
	SALT	-	-	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS	61.2	31.5	.2	25.0	4.0	13.4	21.3
	FRESH	60.1	(D)	.2	24.4	4.0	(D)	21.1
	BRACKISH	(D)	-	-	(D)	-	(D)	(D)
	SALT	(D)	(D)	-	(D)	-	-	(D)
25	FURNITURE AND FIXTURES	4.9	(D)	(D)	(D)	2.5	3.1	(D)
	FRESH	4.9	(D)	(D)	(D)	2.5	3.1	(D)
	BRACKISH	-	-	-	-	-	-	-
	SALT	-	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	1 186.7	370.4	22.6	237.1	25.0	87.1	34.0
	FRESH	1 180.4	329.2	(D)	211.7	(D)	(D)	32.9
	BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	SALT	(D)	(D)	-	(D)	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS	753.9	480.1	70.8	2 760.7	37.6	141.8	80.6
	FRESH	707.8	279.0	67.6	2 116.0	37.6	141.8	75.3
	BRACKISH	18.5	(D)	(D)	148.0	(D)	(Z)	.8
	SALT	27.6	(D)	(D)	496.7	(D)	(Z)	4.5
29	PETROLEUM AND COAL PRODUCTS	60.8	85.4	2.7	825.6	6.2	164.3	27.5
	FRESH	59.0	14.3	(D)	422.5	6.2	164.0	24.7
	BRACKISH	(D)	(D)	-	311.5	(Z)	(D)	(D)
	SALT	(D)	(D)	(D)	91.7	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	27.5	4.7	6.7	111.2	24.2	9.6	3.2
	FRESH	26.9	4.7	(D)	108.8	24.2	9.6	3.2
	BRACKISH	.5	-	(D)	2.5	(Z)	(Z)	(Z)
	SALT	-	-	-	-	-	-	-
31	LEATHER AND LEATHER PRODUCTS	4.8	.2	(D)	(D)	2.1	.6	.6
	FRESH	(D)	.2	(D)	(D)	2.1	.6	.6
	BRACKISH	(D)	-	-	-	-	-	-
	SALT	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	83.6	41.0	3.4	59.5	5.1	5.5	8.4
	FRESH	63.5	41.0	(D)	57.1	5.1	5.5	(D)
	BRACKISH	2.5	-	(D)	2.4	(Z)	-	(D)
	SALT	17.7	-	-	-	-	-	-
33	PRIMARY METAL INDUSTRIES	964.4	923.5	34.4	1 335.0	38.5	50.5	45.8
	FRESH	876.2	787.2	34.4	1 158.3	(D)	49.9	(D)
	BRACKISH	(D)	(D)	(Z)	(D)	(D)	.6	(D)
	SALT	(D)	(D)	-	(D)	-	-	-
34	FABRICATED METAL PRODUCTS	32.6	3.7	3.3	27.8	16.5	3.6	2.3
	FRESH	32.5	(D)	(D)	20.1	(D)	3.6	2.3
	BRACKISH	(D)	-	(D)	(D)	(D)	(Z)	(Z)
	SALT	(D)	(D)	-	(D)	-	-	-
35	MACHINERY, EXCEPT ELECTRICAL	34.1	31.1	20.5	43.3	26.0	4.5	4.7
	FRESH	33.6	17.0	20.5	42.0	26.0	(D)	(D)
	BRACKISH	.2	(D)	(Z)	(D)	(Z)	(D)	(D)
	SALT	-	(D)	-	(D)	-	-	(D)
36	ELECTRIC, ELECTRONIC EQUIP	48.2	.9	10.2	28.1	20.6	3.4	4.3
	FRESH	48.1	.9	(D)	22.2	(D)	3.4	4.3
	BRACKISH	(D)	(Z)	(D)	5.9	(D)	(Z)	(Z)
	SALT	(D)	-	(D)	(Z)	-	-	(Z)
37	TRANSPORTATION EQUIPMENT	73.3	9.6	10.9	61.5	33.5	7.7	37.6
	FRESH	71.1	9.6	(D)	54.8	(D)	7.7	34.4
	BRACKISH	(D)	-	(D)	1.5	(D)	(Z)	(D)
	SALT	(D)	-	-	5.2	-	-	(D)
38	INSTRUMENTS, RELATED PRODUCTS	15.3	4.2	3.9	7.2	2.5	1.5	.8
	FRESH	15.3	4.2	3.9	7.2	2.5	1.5	.8
	BRACKISH	-	-	-	-	-	-	-
	SALT	-	-	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	2.7	(D)	.5	2.8	1.2	.3	(D)
	FRESH	(D)	(D)	.5	2.8	1.2	.3	(D)
	BRACKISH	(D)	-	-	(Z)	-	-	(D)
	SALT	-	-	-	-	-	-	-

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 4b. Water Intake, by Source and Purpose, by Kind of Water, for States: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by source					
			Company system			
	Total	Public	Surface	Ground	Tidewater	Other
UNITED STATES, TOTAL	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9
FRESH	10 975.9	2 322.6	6 533.1	1 448.7	80.7	590.8
BRACKISH	988.7	(D)	(D)	53.6	594.1	9.5
SALT	1 027.1	(D)	(D)	30.4	956.1	36.5
ALABAMA	294.2	72.7	201.5	16.2	(D)	(D)
FRESH	289.3	(D)	(D)	(D)	-	2.8
BRACKISH	4.9	(D)	(D)	(D)	(D)	-
SALT	-	-	-	-	-	-
ARIZONA	21.5	4.4	(D)	15.2	-	(D)
FRESH	20.2	4.4	(D)	(D)	-	(D)
BRACKISH	1.3	-	-	(D)	-	(D)
SALT	-	-	-	-	-	-
ARKANSAS	73.7	(D)	29.8	35.2	-	(D)
FRESH	(D)	(D)	29.8	(D)	-	(D)
BRACKISH	-	-	-	-	-	-
SALT	(D)	-	-	(D)	-	-
CALIFORNIA	307.6	118.4	12.7	69.4	99.6	7.5
FRESH	206.2	(D)	12.7	65.2	(D)	7.1
BRACKISH	17.1	(D)	(Z)	(D)	(D)	(D)
SALT	84.2	-	-	(D)	82.9	(D)
COLORADO	65.6	12.1	47.7	5.3	-	.4
FRESH	(D)	12.1	47.7	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	(D)
SALT	-	-	-	-	-	-
CONNECTICUT	87.7	22.8	25.6	6.3	(D)	(D)
FRESH	55.3	22.8	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	(D)	-	(D)
SALT	(D)	-	-	-	(D)	-
DELAWARE	169.3	5.7	17.1	5.5	(D)	(D)
FRESH	(D)	(D)	(D)	(D)	(D)	(D)
BRACKISH	135.5	(D)	(D)	-	(D)	-
SALT	(D)	-	-	(D)	-	-
FLORIDA	221.1	19.9	25.5	141.2	(D)	(D)
FRESH	172.3	(D)	(D)	119.4	-	(D)
BRACKISH	(D)	(D)	(D)	(D)	(D)	-
SALT	(D)	-	-	(D)	(D)	-
GEORGIA	271.2	56.0	75.8	103.9	(D)	(D)
FRESH	238.8	56.0	(D)	103.9	-	(D)
BRACKISH	(D)	-	(D)	-	(D)	-
SALT	(D)	-	-	-	(D)	-
HAWAII	111.4	1.7	42.5	65.9	(D)	(D)
FRESH	94.8	1.7	42.5	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	(D)	-
SALT	(D)	-	-	(D)	-	-
IDAHO	32.6	(D)	17.0	14.8	-	(D)
FRESH	32.6	(D)	17.0	14.8	-	(D)
BRACKISH	-	-	-	-	-	-
SALT	-	-	-	-	-	-
ILLINOIS	430.9	85.4	254.6	64.6	-	26.5
FRESH	428.2	(D)	253.4	(D)	-	26.5
BRACKISH	2.7	(D)	1.2	(D)	-	-
SALT	-	-	-	-	-	-
INDIANA	634.8	33.3	561.7	37.0	-	2.8
FRESH	(D)	33.3	(D)	37.0	-	2.8
BRACKISH	(D)	-	(D)	-	-	-
SALT	-	-	-	-	-	-
IOWA	147.3	(D)	73.1	47.7	-	(D)
FRESH	147.0	(D)	73.1	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	-
SALT	(D)	-	-	-	-	(D)
KANSAS	37.0	11.3	7.0	18.2	(D)	(D)
FRESH	33.8	(D)	(D)	15.6	(D)	(D)
BRACKISH	3.2	(D)	(D)	2.7	-	-
SALT	-	-	-	-	-	-
KENTUCKY	139.9	51.0	65.0	22.8	(D)	(D)
FRESH	(D)	51.0	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-
LOUISIANA	1 280.2	(D)	986.2	104.1	(D)	180.1
FRESH	1 118.0	(D)	826.7	101.5	(D)	(D)
BRACKISH	161.0	-	(D)	(D)	-	-
SALT	1.2	-	(D)	(D)	-	(D)
MAINE	137.1	5.6	125.0	(D)	3.3	(D)
FRESH	133.4	5.6	(D)	(D)	-	(D)
BRACKISH	(D)	-	(D)	-	(D)	-
SALT	(D)	-	-	-	(D)	-
MARYLAND	371.8	18.4	39.7	(D)	265.4	(D)
FRESH	(D)	18.4	(D)	(D)	-	(D)
BRACKISH	219.0	-	(D)	(D)	(D)	-

See footnotes at end of table.

Table 4b. Water Intake, by Source and Purpose, by Kind of Water, for States: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by purpose						
		Cooling and condensing					
	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
UNITED STATES, TOTAL	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
FRESH	3 541.7	1 565.4	203.3	4 510.0	275.6	540.0	340.0
BRACKISH	73.6	212.4	5.0	686.2	(D)	(D)	6.7
SALT	111.7	278.2	4.2	625.2	(D)	(D)	7.6
ALABAMA	96.1	12.7	15.7	148.1	5.9	10.9	4.8
FRESH	(D)	12.7	(D)	(D)	5.9	10.9	(D)
BRACKISH	(D)	-	(D)	(D)	-	-	(D)
SALT	-	-	-	-	-	-	-
ARIZONA	13.7	1.2	.8	2.9	1.2	1.2	.6
FRESH	12.7	(D)	.8	(D)	(D)	(D)	(D)
BRACKISH	.9	(D)	-	(D)	(D)	(D)	(D)
SALT	-	-	-	-	-	-	-
ARKANSAS	55.0	(D)	(D)	6.9	1.6	4.9	1.1
FRESH	(D)	(D)	(D)	6.9	1.6	4.9	1.1
BRACKISH	-	-	-	-	-	-	-
SALT	(D)	-	-	-	-	-	-
CALIFORNIA	121.7	19.0	2.9	115.2	11.7	20.0	17.1
FRESH	97.0	14.9	(D)	43.4	(D)	(D)	16.4
BRACKISH	2.7	(D)	-	13.1	(D)	(D)	.3
SALT	22.0	(D)	(D)	58.7	-	-	.4
COLORADO	9.2	18.3	.3	28.6	5.0	1.8	2.3
FRESH	(D)	18.3	.3	(D)	(D)	1.8	(D)
BRACKISH	(D)	-	-	(D)	(D)	-	(D)
SALT	-	-	-	-	-	-	-
CONNECTICUT	18.8	10.4	2.4	47.4	3.3	2.0	3.4
FRESH	(D)	(D)	2.3	16.9	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	(D)	(D)	(D)	(D)
SALT	-	(D)	(D)	(D)	-	-	-
DELAWARE	9.1	(D)	1.7	98.3	(D)	(D)	.7
FRESH	8.4	(D)	1.7	(D)	(D)	(D)	.7
BRACKISH	(D)	(D)	-	(D)	-	(D)	-
SALT	(D)	-	-	-	-	-	-
FLORIDA	79.8	35.1	2.9	61.5	10.0	10.4	21.4
FRESH	76.1	10.4	(D)	43.5	(D)	(D)	20.1
BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SALT	(D)	(D)	-	(D)	-	-	(D)
GEORGIA	137.3	53.6	4.3	54.8	5.7	10.8	4.8
FRESH	(D)	(D)	4.3	42.4	5.7	10.8	4.8
BRACKISH	(D)	(D)	-	(D)	-	-	-
SALT	-	-	-	(D)	-	-	-
HAWAII	10.8	39.8	(Z)	16.7	3.5	1.6	39.0
FRESH	(D)	(D)	(Z)	15.4	3.5	1.6	39.0
BRACKISH	(D)	(D)	-	(D)	-	-	-
SALT	-	-	-	(D)	-	-	-
IDAHO	12.7	(D)	(D)	11.3	.5	2.8	1.9
FRESH	12.7	(D)	(D)	11.3	.5	2.8	1.9
BRACKISH	-	-	-	-	-	-	-
SALT	-	-	-	-	-	-	-
ILLINOIS	97.4	132.3	10.3	144.1	11.2	24.9	10.1
FRESH	97.1	132.3	(D)	142.1	(D)	(D)	10.1
BRACKISH	.3	-	(D)	2.0	(D)	(D)	-
SALT	-	-	-	-	-	-	-
INDIANA	171.0	78.9	4.4	352.7	8.3	14.8	4.6
FRESH	(D)	78.9	4.4	(D)	8.3	14.8	(D)
BRACKISH	(D)	-	-	(D)	-	-	(D)
SALT	-	-	-	-	-	-	-
IOWA	28.2	16.0	4.0	88.0	3.8	3.8	3.5
FRESH	28.0	16.0	4.0	(D)	(D)	3.8	3.5
BRACKISH	(D)	-	-	(D)	(D)	-	-
SALT	(D)	-	-	-	-	-	-
KANSAS	8.5	1.5	.4	14.8	2.5	7.3	1.8
FRESH	(D)	(D)	.4	(D)	(D)	7.3	(D)
BRACKISH	(D)	(D)	-	(D)	(D)	-	(D)
SALT	-	-	-	-	-	-	-
KENTUCKY	46.7	.1	1.0	63.5	20.0	4.9	3.5
FRESH	(D)	.1	1.0	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	-	(D)	(D)	(D)	(D)
SALT	-	-	-	-	-	-	-
LOUISIANA	148.2	256.2	6.8	809.8	5.0	27.8	26.1
FRESH	146.3	(D)	6.8	679.2	5.0	(D)	(D)
BRACKISH	(D)	(D)	-	130.6	-	(D)	-
SALT	(D)	-	-	-	-	-	(D)
MAINE	75.9	39.8	.7	13.6	.4	5.3	1.4
FRESH	75.5	39.8	.7	10.3	(D)	(D)	(D)
BRACKISH	(D)	-	-	(D)	(D)	(D)	-
SALT	(D)	-	-	(D)	-	-	(D)
MARYLAND	65.8	93.4	2.2	198.5	2.3	5.2	4.0
FRESH	(D)	(D)	2.2	(D)	(D)	5.2	(D)
BRACKISH	(D)	(D)	-	117.9	(D)	-	(D)

See footnotes at end of table.

Table 4b. Water Intake, by Source and Purpose, by Kind of Water, for States: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by source					
			Company system			
	Total	Public	Surface	Ground	Tidewater	Other
MARYLAND--CON.						
SALT	(D)	-	-	-	(D)	-
MASSACHUSETTS	152.4	41.2	69.4	12.7	28.7	.4
FRESH	110.2	39.6	(D)	(D)	-	(D)
BRACKISH	14.3	(D)	(D)	(D)	(D)	(D)
SALT	27.9	(D)	-	-	(D)	-
MICHIGAN	874.3	278.2	544.3	51.4	-	.5
FRESH	871.9	278.2	(D)	50.6	-	(D)
BRACKISH	(D)	-	(D)	(D)	-	-
SALT	(D)	-	-	(D)	-	(D)
MINNESOTA	160.9	100.1	34.8	25.3	(D)	(D)
FRESH	160.9	100.1	34.8	25.3	(D)	(D)
BRACKISH	-	-	-	-	-	-
SALT	-	-	-	-	-	-
MISSISSIPPI	99.3	(D)	30.7	47.0	(D)	(D)
FRESH	87.7	(D)	30.7	47.0	-	(D)
BRACKISH	(D)	-	-	-	(D)	-
SALT	(D)	-	-	-	(D)	-
MISSOURI	50.7	24.9	6.7	14.2	-	4.9
FRESH	(D)	24.9	(D)	14.2	-	(D)
BRACKISH	(D)	-	(D)	-	-	(D)
SALT	-	-	-	-	-	-
MONTANA	32.2	1.4	23.8	(D)	-	(D)
FRESH	(D)	1.4	23.8	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	-
SALT	-	-	-	-	-	-
NEBRASKA	28.7	13.0	(D)	11.9	-	(D)
FRESH	(D)	13.0	(D)	11.9	-	(D)
BRACKISH	(D)	-	-	-	-	(D)
SALT	-	-	-	-	-	-
NEVADA	18.9	9.0	(D)	5.6	-	(D)
FRESH	15.1	9.0	(D)	1.8	-	(D)
BRACKISH	(D)	-	-	(D)	-	-
SALT	(D)	-	-	(D)	-	(D)
NEW HAMPSHIRE	26.2	2.0	23.5	.7	-	-
FRESH	26.2	2.0	23.5	.7	-	-
BRACKISH	-	-	-	-	-	-
SALT	-	-	-	-	-	-
NEW JERSEY	331.5	145.7	35.4	35.2	113.6	1.5
FRESH	221.7	145.7	31.9	34.5	(D)	(D)
BRACKISH	47.2	-	(D)	.7	(D)	(D)
SALT	62.6	-	(D)	-	60.1	(D)
NEW MEXICO	4.8	1.1	-	3.8	-	-
FRESH	(D)	(D)	-	(D)	-	-
BRACKISH	(D)	(D)	-	(D)	-	-
SALT	-	-	-	-	-	-
NEW YORK	469.7	105.9	261.7	27.0	10.2	65.1
FRESH	435.4	105.9	237.2	25.5	(D)	(D)
BRACKISH	(D)	-	24.3	(D)	(D)	(D)
SALT	(D)	-	-	(D)	(D)	-
NORTH CAROLINA	187.0	46.4	115.1	13.2	(D)	(D)
FRESH	(D)	46.4	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	(D)	-	(D)
SALT	-	-	-	-	-	-
OHIO	584.7	106.4	374.9	73.9	(D)	(D)
FRESH	582.3	(D)	(D)	73.1	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	-	(D)
SALT	(D)	-	-	(D)	-	-
OKLAHOMA	153.5	140.8	9.0	(D)	-	(D)
FRESH	(D)	140.8	9.0	(D)	-	(D)
BRACKISH	(D)	-	-	-	-	(D)
SALT	-	-	-	-	-	-
OREGON	135.5	11.3	99.5	11.1	(D)	(D)
FRESH	127.5	11.3	99.0	11.1	(D)	(D)
BRACKISH	(D)	-	.5	-	(D)	(D)
SALT	(D)	-	-	-	(D)	(D)
PENNSYLVANIA	1 190.1	67.7	897.1	160.8	31.7	32.9
FRESH	1 147.0	67.7	854.3	(D)	31.7	(D)
BRACKISH	(D)	-	42.8	(D)	-	(D)
SALT	(D)	-	-	-	-	(D)
RHODE ISLAND	19.1	9.6	2.9	(D)	-	(D)
FRESH	(D)	9.6	2.9	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	-
SALT	-	-	-	-	-	-
SOUTH CAROLINA	416.4	45.0	357.8	11.5	(D)	(D)
FRESH	414.5	45.0	(D)	(D)	(D)	(D)
BRACKISH	1.9	-	(D)	(D)	(D)	(D)
SALT	-	-	-	-	-	-

See footnotes at end of table.

Table 4b. **Water Intake, by Source and Purpose, by Kind of Water, for States: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by purpose						
		Cooling and condensing					
	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
MARYLAND--CON.							
SALT	-	-	-	(D)	-	-	-
MASSACHUSETTS	35.8	52.7	4.2	40.5	6.9	3.5	8.8
FRESH	33.6	35.4	2.4	(D)	(D)	(D)	8.8
BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SALT	(D)	(D)	(D)	14.1	-	-	(D)
MICHIGAN	417.0	185.4	6.0	221.6	24.9	12.5	6.8
FRESH	(D)	185.4	6.0	(D)	24.9	12.5	6.8
BRACKISH	(D)	-	-	(D)	-	-	-
SALT	(D)	-	-	-	-	-	-
MINNESOTA	92.3	13.2	1.5	22.4	8.1	21.9	1.4
FRESH	92.3	13.2	1.5	22.4	8.1	21.9	1.4
BRACKISH	-	-	-	-	-	-	-
SALT	-	-	-	-	-	-	-
MISSISSIPPI	45.0	(D)	(D)	36.4	1.1	5.6	1.7
FRESH	(D)	(D)	(D)	(D)	1.1	5.6	1.7
BRACKISH	-	-	-	(D)	-	-	-
SALT	(D)	-	-	-	-	-	-
MISSOURI	17.4	.4	1.5	20.1	3.3	3.7	4.1
FRESH	(D)	.4	1.5	(D)	(D)	3.7	4.1
BRACKISH	(D)	-	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-	-
MONTANA	3.8	(D)	(D)	24.5	.2	1.1	2.3
FRESH	3.8	(D)	(D)	24.5	.2	1.1	(D)
BRACKISH	-	-	-	-	-	-	(D)
SALT	-	-	-	-	-	-	-
NEBRASKA	8.3	(D)	1.1	13.9	2.6	1.3	(D)
FRESH	8.3	(D)	1.1	(D)	2.6	1.3	(D)
BRACKISH	-	-	-	(D)	-	-	-
SALT	-	-	-	-	-	-	-
NEVADA	15.7	(D)	(D)	1.8	.2	(D)	.8
FRESH	11.9	(D)	(D)	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	-	-	-	-	-
SALT	(D)	-	(D)	(D)	(D)	(D)	(D)
NEW HAMPSHIRE	17.2	(D)	(D)	2.6	.2	.7	5.2
FRESH	17.2	(D)	(D)	2.6	.2	.7	5.2
BRACKISH	-	-	-	-	-	-	-
SALT	-	-	-	-	-	-	-
NEW JERSEY	158.6	9.3	5.7	132.8	4.9	9.7	10.2
FRESH	149.5	3.7	2.3	46.8	(D)	(D)	5.0
BRACKISH	(D)	(D)	(D)	38.5	(D)	(D)	(D)
SALT	(D)	(D)	(D)	47.5	-	-	(D)
NEW MEXICO	1.9	(D)	(D)	1.2	.1	.3	1.0
FRESH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	-	(D)	(D)	(D)	(D)
SALT	-	-	-	-	-	-	-
NEW YORK	149.4	13.2	20.6	248.5	16.5	12.4	9.1
FRESH	144.1	(D)	(D)	222.9	(D)	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SALT	(D)	-	-	(D)	-	-	-
NORTH CAROLINA	105.7	21.1	8.7	39.2	4.1	7.7	5.3
FRESH	(D)	21.1	(D)	(D)	4.1	7.7	5.3
BRACKISH	(D)	-	(D)	(D)	-	-	-
SALT	-	-	-	-	-	-	-
OHIO	151.3	130.6	6.5	240.3	16.8	27.0	12.4
FRESH	151.1	130.6	(D)	239.3	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	1.0	(D)	(D)	(D)
SALT	(D)	-	-	-	-	-	-
OKLAHOMA	18.9	.5	.4	39.5	2.9	90.8	.6
FRESH	(D)	.5	.4	(D)	2.9	90.8	.6
BRACKISH	(D)	-	-	(D)	-	-	-
SALT	-	-	-	-	-	-	-
OREGON	58.8	15.0	.4	32.2	2.2	7.6	19.4
FRESH	58.0	(D)	.4	31.7	2.2	7.6	(D)
BRACKISH	(D)	-	-	(D)	-	-	(D)
SALT	(D)	(D)	-	(D)	-	-	(D)
PENNSYLVANIA	323.2	181.6	14.4	615.5	19.7	26.3	9.4
FRESH	(D)	181.6	14.4	592.4	(D)	(D)	(D)
BRACKISH	(D)	-	-	23.1	(D)	(D)	-
SALT	-	-	-	-	-	-	(D)
RHODE ISLAND	8.3	.8	.7	2.2	6.0	.8	.3
FRESH	(D)	.8	.7	2.2	6.0	.8	.3
BRACKISH	(D)	-	-	-	-	-	-
SALT	-	-	-	-	-	-	-
SOUTH CAROLINA	67.0	19.6	18.1	265.1	2.6	7.5	36.5
FRESH	(D)	19.6	18.1	(D)	(D)	7.5	(D)
BRACKISH	(D)	-	-	(D)	(D)	-	(D)
SALT	-	-	-	-	-	-	-

See footnotes at end of table.

Table 4b. Water Intake, by Source and Purpose, by Kind of Water, for States: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by source					
			Company system			
	Total	Public	Surface	Ground	Tidewater	Other
TENNESSEE	366.6	58.4	278.2	29.4	-	.5
FRESH	(D)	58.4	(D)	(D)	-	.5
BRACKISH	(D)	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-
TEXAS	1 395.7	349.3	194.4	70.2	763.6	18.3
FRESH	580.1	347.9	144.8	(D)	(D)	12.9
BRACKISH	178.3	1.3	49.6	(D)	(D)	(D)
SALT	637.3	-	-	(D)	637.1	(D)
UTAH	58.7	5.8	(D)	12.2	-	(D)
FRESH	15.8	(D)	(D)	5.8	-	-
BRACKISH	(D)	(D)	(D)	6.3	-	(D)
SALT	(D)	-	-	-	-	(D)
VERMONT	5.8	1.2	3.1	(D)	-	(D)
FRESH	5.8	1.2	3.1	(D)	-	(D)
BRACKISH	-	-	-	-	-	-
SALT	-	-	-	-	-	-
VIRGINIA	247.3	18.0	161.3	35.0	31.6	1.3
FRESH	213.7	18.0	(D)	35.0	(D)	(D)
BRACKISH	(D)	-	(D)	-	(D)	(D)
SALT	(D)	-	-	-	(D)	-
WASHINGTON	424.4	77.8	160.8	48.6	(D)	(D)
FRESH	401.3	77.8	(D)	(D)	-	(D)
BRACKISH	14.6	-	(D)	-	(D)	-
SALT	8.6	-	-	(D)	(D)	-
WEST VIRGINIA	456.9	37.5	399.1	(D)	-	(D)
FRESH	(D)	37.5	(D)	(D)	-	(D)
BRACKISH	(D)	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-
WISCONSIN	202.7	57.8	123.8	(D)	(D)	.5
FRESH	197.5	57.8	(D)	(D)	(D)	.5
BRACKISH	5.3	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-
WYOMING	10.7	3.2	6.9	(D)	-	(D)
FRESH	(D)	3.2	6.9	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	-
SALT	-	-	-	-	-	-

See footnotes at end of table.

Table 4b. Water Intake, by Source and Purpose, by Kind of Water, for States: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State and kind of water	Water intake by purpose						
		Cooling and condensing					
	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
TENNESSEE	86.0	43.4	15.3	191.8	12.2	9.7	8.3
FRESH	86.0	43.4	15.3	(D)	12.2	9.7	(D)
BRACKISH	-	-	-	(D)	-	-	(D)
SALT	-	-	-	-	-	-	-
TEXAS	218.7	326.2	7.7	718.5	20.8	81.2	22.6
FRESH	188.8	(D)	(D)	162.9	20.7	80.9	20.5
BRACKISH	(D)	(D)	(D)	172.6	(Z)	(D)	(D)
SALT	(D)	225.5	(D)	383.0	-	(D)	(D)
UTAH	44.2	(D)	.3	7.3	1.0	1.6	(D)
FRESH	6.1	(D)	.3	3.6	(D)	(D)	(D)
BRACKISH	(D)	(D)	-	3.7	(D)	(D)	(D)
SALT	(D)	-	-	-	-	-	-
VERMONT	3.6	(D)	.2	.6	.2	.1	(D)
FRESH	3.6	(D)	.2	.6	.2	.1	(D)
BRACKISH	-	-	-	-	-	-	-
SALT	-	-	-	-	-	-	-
VIRGINIA	59.0	33.3	11.2	124.8	2.2	7.6	8.9
FRESH	56.0	(D)	11.2	94.9	2.2	(D)	(D)
BRACKISH	(D)	(D)	-	(D)	-	(D)	-
SALT	(D)	-	-	(D)	-	-	(D)
WASHINGTON	189.3	14.8	5.1	185.9	2.3	9.8	17.2
FRESH	180.0	(D)	5.1	176.4	2.3	9.8	(D)
BRACKISH	(D)	-	-	(D)	-	-	(D)
SALT	(D)	(D)	-	(D)	-	-	-
WEST VIRGINIA	107.4	67.6	7.7	248.2	2.9	19.3	3.8
FRESH	(D)	67.6	7.7	(D)	2.9	19.3	(D)
BRACKISH	(D)	-	-	(D)	-	-	(D)
SALT	-	-	-	-	-	-	-
WISCONSIN	93.9	37.8	3.2	46.6	8.3	7.6	4.8
FRESH	(D)	(D)	3.2	(D)	8.3	(D)	4.8
BRACKISH	(D)	(D)	-	(D)	-	(D)	-
SALT	-	-	-	-	-	-	-
WYOMING	2.1	(D)	(D)	5.7	(D)	2.3	(D)
FRESH	2.1	(D)	(D)	5.7	(D)	2.3	(D)
BRACKISH	-	-	-	-	-	-	(D)
SALT	-	-	-	-	-	-	-

Note: States for which all data would be withheld to avoid disclosure have been omitted from the table.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 4c. Water Intake, by Source and Purpose, by Kind of Water, for Water Use Regions: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

Water use region[1] and kind of water	Water intake by source					
			Company system			
	Total	Public water system	Surface	Ground	Tidewater	Other
UNITED STATES, TOTAL	12 991.7	2 331.0	6 860.2	1 532.7	1 630.9	636.9
FRESH	10 975.9	2 322.6	6 533.1	1 448.7	80.7	590.8
BRACKISH	988.7	(D)	(D)	53.6	594.1	9.5
SALT	1 027.1	(D)	(D)	30.4	956.1	36.5
NEW ENGLAND	424.6	81.6	247.2	27.3	63.9	4.9
FRESH	346.3	80.0	239.9	21.7	(D)	(D)
BRACKISH	16.8	(D)	7.3	5.6	(D)	(D)
SALT	61.5	(D)	-	-	(D)	-
MIDDLE ATLANTIC	1 618.7	251.6	491.9	228.2	595.3	51.6
FRESH	1 061.8	(D)	473.1	227.6	58.2	(D)
BRACKISH	416.3	(D)	(D)	(D)	399.2	(D)
SALT	140.6	-	(D)	(D)	137.9	(D)
SOUTH ATLANTIC	1 369.2	235.6	707.1	324.9	74.0	27.8
FRESH	1 262.3	(D)	706.4	298.7	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	50.2	(D)
SALT	(D)	-	(D)	(D)	(D)	-
GREAT LAKES	2 513.7	531.7	1 800.4	106.0	(D)	(D)
FRESH	2 480.9	(D)	1 771.6	102.8	(D)	65.0
BRACKISH	(D)	(D)	28.8	(D)	-	(D)
SALT	(D)	-	-	(D)	-	(D)
OHIO	1 717.3	189.3	1 318.4	159.0	-	50.6
FRESH	1 671.4	(D)	1 274.6	(D)	-	50.6
BRACKISH	(D)	(D)	43.8	(D)	-	-
SALT	(D)	-	-	(D)	-	-
TENNESSEE	428.0	39.4	318.7	4.2	(D)	(D)
FRESH	(D)	39.4	(D)	(D)	(D)	(D)
BRACKISH	(D)	-	(D)	(D)	-	-
SALT	-	-	-	-	-	-
UPPER MISSISSIPPI	530.2	182.2	209.2	113.6	(D)	(D)
FRESH	523.6	(D)	(D)	(D)	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	-	-
SALT	(D)	-	-	-	-	(D)
LOWER MISSISSIPPI	1 405.6	37.4	1 007.9	179.4	(D)	(D)
FRESH	1 241.6	37.4	(D)	175.0	(D)	(D)
BRACKISH	161.0	-	(D)	(D)	-	-
SALT	3.0	-	-	(D)	-	(D)
MISSOURI	161.5	44.1	47.7	45.9	-	23.7
FRESH	159.1	44.1	47.7	(D)	-	(D)
BRACKISH	2.4	-	-	(D)	-	(D)
SALT	-	-	-	-	-	-
ARKANSAS, WHITE AND RED	322.1	175.0	101.5	34.0	(D)	(D)
FRESH	314.2	(D)	(D)	27.3	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	-	(D)
SALT	(D)	-	-	(D)	-	-
TEXAS GULF	1 247.5	333.6	150.1	58.0	698.2	7.7
FRESH	497.6	332.3	100.5	57.6	(D)	(D)
BRACKISH	177.9	1.2	49.6	(D)	(D)	(D)
SALT	571.9	-	-	(D)	571.7	(D)
LOWER COLORADO	26.3	4.8	(D)	17.6	-	(D)
FRESH	24.9	4.8	(D)	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	-	(D)
SALT	(D)	-	-	-	-	(D)
GREAT BASIN	64.9	11.0	(D)	14.3	-	(D)
FRESH	18.2	(D)	(D)	(D)	-	-
BRACKISH	(D)	(D)	(D)	6.3	-	(D)
SALT	(D)	-	-	(D)	-	(D)
COLUMBIA - NORTH PACIFIC	605.0	88.2	281.7	75.5	19.7	140.2
FRESH	573.8	88.2	263.7	(D)	(D)	140.2
BRACKISH	15.4	-	11.6	-	(D)	(D)
SALT	15.9	-	-	(D)	15.9	(D)
CALIFORNIA - SOUTH PACIFIC	310.3	118.4	15.0	69.9	99.6	7.5
FRESH	209.0	(D)	(D)	65.8	(D)	7.1
BRACKISH	17.1	(D)	(D)	(D)	(D)	(D)
SALT	84.2	-	-	(D)	82.9	(D)
HAWAII	111.4	1.7	42.5	65.9	(D)	(D)
FRESH	94.8	1.7	42.5	(D)	-	(D)
BRACKISH	(D)	-	-	(D)	(D)	-
SALT	(D)	-	-	(D)	-	-

See footnotes at end of table.

Table 4c. Water Intake, by Source and Purpose, by Kind of Water, for Water Use Regions: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

Water use region[1] and kind of water	Water intake by purpose						
		Cooling and condensing					
	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
UNITED STATES, TOTAL	3 727.0	2 055.7	212.7	5 821.4	276.9	543.6	354.3
FRESH	3 541.7	1 565.4	203.3	4 510.0	275.6	540.0	340.0
BRACKISH	73.6	212.4	5.0	686.2	(D)	(D)	6.7
SALT	111.7	278.2	4.2	625.2	(D)	(D)	7.6
NEW ENGLAND	157.4	103.8	8.2	106.7	16.9	12.4	19.3
FRESH	154.6	85.0	6.3	52.1	(D)	(D)	19.2
BRACKISH	(D)	(D)	(D)	8.7	(D)	(D)	(D)
SALT	(D)	(D)	(D)	46.0	-	-	(D)
MIDDLE ATLANTIC	401.0	208.5	46.1	869.3	22.8	39.9	31.1
FRESH	375.4	(D)	42.7	489.7	(D)	39.8	23.9
BRACKISH	(D)	135.1	(D)	256.4	(D)	.1	1.8
SALT	(D)	(D)	(D)	123.2	-	-	5.4
SOUTH ATLANTIC	491.7	144.6	44.4	535.1	27.9	49.9	75.5
FRESH	477.2	104.5	(D)	487.4	(D)	(D)	72.9
BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SALT	(D)	(D)	-	(D)	-	-	(D)
GREAT LAKES	853.3	538.4	20.5	953.4	63.1	57.7	27.3
FRESH	856.8	(D)	(D)	928.8	63.3	(D)	(D)
BRACKISH	(D)	(D)	(D)	24.6	.1	(D)	(D)
SALT	(D)	-	-	-	-	-	-
OHIO	513.4	244.3	16.8	812.6	43.2	60.8	26.2
FRESH	493.6	244.3	(D)	786.7	(D)	60.3	25.9
BRACKISH	(D)	-	(D)	24.9	(D)	.5	.4
SALT	(D)	-	-	-	-	-	-
TENNESSEE	91.5	44.4	22.7	246.7	5.9	9.9	7.0
FRESH	91.5	44.4	22.7	(D)	5.9	9.9	(D)
BRACKISH	-	-	-	(D)	-	-	(D)
SALT	-	-	-	-	-	-	-
UPPER MISSISSIPPI	196.0	52.3	15.7	193.8	23.6	39.4	9.4
FRESH	191.3	52.3	(D)	(D)	(D)	(D)	9.4
BRACKISH	(D)	-	(D)	(D)	(D)	(D)	-
SALT	(D)	-	-	-	-	-	-
LOWER MISSISSIPPI	216.9	274.9	7.7	831.7	13.5	33.7	26.9
FRESH	213.1	(D)	7.7	701.2	13.5	(D)	(D)
BRACKISH	(D)	(D)	-	130.6	-	(D)	-
SALT	(D)	-	-	-	-	-	(D)
MISSOURI	26.3	11.5	2.0	94.4	9.8	10.9	6.5
FRESH	(D)	11.5	2.0	(D)	(D)	10.9	(D)
BRACKISH	(D)	-	-	(D)	(D)	-	(D)
SALT	-	-	-	-	-	-	-
ARKANSAS, WHITE AND RED	84.4	13.0	2.2	101.5	9.9	103.6	7.4
FRESH	79.4	(D)	(D)	(D)	(D)	(D)	(D)
BRACKISH	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SALT	(D)	-	-	-	-	-	-
TEXAS GULF	186.4	323.6	6.9	619.0	16.7	75.9	18.4
FRESH	156.7	97.3	5.8	128.7	16.7	75.6	16.3
BRACKISH	(D)	(D)	(D)	172.4	(Z)	(D)	(D)
SALT	(D)	(D)	(D)	317.9	-	(D)	(D)
LOWER COLORADO	14.5	1.5	.9	5.1	1.4	1.5	1.4
FRESH	13.4	(D)	(D)	5.0	(D)	(D)	1.3
BRACKISH	(D)	(D)	-	(D)	(D)	(D)	(D)
SALT	(D)	-	(D)	(D)	-	-	(D)
GREAT BASIN	55.5	(D)	(D)	5.7	.5	1.1	1.2
FRESH	13.6	(D)	(D)	2.0	.3	1.0	(D)
BRACKISH	(D)	(D)	-	3.7	(D)	(D)	(D)
SALT	(D)	-	-	-	(D)	(D)	-
COLUMBIA - NORTH PACIFIC	256.7	31.1	5.5	246.8	5.1	20.3	39.5
FRESH	253.2	(D)	5.5	229.2	5.1	20.3	(D)
BRACKISH	(D)	-	-	(D)	-	-	(D)
SALT	(D)	(D)	-	(D)	-	-	(D)
CALIFORNIA - SOUTH PACIFIC	113.9	19.4	3.0	127.2	11.1	19.2	16.5
FRESH	89.1	15.3	(D)	55.4	(D)	(D)	15.8
BRACKISH	2.7	(D)	-	13.1	(D)	(D)	.3
SALT	22.0	(D)	(D)	58.7	-	-	.4
HAWAII	10.8	39.8	(Z)	16.7	3.5	1.6	39.0
FRESH	(D)	(D)	(Z)	15.4	3.5	1.6	39.0
BRACKISH	(D)	(D)	-	(D)	-	-	-
SALT	-	-	-	(D)	-	-	-

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1] See appendix H for maps and appendix I for definitions.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	ALL INDUSTRIES, TOTAL	6 052	34 199.2	11 902.0	1 616.4	1 785.2	17 468.9	12.0	1 151.6	263.0
20	FOOD AND KINDRED PRODUCTS	1 263	1 026.1	293.8	24.3	39.2	593.5	1.0	36.9	37.6
201	MEAT PRODUCTS	253	44.6	6.9	1.7	2.6	28.9	.6	1.9	2.1
2011	MEATPACKING PLANTS	116	30.4	2.9	(D)	2.5	19.9	(D)	1.3	1.7
2013	SAUSAGES AND OTHER PREPARED MEATS	33	6.3	.3	-	(D)	5.6	-	.2	(D)
2016	POULTRY DRESSING PLANTS	99	7.7	3.7	(D)	(D)	3.4	(D)	.2	(D)
2017	POULTRY AND EGG PROCESSING	5	.2	-	-	-	.1	-	.1	-
202	DAIRY PRODUCTS	221	39.8	5.2	(D)	2.7	29.2	(D)	1.0	1.4
2021	CREAMERY BUTTER	4	(D)	-	-	-	(D)	-	(D)	-
2022	CHEESE, NATURAL AND PROCESSED	25	4.0	(D)	-	(D)	(D)	(D)	.2	(D)
2023	CONDENSED AND EVAPORATED MILK	43	9.2	.4	(D)	(D)	6.5	-	.2	(D)
2024	ICE CREAM AND FROZEN DESSERTS	16	(D)	(D)	(D)	-	2.8	-	(Z)	-
2026	FLUID MILK	133	23.4	4.5	.1	.3	17.4	(D)	(D)	1.3
203	PRESERVED FRUITS AND VEGETABLES	306	145.7	86.7	(D)	2.1	51.6	(D)	4.4	.7
2032	CANNED SPECIALTIES	29	3.9	1.1	(D)	(D)	2.2	-	.5	(D)
2033	CANNED FRUITS AND VEGETABLES	158	66.1	46.0	(D)	(D)	17.7	(Z)	1.9	.5
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	15	7.0	4.3	-	(D)	1.4	-	.4	(D)
2035	PICKLES, SAUCES, SALAD DRESSINGS	13	4.6	(D)	-	1.2	3.0	-	(D)	(D)
2037	FROZEN FRUITS AND VEGETABLES	69	62.3	34.9	-	(D)	25.7	(D)	1.4	(D)
2038	FROZEN SPECIALTIES	22	1.9	(D)	(D)	(D)	1.6	-	(D)	(D)
204	GRAIN MILL PRODUCTS	57	155.4	13.7	(D)	6.3	130.1	(D)	4.6	(D)
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	9	1.5	(D)	(D)	(D)	(D)	(D)	.2	-
2043	CEREAL BREAKFAST FOODS	10	6.5	-	-	5.2	1.2	-	(D)	(D)
2044	RICE MILLING	4	(D)	(D)	-	-	(D)	-	(D)	-
2046	WET CORN MILLING	17	144.4	12.9	(D)	(D)	126.0	(D)	3.8	(D)
2047	DOG, CAT, AND OTHER PET FOOD	11	1.6	(D)	-	(D)	.6	-	.5	(D)
2048	PREPARED FEEDS, NEC	5	1.1	(D)	-	(D)	(D)	-	(D)	(D)
205	BAKERY PRODUCTS	25	4.8	(D)	(D)	(D)	(D)	-	(D)	(D)
2051	BREAD, CAKE, AND RELATED PRODUCTS	15	.7	(D)	(D)	(D)	(D)	-	(D)	-
2052	COOKIES AND CRACKERS	10	4.1	(D)	-	(D)	3.6	-	.1	(D)
206	SUGAR, CONFECTIONERY PRODUCTS	109	224.6	73.3	(D)	7.3	94.5	(D)	9.9	31.1
2061	RAW CANE SUGAR	28	118.7	44.0	(D)	(D)	35.5	(D)	3.3	25.3
2062	CANE SUGAR REFINING	16	26.6	(D)	(D)	-	(D)	-	2.0	-
2063	BEET SUGAR	38	64.1	26.9	-	(D)	27.2	-	(D)	(D)
2065	CONFECTIONERY PRODUCTS	18	8.3	(D)	-	5.2	(D)	(D)	.3	-
2066	CHOCOLATE AND COCOA PRODUCTS	6	(D)	-	-	(D)	4.9	-	(D)	-
207	FATS AND OILS	95	129.0	2.8	(D)	1.6	122.7	(D)	1.7	(D)
2074	COTTONSEED OIL MILLS	6	1.3	(D)	-	-	(D)	-	.1	-
2075	SOYBEAN OIL MILLS	49	82.7	2.7	-	-	78.8	-	1.2	-
2077	ANIMAL AND MARINE FATS AND OILS	10	(D)	(D)	(D)	-	(D)	-	(D)	(D)
2079	SHORTENING AND COOKING OILS	29	43.3	(D)	(D)	(D)	41.3	(D)	.4	(D)
2082	MALT BEVERAGES	53	214.2	100.5	11.0	3.1	93.9	(D)	5.3	(D)
2084	WINES, BRANDY, AND BRANDY SPIRITS	10	.4	(D)	-	(D)	.3	-	(Z)	-
2085	DISTILLED LIQUOR, EXCEPT BRANDY	15	5.5	(D)	-	(D)	4.4	(D)	.4	(D)
2086	BOTTLED AND CANNED SOFT DRINKS	36	.8	.3	-	(Z)	.2	(D)	.1	(D)
2087	FLAVORING EXTRACTS, SIRUPS, NEC	11	8.9	(D)	(D)	(D)	7.8	(D)	(D)	(D)
209	MISC. FOODS, KINDRED PRODUCTS	60	37.8	1.6	(D)	5.8	22.7	(D)	7.7	(D)
2091	CANNED AND CURED SEAFOODS	4	(D)	(D)	-	(D)	(D)	-	(D)	-
2092	FRESH OR FROZEN PACKAGED FISH	6	.9	(D)	-	-	(D)	-	-	-
2097	MANUFACTURED ICE	3	(D)	-	-	-	(D)	-	-	-
2098	MACARONI AND SPAGHETTI	1	(D)	-	-	-	(D)	-	-	-
2099	FOOD PREPARATIONS, NEC	37	15.8	1.3	-	(D)	9.4	(D)	(D)	(D)
21	TOBACCO PRODUCTS	20	34.2	.6	(D)	20.9	8.4	-	1.0	(D)
2111	CIGARETTES	12	26.7	(D)	(D)	19.9	2.6	-	(D)	-
2141	TOBACCO STEMMING AND REDRYING	8	7.5	(D)	-	1.0	5.8	-	(D)	(D)
22	TEXTILE MILL PRODUCTS	343	257.8	13.7	1.0	202.4	27.5	9.3	3.8	.2
2211	WEAVING MILLS, COTTON	56	85.3	.9	(D)	72.8	10.7	(D)	.6	(D)
2221	WEAV'G MILLS, MANMADE FIBER, SILK	68	84.8	(D)	(D)	71.3	7.9	(D)	.6	-
2231	WEAVING AND FINISHING MILLS, WOOL	9	(D)	(D)	-	(D)	(D)	-	.1	(D)
2241	NARROW FABRIC MILLS	2	(D)	-	-	(D)	(D)	-	-	-
225	KNITTING MILLS	51	8.0	.8	-	4.9	1.9	(D)	.3	(D)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	7	.5	-	-	.5	-	-	(Z)	-
2252	HOSIERY, NEC	5	.1	-	-	(D)	-	-	(D)	-
2253	KNIT OUTERWEAR MILLS	3	(D)	(D)	-	(D)	(D)	-	(D)	-
2254	KNIT UNDERWEAR MILLS	2	(D)	-	-	-	(D)	-	(D)	-
2257	CIRCULAR KNIT FABRIC MILLS	26	5.7	.6	-	3.8	1.1	(D)	.2	(D)
2258	WARP KNIT FABRIC MILLS	8	1.3	(D)	-	(D)	(D)	(D)	(D)	-
226	TEXTILE FINISHING, EXCEPT WOOL	70	15.4	5.7	.7	1.8	.6	(D)	1.0	(D)
2261	FINISHING PLANTS, COTTON	14	1.4	(D)	(D)	(D)	(D)	(D)	.5	(D)
2262	FINISH. PLTS, MANMADE FIBER, SILK	39	11.5	4.3	(D)	(D)	.5	(D)	.5	(D)
2269	FINISHING PLANTS, NEC	17	2.5	(D)	-	1.6	(D)	-	(Z)	-
227	FLOOR COVERING MILLS	22	18.3	1.4	(D)	15.9	.6	(D)	.3	(D)
2272	TUFTED CARPETS AND RUGS	19	4.5	1.4	(D)	2.4	.6	(D)	.2	(D)
228	YARN AND THREAD MILLS	39	37.7	(D)	-	32.5	3.4	(D)	.4	-
2281	YARN MILLS, EXCEPT WOOL	25	33.9	1.0	-	29.7	(D)	(D)	.4	-
2282	THROWING AND WINDING MILLS	9	1.7	.3	-	(D)	(D)	(D)	(D)	-
2284	THREAD MILLS	5	2.0	(D)	-	(D)	.5	-	(D)	-

See footnotes at end of table.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
22	TEXTILE MILL PRODUCTS--CON.									
229	MISCELLANEOUS TEXTILE GOODS.	26	7.8	1.8	(D)	3.1	2.2	(D)	.5	(D)
2291	FELT GOODS, EXC. WOVEN FELT, HATS.	2	(D)	(D)	-	(D)	(D)	(D)	-	-
2292	LACE GOODS	-	-	-	-	-	-	-	-	-
2294	PROCESSED TEXTILE WASTE.	-	-	-	-	-	-	-	-	-
2295	COATED FABRICS, NOT RUBBERIZED	8	2.0	(D)	(D)	(D)	.8	(D)	(D)	-
2296	TIRE CORD AND FABRIC	5	2.8	-	-	1.9	(D)	-	(D)	-
2297	NONWOVEN FABRICS	8	2.6	(D)	-	(D)	.5	(D)	.1	(D)
2299	TEXTILE GOODS, NEC	2	(D)	-	-	(D)	(D)	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	181	268.7	186.4	35.0	(D)	9.4	(Z)	(D)	31.2
242	SAWMILLS AND PLANING MILLS	87	240.3	169.5	31.2	(D)	7.6	-	(D)	28.3
2421	SAWMILLS, PLANING MILLS, GENERAL	86	240.3	169.5	31.2	(D)	7.6	-	(D)	28.3
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	61	12.3	2.8	(D)	-	.7	(D)	2.4	2.7
2431	MILLWORK	3	(D)	-	-	-	-	-	(D)	-
2435	HARDWOOD VENEER AND PLYWOOD.	4	(D)	(D)	-	-	(D)	-	(D)	(D)
2436	SOFTWOOD VENEER AND PLYWOOD.	54	11.9	(D)	(D)	-	(D)	(D)	2.2	(D)
249	MISCELLANEOUS WOOD PRODUCTS.	28	15.1	13.2	-	-	1.1	(D)	.6	(D)
2492	PARTICLEBOARD.	7	(D)	(D)	-	-	.5	(D)	(D)	-
2499	WOOD PRODUCTS, NEC	18	14.2	13.2	-	-	(D)	(D)	.6	(D)
25	FURNITURE AND FIXTURES	34	2.7	.2	-	(D)	1.5	-	.5	(D)
251	HOUSEHOLD FURNITURE.	19	.7	(D)	-	(D)	.2	-	.3	-
2514	METAL HOUSEHOLD FURNITURE.	4	(D)	(D)	-	(D)	(D)	-	(D)	-
252	OFFICE FURNITURE	3	1.3	-	-	-	(D)	-	(D)	(D)
2522	METAL OFFICE FURNITURE	3	1.3	-	-	-	(D)	-	(D)	(D)
254	PARTITIONS AND FIXTURES.	7	.3	(D)	-	-	(D)	-	(D)	(D)
2542	METAL PARTITIONS AND FIXTURES.	7	.3	(D)	-	-	(D)	-	(D)	(D)
2599	FURNITURE AND FIXTURES, NEC.	-	-	-	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS.	468	9 216.4	8 434.7	325.3	52.3	258.0	(D)	138.9	(D)
2611	PULPMILLS.	31	832.7	742.2	(D)	(D)	42.1	-	22.3	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER.	205	5 874.8	5 513.7	177.5	28.0	92.5	(D)	58.4	(D)
2631	PAPERBOARD MILLS	134	2 379.2	2 096.6	124.1	11.3	103.7	(D)	42.5	(D)
264	MISC. CONVERTED PAPER PRODUCTS	55	78.3	49.1	-	11.6	15.9	-	(D)	(D)
2641	PAPER COATING AND GLAZING.	17	1.5	.3	-	.1	1.0	-	(D)	(D)
2643	BAGS, EXCEPT TEXTILE BAGS.	11	10.6	(D)	-	2.0	6.1	-	.1	(D)
2647	SANITARY PAPER PRODUCTS.	14	51.8	34.9	-	9.2	6.8	-	.9	-
2649	CONVERTED PAPER PRODUCTS, NEC.	3	(D)	(D)	-	(D)	(D)	-	-	(D)
265	PAPERBOARD CONTAINERS AND BOXES.	16	3.2	(D)	-	(D)	1.5	-	(D)	-
2661	BUILDING PAPER AND BOARD MILLS	27	48.3	(D)	(D)	-	2.2	-	14.2	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	913	8 731.0	500.2	158.9	304.0	7 269.0	.3	460.8	38.0
281	INDUSTRIAL INORGANIC CHEMICALS	212	1 408.7	67.6	39.6	47.8	1 221.7	(D)	27.1	(D)
2812	ALKALIES AND CHLORINE.	21	183.7	9.6	(D)	(D)	163.1	-	1.5	(D)
2816	INORGANIC PIGMENTS	22	64.2	3.8	(D)	(D)	51.8	-	3.4	(D)
2819	INDUSTRIAL INORGANIC CHEM., NEC.	125	560.1	46.4	31.3	46.5	413.1	(D)	22.2	(D)
282	PLASTICS MATERIALS, SYNTHETICS	157	1 481.0	145.2	50.9	173.8	1 085.4	(D)	16.1	(D)
2821	PLASTICS MATERIALS AND RESINS.	102	653.4	61.9	(D)	(D)	575.4	(D)	8.8	(D)
2822	SYNTHETIC RUBBER	17	280.7	(D)	-	(D)	259.2	-	(D)	-
2823	CELLULOSIC MANMADE FIBERS.	6	88.6	(D)	(D)	5.9	45.4	-	(D)	(D)
2824	ORGANIC FIBERS, NONCELLULOSIC.	32	458.3	43.6	36.1	162.6	205.4	(D)	2.8	(D)
283	DRUGS.	60	160.0	4.7	(D)	42.0	112.0	(D)	1.3	(D)
2833	MEDICINALS AND BOTANICALS.	15	72.9	(D)	-	(D)	71.0	-	.6	-
2834	PHARMACEUTICAL PREPARATIONS.	38	84.6	(D)	(D)	(D)	40.7	(D)	.7	(D)
284	SOAPS, CLEANERS, TOILET GOODS.	63	49.0	1.4	(D)	4.7	34.2	-	8.5	(D)
2841	SOAP AND OTHER DETERGENTS.	33	23.0	1.2	(D)	(D)	20.5	-	.6	(D)
2843	SURFACE ACTIVE AGENTS.	11	13.5	(D)	-	(D)	10.3	-	2.8	-
2844	TOILET PREPARATIONS.	14	6.2	(D)	-	2.6	3.4	-	.1	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	220	3 879.4	77.9	42.5	33.5	3 668.4	(D)	54.1	(D)
2865	CYCLIC CRUDES AND INTERMEDIATES.	51	279.2	1.3	(D)	.2	273.8	-	3.4	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	165	3 583.0	75.5	(D)	33.3	3 379.7	(D)	50.6	(D)
287	AGRICULTURAL CHEMICALS	103	1 652.9	196.1	(D)	1.5	1 061.1	(D)	351.1	20.3
2873	NITROGENOUS FERTILIZERS.	55	1 134.2	3.1	(D)	(D)	770.7	-	347.4	(D)
2874	PHOSPHATIC FERTILIZERS	35	400.8	191.6	(D)	(D)	175.1	-	2.9	(D)
2879	AGRICULTURAL CHEMICALS, NEC.	12	(D)	(D)	-	(D)	(D)	(D)	(D)	-
289	MISCELLANEOUS CHEMICAL PRODUCTS.	80	97.0	7.4	(D)	.5	83.8	(D)	2.4	(D)
2891	ADHESIVES AND SEALANTS	10	2.8	(D)	-	(D)	2.6	-	.1	-
2892	EXPLOSIVES	10	(D)	(D)	(D)	(D)	(D)	-	(D)	-
2895	CARBON BLACK	14	3.1	.9	-	(D)	1.6	(D)	(D)	-
2899	CHEMICAL PREPARATIONS, NEC	45	89.3	6.2	(D)	.5	78.0	(D)	1.4	(D)

See footnotes at end of table.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by condensing							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
29	PETROLEUM AND COAL PRODUCTS	220	7 108.9	48.0	159.5	10.6	6 836.0	(D)	53.9	(D)
2911	PETROLEUM REFINING	179	7 094.8	36.8	(D)	10.5	6 834.3	(D)	53.1	(D)
295	PAVING AND ROOFING MATERIALS	30	12.6	10.4	(D)	(D)	1.0	-	(D)	(D)
2952	ASPHALT FELTS AND COATINGS	20	12.0	10.3	(D)	(D)	.9	-	(D)	(D)
299	MISC. PETROLEUM, COAL PRODUCTS	11	1.5	.7	-	(D)	.7	(D)	(D)	(D)
2992	LUBRICATING OILS AND GREASES	5	.8	(D)	-	(D)	(D)	-	(D)	(D)
2999	PETROLEUM AND COAL PRODUCTS, NEC	6	.7	(D)	-	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	268	515.5	216.7	6.6	24.7	241.6	(D)	26.4	(D)
3011	TIRES AND INNER TUBES	50	366.4	187.6	(D)	(D)	152.0	(D)	18.5	(D)
3041	RUBBER, PLASTICS HOSE AND BELTING	19	18.5	5.0	(D)	(D)	5.8	-	1.4	-
3069	FABRICATED RUBBER PRODUCTS, NEC.	58	11.8	1.4	(D)	(D)	8.5	(D)	.5	.8
3079	MISCELLANEOUS PLASTICS PRODUCTS	137	117.4	22.7	.6	12.3	74.0	(D)	6.0	(D)
31	LEATHER AND LEATHER PRODUCTS	17	1.9	.5	(D)	(D)	(D)	-	.6	-
3111	LEATHER TANNING AND FINISHING	16	(D)	(D)	(D)	(D)	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	369	266.8	62.5	3.0	48.2	135.7	.1	1.9	15.6
3211	FLAT GLASS	16	30.9	(D)	-	(D)	22.3	(D)	(D)	-
322	GLASS, PRESSED OR BLOWN	108	110.4	14.2	(D)	41.3	54.3	-	.5	(D)
3221	GLASS CONTAINERS	71	27.5	4.8	(D)	(D)	22.1	-	.2	(D)
3229	PRESSED AND BLOWN GLASS, NEC	37	82.9	9.5	-	(D)	32.1	-	.3	(D)
3231	PRODUCTS OF PURCHASED GLASS	4	.6	(D)	-	(D)	(D)	-	(D)	-
3241	CEMENT, HYDRAULIC	77	44.4	5.8	(D)	1.9	33.7	(D)	.3	.6
325	STRUCTURAL CLAY PRODUCTS	10	(D)	.1	-	(D)	2.8	-	(D)	(D)
3253	CERAMIC WALL AND FLOOR TILE	2	(D)	(D)	-	(D)	(D)	-	(D)	-
3259	STRUCTURAL CLAY PRODUCTS, NEC	3	(D)	(D)	-	-	(D)	-	(D)	-
326	POTTERY AND RELATED PRODUCTS	10	2.8	.1	(D)	(D)	(D)	-	(D)	(D)
3262	VITREOUS CHINA FOOD UTENSILS	1	(D)	(D)	-	-	-	-	-	-
3263	FINE EARTHENWARE FOOD UTENSILS	1	(D)	-	-	-	(D)	-	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES	3	(D)	(D)	-	-	(D)	-	(D)	-
327	CONCRETE, GYPSUM, PLASTER PRODS.	57	25.5	9.8	-	(D)	2.6	(D)	(D)	13.0
3272	CONCRETE PRODUCTS, NEC	2	(D)	(D)	-	-	(D)	-	-	-
3273	READY-MIXED CONCRETE	22	5.3	(D)	-	-	-	-	-	(D)
3274	LIME	15	19.5	4.1	-	-	2.5	(D)	-	(D)
3275	GYPSUM PRODUCTS	18	(D)	(D)	-	(D)	(D)	-	(D)	(D)
3281	CUT STONE AND STONE PRODUCTS	2	(D)	(D)	(D)	-	-	-	(D)	-
329	MISC. NONMETALLIC MINERAL PRODS.	85	48.8	24.4	-	3.7	18.4	(D)	(D)	1.2
3291	ABRASIVE PRODUCTS	11	2.8	(D)	-	1.0	.3	-	(D)	(D)
3292	ASBESTOS PRODUCTS	15	10.8	8.4	-	(D)	2.0	-	(D)	(D)
3293	GASKETS, PACKING, SEALING DEVICES	(D)	(D)	(D)	-	(D)	(D)	-	(D)	-
3295	MINERALS, GROUND OR TREATED	12	4.8	2.8	-	-	(D)	-	(D)	-
3296	MINERAL WOOL	36	28.1	11.8	-	(D)	13.4	(D)	(D)	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC	7	.7	.6	-	-	(D)	-	(D)	-
33	PRIMARY METAL INDUSTRIES	570	3 474.0	1 238.9	856.0	16.5	1 318.9	.3	8.8	34.7
331	BLAST FURNACE, BASIC STEEL PROD.	196	2 183.8	993.3	166.6	2.5	1 007.0	(D)	(D)	9.2
3312	BLAST FURNACES AND STEEL MILLS	125	2 111.0	978.2	166.6	2.4	950.7	(D)	(D)	8.1
3313	ELECTROMETALLURGICAL PRODUCTS	9	31.2	(D)	-	-	25.2	-	-	(D)
3315	STEEL WIRE AND RELATED PRODUCTS	23	4.1	2.5	-	(D)	1.5	-	(Z)	(D)
3316	COLD FINISHING OF STEEL SHAPES	19	24.2	(D)	-	(D)	22.4	-	(D)	(D)
3317	STEEL PIPE AND TUBES	20	13.3	6.0	-	-	7.2	(D)	(D)	(D)
332	IRON AND STEEL FOUNDRIES	133	139.9	53.5	-	.9	71.6	(D)	(D)	13.4
3321	GRAY IRON FOUNDRIES	84	110.9	48.1	-	.5	48.4	(D)	(D)	13.4
3322	MALLEABLE IRON FOUNDRIES	10	3.2	(D)	-	(D)	1.3	-	(D)	(D)
3325	STEEL FOUNDRIES, NEC	34	25.0	3.6	-	(D)	21.2	(D)	(D)	(D)
333	PRIMARY NONFERROUS METALS	63	395.6	96.8	153.3	2.7	129.8	(Z)	2.1	10.8
3331	PRIMARY COPPER	21	110.1	26.6	41.6	(D)	41.2	(D)	.5	(D)
3334	PRIMARY ALUMINUM	22	186.5	35.3	(D)	.7	37.0	(D)	(D)	(D)
3339	PRIMARY NONFERROUS METALS, NEC	10	71.1	18.8	(D)	(D)	42.1	(D)	(D)	(D)
3341	SECONDARY NONFERROUS METALS	15	7.8	5.2	(D)	(D)	1.7	-	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING	129	728.1	87.6	(D)	10.4	93.1	(D)	.4	(D)
3351	COPPER ROLLING AND DRAWING	29	36.2	21.2	(D)	(D)	10.8	-	.1	(D)
3353	ALUMINUM SHEET, PLATE, AND FOIL	19	101.1	(D)	-	1.3	50.7	(D)	(Z)	(D)
3354	ALUMINUM EXTRUDED PRODUCTS	25	(D)	2.2	-	(D)	(D)	-	(D)	(D)
3355	ALUMINUM ROLLING AND DRAWING, NEC	4	(D)	(D)	-	-	(D)	-	-	-
3356	NONFERROUS ROLLING & DRAWING, NEC	16	21.1	2.1	-	(D)	18.0	-	(D)	-
336	NONFERROUS FOUNDRIES	21	16.6	(D)	-	.5	13.6	(D)	(D)	-
3361	ALUMINUM FOUNDRIES	11	14.0	(D)	-	.3	12.7	(D)	(D)	-
3369	NONFERROUS FOUNDRIES, NEC	8	(D)	1.5	-	(D)	(D)	-	(D)	-
339	MISC. PRIMARY METAL PRODUCTS	13	2.3	(D)	-	(D)	2.0	-	-	(D)
3398	METAL HEAT TREATING	8	.6	(D)	-	-	(D)	-	-	-
3399	PRIMARY METAL PRODUCTS, NEC	5	1.7	(D)	-	(D)	(D)	-	-	(D)

See footnotes at end of table.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
34	FABRICATED METAL PRODUCTS	340	196.0	36.7	(D)	16.7	110.1	(D)	5.2	25.6
341	METAL CANS, SHIPPING CONTAINERS	30	15.4	11.7	-	(D)	3.4	-	(D)	(D)
3411	METAL CANS	25	15.0	11.7	-	(D)	(D)	-	(D)	(D)
3412	METAL BARRELS, DRUMS, AND PAILS	5	.3	-	-	(D)	(D)	-	-	-
342	CUTLERY, HANDTOOLS AND HARDWARE	38	29.9	5.5	-	3.4	18.5	-	(D)	(D)
3423	HAND AND EDGE TOOLS, NEC	12	3.5	(D)	-	(D)	2.3	-	.1	(D)
3425	HANDSAWS AND SAW BLADES	3	(D)	(D)	-	(D)	(D)	-	(D)	-
3429	HARDWARE, NEC	20	22.1	5.2	-	.6	15.0	-	1.4	-
343	PLUMBING, HEATING, EXCEPT ELEC	15	7.1	.6	(D)	(D)	3.8	(D)	.1	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS	6	.7	.1	-	(D)	(D)	-	(Z)	(D)
3433	HEATING EQUIPMENT, EXC. ELECTRIC	4	1.0	(D)	-	-	(D)	-	-	-
344	FABRICATED STRUC. METAL PRODS.	29	12.4	1.6	-	2.5	7.5	(D)	.6	(D)
3442	METAL DOORS, SASH, AND TRIM	4	.6	(D)	-	(D)	(D)	(D)	(D)	-
3443	FABRICATED PLATEWORK, BOILER SHOP	12	9.7	.3	-	2.4	6.3	(D)	(D)	(D)
3444	SHEET METALWORK	6	1.1	(D)	-	(D)	(D)	-	(D)	-
3446	ARCHITECTURAL METALWORK	3	(D)	(D)	-	-	-	-	(D)	-
3448	PREFABRICATED METAL BUILDINGS	2	(D)	(D)	-	-	(D)	-	(D)	-
345	SCREW MACHINE PROD., BOLTS, ETC	27	5.1	1.5	-	(D)	3.1	(D)	.1	-
3452	BOLTS, NUTS, RIVETS, AND WASHERS	25	(D)	(D)	-	(D)	(D)	(D)	(D)	-
346	METAL FORGINGS AND STAMPINGS	77	101.9	11.8	(D)	5.0	60.2	(D)	2.0	(D)
3462	IRON AND STEEL FORGINGS	20	13.7	8.6	(D)	(D)	4.8	(D)	(D)	-
3463	NONFERROUS FORGINGS	5	(D)	-	-	-	.7	-	(D)	(D)
3465	AUTOMOTIVE STAMPINGS	27	82.5	1.9	-	2.9	54.0	-	(D)	(D)
3469	METAL STAMPINGS, NEC	23	4.3	(D)	(D)	(D)	(D)	-	.4	(D)
347	METAL SERVICES, NEC	49	3.1	1.6	(D)	(D)	1.3	-	.1	-
3471	PLATING AND POLISHING	43	2.5	(D)	(D)	(D)	(D)	-	(D)	-
3479	METAL COATING AND ALLIED SERVICES	6	.6	(D)	-	(D)	(D)	-	(D)	-
348	ORDNANCE AND ACCESSORIES, NEC	25	9.8	.9	-	3.9	3.8	-	(D)	(D)
3482	SMALL ARMS AMMUNITION	7	(D)	(D)	-	(D)	(D)	-	(D)	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	10	5.3	(D)	-	(D)	(D)	-	.2	(D)
3484	SMALL ARMS	3	(D)	(D)	-	(D)	(D)	-	(D)	-
3489	ORDNANCE AND ACCESSORIES NEC	5	3.5	-	-	(D)	(D)	-	(D)	-
349	MISC. FABRICATED METAL PRODUCTS	50	11.4	1.6	(D)	1.2	8.3	-	.2	(D)
3493	STEEL SPRINGS, EXCEPT WIRE	1	(D)	-	-	-	(D)	-	-	-
3494	VALVES AND PIPE FITTINGS	23	2.2	.9	-	(D)	1.0	-	(Z)	(D)
3496	MISC. FABRICATED WIRE PRODUCTS	9	5.8	(D)	-	(D)	4.8	-	(D)	-
3497	METAL FOIL AND LEAF	3	(D)	(D)	-	(D)	(D)	-	(D)	-
3498	FABRICATED PIPE AND FITTINGS	3	(D)	(D)	-	-	(D)	-	(D)	-
3499	FABRICATED METAL PRODUCTS, NEC	9	1.3	(D)	(D)	(D)	1.1	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	296	253.8	78.6	7.1	42.6	100.5	.2	21.7	3.1
351	ENGINES AND TURBINES	33	29.7	5.0	(D)	2.8	18.9	-	1.7	(D)
3511	TURBINES, TURBINE GENERATOR SETS	8	7.2	(D)	-	(D)	6.4	-	(D)	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	25	22.5	(D)	(D)	(D)	12.5	-	(D)	(D)
352	FARM AND GARDEN MACHINERY	24	13.3	4.6	(D)	.2	6.0	(D)	.6	(D)
3523	FARM MACHINERY AND EQUIPMENT	22	(D)	(D)	-	.2	(D)	(D)	.6	(D)
3524	LAWN AND GARDEN EQUIPMENT	2	(D)	(D)	(D)	-	(D)	-	-	-
353	CONSTRUCTION, RELATED MACHINERY	43	87.2	44.1	(D)	10.0	24.7	(D)	7.0	(D)
3531	CONSTRUCTION MACHINERY	27	69.9	36.3	(D)	5.8	19.6	(D)	7.0	(D)
3532	MINING MACHINERY	2	.2	(D)	-	-	(D)	-	-	-
3535	CONVEYORS AND CONVEYING EQUIPMENT	-	-	-	-	-	-	-	-	-
354	METALWORKING MACHINERY	28	6.5	1.5	-	1.7	2.9	(D)	.3	(D)
3541	MACHINE TOOLS, METAL-CUTTING	7	2.1	(D)	-	(D)	(D)	-	.1	(D)
3544	SPECIAL DIES, TOOLS, JIGS, ETC	1	(D)	(D)	-	(D)	-	(D)	-	-
3545	MACHINE TOOL ACCESSORIES	5	2.0	(D)	-	(D)	(D)	-	(D)	(D)
3546	POWER DRIVEN HANDTOOLS	10	1.5	.7	-	.5	(D)	-	(D)	-
355	SPECIAL INDUSTRY MACHINERY	12	7.4	(D)	(D)	(D)	.8	(D)	(D)	-
3559	SPECIAL INDUSTRY MACHINERY, NEC	8	5.5	-	(D)	(D)	(D)	(D)	(D)	-
356	GENERAL INDUSTRIAL MACHINERY	60	53.0	12.5	-	7.6	25.8	(D)	7.0	(D)
3561	PUMPS AND PUMPING EQUIPMENT	13	2.7	(D)	-	.1	1.4	-	(D)	(D)
3562	BALL AND ROLLER BEARINGS	18	38.2	10.2	-	7.3	20.5	-	.2	-
3563	AIR AND GAS COMPRESSORS	7	7.5	(D)	-	-	1.3	-	(D)	-
3566	SPEED CHANGERS, DRIVES, AND GEARS	5	2.1	(D)	-	(D)	1.1	(D)	(D)	(D)
3568	POWER TRANSMISSION EQUIPMENT, NEC	11	1.9	.3	-	(D)	1.4	-	(D)	-
3569	GENERAL INDUSTRIAL MACHINERY, NEC	3	(D)	(D)	-	-	(D)	-	(D)	-
357	OFFICE AND COMPUTING MACHINES	34	21.9	(D)	-	13.0	3.3	-	3.4	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT	20	5.5	(D)	-	4.8	(D)	-	.1	(D)
3576	SCALES, BALANCES, EXC. LABORATORY	-	-	-	-	-	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC	10	(D)	.7	-	(D)	1.3	-	(D)	-
358	REFRIGERATION AND SERVICE MACH	45	24.7	7.4	-	6.3	9.9	-	(D)	(D)
3585	REFRIGERATION, HEATING EQUIPMENT	38	24.1	7.3	-	6.1	9.5	-	(D)	(D)
3586	MEASURING AND DISPENSING PUMPS	3	(D)	(D)	-	(D)	(D)	-	(D)	(D)
359	MISC. MACHINERY, EXC. ELEC	17	10.3	.5	(D)	.9	8.3	(D)	.4	(D)
3592	CARBURETORS, PISTONS, RINGS, ETC	14	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	3	(D)	(D)	(D)	(D)	(D)	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	348	366.1	37.1	(D)	162.1	124.9	(D)	14.7	2.4
361	ELECTRIC DISTRIBUTING EQUIPMENT	25	15.0	1.6	-	5.7	7.5	(D)	.2	(D)
3612	TRANSFORMERS	14	6.7	(D)	-	2.3	2.8	-	(D)	-

See footnotes at end of table.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
36	ELECTRIC, ELECTRONIC EQUIP.--CON.									
361	ELECTRIC DISTRIBUTING EQUIPMENT--CON.									
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	11	8.4	(D)	-	3.4	4.7	(D)	(D)	(D)
362	ELECTRICAL INDUSTRIAL APPARATUS	40	10.4	.3	-	1.9	7.7	(D)	.3	(D)
3621	MOTORS AND GENERATORS	13	2.7	.2	-	.8	1.5	-	(D)	(D)
3622	INDUSTRIAL CONTROLS	11	1.1	(D)	-	(D)	.6	-	(D)	-
3623	WELDING APPARATUS, ELECTRIC	4	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3624	CARBON AND GRAPHITE PRODUCTS	11	5.5	(D)	-	(D)	5.1	-	(D)	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC	1	(D)	(D)	-	(D)	(D)	-	(D)	-
363	HOUSEHOLD APPLIANCES	48	21.8	5.0	-	5.5	10.3	-	(D)	(D)
3631	HOUSEHOLD COOKING EQUIPMENT	12	1.5	(D)	-	(D)	.8	-	.2	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	8	10.2	(D)	-	(D)	4.1	-	(D)	-
3633	HOUSEHOLD LAUNDRY EQUIPMENT	9	6.5	.3	-	(D)	3.2	-	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS	9	1.4	.1	-	.6	.4	-	.2	-
3635	HOUSEHOLD VACUUM CLEANERS	3	(D)	(D)	-	(D)	(D)	-	(D)	-
3639	HOUSEHOLD APPLIANCES, NEC	4	(D)	(D)	-	(D)	(D)	-	(D)	-
364	ELEC. LIGHTING, WIRING EQUIP	37	19.9	2.2	(D)	(D)	10.1	-	.1	(D)
3641	ELECTRIC LAMPS	6	.3	(D)	-	(D)	.2	-	(D)	-
3644	NONCURRENT-CARRYING WIR'G DEVICES	10	.8	.3	-	(D)	(D)	-	(D)	(D)
3645	RESIDENTIAL LIGHTING FIXTURES	3	(D)	(D)	-	-	-	-	(D)	-
3646	COMMERCIAL LIGHTING FIXTURES	1	(D)	-	-	-	(D)	-	-	-
365	RADIO, TV RECEIVING EQUIPMENT	11	8.7	1.9	-	(D)	5.1	-	(D)	-
3652	PHONO. RECORDS, PRERECORDED TAPE	6	2.4	(D)	-	(D)	(D)	-	(D)	-
366	COMMUNICATION EQUIPMENT	54	116.1	5.2	(D)	68.2	10.6	(D)	11.3	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	32	66.5	1.1	-	54.2	.7	(D)	10.3	(D)
367	ELECTRONIC COMPONENTS, ACCESS	85	101.5	1.5	-	68.3	28.7	(D)	1.3	(D)
3671	ELECTRON TUBES, RECEIVING TYPE	21	20.8	.3	-	12.2	7.7	(D)	.2	(D)
3674	SEMICONDUCTORS, RELATED DEVICES	28	56.8	.9	-	36.6	17.3	-	(D)	(D)
3675	ELECTRONIC CAPACITORS	6	.4	(D)	-	(D)	(D)	-	(D)	(D)
3676	ELECTRONIC RESISTORS	7	1.4	(D)	-	(D)	.7	-	(D)	-
3678	ELECTRONIC CONNECTORS	4	.1	(D)	-	(D)	(D)	-	(D)	-
3679	ELECTRONIC COMPONENTS, NEC	19	22.0	.2	-	18.6	2.8	-	(D)	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	48	72.6	19.5	-	7.8	44.8	(D)	.1	(D)
3691	STORAGE BATTERIES	23	10.4	5.8	-	.3	4.2	(D)	(D)	(D)
3692	PRIMARY BATTERIES, DRY AND WET	2	(D)	-	-	(D)	(D)	-	(D)	-
3693	X-RAY APPARATUS AND TUBES	4	(D)	-	-	(D)	(D)	-	-	-
3694	ENGINE ELECTRICAL EQUIPMENT	15	61.2	13.7	-	7.4	39.7	(D)	.1	(D)
37	TRANSPORTATION EQUIPMENT	271	2 358.1	753.0	(D)	801.2	369.8	(D)	367.0	61.8
3714	MOTOR VEHICLE PARTS, ACCESSORIES	106	502.9	355.2	(D)	14.9	129.6	(D)	4.9	(D)
372	AIRCRAFT AND PARTS	57	111.3	8.8	(D)	39.3	59.1	-	3.3	(D)
3721	AIRCRAFT	13	34.7	1.6	-	27.3	(D)	-	(D)	(D)
3724	AIRCRAFT ENGINES AND ENGINE PARTS	24	62.7	6.6	(D)	9.9	44.9	-	.9	(D)
3728	AIRCRAFT EQUIPMENT, NEC	20	13.9	.5	(D)	2.2	(D)	-	(D)	(D)
373	SHIP, BOAT BUILDING, REPAIRING	12	42.8	(D)	-	1.4	(D)	(D)	2.3	(D)
3731	SHIP BUILDING AND REPAIRING	11	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	2	(D)	(D)	-	(D)	(D)	-	(D)	-
376	GUIDED MISSILES, SPACE VEHICLES	19	22.4	(D)	-	16.3	3.5	-	(D)	(D)
3761	GUIDED MISSILES, SPACE VEHICLES	9	(D)	(D)	-	(D)	(D)	-	(D)	-
379	MISC. TRANSPORTATION EQUIPMENT	4	(D)	(D)	-	-	(D)	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	85	108.7	2.4	(D)	42.9	59.3	(D)	2.7	(D)
3811	ENGINEERING, SCIENTIFIC INSTRU	8	1.1	(D)	-	(D)	(D)	(D)	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	38	10.8	.7	(D)	5.8	3.4	(D)	.8	(D)
3822	ENVIRONMENTAL CONTROLS	9	.7	(D)	-	(D)	.5	-	(D)	-
3823	PROCESS CONTROL INSTRUMENTS	5	.8	(D)	-	(D)	-	(D)	(D)	-
3824	FLUID METERS AND COUNTING DEVICES	8	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3825	INSTRU. TO MEASURE ELECTRICITY	12	8.8	(D)	-	5.2	2.8	-	(D)	-
3829	MEASUR'G, CONTROL'G DEVICES, NEC	4	(D)	(D)	(D)	(D)	(D)	-	(D)	-
3832	OPTICAL INSTRUMENTS AND LENSES	2	(D)	(D)	-	(D)	-	-	(D)	-
384	MEDICAL INSTRUMENTS, SUPPLIES	9	.9	(Z)	-	(D)	(D)	-	(Z)	-
3841	SURGICAL AND MEDICAL INSTRUMENTS	4	.1	(D)	-	(D)	(D)	-	(D)	-
3842	SURGICAL APPLIANCES AND SUPPLIES	5	.8	(D)	-	(D)	(D)	-	(D)	-
3851	OPHTHALMIC GOODS	4	(D)	(D)	(D)	(D)	(D)	-	-	(D)
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	22	94.8	1.7	(D)	35.8	54.2	-	1.9	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES	2	(D)	-	-	(D)	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	44	12.2	.9	(D)	.6	(D)	(D)	(D)	(D)
391	JEWELRY, SILVER AND PLATED WARE	4	(D)	(D)	-	(D)	(D)	-	(D)	-
3914	SILVERWARE AND PLATED WARE	4	(D)	(D)	-	(D)	(D)	-	(D)	-
3931	MUSICAL INSTRUMENTS	1	(D)	-	-	-	(D)	-	(D)	-
394	TOYS AND SPORTING GOODS	10	1.6	(D)	-	(D)	1.3	-	(D)	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	5	1.4	(D)	-	(D)	1.2	-	(D)	-
3949	SPORTING AND ATHLETIC GOODS, NEC	5	.2	(D)	-	-	(D)	-	-	-

See footnotes at end of table.

Table 5a. Water Recirculated and Reused, by Purpose, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler Feed	Other
39	MISC. MANUFACTUR'G INDUSTRIES--CON.									
395	PENS, OFFICE AND ART GOODS	6	.7	-	-	(D)	(D)	(D)	(Z)	(D)
3951	PENS AND MECHNICAL PENCILS	2	(D)	-	-	(D)	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS	9	.3	.1	-	(D)	(D)	-	(D)	-
3964	NEEDLES, PINS, AND FASTENERS	7	(D)	(D)	-	(D)	(D)	-	(D)	-
399	MISCELLANEOUS MANUFACTURES	14	9.4	.4	(D)	(D)	8.4	-	.2	-
3999	MANUFACTURING INDUSTRIES, NEC	6	.8	(D)	(D)	(D)	(D)	-	(D)	-

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries whether or not separate figures are shown for individual industries in the group. Industries omitted from the table have a level of gross water use of less than .05 or have data being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (S) Data is inconsistant with other reported data and, therefore, is being withheld. Suppressed values for gross water used may be estimated from data shown for water intake and recirculated water. (Z) Less than 50 million gallons.

Table 5b. Water Recirculated and Reused, by Purpose, for States: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

State	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
UNITED STATES, TOTAL	6 052	34 199.2	11 902.0	1 616.4	1 785.2	17 468.9	12.0	1 151.6	263.0
ALABAMA	130	1 009.5	169.5	49.0	52.5	713.5	(D)	(D)	16.1
ARIZONA	40	155.1	51.2	13.3	33.3	56.0	(D)	1.0	(D)
ARKANSAS	81	220.3	108.0	28.9	1.8	76.6	(D)	4.0	(D)
CALIFORNIA	431	1 041.1	315.4	25.6	31.1	629.1	.3	16.0	23.8
COLORADO	45	127.1	24.8	(D)	(D)	80.7	(D)	2.9	.8
CONNECTICUT	108	622.6	56.9	540.1	7.0	17.4	(D)	(D)	(Z)
DELAWARE	27	91.9	5.7	(D)	4.4	57.1	-	.8	(D)
FLORIDA	92	757.2	411.9	49.1	(D)	256.6	(D)	11.9	17.5
GEORGIA	179	792.8	490.8	21.9	45.9	226.1	(D)	7.5	(D)
HAWAII	22	82.1	31.1	(D)	(D)	17.8	(D)	2.9	(D)
IDAHO	38	111.8	77.6	(D)	(D)	31.1	-	.7	2.2
ILLINOIS	366	1 163.7	296.8	37.5	28.3	786.5	.3	13.0	1.3
INDIANA	212	782.9	287.2	5.2	32.9	445.6	.1	9.7	2.2
IOWA	106	229.6	30.0	(D)	4.1	184.8	(D)	4.9	3.0
KANSAS	62	250.6	14.9	(D)	2.0	227.9	(D)	4.3	.5
KENTUCKY	112	288.6	46.3	(D)	7.3	230.7	(D)	1.7	(D)
LOUISIANA	134	2 650.4	292.5	22.8	17.5	2 263.1	(D)	49.0	(D)
MAINE	30	116.8	98.0	(D)	(D)	10.4	(D)	4.9	-
MARYLAND	74	138.1	94.3	(D)	6.8	32.6	(D)	1.7	.5
MASSACHUSETTS	136	159.2	60.5	7.1	9.9	77.9	(D)	3.5	(D)
MICHIGAN	262	1 318.8	432.5	(D)	22.9	454.8	(D)	361.0	37.6
MINNESOTA	97	127.4	70.9	(D)	4.2	33.4	(D)	16.3	.6
MISSISSIPPI	67	463.7	200.4	(D)	20.3	219.0	(D)	4.5	1.0
MISSOURI	113	209.9	82.7	(D)	18.8	99.1	(D)	8.4	1.0
MONTANA	18	65.5	15.6	(D)	(D)	26.7	-	.9	(D)
NEBRASKA	49	368.6	7.2	-	(D)	32.7	(D)	328.4	(D)
NEVADA	12	7.2	.3	(D)	(D)	6.7	-	(D)	-
NEW JERSEY	234	375.3	94.6	13.6	20.0	237.2	(D)	7.0	(D)
NEW MEXICO	10	47.1	(D)	(D)	(D)	31.8	-	.3	-
NEW YORK	308	469.4	68.9	10.8	68.9	220.6	(D)	14.9	(D)
NORTH CAROLINA	216	811.3	318.6	46.2	137.2	280.8	(D)	28.3	(D)
OHIO	416	1 576.5	762.0	90.9	26.6	658.2	.1	23.5	15.2
OKLAHOMA	64	1 437.2	785.8	(D)	4.3	621.0	(D)	5.2	(D)
OREGON	106	275.0	170.1	14.6	(D)	48.6	(D)	13.6	26.2
PENNSYLVANIA	385	3 533.2	2 763.5	47.2	38.9	659.7	.2	20.0	3.0
RHODE ISLAND	29	13.5	7.8	(D)	1.9	3.0	(D)	.1	(D)
SOUTH CAROLINA	166	735.4	270.8	31.5	185.5	220.3	(D)	14.5	(D)
SOUTH DAKOTA	4	(D)	(D)	-	-	(D)	-	(D)	-
TENNESSEE	144	1 082.3	605.4	30.5	76.0	355.5	(D)	13.3	(D)
TEXAS	310	7 337.5	740.1	341.9	805.1	5 347.7	.2	95.5	7.0
UTAH	26	183.4	18.3	(D)	3.0	120.8	-	2.0	(D)
VERMONT	17	8.9	8.1	(D)	(D)	(D)	-	(D)	(D)
VIRGINIA	111	649.6	419.9	23.1	34.8	162.0	(D)	6.5	(D)
WASHINGTON	103	698.5	531.2	(D)	3.4	152.4	(D)	7.0	1.3
WEST VIRGINIA	50	197.4	59.6	-	.2	135.4	(D)	1.3	(D)
WISCONSIN	260	382.9	271.1	15.9	8.3	69.5	(D)	13.1	(D)
WYOMING	14	83.2	(D)	(D)	-	64.6	-	11.4	-

Note: States omitted from table have gross water use of less than 50 million gallons or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

Table 5c. Water Recirculated and Reused, by Purpose, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose						
					Cooling and condensing				
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	UNITED STATES, TOTAL	6 052	34 199.2	11 902.0	1 616.4	1 785.2	17 468.9	12.0	1 151.6	263.0
	NEW ENGLAND									
20	FOOD AND KINDRED PRODUCTS	19	15.9	6.5	(D)	(D)	7.9	(D)	.3	(D)
22	TEXTILE MILL PRODUCTS	18	2.3	(D)	(D)	(D)	(D)	(D)	.4	(D)
26	PAPER AND ALLIED PRODUCTS	61	235.8	217.6	4.1	(D)	10.3	-	5.4	(D)
29	PETROLEUM AND COAL PRODUCTS	4	(D)	(D)	-	-	(D)	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	26	11.7	1.9	-	(D)	9.0	-	.4	(D)
31	LEATHER AND LEATHER PRODUCTS	1	(D)	-	-	-	(D)	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	7	6.0	(D)	-	(D)	2.2	-	(D)	-
34	FABRICATED METAL PRODUCTS	30	6.7	.8	(D)	2.4	3.1	-	.4	(D)
35	MACHINERY, EXCEPT ELECTRICAL	20	13.0	(D)	(D)	1.7	4.6	(D)	.5	-
36	ELECTRIC, ELECTRONIC EQUIP	29	15.1	.9	(D)	1.6	8.2	-	(D)	-
37	TRANSPORTATION EQUIPMENT	17	79.4	37.9	-	3.5	35.8	(D)	2.0	(D)
38	INSTRUMENTS, RELATED PRODUCTS	22	10.7	.4	-	2.4	7.4	-	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	13	.9	.2	-	(D)	.5	-	(D)	-
	MIDDLE ATLANTIC	815	4 259.1	2 983.9	67.5	114.0	1 006.8	.4	38.0	48.5
20	FOOD AND KINDRED PRODUCTS	167	73.7	16.2	(D)	9.4	46.3	(D)	2.1	.3
22	TEXTILE MILL PRODUCTS	32	2.6	1.1	(D)	.2	.8	(D)	.2	(D)
24	LUMBER AND WOOD PRODUCTS	6	.8	(D)	(D)	-	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	159	625.7	78.0	16.9	43.6	473.8	(D)	9.0	(D)
29	PETROLEUM AND COAL PRODUCTS	14	321.6	4.4	(D)	(D)	300.9	-	4.5	(D)
30	RUBBER, MISC. PLASTICS PROD.	51	32.3	5.6	(D)	3.6	18.3	-	4.2	(D)
31	LEATHER AND LEATHER PRODUCTS	3	(D)	(D)	-	-	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	58	28.9	10.1	-	1.0	16.8	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES	73	196.9	110.5	-	2.3	81.0	(D)	(D)	2.7
34	FABRICATED METAL PRODUCTS	33	9.3	2.4	-	(D)	5.1	-	.6	(D)
35	MACHINERY, EXCEPT ELECTRICAL	31	18.1	4.2	-	.9	6.2	(D)	6.8	(D)
36	ELECTRIC, ELECTRONIC EQUIP	55	41.4	1.3	-	31.0	7.5	(D)	1.1	(D)
37	TRANSPORTATION EQUIPMENT	28	162.3	83.1	-	12.5	26.6	-	1.1	39.1
38	INSTRUMENTS, RELATED PRODUCTS	12	7.2	(D)	(D)	4.0	2.0	(D)	.4	(D)
	SOUTH ATLANTIC	792	4 529.7	1 995.4	188.3	421.1	1 807.0	9.2	75.1	33.8
20	FOOD AND KINDRED PRODUCTS	126	96.2	18.5	(D)	1.1	75.9	(D)	1.9	.5
21	TOBACCO PRODUCTS	8	21.7	(D)	(D)	16.1	1.7	-	.7	-
22	TEXTILE MILL PRODUCTS	255	231.3	11.9	.3	181.7	25.6	9.1	2.8	.1
24	LUMBER AND WOOD PRODUCTS	27	5.6	.2	(D)	-	.4	(D)	.7	.8
26	PAPER AND ALLIED PRODUCTS	55	1 740.7	1 446.2	101.8	37.7	113.9	(D)	40.3	(D)
28	CHEMICALS AND ALLIED PRODUCTS	108	1 587.4	226.1	43.0	117.8	1 165.6	-	9.8	25.0
29	PETROLEUM AND COAL PRODUCTS	10	80.4	.3	-	(D)	79.5	-	.3	(D)
30	RUBBER, MISC. PLASTICS PROD.	24	347.8	180.2	(D)	10.1	140.0	(D)	16.8	(D)
32	STONE, CLAY, GLASS PRODUCTS	41	72.1	11.7	(D)	36.5	23.5	-	.2	(D)
33	PRIMARY METAL INDUSTRIES	37	233.0	45.9	(D)	(D)	144.7	-	.4	(D)
34	FABRICATED METAL PRODUCTS	21	17.1	4.5	-	(D)	10.3	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	18	25.0	4.8	-	5.7	14.4	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	32	16.8	4.8	-	7.2	4.5	(D)	.3	(D)
37	TRANSPORTATION EQUIPMENT	10	53.1	40.9	-	4.5	6.8	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	5	1.1	-	(D)	(D)	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	5	.1	(D)	-	(D)	(D)	-	(D)	-
	GREAT LAKES	1 090	3 428.8	1 253.9	151.6	103.5	1 474.2	.5	390.4	54.7

See footnotes at end of table.

Table 5c. Water Recirculated and Reused, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	GREAT LAKES--CON.									
22	TEXTILE MILL PRODUCTS.	4	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	8	1.5	(D)	-	-	1.1	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	93	514.0	479.4	17.3	(D)	10.1	-	6.0	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	123	388.6	8.1	(D)	18.0	341.7	(D)	10.3	1.7
29	PETROLEUM AND COAL PRODUCTS.	29	380.1	18.4	(D)	-	359.3	(D)	1.9	.5
30	RUBBER, MISC. PLASTICS PROD.	44	19.5	5.1	(D)	.4	13.4	-	.4	(D)
31	LEATHER AND LEATHER PRODUCTS	9	(D)	.2	(D)	(D)	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS.	51	16.5	5.3	(D)	1.3	9.0	-	(D)	.7
33	PRIMARY METAL INDUSTRIES	149	946.3	509.0	(D)	1.4	346.6	(D)	2.0	12.9
34	FABRICATED METAL PRODUCTS.	109	106.6	11.3	(D)	3.2	63.5	(D)	3.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	84	67.2	20.6	(D)	10.2	33.3	(D)	1.7	.5
36	ELECTRIC, ELECTRONIC EQUIP	75	86.2	4.7	(D)	14.3	44.7	(D)	1.8	.3
39	MISC. MANUFACTUR'G INDUSTRIES.	5	.3	(D)	(D)	-	(D)	-	(D)	-
	OHIO	694	2 324.4	949.7	36.0	60.8	1 234.3	.4	35.4	8.1
20	FOOD AND KINDRED PRODUCTS.	90	90.1	23.7	.6	3.7	52.1	(D)	9.3	(D)
22	TEXTILE MILL PRODUCTS.	6	.3	(D)	-	(D)	(D)	-	(D)	-
24	LUMBER AND WOOD PRODUCTS	4	(D)	-	-	-	(D)	-	(D)	-
25	FURNITURE AND FIXTURES	6	.3	(D)	-	(D)	(D)	-	(D)	-
26	PAPER AND ALLIED PRODUCTS.	32	558.2	542.8	8.1	(D)	4.6	-	2.3	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	101	487.1	5.2	16.5	16.5	443.3	(D)	4.4	(D)
29	PETROLEUM AND COAL PRODUCTS.	25	294.7	1.2	(D)	(D)	280.8	-	2.3	-
30	RUBBER, MISC. PLASTICS PROD.	42	26.5	5.8	-	4.5	13.2	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	66	43.9	15.4	(D)	.5	26.5	(D)	.4	(D)
33	PRIMARY METAL INDUSTRIES	112	576.7	237.5	(D)	1.7	332.9	(D)	2.4	1.8
34	FABRICATED METAL PRODUCTS.	56	30.4	8.7	(D)	3.3	17.5	(D)	.6	(D)
35	MACHINERY, EXCEPT ELECTRICAL	43	59.5	33.4	-	2.7	13.6	(D)	9.7	(D)
36	ELECTRIC, ELECTRONIC EQUIP	57	61.0	19.1	-	15.9	25.4	(D)	.4	(D)
37	TRANSPORTATION EQUIPMENT	42	92.0	57.2	(D)	7.7	23.2	-	2.9	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	7	.4	(D)	-	(D)	.2	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	2	(D)	(D)	-	-	(D)	-	-	-
	TENNESSEE.	152	1 099.0	618.3	47.2	92.3	315.7	(D)	14.1	(D)
20	FOOD AND KINDRED PRODUCTS.	19	4.7	.2	-	-	4.2	-	.3	-
22	TEXTILE MILL PRODUCTS.	14	3.1	(D)	(D)	2.1	(D)	(D)	.1	-
26	PAPER AND ALLIED PRODUCTS.	14	357.5	281.8	(D)	(D)	20.9	(D)	10.3	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	34	352.9	6.4	(D)	74.3	262.8	(D)	3.3	(D)
30	RUBBER, MISC. PLASTICS PROD.	13	6.7	5.2	-	(D)	4.3	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	8	4.2	(D)	(D)	(D)	.9	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	19	69.4	40.2	-	(D)	18.9	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	5	(D)	(D)	-	(D)	(D)	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	9	3.8	(D)	-	2.3	1.5	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	-	-	-	-	-	-	-	-	-
	UPPER MISSISSIPPI.	451	998.2	339.0	8.6	31.8	581.8	.2	31.9	4.9
20	FOOD AND KINDRED PRODUCTS.	159	246.7	41.4	3.3	7.3	184.8	(D)	4.8	(D)
22	TEXTILE MILL PRODUCTS.	2	(D)	(D)	-	-	(D)	-	-	-
25	FURNITURE AND FIXTURES	2	(D)	-	-	-	(D)	-	-	-
26	PAPER AND ALLIED PRODUCTS.	38	194.6	159.4	(D)	1.3	11.1	-	18.2	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	53	97.1	8.1	(D)	1.0	85.2	-	2.4	(D)

See footnotes at end of table.

Table 5c. Water Recirculated and Reused, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	UPPER MISSISSIPPI--CON.									
29	PETROLEUM AND COAL PRODUCTS	5	203.6	(D)	-	-	202.6	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	20	13.3	2.6	-	(D)	9.1	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	15	14.0	2.6	-	-	11.2	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	40	145.9	92.1	(D)	.6	52.5	(D)	.4	(D)
34	FABRICATED METAL PRODUCTS	28	4.0	1.1	-	.6	2.2	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	43	40.1	10.6	(D)	9.6	14.4	(D)	2.5	(D)
36	ELECTRIC, ELECTRONIC EQUIP	25	2.1	.4	-	1.0	.4	(D)	.2	(D)
37	TRANSPORTATION EQUIPMENT	17	36.1	20.4	-	9.7	4.4	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	4	(D)	(D)	-	-	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	3	(D)	-	-	-	(D)	(D)	(D)	(D)
	LOWER MISSISSIPPI	222	2 986.8	349.6	59.2	36.1	2 484.7	(D)	52.2	(D)
20	FOOD AND KINDRED PRODUCTS	45	44.0	5.4	(D)	(D)	37.5	(D)	1.2	(D)
24	LUMBER AND WOOD PRODUCTS	19	3.6	1.0	(D)	(D)	.4	-	.7	1.4
25	FURNITURE AND FIXTURES	2	(D)	(D)	-	(D)	(D)	-	(D)	-
26	PAPER AND ALLIED PRODUCTS	22	357.3	288.9	(D)	4.0	12.0	-	15.7	(D)
28	CHEMICALS AND ALLIED PRODUCTS	68	1 782.7	47.2	21.8	(D)	1 676.7	-	30.0	(D)
29	PETROLEUM AND COAL PRODUCTS	18	712.3	.5	(D)	(D)	704.5	(D)	3.9	(D)
30	RUBBER, MISC. PLASTICS PROD.	10	10.2	4.2	-	(D)	5.4	-	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	7	13.3	(D)	-	(D)	(D)	-	-	-
34	FABRICATED METAL PRODUCTS	8	1.3	(D)	-	(D)	.1	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	5	.6	(D)	-	(D)	(D)	-	(D)	-
	SOURIS - RED - RAINY									
20	FOOD AND KINDRED PRODUCTS	5	(D)	(D)	-	-	(D)	-	(D)	-
	MISSOURI	195	1 583.3	63.0	38.0	12.4	1 128.9	.1	339.9	1.0
20	FOOD AND KINDRED PRODUCTS	90	62.9	20.9	(D)	.9	28.3	(D)	3.4	.6
28	CHEMICALS AND ALLIED PRODUCTS	22	449.1	(D)	(D)	(D)	119.1	-	328.9	(D)
29	PETROLEUM AND COAL PRODUCTS	16	977.5	2.3	(D)	(D)	950.1	-	1.3	-
30	RUBBER, MISC. PLASTICS PROD.	9	17.2	(D)	(D)	(D)	9.3	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	11	4.4	(D)	-	(D)	3.3	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES	9	16.2	4.8	-	-	11.4	(D)	(D)	-
34	FABRICATED METAL PRODUCTS	4	.7	(D)	-	(D)	(D)	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	9	12.5	.2	-	(D)	5.9	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS	2	(D)	(D)	-	(D)	(D)	-	(D)	-
	ARKANSAS, WHITE AND RED	214	2 239.1	1 018.5	46.9	51.4	1 075.4	.4	31.7	14.9
20	FOOD AND KINDRED PRODUCTS	46	12.8	1.1	(D)	1.3	9.3	(D)	.7	(D)
22	TEXTILE MILL PRODUCTS	1	(D)	-	-	(D)	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	10	859.2	819.3	(D)	(D)	(D)	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	34	158.4	3.2	(D)	.4	144.6	(D)	6.5	(D)
29	PETROLEUM AND COAL PRODUCTS	25	837.2	5.0	(D)	(D)	819.1	-	6.5	(D)
30	RUBBER, MISC. PLASTICS PROD.	11	18.0	1.7	(D)	2.0	12.3	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	21	29.2	.6	-	1.6	14.3	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES	16	89.7	22.1	(D)	(D)	47.5	(D)	1.4	(D)
34	FABRICATED METAL PRODUCTS	10	3.2	(D)	-	(D)	.9	-	.2	(D)
35	MACHINERY, EXCEPT ELECTRICAL	7	2.5	.9	-	.5	1.2	(D)	(D)	-
37	TRANSPORTATION EQUIPMENT	9	3.2	(D)	(D)	(D)	2.3	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	4	(D)	-	-	(D)	(D)	-	(D)	-
	TEXAS GULF	266	6 935.1	717.9	305.1	763.4	5 071.6	.2	75.7	1.4

See footnotes at end of table.

Table 5c. Water Recirculated and Reused, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
					Cooling and condensing					
			Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	TEXAS GULF--CON.									
20	FOOD AND KINDRED PRODUCTS	43	19.0	.9	-	.8	17.7	(D)	.4	(D)
22	TEXTILE MILL PRODUCTS	3	(D)	(D)	-	(D)	(D)	-	(D)	-
24	LUMBER AND WOOD PRODUCTS	13	2.0	1.3	(D)	-	(D)	(D)	.3	(D)
26	PAPER AND ALLIED PRODUCTS	6	574.0	502.9	(D)	(D)	8.4	-	7.8	(D)
28	CHEMICALS AND ALLIED PRODUCTS	90	2 523.6	82.1	40.1	23.0	2 341.0	(D)	37.1	(D)
29	PETROLEUM AND COAL PRODUCTS	31	2 643.6	5.6	(D)	(D)	2 502.7	(D)	27.8	(D)
30	RUBBER, MISC. PLASTICS PROD.	8	3.5	(D)	-	(D)	1.4	-	.1	-
32	STONE, CLAY, GLASS PRODUCTS	22	5.7	3.3	(D)	(D)	2.3	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	12	322.7	96.1	(D)	(D)	115.7	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS	10	5.0	3.7	-	(D)	1.2	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	16	12.8	(D)	(D)	3.7	7.0	-	1.5	-
36	ELECTRIC, ELECTRONIC EQUIP	9	2.7	.5	-	1.8	(D)	-	(D)	-
	RIO GRANDE	18	67.1	2.2	(D)	1.7	56.0	(D)	.7	(D)
20	FOOD AND KINDRED PRODUCTS	4	5.3	-	-	(D)	(D)	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	1	(D)	-	-	(D)	(D)	-	-	-
	LOWER COLORADO	51	199.4	51.4	26.6	33.4	86.5	(D)	1.3	(D)
20	FOOD AND KINDRED PRODUCTS	7	2.5	(D)	-	(D)	1.7	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	6	.7	(D)	-	-	(D)	-	-	-
33	PRIMARY METAL INDUSTRIES	13	105.5	33.8	25.4	(D)	39.4	(D)	(D)	(D)
	GREAT BASIN	27	78.7	6.4	(D)	(D)	52.2	-	1.1	.2
20	FOOD AND KINDRED PRODUCTS	6	.4	(D)	-	-	(D)	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	4	45.4	(D)	-	-	45.1	-	(D)	(D)
	COLUMBIA - NORTH PACIFIC	254	1 103.6	791.4	17.9	(D)	236.7	(D)	21.4	29.8
20	FOOD AND KINDRED PRODUCTS	79	59.7	36.2	-	(D)	20.0	(D)	1.1	2.3
24	LUMBER AND WOOD PRODUCTS	77	51.8	4.2	16.0	-	2.6	-	3.2	25.9
26	PAPER AND ALLIED PRODUCTS	32	770.8	723.0	(D)	(D)	31.2	-	14.4	(D)
28	CHEMICALS AND ALLIED PRODUCTS	22	62.3	15.9	-	(D)	45.8	-	.5	(D)
29	PETROLEUM AND COAL PRODUCTS	4	(D)	(D)	-	-	(D)	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	1	(D)	-	-	-	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	11	6.8	1.6	-	-	(D)	-	-	(D)
33	PRIMARY METAL INDUSTRIES	17	16.2	8.6	(D)	-	7.5	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS	(D)	(D)	(D)	-	-	-	-	-	-
	CALIFORNIA - SOUTH PACIFIC	432	1 041.2	315.4	25.6	31.1	629.1	.3	16.1	23.8
20	FOOD AND KINDRED PRODUCTS	153	113.3	52.1	(D)	(D)	50.3	(Z)	4.4	5.7
22	TEXTILE MILL PRODUCTS	4	(D)	(D)	-	-	-	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	21	26.5	8.0	(D)	-	(D)	-	.6	2.5
26	PAPER AND ALLIED PRODUCTS	22	186.4	169.3	(D)	(D)	12.5	-	1.6	-
28	CHEMICALS AND ALLIED PRODUCTS	53	122.8	14.0	(D)	(D)	100.8	(D)	4.3	(D)
29	PETROLEUM AND COAL PRODUCTS	26	434.7	8.5	(D)	(D)	416.8	-	3.0	-
30	RUBBER, MISC. PLASTICS PROD.	6	7.9	3.1	-	(D)	4.3	-	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS	1	(D)	(D)	-	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	35	19.2	4.0	(D)	(D)	10.4	(D)	(D)	.7
33	PRIMARY METAL INDUSTRIES	21	35.4	20.7	(D)	(D)	13.3	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS	23	7.6	2.5	-	.1	4.4	(D)	(Z)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	10	10.2	.6	-	(D)	4.0	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	24	15.0	1.0	-	9.2	3.0	-	(D)	(D)

See footnotes at end of table.

Table 5c. Water Recirculated and Reused, by Purpose, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Establishments reporting the recirculation and reuse of water (number)	Water recirculated by purpose							
			Total	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
					Steam electric power generation	Air conditioning	Other			
	CALIFORNIA - SOUTH PACIFIC--CON.									
37	TRANSPORTATION EQUIPMENT	25	59.2	31.6	-	9.2	8.3	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	7	2.5	(D)	-	(D)	(D)	-	(D)	-
	ALASKA									
20	FOOD AND KINDRED PRODUCTS	1	(D)	-	-	-	(D)	-	-	-
	HAWAII	22	82.1	31.1	(D)	(D)	17.8	(D)	2.9	(D)
20	FOOD AND KINDRED PRODUCTS	18	80.6	31.0	(D)	(D)	16.5	(D)	2.8	(D)
34	FABRICATED METAL PRODUCTS	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Water use regions or major industry groups which have been omitted from table have water intake of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (S) Data is inconsistent with other reported data and, therefore, is being withheld. Suppressed values for gross water used may be estimated from data shown for water intake and recirculated water. (Z) Less than 50 million gallons.

[1] See appendix H for maps and appendix I for definitions.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments--Discharging to public sewers	Number of establishments--Discharging exclusively to public sewers	Water treated by point of discharge--Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	ALL INDUSTRIES, TOTAL. . . .	12 991.7	11 682.2	7 259	3 981	4 709.2	388.8	3 172.0	280.9	688.7	54.0	76.7	48.1
20	FOOD AND KINDRED PRODUCTS. . .	739.6	649.2	1 771	1 192	242.9	70.9	56.0	9.8	12.3	34.2	38.4	21.3
201	MEAT PRODUCTS.	112.5	104.9	355	283	52.4	31.1	14.8	2.4	(D)	-	3.2	(D)
2011	MEATPACKING PLANTS	77.5	72.5	159	119	31.4	18.3	7.7	2.4	-	-	2.3	.7
2013	SAUSAGES AND OTHER PREPARED MEATS.	5.2	4.5	54	43	(D)	2.0	(D)	-	-	-	(D)	(D)
2016	POULTRY DRESSING PLANTS.	28.1	26.2	126	110	18.2	10.6	(D)	(Z)	(D)	-	.6	(D)
2017	POULTRY AND EGG PROCESSING	1.7	1.7	16	11	(D)	.2	-	-	-	-	(D)	-
202	DAIRY PRODUCTS	42.2	35.9	374	270	5.0	(D)	2.4	(D)	(D)	-	.3	.1
2021	CREAMERY BUTTER.	1.4	1.4	10	6	(D)	(D)	(D)	-	-	-	-	-
2022	CHEESE, NATURAL AND PROCESSED. . .	5.9	5.5	47	19	.8	.3	(D)	(D)	-	-	(D)	(D)
2023	CONDENSED AND EVAPORATED MILK. . .	11.8	12.0	53	20	1.7	.6	.9	-	(D)	-	.1	(D)
2024	ICE CREAM AND FROZEN DESSERTS. . .	2.0	1.4	30	26	(D)	(D)	-	-	-	-	-	-
2026	FLUID MILK	21.1	15.5	234	199	2.3	.9	1.3	-	-	-	(D)	(D)
203	PRESERVED FRUITS AND VEGETABLES.	112.7	100.7	328	155	41.5	13.8	8.2	.4	(D)	(D)	9.8	5.1
2032	CANNED SPECIALTIES	17.2	13.3	40	17	6.0	4.0	(D)	-	(D)	-	1.6	-
2033	CANNED FRUITS AND VEGETABLES . . .	43.1	38.8	165	77	15.0	4.5	2.6	(D)	(D)	-	2.1	1.4
2034	DEHYD. FRUITS, VEGETABLES, SOUPS .	4.0	3.8	12	7	1.7	(D)	(D)	-	-	-	.3	(D)
2035	PICKLES, SAUCES, SALAD DRESSINGS .	2.7	2.3	26	9	1.1	(D)	.2	-	-	-	(Z)	(D)
2037	FROZEN FRUITS AND VEGETABLES . . .	40.1	37.9	57	25	15.5	(D)	4.9	-	-	(D)	4.9	2.8
2038	FROZEN SPECIALTIES	5.7	4.6	28	20	2.1	1.1	(D)	(D)	-	-	.9	(D)
204	GRAIN MILL PRODUCTS.	88.5	82.2	74	44	21.7	6.7	9.6	(D)	-	-	(D)	-
2041	FLOUR, OTHER GRAIN MILL PRODUCTS .	.8	.6	11	9	(D)	(D)	(D)	-	-	-	-	-
2043	CEREAL BREAKFAST FOODS	5.1	4.7	14	9	1.9	(D)	(D)	-	-	-	-	-
2044	RICE MILLING	(D)	(D)	4	4	(D)	(D)	(D)	-	-	-	-	-
2046	WET CORN MILLING	78.8	73.8	19	7	18.9	5.6	(D)	(D)	-	-	(D)	-
2047	DOG, CAT, AND OTHER PET FOOD . . .	2.2	1.8	20	12	.7	.6	(D)	-	-	-	(D)	-
2048	PREPARED FEEDS, NEC.	1.3	.9	5	3	(D)	-	(D)	-	-	-	-	-
205	BAKERY PRODUCTS.	4.6	3.5	58	49	.4	(D)	-	-	-	-	(D)	-
2051	BREAD, CAKE, AND RELATED PRODUCTS.	2.7	2.1	42	39	.2	(D)	-	-	-	-	(D)	-
2052	COOKIES AND CRACKERS	1.9	1.5	16	10	.2	.2	-	-	-	-	-	-
206	SUGAR, CONFECTIONERY PRODUCTS. .	207.1	175.3	87	36	89.3	1.7	6.9	1.1	(D)	(D)	24.5	14.7
2061	RAW CANE SUGAR	118.4	94.1	4	-	67.6	-	1.3	(D)	(D)	(D)	(D)	12.8
2062	CANE SUGAR REFINING.	56.0	53.8	14	1	8.5	(D)	(D)	(D)	(D)	-	(D)	(D)
2063	BEET SUGAR	21.3	16.7	22	3	12.6	(D)	5.0	(D)	-	-	5.2	1.7
2065	CONFECTIONERY PRODUCTS	(D)	(D)	32	25	(D)	.3	(D)	-	-	-	-	(D)
2066	CHOCOLATE AND COCOA PRODUCTS . . .	6.2	6.1	11	4	(D)	(D)	-	-	-	-	-	(D)
207	FATS AND OILS.	43.6	37.0	103	65	13.3	7.5	5.2	(D)	(D)	(D)	(Z)	(D)
2074	COTTONSEED OIL MILLS	(D)	(D)	5	3	(D)	(Z)	(D)	(D)	-	-	(D)	(D)
2075	SOYBEAN OIL MILLS.	20.9	15.7	46	30	6.1	2.1	3.9	-	(D)	(D)	(D)	(D)
2077	ANIMAL AND MARINE FATS AND OILS. .	3.2	4.6	12	9	(D)	.3	(D)	-	(D)	-	(D)	-
2079	SHORTENING AND COOKING OILS. . . .	17.4	14.9	38	22	6.2	5.1	(D)	(D)	-	-	-	-
208	BEVERAGES.	105.0	88.0	258	195	13.4	5.3	7.4	(D)	-	-	.2	(D)
2082	MALT BEVERAGES	73.4	63.0	65	36	10.0	3.5	6.2	-	-	-	(D)	(D)
2083	MALT	7.9	6.9	18	9	1.7	.9	(D)	-	-	-	(D)	(D)
2084	WINES, BRANDY, AND BRANDY SPIRITS.	2.0	1.7	7	7	.4	(D)	(D)	(D)	-	-	(D)	-
2085	DISTILLED LIQUOR, EXCEPT BRANDY. .	9.0	7.8	15	7	.6	(D)	(D)	-	-	-	-	-
2086	BOTTLED AND CANNED SOFT DRINKS . .	8.2	4.6	129	117	.5	.4	(D)	-	-	-	(D)	(D)
2087	FLAVORING EXTRACTS, SIRUPS, NEC. .	4.4	4.1	24	19	.1	(D)	(D)	-	-	-	-	-
209	MISC. FOODS, KINDRED PRODUCTS. .	23.5	21.9	134	95	6.1	2.6	1.5	(D)	1.6	(D)	.3	(D)
2091	CANNED AND CURED SEAFOODS.	4.2	4.2	7	-	1.3	.9	(D)	-	(D)	-	(D)	(D)
2092	FRESH OR FROZEN PACKAGED FISH. . .	2.6	2.3	15	8	1.8	.2	(D)	-	(D)	(D)	(D)	-
2095	ROASTED COFFEE	(D)	1.4	10	5	(D)	.2	(D)	-	-	-	-	-
2097	MANUFACTURED ICE	1.7	(D)	10	9	(D)	-	(D)	(D)	-	-	-	-
2098	MACARONI AND SPAGHETTI	(D)	(D)	4	3	-	-	-	-	-	-	-	-
2099	FOOD PREPARATIONS, NEC	13.3	12.5	88	70	2.8	1.3	(D)	-	-	-	(D)	-
21	TOBACCO PRODUCTS	4.5	3.3	16	10	1.1	(D)	1.1	-	-	-	(D)	-
2111	CIGARETTES	3.2	2.2	12	8	(Z)	(D)	(D)	-	-	-	-	-
2141	TOBACCO STEMMING AND REDRYING. . .	(D)	(D)	4	2	1.1	(D)	(D)	-	-	-	(D)	-
22	TEXTILE MILL PRODUCTS.	162.9	147.4	551	413	56.9	19.1	35.1	2.2	-	-	.1	.9
2211	WEAVING MILLS, COTTON.	18.2	14.4	67	41	5.2	3.4	2.3	-	-	-	-	-
2221	WEAVING MILLS, MANMADE FIBER, SILK.	30.0	25.7	118	70	6.0	.9	4.7	.4	-	-	(D)	(D)
2231	WEAVING AND FINISHING MILLS, WOOL.	3.9	3.9	14	10	(D)	(D)	2.1	-	-	-	-	-
2241	NARROW FABRIC MILLS.	.4	.4	6	5	(D)	(D)	-	-	-	-	(D)	-
225	KNITTING MILLS	20.9	20.1	103	90	11.0	6.4	4.4	-	-	-	(D)	(D)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS. . .	(D)	(D)	10	7	(D)	(D)	-	-	-	-	-	-
2252	HOSIERY, NEC	(D)	(D)	15	15	(D)	(D)	-	-	-	-	-	-
2253	KNIT OUTERWEAR MILLS	1.5	1.5	13	13	(D)	(D)	-	-	-	-	-	-
2254	KNIT UNDERWEAR MILLS	1.5	1.5	11	10	(D)	(D)	(D)	-	-	-	-	-
2257	CIRCULAR KNIT FABRIC MILLS	12.8	12.9	43	37	7.9	5.0	2.8	-	-	-	-	-
2258	WARP KNIT FABRIC MILLS	3.5	3.1	10	7	2.5	.8	1.5	-	-	-	(D)	(D)
226	TEXTILE FINISHING, EXCEPT WOOL .	50.8	47.2	103	89	23.0	3.9	17.0	(D)	-	-	(D)	(D)
2261	FINISHING PLANTS, COTTON	11.9	10.9	28	24	4.5	1.7	2.8	-	-	-	-	-
2262	FINISH. PLTS, MANMADE FIBER, SILK.	34.4	31.9	48	42	16.9	1.4	(D)	(D)	-	-	(D)	(D)
2269	FINISHING PLANTS, NEC.	4.5	4.4	27	23	1.6	.9	(D)	-	-	-	(D)	(D)
227	FLOOR COVERING MILLS	22.4	21.1	49	40	3.2	(D)	1.6	(D)	-	-	-	-
2272	TUFTED CARPETS AND RUGS.	22.0	20.8	46	37	3.2	(D)	1.6	(D)	-	-	-	-
228	YARN AND THREAD MILLS.	8.8	7.5	54	46	4.1	1.6	2.2	-	-	-	(D)	(D)
2281	YARN MILLS, EXCEPT WOOL.	5.3	4.5	35	29	1.9	(D)	1.1	-	-	-	(D)	(D)

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	ALL INDUSTRIES, TOTAL	6 973.0	1 140.6	4 685.1	574.7	339.8	43.7	93.6	95.5
20	FOOD AND KINDRED PRODUCTS	406.5	154.9	159.5	13.5	28.7	9.5	18.9	21.7
201	MEAT PRODUCTS	52.5	34.4	10.9	(D)	(D)	-	1.0	4.8
2011	MEATPACKING PLANTS	41.1	24.9	10.2	1.4	(D)	-	(D)	4.4
2013	SAUSAGES AND OTHER PREPARED MEATS	(D)	1.4	.6	(D)	-	-	(D)	(D)
2016	POULTRY DRESSING PLANTS	8.0	7.1	(D)	(D)	(D)	-	.5	(D)
2017	POULTRY AND EGG PROCESSING	(D)	1.0	(D)	-	-	-	-	-
202	DAIRY PRODUCTS	30.9	17.2	12.1	.3	-	-	1.0	.4
2021	CREAMERY BUTTER	(D)	.4	(D)	-	-	-	-	-
2022	CHEESE, NATURAL AND PROCESSED	4.7	1.6	2.6	(D)	-	-	.1	(D)
2023	CONDENSED AND EVAPORATED MILK	10.3	3.5	6.5	(D)	-	-	.3	(D)
2024	ICE CREAM AND FROZEN DESSERTS	(D)	1.1	(D)	-	-	-	-	(D)
2026	FLUID MILK	13.2	10.6	1.9	(D)	-	-	.5	(D)
203	PRESERVED FRUITS AND VEGETABLES	59.2	29.4	14.1	1.1	(D)	(D)	11.0	2.9
2032	CANNED SPECIALTIES	7.3	4.3	1.9	-	-	(D)	.5	(D)
2033	CANNED FRUITS AND VEGETABLES	23.8	18.1	1.5	(D)	(D)	-	2.1	1.6
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	2.1	.8	-	-	-	-	(D)	(D)
2035	PICKLES, SAUCES, SALAD DRESSINGS	1.2	.9	.2	(D)	(D)	-	(Z)	(D)
2037	FROZEN FRUITS AND VEGETABLES	22.4	4.1	9.5	(D)	(D)	(D)	7.6	.3
2038	FROZEN SPECIALTIES	2.5	1.2	1.0	(D)	-	-	(D)	-
204	GRAIN MILL PRODUCTS	60.5	17.6	40.7	(D)	(D)	-	(Z)	.2
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	(D)	.3	(D)	-	(D)	-	-	-
2043	CEREAL BREAKFAST FOODS	2.8	1.0	(D)	-	-	-	(D)	(D)
2044	RICE MILLING	(D)	(D)	(D)	-	-	-	-	-
2046	WET CORN MILLING	54.8	15.1	37.8	(D)	-	-	(D)	(D)
2047	DOG, CAT, AND OTHER PET FOOD	1.1	.7	(D)	-	-	-	(D)	(D)
2048	PREPARED FEEDS, NEC	(D)	(D)	.7	-	-	-	-	-
205	BAKERY PRODUCTS	3.2	2.4	.7	(D)	-	-	.1	(D)
2051	BREAD, CAKE, AND RELATED PRODUCTS	1.9	1.8	-	(D)	-	-	(D)	(D)
2052	COOKIES AND CRACKERS	1.3	.5	(D)	-	-	-	(D)	(D)
206	SUGAR, CONFECTIONERY PRODUCTS	86.1	3.6	30.9	(D)	(D)	(D)	2.7	11.8
2061	RAW CANE SUGAR	26.6	(D)	5.5	(D)	-	(D)	2.0	11.2
2062	CANE SUGAR REFINING	45.3	.6	17.0	(D)	(D)	-	(D)	(D)
2063	BEET SUGAR	4.1	(D)	2.7	(D)	-	-	(D)	(D)
2065	CONFECTIONERY PRODUCTS	4.0	2.3	(D)	-	(D)	-	(D)	(D)
2066	CHOCOLATE AND COCOA PRODUCTS	(D)	.4	5.5	-	-	-	(D)	-
207	FATS AND OILS	23.7	7.9	10.7	(D)	(D)	(D)	.2	.7
2074	COTTONSEED OIL MILLS	(D)	.8	(D)	(D)	-	-	(D)	(D)
2075	SOYBEAN OIL MILLS	9.6	1.6	7.2	(D)	-	-	(D)	(D)
2077	ANIMAL AND MARINE FATS AND OILS	3.8	(D)	(D)	-	(D)	(D)	(D)	-
2079	SHORTENING AND COOKING OILS	8.7	5.3	3.0	(D)	(D)	(D)	-	(D)
208	BEVERAGES	74.6	33.8	35.9	(D)	(D)	-	2.8	.8
2082	MALT BEVERAGES	52.9	25.9	25.6	(D)	(D)	-	(D)	(D)
2083	MALT	5.2	(D)	3.9	-	-	-	-	(D)
2084	WINES, BRANDY, AND BRANDY SPIRITS	1.3	(D)	-	(D)	-	-	.5	(D)
2085	DISTILLED LIQUOR, EXCEPT BRANDY	7.1	(D)	5.4	-	-	-	(D)	-
2086	BOTTLED AND CANNED SOFT DRINKS	4.1	(D)	.1	-	-	-	(D)	.1
2087	FLAVORING EXTRACTS, SIRUPS, NEC	4.0	.8	.9	(D)	-	-	(D)	(D)
209	MISC. FOODS, KINDRED PRODUCTS	15.8	8.7	3.5	(D)	.7	(D)	.2	(D)
2091	CANNED AND CURED SEAFOODS	2.8	(D)	(D)	-	.3	(D)	(D)	(D)
2092	FRESH OR FROZEN PACKAGED FISH	.6	.2	(D)	-	(D)	(D)	(D)	-
2095	ROASTED COFFEE	(D)	.6	(D)	-	-	-	(D)	(D)
2097	MANUFACTURED ICE	1.4	.6	(D)	(D)	-	-	-	(D)
2098	MACARONI AND SPAGHETTI	(D)	(D)	(D)	-	-	-	-	-
2099	FOOD PREPARATIONS, NEC	9.8	7.2	2.4	(D)	(D)	-	(D)	(D)
21	TOBACCO PRODUCTS	2.2	2.1	(D)	-	-	-	(D)	-
2111	CIGARETTES	2.1	(D)	(D)	-	-	-	(D)	-
2141	TOBACCO STEMMING AND REDRYING	(D)	(D)	(D)	-	-	-	-	-
22	TEXTILE MILL PRODUCTS	90.5	77.7	11.8	.3	-	-	.6	.6
2211	WEAVING MILLS, COTTON	9.2	5.0	4.1	(D)	-	-	(D)	-
2221	WEAVING MILLS, MANMADE FIBER, SILK	19.7	17.3	1.7	(D)	-	-	.2	(D)
2231	WEAVING AND FINISHING MILLS, WOOL	(D)	.9	(D)	-	-	-	(D)	-
2241	NARROW FABRIC MILLS	(D)	.3	(D)	-	-	-	-	-
225	KNITTING MILLS	9.1	8.9	.4	-	-	-	(D)	(D)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	.4	.4	(D)	-	-	-	(D)	-
2252	HOSIERY, NEC	(D)	(D)	-	-	-	-	-	-
2253	KNIT OUTERWEAR MILLS	(D)	(D)	-	-	-	-	-	-
2254	KNIT UNDERWEAR MILLS	(D)	(D)	(D)	-	-	-	-	-
2257	CIRCULAR KNIT FABRIC MILLS	5.0	4.9	.4	-	-	-	(D)	(D)
2258	WARP KNIT FABRIC MILLS	.6	.5	(D)	-	-	-	-	(D)
226	TEXTILE FINISHING, EXCEPT WOOL	24.3	22.6	1.6	-	-	-	(D)	(D)
2261	FINISHING PLANTS, COTTON	6.5	(D)	(D)	-	-	-	-	-
2262	FINISH. PLTS, MANMADE FIBER, SILK	15.0	13.5	1.5	-	-	-	(D)	(D)
2269	FINISHING PLANTS, NEC	2.7	(D)	(D)	-	-	-	-	-
227	FLOOR COVERING MILLS	17.9	17.6	(D)	-	-	-	(D)	(D)
2272	TUFTED CARPETS AND RUGS	17.6	17.3	(D)	-	-	-	(D)	(D)
228	YARN AND THREAD MILLS	3.5	3.2	.1	(D)	-	-	(D)	-
2281	YARN MILLS, EXCEPT WOOL	2.6	2.4	(Z)	(D)	-	-	(D)	-

See footnotes at end of table.

Table 6a. **Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978**—Con.

(All figures in billions of gallons, except where noted. For explanation of terms see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments--Discharging to public sewers	Number of establishments--Discharging exclusively to public sewers	Water treated by point of discharge--Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
22	TEXTILE MILL PRODUCTS--CON.												
228	YARN AND THREAD MILLS--CON.												
2282	THROWING AND WINDING MILLS	(D)	1.2	12	12	.6	(D)	(D)	-	-	-	-	-
2284	THREAD MILLS	2.0	(D)	6	4	1.6	(D)	(D)	-	-	-	-	-
229	MISCELLANEOUS TEXTILE GOODS.	7.6	7.1	37	22	1.6	.7	.9	(D)	-	-	(D)	(D)
2294	PROCESSED TEXTILE WASTE.	.1	.1	3	2	(D)	(D)	-	-	-	-	-	-
2295	COATED FABRICS, NOT RUBBERIZED	3.9	3.7	8	4	.1	(D)	(D)	-	-	-	-	-
2296	TIRE CORD AND FABRIC	.4	.3	6	3	(D)	-	-	(D)	-	-	-	-
2297	NONWOVEN FABRICS	2.5	2.3	11	7	1.2	(D)	(D)	-	-	-	-	-
2298	CORDAGE AND TWINE.	(D)	(D)	3	2	-	-	-	-	-	-	-	-
2299	TEXTILE GOODS, NEC	.3	.3	2	2	(D)	(D)	(D)	-	-	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	156.9	112.1	126	31	50.3	(D)	44.9	2.5	(D)	-	1.4	.7
242	SAWMILLS AND PLANING MILLS	122.4	82.9	54	8	36.7	(D)	33.1	1.4	(D)	-	1.1	.7
2421	SAWMILLS, PLANING MILLS, GENERAL	(D)	(D)	52	7	36.7	(D)	33.1	1.4	(D)	-	1.1	.7
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	13.8	10.6	42	15	(D)	.1	1.5	(D)	-	-	.1	(D)
2435	HARDWOOD VENEER AND PLYWOOD.	2.0	1.5	5	4	(D)	(D)	(D)	-	-	-	(D)	-
2436	SOFTWOOD VENEER AND PLYWOOD.	11.5	8.8	34	11	1.6	(D)	(D)	(D)	-	-	.1	(D)
249	MISCELLANEOUS WOOD PRODUCTS.	10.1	7.9	25	6	5.0	(D)	3.6	.9	-	-	.2	(D)
2492	PARTICLEBOARD.	(D)	(D)	4	2	(D)	-	.2	(D)	-	-	(D)	(D)
2499	WOOD PRODUCTS, NEC	9.4	7.5	18	3	4.7	(D)	3.4	(D)	-	-	.2	(D)
25	FURNITURE AND FIXTURES	24.0	23.8	55	30	.5	.3	(D)	-	-	-	(D)	-
251	HOUSEHOLD FURNITURE.	(D)	9.5	30	17	.1	.1	(D)	-	-	-	(D)	-
2514	METAL HOUSEHOLD FURNITURE.	.5	.5	9	4	(D)	(D)	(D)	-	-	-	-	-
252	OFFICE FURNITURE	.6	.6	5	3	(D)	(D)	(D)	-	-	-	-	-
2522	METAL OFFICE FURNITURE	.6	.6	5	3	(D)	(D)	(D)	-	-	-	-	-
254	PARTITIONS AND FIXTURES.	.8	.7	12	5	(D)	(D)	(D)	-	-	-	-	-
2542	METAL PARTITIONS AND FIXTURES.	.8	.7	12	5	(D)	(D)	(D)	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS.	1 963.1	1 765.1	367	142	1 192.3	93.4	924.7	12.5	146.5	11.4	2.8	1.0
2611	PULPMILLS.	287.3	268.2	18	6	215.9	5.5	126.2	-	82.1	(D)	(D)	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER.	878.1	826.6	144	33	582.3	54.9	483.0	(D)	(D)	(D)	1.6	.9
2631	PAPERBOARD MILLS	609.8	533.1	84	35	358.7	27.5	290.7	(D)	(D)	(D)	1.1	.1
264	MISC. CONVERTED PAPER PRODUCTS	79.3	74.7	73	35	31.2	(D)	(D)	-	(D)	-	(D)	(D)
2641	PAPER COATING AND GLAZING.	5.3	5.0	30	14	.6	(Z)	(D)	-	-	-	(D)	-
2643	BAGS, EXCEPT TEXTILE BAGS.	10.0	9.8	16	6	(D)	.1	.3	-	(D)	-	-	-
2645	DIE-CUT PAPER AND BOARD.	(D)	.1	2	2	-	-	-	-	-	-	-	-
2647	SANITARY PAPER PRODUCTS.	24.7	25.8	11	3	22.9	(D)	19.9	-	-	-	(D)	(D)
2649	CONVERTED PAPER PRODUCTS, NEC.	.5	.5	4	4	(D)	(D)	(D)	-	-	-	-	(D)
265	PAPERBOARD CONTAINERS AND BOXES.	(D)	9.7	24	19	(D)	.2	-	-	-	-	(D)	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	.7	.4	9	9	(D)	.2	-	-	-	-	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS.	4 325.5	3 910.3	684	333	967.4	100.5	604.0	107.5	129.4	(D)	17.6	(D)
281	INDUSTRIAL INORGANIC CHEMICALS	964.6	855.3	118	48	299.0	46.7	184.6	33.4	28.7	(D)	2.4	(D)
2812	ALKALIES AND CHLORINE.	175.8	177.0	9	1	129.6	(D)	93.6	(D)	(D)	-	(D)	(D)
2816	INORGANIC PIGMENTS	(D)	(D)	19	9	47.3	(D)	34.4	(D)	(D)	-	(D)	-
2819	INDUSTRIAL INORGANIC CHEM., NEC.	653.8	595.9	70	24	121.9	44.8	56.5	7.2	8.7	(D)	1.9	(D)
282	PLASTICS MATERIALS, SYNTHETICS	481.6	454.9	96	50	110.1	7.8	97.0	(D)	3.4	-	.9	(D)
2821	PLASTICS MATERIALS AND RESINS.	150.7	139.1	76	40	27.2	5.4	20.0	(D)	1.1	-	.2	(D)
2822	SYNTHETIC RUBBER	33.2	29.0	6	4	(D)	(D)	7.3	-	(D)	-	(D)	(D)
2823	CELLULOSIC MANMADE FIBERS.	109.0	103.9	1	-	(D)	-	35.8	-	-	-	(D)	-
2824	ORGANIC FIBERS, NONCELLULOSIC.	188.7	182.9	13	6	36.3	(D)	33.8	(D)	(D)	-	(D)	(D)
283	DRUGS.	90.1	87.2	98	61	28.8	5.8	6.3	(D)	(D)	-	(D)	(D)
2831	BIOLOGICAL PRODUCTS.	.3	.3	8	5	(D)	(D)	-	-	-	-	-	-
2833	MEDICINALS AND BOTANICALS.	55.2	52.2	17	10	(D)	(D)	(D)	-	(D)	-	(D)	(D)
2834	PHARMACEUTICAL PREPARATIONS.	34.6	34.7	73	46	8.2	4.3	(D)	(D)	(D)	-	(D)	(D)
284	SOAPS, CLEANERS, TOILET GOODS.	(D)	(D)	87	46	(D)	10.3	1.0	-	(D)	-	-	(Z)
2841	SOAP AND OTHER DETERGENTS.	17.5	16.8	38	19	3.3	.7	(D)	-	(D)	-	-	(D)
2842	POLISHES AND SANITATION GOODS.	1.5	(D)	10	6	(D)	(D)	-	-	-	-	-	-
2843	SURFACE ACTIVE AGENTS.	15.0	14.3	15	9	9.9	9.2	(D)	-	-	-	-	(D)
2844	TOILET PREPARATIONS.	.2	1.6	24	12	(D)	(D)	(D)	-	-	-	-	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	2 150.6	1 996.3	151	67	422.9	25.0	249.7	(D)	66.2	(D)	12.3	2.0
2865	CYCLIC CRUDES AND INTERMEDIATES.	(D)	(D)	50	26	(D)	(D)	(D)	-	33.6	(D)	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	1 909.9	1 764.9	98	40	362.4	15.8	235.7	(D)	(D)	-	11.8	(D)
287	AGRICULTURAL CHEMICALS	301.6	233.3	22	7	74.9	.8	60.3	(D)	12.7	-	.7	(D)
2873	NITROGENOUS FERTILIZERS.	87.4	58.9	12	6	22.2	(D)	19.7	(D)	(D)	-	(D)	(D)
2874	PHOSPHATIC FERTILIZERS	190.7	158.4	4	1	44.9	(D)	34.5	-	(D)	-	.5	-
2879	AGRICULTURAL CHEMICALS, NEC.	(D)	(D)	6	-	(D)	.1	(D)	(D)	(D)	-	(D)	-
289	MISCELLANEOUS CHEMICAL PRODUCTS.	188.7	137.3	80	36	17.5	3.5	5.1	7.5	(D)	-	.7	(D)
2891	ADHESIVES AND SEALANTS	4.1	3.9	21	11	.1	(D)	(D)	-	-	-	-	-
2895	CARBON BLACK	4.4	1.4	4	1	.7	(D)	(D)	(D)	-	-	(D)	-
2899	CHEMICAL PREPARATIONS, NEC	140.9	93.9	49	22	13.3	3.2	1.7	(D)	(D)	-	(D)	(D)

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
22	TEXTILE MILL PRODUCTS--CON.								
228	YARN AND THREAD MILLS--CON.								
2282	THROWING AND WINDING MILLS	.6	.6	-	-	-	-	-	-
2284	THREAD MILLS	(D)	(D)	(D)	-	-	-	(D)	-
229	MISCELLANEOUS TEXTILE GOODS	5.5	1.9	3.4	(D)	-	-	.1	(D)
2294	PROCESSED TEXTILE WASTE	(D)	(D)	(D)	-	-	-	-	-
2295	COATED FABRICS, NOT RUBBERIZED	3.6	.5	3.1	-	-	-	-	-
2296	TIRE CORD AND FABRIC	(D)	.1	.1	(D)	-	-	-	-
2297	NONWOVEN FABRICS	1.1	.9	(D)	-	-	-	(D)	(D)
2298	CORDAGE AND TWINE	(D)	(D)	(D)	-	-	-	-	-
2299	TEXTILE GOODS, NEC	(D)	-	(D)	-	-	-	(D)	-
24	LUMBER AND WOOD PRODUCTS	61.8	2.9	42.1	4.1	(D)	(D)	6.2	4.3
242	SAWMILLS AND PLANING MILLS	46.2	1.7	30.9	3.1	(D)	(D)	5.0	3.6
2421	SAWMILLS, PLANING MILLS, GENERAL	(D)	1.7	30.9	3.1	(D)	(D)	5.0	3.6
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	8.6	.8	5.5	(D)	(D)	-	1.1	(D)
2435	HARDWOOD VENEER AND PLYWOOD	(D)	(D)	(D)	-	-	-	(D)	-
2436	SOFTWOOD VENEER AND PLYWOOD	7.2	.6	(D)	(D)	(D)	-	.1	(D)
249	MISCELLANEOUS WOOD PRODUCTS	3.0	.3	1.7	(D)	(D)	-	(Z)	(D)
2492	PARTICLEBOARD	(D)	(D)	(D)	-	-	-	(D)	-
2499	WOOD PRODUCTS, NEC	2.8	(D)	(D)	(D)	(D)	-	(Z)	(D)
25	FURNITURE AND FIXTURES	23.3	21.6	1.5	-	(D)	(D)	.2	-
251	HOUSEHOLD FURNITURE	9.4	8.1	(D)	-	-	-	(D)	-
2514	METAL HOUSEHOLD FURNITURE	(D)	(D)	(D)	-	-	-	-	-
252	OFFICE FURNITURE	(D)	.4	(D)	-	-	-	(D)	-
2522	METAL OFFICE FURNITURE	(D)	.4	(D)	-	-	-	(D)	-
254	PARTITIONS AND FIXTURES	(D)	.4	(D)	-	-	(D)	-	-
2542	METAL PARTITIONS AND FIXTURES	(D)	.4	(D)	-	-	(D)	-	-
26	PAPER AND ALLIED PRODUCTS	572.8	124.9	321.7	13.3	78.2	(D)	(D)	25.8
2611	PULPMILLS	52.3	(D)	(D)	-	36.2	(D)	-	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER	244.3	40.1	167.7	(D)	(D)	(D)	.3	24.1
2631	PAPERBOARD MILLS	174.4	25.2	111.8	(D)	31.0	-	(D)	.4
264	MISC. CONVERTED PAPER PRODUCTS	43.4	3.9	36.7	(D)	(D)	-	.1	1.2
2641	PAPER COATING AND GLAZING	4.4	.8	3.5	(D)	-	-	(D)	(D)
2643	BAGS, EXCEPT TEXTILE BAGS	(D)	.5	1.3	(D)	(D)	-	(Z)	(D)
2645	DIE-CUT PAPER AND BOARD	.1	(D)	(D)	-	-	-	-	-
2647	SANITARY PAPER PRODUCTS	2.9	.6	2.1	-	(D)	-	-	(D)
2649	CONVERTED PAPER PRODUCTS, NEC	(D)	(D)	(D)	-	-	-	-	-
265	PAPERBOARD CONTAINERS AND BOXES	(D)	9.0	.5	(D)	-	-	(D)	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	(D)	.2	(D)	(D)	-	-	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS	2 942.9	306.7	2 384.3	127.2	93.6	2.9	9.5	18.4
281	INDUSTRIAL INORGANIC CHEMICALS	556.3	5.8	432.9	96.9	9.7	(D)	(D)	3.2
2812	ALKALIES AND CHLORINE	47.4	2.6	42.3	(D)	-	(D)	(D)	(D)
2816	INORGANIC PIGMENTS	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
2819	INDUSTRIAL INORGANIC CHEM., NEC	474.0	2.5	374.3	81.7	(D)	(D)	1.4	2.2
282	PLASTICS MATERIALS, SYNTHETICS	344.8	4.7	324.1	(D)	(D)	-	1.8	9.5
2821	PLASTICS MATERIALS AND RESINS	111.9	3.8	100.5	(D)	(D)	-	.4	.8
2822	SYNTHETIC RUBBER	(D)	(D)	(D)	-	-	-	(D)	(D)
2823	CELLULOSIC MANMADE FIBERS	(D)	(D)	(D)	-	-	-	-	-
2824	ORGANIC FIBERS, NONCELLULOSIC	146.6	.8	143.2	(D)	(D)	-	(D)	(D)
283	DRUGS	58.1	7.7	26.6	5.8	(D)	-	(D)	.3
2831	BIOLOGICAL PRODUCTS	(D)	.3	(Z)	(D)	-	-	(D)	-
2833	MEDICINALS AND BOTANICALS	(D)	.8	12.6	(D)	(D)	-	-	(D)
2834	PHARMACEUTICAL PREPARATIONS	26.2	6.7	14.0	(D)	-	-	.2	(D)
284	SOAPS, CLEANERS, TOILET GOODS	20.4	6.8	6.5	(D)	5.0	(D)	.3	.1
2841	SOAP AND OTHER DETERGENTS	13.5	4.8	2.0	(D)	5.0	-	(D)	(D)
2842	POLISHES AND SANITATION GOODS	1.2	.5	(D)	-	-	-	(D)	(D)
2843	SURFACE ACTIVE AGENTS	4.3	.9	(D)	-	-	-	-	-
2844	TOILET PREPARATIONS	1.4	.6	.5	-	-	(D)	(D)	(Z)
286	INDUSTRIAL ORGANIC CHEMICALS	1 573.4	121.9	1 392.5	4.1	46.4	(D)	(D)	4.7
2865	CYCLIC CRUDES AND INTERMEDIATES	(D)	113.0	(D)	-	(D)	-	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC	1 402.6	(D)	1 344.0	4.1	37.4	(D)	(D)	4.7
287	AGRICULTURAL CHEMICALS	158.4	.9	145.9	(D)	(D)	-	1.0	.5
2873	NITROGENOUS FERTILIZERS	36.7	.9	26.8	(D)	(D)	-	.8	(D)
2874	PHOSPHATIC FERTILIZERS	113.5	(D)	111.0	-	(D)	-	(D)	(D)
2879	AGRICULTURAL CHEMICALS, NEC	(D)	(D)	(D)	-	(D)	-	-	(D)
289	MISCELLANEOUS CHEMICAL PRODUCTS	119.8	49.0	52.3	15.1	.8	-	2.5	.1
2891	ADHESIVES AND SEALANTS	3.9	(D)	.9	(D)	(D)	-	(D)	(D)
2895	CARBON BLACK	.7	(D)	(D)	(D)	-	-	(D)	-
2899	CHEMICAL PREPARATIONS, NEC	80.6	47.2	16.6	13.8	(D)	-	2.2	(D)

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
29	PETROLEUM AND COAL PRODUCTS. .	1 172.5	963.7	119	42	580.8	11.4	365.1	45.7	142.0	3.3	2.8	10.6
2911	PETROLEUM REFINING	1 149.4	955.3	82	22	577.2	10.6	362.3	45.7	142.0	3.3	2.7	10.6
295	PAVING AND ROOFING MATERIALS . .	21.6	7.9	28	15	3.4	(D)	(D)	-	-	-	(D)	-
2951	PAVING MIXTURES AND BLOCKS	(D)	2.7	3	2	(D)	-	(Z)	-	-	-	(D)	-
2952	ASPHALT FELTS AND COATINGS	(D)	5.2	25	13	(D)	(D)	(D)	-	-	-	-	-
299	MISC. PETROLEUM, COAL PRODUCTS .	1.6	.6	9	5	.2	(D)	(D)	-	-	(Z)	(D)	-
2992	LUBRICATING OILS AND GREASES . . .	.4	.3	6	3	(D)	(D)	(D)	-	-	-	-	-
2999	PETROLEUM AND COAL PRODUCTS, NEC .	1.2	.2	3	2	(D)	-	(D)	-	-	(Z)	(D)	-
30	RUBBER, MISC. PLASTICS PROD. .	187.0	167.5	347	150	51.5	3.9	44.0	.7	(D)	-	2.5	(D)
3011	TIRES AND INNER TUBES.	41.5	38.7	46	11	23.1	1.2	21.0	(D)	-	-	(D)	-
3041	RUBBER, PLASTICS HOSE AND BELTING.	10.2	9.0	22	6	(D)	(Z)	4.3	(D)	-	-	-	-
3069	FABRICATED RUBBER PRODUCTS, NEC. .	18.9	17.7	93	42	1.5	.8	.6	(D)	(D)	-	(D)	-
3079	MISCELLANEOUS PLASTICS PRODUCTS. .	114.1	99.9	180	89	22.4	1.9	18.0	(Z)	(D)	-	2.4	(D)
31	LEATHER AND LEATHER PRODUCTS .	8.5	8.2	45	39	3.7	3.0	.6	-	-	-	-	-
3111	LEATHER TANNING AND FINISHING. . .	6.4	6.2	41	35	3.7	3.0	.6	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	206.6	182.0	346	136	42.6	3.9	30.7	1.5	3.7	(D)	1.7	(D)
322	GLASS, PRESSED OR BLOWN.	15.6	13.6	104	43	6.0	1.5	3.9	(D)	-	-	.3	(D)
3221	GLASS CONTAINERS	8.1	7.2	69	29	2.6	(D)	1.5	(D)	-	-	(D)	(D)
3229	PRESSED AND BLOWN GLASS, NEC . . .	7.5	6.4	35	14	3.4	(D)	2.5	-	-	-	(D)	-
3231	PRODUCTS OF PURCHASED GLASS. . . .	1.6	1.6	15	8	.3	.1	.2	-	-	-	-	-
3241	CEMENT, HYDRAULIC.	85.4	74.6	48	9	11.5	.2	9.7	1.0	(D)	(D)	.3	(D)
325	STRUCTURAL CLAY PRODUCTS	1.2	.8	10	5	.1	(D)	(D)	(D)	-	-	(D)	-
3253	CERAMIC WALL AND FLOOR TILE. . . .	(D)	(D)	3	-	(D)	(D)	(D)	(D)	-	-	(D)	-
3255	CLAY REFRACTORIES.	.8	.6	4	1	(D)	-	(D)	-	-	-	(D)	-
3259	STRUCTURAL CLAY PRODUCTS, NEC. . .	(D)	(D)	3	3	(D)	(D)	(D)	-	-	-	-	-
326	POTTERY AND RELATED PRODUCTS . .	2.0	1.7	20	7	.6	(D)	.4	(D)	(D)	-	(D)	-
3261	VITREOUS PLUMBING FIXTURES	.9	.9	9	3	.3	(D)	.2	(D)	-	-	(D)	-
3262	VITREOUS CHINA FOOD UTENSILS . . .	(D)	(D)	4	1	(D)	(D)	(D)	-	-	-	-	-
3263	FINE EARTHENWARE FOOD UTENSILS . .	(D)	(D)	4	3	(D)	(D)	-	-	-	-	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES. . .	.5	.3	3	-	.1	(D)	(D)	-	(D)	-	-	-
327	CONCRETE, GYPSUM, PLASTER PRODS.	34.1	27.5	41	18	6.3	.1	4.9	(D)	(D)	-	.6	.5
3272	CONCRETE PRODUCTS, NEC	(D)	.5	7	2	(D)	(D)	(D)	(D)	-	-	(D)	-
3273	READY-MIXED CONCRETE	22.2	21.6	15	6	2.9	(D)	2.0	(D)	-	-	.5	(D)
3274	LIME	7.5	4.6	3	-	3.0	-	(D)	-	-	-	(D)	-
3275	GYPSUM PRODUCTS.	2.5	(D)	17	10	(D)	(D)	(Z)	-	(D)	-	.1	(D)
3281	CUT STONE AND STONE PRODUCTS . . .	(D)	(D)	-	-	(D)	-	(D)	-	-	-	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	45.8	40.6	92	43	13.3	1.7	7.4	(D)	(D)	-	.4	-
3291	ABRASIVE PRODUCTS.	3.9	3.5	19	7	.6	(D)	(D)	-	-	-	(D)	-
3292	ASBESTOS PRODUCTS.	3.1	2.3	16	6	1.0	.3	(D)	(D)	-	-	(D)	-
3295	MINERALS, GROUND OR TREATED. . . .	22.5	22.0	8	4	3.9	(D)	3.6	-	-	-	(D)	-
3296	MINERAL WOOL	8.3	5.5	32	20	(D)	1.0	(D)	-	-	-	(D)	-
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	2.9	2.5	4	2	(D)	-	(D)	-	-	-	(D)	-
33	PRIMARY METAL INDUSTRIES . . .	3 392.1	3 132.4	608	231	1 349.8	16.5	971.8	94.5	252.8	(D)	(D)	9.1
331	BLAST FURNACE, BASIC STEEL PROD.	2 839.5	2 649.7	205	54	1 197.7	9.5	843.9	81.5	(D)	(D)	3.2	7.1
3312	BLAST FURNACES AND STEEL MILLS . .	2 782.8	2 594.6	123	22	1 185.8	8.5	833.6	81.5	(D)	(D)	2.7	7.0
3315	STEEL WIRE AND RELATED PRODUCTS. .	(D)	(D)	30	17	(D)	.6	(D)	-	-	-	(D)	(D)
3316	COLD FINISHING OF STEEL SHAPES . .	13.8	13.6	27	8	5.0	(D)	4.9	-	-	-	(D)	(D)
3317	STEEL PIPE AND TUBES	5.3	5.0	22	7	3.3	.3	2.9	-	-	-	(D)	(D)
332	IRON AND STEEL FOUNDRIES	66.3	53.9	181	79	21.8	1.9	19.2	.3	(D)	-	.2	(D)
3321	GRAY IRON FOUNDRIES.	51.9	39.8	115	49	14.5	.3	13.7	(D)	-	-	.2	(D)
3322	MALLEABLE IRON FOUNDRIES	7.2	7.1	14	4	5.4	(D)	(D)	(D)	-	-	(Z)	-
3325	STEEL FOUNDRIES, NEC	(D)	(D)	46	25	(D)	1.4	(D)	(D)	(D)	-	-	-
333	PRIMARY NONFERROUS METALS. . . .	391.1	339.6	21	7	87.4	(D)	81.3	2.5	.6	-	1.1	(D)
3331	PRIMARY COPPER	29.3	22.0	8	2	7.8	(D)	(D)	(D)	(D)	-	(D)	(D)
3334	PRIMARY ALUMINUM	200.5	193.3	4	-	34.0	(D)	32.4	(D)	(D)	-	(D)	(D)
3341	SECONDARY NONFERROUS METALS. . . .	1.6	1.1	16	10	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING .	87.1	82.1	127	48	40.6	4.5	25.6	10.1	-	-	(D)	(D)
3351	COPPER ROLLING AND DRAWING	26.7	24.0	34	8	7.9	1.8	(D)	(D)	-	-	-	-
3353	ALUMINUM SHEET, PLATE, AND FOIL. .	36.1	34.8	11	5	22.7	(D)	15.8	(D)	-	-	(D)	(D)
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	(D)	24	12	(D)	(D)	.8	-	-	-	.2	-
3356	NONFERROUS ROLLING & DRAWING, NEC.	6.8	6.4	12	4	4.2	1.1	1.5	(D)	-	-	(Z)	(D)
3357	NONFERROUS WIREDRAWING, INSULATING.	10.5	10.1	44	19	1.5	1.0	(D)	(D)	-	-	-	-
336	NONFERROUS FOUNDRIES	3.9	3.7	28	12	1.0	(D)	.9	(D)	-	-	(D)	(D)
3361	ALUMINUM FOUNDRIES	2.1	1.9	17	8	.5	(D)	.4	(D)	-	-	(D)	(D)
3362	BRASS, BRONZE, COPPER FOUNDRIES. .	(D)	(D)	2	1	(D)	(D)	(D)	-	-	-	-	-
3369	NONFERROUS FOUNDRIES, NEC.	(D)	(D)	9	3	(D)	(D)	(D)	(D)	-	-	-	-
339	MISC. PRIMARY METAL PRODUCTS . .	2.5	2.4	30	21	(D)	.3	(D)	-	-	-	-	-
3398	METAL HEAT TREATING.	1.3	1.2	23	19	.2	(D)	-	-	-	-	-	-
3399	PRIMARY METAL PRODUCTS, NEC. . . .	1.2	1.2	7	2	(D)	(D)	(D)	-	-	-	-	-

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
29	PETROLEUM AND COAL PRODUCTS	382.9	40.5	234.6	(D)	93.3	(D)	2.4	10.6
2911	PETROLEUM REFINING	378.1	38.6	234.4	(D)	93.3	(D)	1.3	9.0
295	PAVING AND ROOFING MATERIALS	4.5	1.8	.1	(D)	-	-	.9	(D)
2951	PAVING MIXTURES AND BLOCKS	(D)	(D)	-	(D)	-	-	.9	(D)
2952	ASPHALT FELTS AND COATINGS	(D)	(D)	.1	-	-	-	(Z)	-
299	MISC. PETROLEUM, COAL PRODUCTS	.4	.1	.1	(D)	-	-	(D)	(D)
2992	LUBRICATING OILS AND GREASES	(D)	.1	(D)	-	-	-	-	-
2999	PETROLEUM AND COAL PRODUCTS, NEC	(D)	(Z)	(D)	(D)	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	116.0	50.9	51.3	5.5	(D)	-	6.0	(D)
3011	TIRES AND INNER TUBES	15.5	4.4	9.6	(D)	(D)	-	(D)	(D)
3041	RUBBER, PLASTICS HOSE AND BELTING	(D)	(D)	(D)	(D)	-	-	-	-
3069	FABRICATED RUBBER PRODUCTS, NEC	16.3	9.1	4.7	1.9	(D)	-	.1	(D)
3079	MISCELLANEOUS PLASTICS PRODUCTS	77.5	36.2	33.0	(D)	(D)	-	5.8	1.3
31	LEATHER AND LEATHER PRODUCTS	4.5	4.4	(D)	-	-	-	(D)	-
3111	LEATHER TANNING AND FINISHING	2.5	2.4	(D)	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	139.4	11.9	49.0	54.9	4.0	(D)	5.3	(D)
322	GLASS, PRESSED OR BLOWN	7.6	3.4	4.0	.1	-	(D)	.1	(D)
3221	GLASS CONTAINERS	4.5	2.3	2.2	(D)	-	(D)	(D)	(D)
3229	PRESSED AND BLOWN GLASS, NEC	3.0	1.2	1.8	(D)	-	-	(D)	-
3231	PRODUCTS OF PURCHASED GLASS	1.3	.6	.7	-	-	-	-	-
3241	CEMENT, HYDRAULIC	63.1	1.1	21.0	37.5	(D)	(D)	1.2	1.4
325	STRUCTURAL CLAY PRODUCTS	.6	.1	.5	-	-	-	(D)	-
3253	CERAMIC WALL AND FLOOR TILE	(D)	(D)	(D)	-	-	-	(D)	-
3255	CLAY REFRACTORIES	(D)	(D)	(D)	-	-	-	(D)	-
3259	STRUCTURAL CLAY PRODUCTS, NEC	(D)	(D)	-	-	-	-	-	-
326	POTTERY AND RELATED PRODUCTS	1.1	.7	.3	(D)	-	-	(D)	-
3261	VITREOUS PLUMBING FIXTURES	.6	.4	(D)	(D)	-	-	(D)	-
3262	VITREOUS CHINA FOOD UTENSILS	(D)	(D)	(D)	-	-	-	-	-
3263	FINE EARTHENWARE FOOD UTENSILS	(D)	(D)	(D)	-	-	-	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES	.2	(D)	.2	-	-	-	(D)	-
327	CONCRETE, GYPSUM, PLASTER PRODS.	21.2	(D)	1.2	17.0	(D)	-	2.5	.2
3272	CONCRETE PRODUCTS, NEC	(D)	(Z)	(D)	(D)	-	-	(D)	-
3273	READY-MIXED CONCRETE	18.7	(Z)	.2	16.2	-	-	2.0	.2
3274	LIME	1.6	(D)	.8	(D)	-	-	(D)	-
3275	GYPSUM PRODUCTS	.6	.1	.2	(D)	(D)	-	.2	(Z)
3281	CUT STONE AND STONE PRODUCTS	-	-	-	-	-	-	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	27.3	4.9	5.1	.2	(D)	(D)	1.3	(D)
3291	ABRASIVE PRODUCTS	2.9	(D)	1.6	(D)	-	-	-	-
3292	ASBESTOS PRODUCTS	1.3	.5	.6	-	-	-	(D)	(D)
3295	MINERALS, GROUND OR TREATED	18.1	.2	(D)	(D)	(D)	(D)	(D)	(D)
3296	MINERAL WOOL	4.1	2.4	1.6	(D)	-	-	(D)	-
3299	NONMETALLIC MINERAL PRODUCTS, NEC	(D)	(D)	(D)	-	(D)	-	-	-
33	PRIMARY METAL INDUSTRIES	1 782.6	95.9	1 316.9	347.5	5.6	-	4.9	11.7
331	BLAST FURNACE, BASIC STEEL PROD.	1 452.0	57.2	1 047.3	340.3	(D)	-	(D)	4.9
3312	BLAST FURNACES AND STEEL MILLS	1 408.7	52.2	1 009.4	340.2	(D)	-	(D)	4.8
3315	STEEL WIRE AND RELATED PRODUCTS	1.5	.7	.7	(D)	-	-	-	(D)
3316	COLD FINISHING OF STEEL SHAPES	8.6	3.4	5.0	-	(D)	-	.2	(D)
3317	STEEL PIPE AND TUBES	1.6	.9	.7	(D)	-	-	-	(D)
332	IRON AND STEEL FOUNDRIES	32.1	20.2	10.0	1.1	(D)	-	.4	(D)
3321	GRAY IRON FOUNDRIES	25.2	16.2	7.5	1.0	(D)	-	(D)	-
3322	MALLEABLE IRON FOUNDRIES	1.7	.9	.7	-	-	-	(D)	(D)
3325	STEEL FOUNDRIES, NEC	4.6	2.9	1.5	(D)	(D)	-	(Z)	-
333	PRIMARY NONFERROUS METALS	252.2	8.2	228.3	1.4	5.0	-	1.7	7.7
3331	PRIMARY COPPER	14.2	.1	(D)	-	(D)	-	(D)	(D)
3334	PRIMARY ALUMINUM	159.3	(D)	156.7	(D)	(D)	-	(D)	(D)
3341	SECONDARY NONFERROUS METALS	(D)	.3	.2	(D)	(D)	-	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING	41.5	7.8	28.5	4.6	(D)	-	.3	(D)
3351	COPPER ROLLING AND DRAWING	16.2	1.9	13.0	(D)	-	-	(D)	(D)
3353	ALUMINUM SHEET, PLATE, AND FOIL	12.0	(D)	10.1	(D)	-	-	(D)	(D)
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	1.0	(D)	(D)	-	-	.2	(D)
3356	NONFERROUS ROLLING & DRAWING, NEC	2.2	1.0	1.0	(D)	-	-	(D)	(D)
3357	NONFERROUS WIREDRAW'G, INSULATING	8.6	3.4	3.2	(D)	(D)	-	(Z)	(D)
336	NONFERROUS FOUNDRIES	2.6	1.4	1.0	(D)	-	-	(D)	-
3361	ALUMINUM FOUNDRIES	1.3	.9	(D)	(D)	-	-	(D)	-
3362	BRASS, BRONZE, COPPER FOUNDRIES	(D)	(D)	(D)	-	-	-	(D)	-
3369	NONFERROUS FOUNDRIES, NEC	(D)	(D)	.6	(D)	-	-	(D)	-
339	MISC. PRIMARY METAL PRODUCTS	1.4	.8	.6	-	-	-	-	-
3398	METAL HEAT TREATING	1.0	(D)	(D)	-	-	-	-	-
3399	PRIMARY METAL PRODUCTS, NEC	.4	(D)	(D)	-	-	-	-	-

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
34	FABRICATED METAL PRODUCTS. . .	90.0	86.2	616	415	25.1	13.9	9.9	.4	-	(D)	.6	(D)
341	METAL CANS, SHIPPING CONTAINERS.	4.1	4.0	56	46	1.7	1.6	(D)	-	-	-	(D)	-
3411	METAL CANS	3.8	3.7	49	41	(D)	(D)	(D)	-	-	-	(D)	-
3412	METAL BARRELS, DRUMS, AND PAILS. .	.3	.3	7	5	(D)	(D)	-	-	-	-	-	-
342	CUTLERY, HANDTOOLS AND HARDWARE.	19.6	19.3	71	48	2.7	1.8	.8	(D)	-	(D)	-	(D)
3423	HAND AND EDGE TOOLS, NEC	2.8	2.8	22	17	.3	(D)	(D)	-	-	-	-	-
3425	HANDSAWS AND SAW BLADES.	(D)	(D)	5	3	(D)	(D)	-	-	-	-	-	-
3429	HARDWARE, NEC.	5.6	5.4	41	28	2.3	1.7	.6	(D)	-	(D)	-	(D)
343	PLUMBING, HEATING, EXCEPT ELEC .	2.8	2.1	27	17	1.0	(D)	.7	-	-	-	(D)	-
3431	METAL SANITARY WARE.	.8	.7	7	6	(D)	(D)	(D)	-	-	-	-	-
3432	PLUMBING FITTINGS AND BRASS GOODS.	.8	.8	11	8	.5	(D)	.3	-	-	-	(D)	-
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	1.2	.6	9	3	(D)	-	(D)	-	-	-	-	-
344	FABRICATED STRUC. METAL PRODS. .	8.5	8.2	55	27	1.5	.4	1.1	-	-	-	(D)	(D)
3442	METAL DOORS, SASH, AND TRIM. . . .	.6	.6	12	7	.3	.2	(D)	-	-	-	(D)	-
3443	FABRICATED PLATEWORK, BOILER SHOP.	3.1	3.0	21	8	1.0	(D)	1.0	-	-	-	-	(D)
3444	SHEET METALWORK.	.6	.6	9	4	.1	(D)	(D)	-	-	-	-	-
3446	ARCHITECTURAL METALWORK.	.2	.2	4	3	(D)	(D)	-	-	-	-	-	-
3448	PREFABRICATED METAL BUILDINGS. . .	(D)	(D)	3	3	(D)	(D)	-	-	-	-	-	-
345	SCREW MACHINE PROD., BOLTS, ETC.	4.1	3.8	40	29	1.1	(D)	(D)	-	-	-	-	(D)
3452	BOLTS, NUTS, RIVETS, AND WASHERS .	(D)	(D)	38	27	(D)	(D)	(D)	-	-	-	-	(D)
346	METAL FORGINGS AND STAMPINGS . .	15.4	14.6	124	69	4.0	1.8	1.6	.2	-	-	(D)	(D)
3462	IRON AND STEEL FORGINGS.	3.9	3.6	32	23	1.0	.5	(D)	-	-	-	(D)	(D)
3463	NONFERROUS FORGINGS.	(D)	(D)	5	5	(D)	(Z)	-	(D)	-	-	(D)	-
3465	AUTOMOTIVE STAMPINGS	6.0	5.5	45	24	1.5	.5	(D)	(D)	-	-	-	-
3466	CROWNS AND CLOSURES.	(D)	(D)	4	1	-	-	-	-	-	-	-	-
3469	METAL STAMPINGS, NEC	3.6	3.5	38	16	(D)	.8	(D)	(D)	-	-	(D)	-
347	METAL SERVICES, NEC.	10.8	10.4	127	112	6.8	5.6	(D)	-	-	-	(D)	-
3471	PLATING AND POLISHING.	9.3	9.0	111	98	6.1	5.4	(D)	-	-	-	(D)	-
3479	METAL COATING AND ALLIED SERVICES.	1.5	1.5	16	14	.7	.2	(D)	-	-	-	(D)	-
348	ORDNANCE AND ACCESSORIES, NEC. .	9.6	9.0	28	12	3.5	1.2	1.9	(D)	-	(D)	(D)	(D)
3482	SMALL ARMS AMMUNITION.	1.4	1.3	5	3	(D)	(D)	(D)	(D)	-	-	-	-
3483	AMMUNITION, EXC. SMALL ARMS, NEC .	4.0	3.9	9	4	1.9	(D)	1.1	(D)	-	-	(D)	(D)
3484	SMALL ARMS	1.6	1.5	7	3	(D)	(D)	(D)	-	-	-	-	-
3489	ORDNANCE AND ACCESSORIES NEC . . .	2.6	2.4	7	2	.5	(D)	(D)	-	-	(D)	-	(D)
349	MISC. FABRICATED METAL PRODUCTS.	15.2	14.7	88	55	2.7	.6	1.9	(D)	-	-	(D)	(D)
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	.8	5	2	(D)	-	(D)	-	-	-	-	-
3494	VALVES AND PIPE FITTINGS	10.7	10.6	43	27	1.8	.3	1.5	(D)	-	-	(D)	(D)
3495	WIRE SPRINGS	(D)	(D)	3	2	(D)	(D)	-	-	-	-	-	-
3496	MISC. FABRICATED WIRE PRODUCTS . .	2.2	1.6	15	10	.3	(D)	(D)	-	-	-	-	-
3497	METAL FOIL AND LEAF.	.4	.4	5	(D)	(D)	(D)	(D)	-	-	-	-	-
3498	FABRICATED PIPE AND FITTINGS . . .	.3	(D)	6	5	(D)	-	-	(D)	-	-	-	-
3499	FABRICATED METAL PRODUCTS, NEC . .	1.1	.8	11	5	.2	(D)	(D)	(D)	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	164.5	158.5	474	235	38.1	7.8	28.7	1.1	(D)	(D)	.4	(D)
351	ENGINES AND TURBINES	38.0	36.7	44	18	8.9	.8	8.0	(D)	(D)	-	(D)	-
3519	INTERNAL COMBUSTION ENGINES, NEC .	5.5	(D)	33	15	(D)	(D)	(D)	(D)	-	-	-	-
352	FARM AND GARDEN MACHINERY. . . .	46.2	45.6	45	21	13.0	2.0	9.7	(D)	-	-	(D)	(D)
3523	FARM MACHINERY AND EQUIPMENT . . .	45.7	45.1	38	19	(D)	(D)	9.7	(D)	-	-	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT.	.5	.5	7	2	(D)	(D)	-	-	-	-	-	-
353	CONSTRUCTION, RELATED MACHINERY.	16.6	15.8	71	38	6.7	.7	6.0	(D)	-	-	(D)	-
3531	CONSTRUCTION MACHINERY	14.4	13.8	39	20	(D)	.3	5.7	(D)	-	-	-	-
3532	MINING MACHINERY	.3	.3	6	4	-	-	-	-	-	-	-	-
3533	OILFIELD MACHINERY	1.1	.9	10	4	.5	.3	(D)	-	-	-	(D)	-
3535	CONVEYORS AND CONVEYING EQUIPMENT.	.1	(D)	4	1	-	-	-	-	-	-	-	-
3536	HOISTS, CRANES, AND MONORAILS. . .	(D)	(D)	3	2	-	-	-	-	-	-	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS . .	.5	.5	9	7	(D)	(D)	(D)	-	-	-	-	-
354	METALWORKING MACHINERY	9.3	8.3	59	27	.8	.6	.1	-	(D)	-	(D)	-
3541	MACHINE TOOLS, METAL-CUTTING . . .	3.1	2.7	19	6	.2	(D)	-	-	(D)	-	(D)	-
3542	MACHINE TOOLS, METAL-FORMING . . .	(D)	(D)	4	2	-	-	-	-	-	-	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC . .	1.7	1.7	6	3	-	-	-	-	-	-	-	-
3545	MACHINE TOOL ACCESSORIES	2.3	2.2	16	8	(D)	-	(D)	-	-	-	(D)	-
3546	POWER DRIVEN HANDTOOLS	1.6	1.2	13	8	.5	(D)	(D)	-	-	-	(D)	-
355	SPECIAL INDUSTRY MACHINERY . . .	8.9	8.9	22	7	.2	(D)	(D)	-	-	-	(D)	-
3551	FOOD PRODUCTS MACHINERY.	(D)	(D)	2	1	(D)	-	(D)	-	-	-	-	-
3552	TEXTILE MACHINERY.	(D)	(D)	4	1	(D)	(D)	(D)	-	-	-	-	-
356	GENERAL INDUSTRIAL MACHINERY . .	10.9	9.7	93	46	2.2	1.2	.9	(D)	-	(D)	(D)	-
3561	PUMPS AND PUMPING EQUIPMENT. . . .	1.9	1.8	20	9	(Z)	(D)	(D)	(D)	-	-	-	-
3562	BALL AND ROLLER BEARINGS	3.6	2.6	21	12	1.2	.8	.4	-	-	(D)	(D)	-
3563	AIR AND GAS COMPRESSORS.	1.7	1.6	13	4	.4	(D)	(D)	-	-	-	-	-
3566	SPEED CHANGERS, DRIVES, AND GEARS.	.7	.7	9	4	(D)	(D)	(D)	-	-	-	-	-
3568	POWER TRANSMISSION EQUIPMENT, NEC.	2.4	2.3	21	12	.4	.2	(D)	-	-	-	(D)	-
3569	GENERAL INDUSTRIAL MACHINERY, NEC.	.3	.3	5	4	(D)	-	-	-	-	-	(D)	-
357	OFFICE AND COMPUTING MACHINES. .	20.1	19.7	52	28	1.4	1.1	(D)	-	(D)	-	-	-
3573	ELECTRONIC COMPUTING EQUIPMENT . .	17.4	17.2	35	18	.8	(D)	(D)	-	-	-	-	-
3574	CALCULATING, ACCOUNTING MACHINES .	(D)	(D)	5	4	(D)	(D)	-	-	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	1.6	1.3	11	5	(D)	(D)	(D)	-	(D)	-	-	-
358	REFRIGERATION AND SERVICE MACH .	11.9	11.5	64	36	4.6	1.0	3.6	(D)	-	-	(D)	-
3581	AUTOMATIC MERCHANDISING MACHINES .	.1	.1	4	4	(D)	-	-	(D)	-	-	(D)	-
3585	REFRIGERATION, HEATING EQUIPMENT .	11.4	11.0	56	29	4.6	(D)	(D)	(D)	-	-	(D)	-
3586	MEASURING AND DISPENSING PUMPS . .	.3	.3	4	4	(D)	(D)	(D)	-	-	-	-	-
359	MISC. MACHINERY, EXC. ELEC . . .	2.5	2.3	24	14	.3	(D)	(D)	-	-	-	-	-

See foonotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
34	FABRICATED METAL PRODUCTS	61.1	39.3	8.6	1.6	(D)	-	.5	(D)
341	METAL CANS, SHIPPING CONTAINERS	2.3	1.7	.2	(D)	(D)	-	(D)	-
3411	METAL CANS	(D)	1.5	(D)	(D)	(D)	-	(D)	-
3412	METAL BARRELS, DRUMS, AND PAILS	(D)	.2	(D)	(D)	-	-	(D)	-
342	CUTLERY, HANDTOOLS AND HARDWARE	16.6	5.2	1.0	(D)	(D)	-	(D)	-
3423	HAND AND EDGE TOOLS, NEC	2.5	2.1	(D)	(D)	-	-	(D)	-
3425	HANDSAWS AND SAW BLADES	.5	(D)	(D)	-	-	-	-	-
3429	HARDWARE, NEC	3.1	2.8	.3	-	-	-	-	-
343	PLUMBING, HEATING, EXCEPT ELEC	1.1	.9	.1	(D)	-	-	(D)	(D)
3431	METAL SANITARY WARE	(D)	(D)	-	-	-	-	-	-
3432	PLUMBING FITTINGS AND BRASS GOODS	.3	(D)	(D)	-	-	-	-	-
3433	HEATING EQUIPMENT, EXC. ELECTRIC	.5	(D)	(D)	(D)	-	-	(D)	(D)
344	FABRICATED STRUC. METAL PRODS.	6.7	5.4	1.1	(D)	-	-	.1	(D)
3442	METAL DOORS, SASH, AND TRIM	.3	.1	(D)	-	-	-	-	(D)
3443	FABRICATED PLATEWORK, BOILER SHOP	2.0	1.2	.6	(D)	-	-	(D)	-
3444	SHEET METALWORK	.5	.3	.3	-	-	-	-	-
3446	ARCHITECTURAL METALWORK	(D)	.1	(D)	-	-	-	-	-
3448	PREFABRICATED METAL BUILDINGS	(D)	(D)	-	(D)	-	-	-	-
345	SCREW MACHINE PROD., BOLTS, ETC.	2.7	2.5	(D)	(D)	-	-	-	-
3452	BOLTS, NUTS, RIVETS, AND WASHERS	2.6	2.4	(D)	(D)	-	-	-	-
346	METAL FORGINGS AND STAMPINGS	10.6	7.6	2.2	.7	-	-	(D)	(D)
3462	IRON AND STEEL FORGINGS	2.7	1.6	.9	(D)	-	-	(D)	(D)
3463	NONFERROUS FORGINGS	1.3	(D)	-	(D)	-	-	-	-
3465	AUTOMOTIVE STAMPINGS	4.0	3.5	(D)	-	-	-	-	(D)
3466	CROWNS AND CLOSURES	(D)	(D)	(D)	(D)	-	-	-	-
3469	METAL STAMPINGS, NEC	(D)	(D)	.7	(D)	-	-	(D)	-
347	METAL SERVICES, NEC	3.6	3.2	(D)	-	-	-	-	(D)
3471	PLATING AND POLISHING	2.8	(D)	(D)	-	-	-	-	(D)
3479	METAL COATING AND ALLIED SERVICES	.7	(D)	(D)	-	-	-	-	-
348	ORDNANCE AND ACCESSORIES, NEC	5.5	2.7	2.3	(D)	-	-	(D)	(D)
3482	SMALL ARMS AMMUNITION	(D)	(D)	(D)	-	-	-	-	-
3483	AMMUNITION, EXC. SMALL ARMS, NEC	1.9	(D)	.9	(D)	-	-	(D)	-
3484	SMALL ARMS	(D)	.9	(D)	(D)	-	-	-	-
3489	ORDNANCE AND ACCESSORIES NEC	1.9	.8	(D)	-	-	-	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS	12.0	10.1	1.2	(D)	(D)	-	.2	.2
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	(D)	(D)	-	-	-	-	-
3494	VALVES AND PIPE FITTINGS	8.8	8.0	.3	(D)	-	-	(Z)	(D)
3495	WIRE SPRINGS	(D)	(D)	(D)	-	-	-	-	-
3496	MISC. FABRICATED WIRE PRODUCTS	1.4	1.1	(D)	-	(D)	-	(D)	-
3497	METAL FOIL AND LEAF	(D)	(D)	(D)	-	-	-	-	-
3498	FABRICATED PIPE AND FITTINGS	.3	(D)	(D)	-	-	-	-	-
3499	FABRICATED METAL PRODUCTS, NEC	.6	.3	(D)	-	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	120.5	51.1	39.9	5.9	20.7	(D)	2.7	(D)
351	ENGINES AND TURBINES	28.0	(D)	(D)	(D)	(D)	-	(D)	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	3.4	2.0	.8	(D)	-	-	(D)	(D)
352	FARM AND GARDEN MACHINERY	32.6	18.4	13.4	-	-	-	(D)	(D)
3523	FARM MACHINERY AND EQUIPMENT	(D)	18.1	(D)	-	-	-	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT	(D)	.3	(D)	-	-	-	-	-
353	CONSTRUCTION, RELATED MACHINERY	9.0	(D)	(D)	-	-	-	(D)	(D)
3531	CONSTRUCTION MACHINERY	(D)	2.6	5.1	-	-	-	(D)	(D)
3532	MINING MACHINERY	.3	(D)	(D)	-	-	-	-	-
3533	OILFIELD MACHINERY	.4	.2	(D)	-	-	-	(D)	-
3535	CONVEYORS AND CONVEYING EQUIPMENT	(D)	(D)	(D)	-	-	-	-	-
3536	HOISTS, CRANES, AND MONORAILS	(D)	(D)	(D)	-	-	-	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS	(D)	(D)	(D)	-	-	-	-	-
354	METALWORKING MACHINERY	7.6	5.0	2.3	(D)	(D)	(D)	.2	(D)
3541	MACHINE TOOLS, METAL-CUTTING	2.5	.8	1.6	-	(D)	-	(D)	-
3542	MACHINE TOOLS, METAL-FORMING	(D)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
3544	SPECIAL DIES, TOOLS, JIGS, ETC	1.7	(D)	(D)	-	-	-	-	-
3545	MACHINE TOOL ACCESSORIES	(D)	1.9	.1	-	-	-	(D)	-
3546	POWER DRIVEN HANDTOOLS	.7	.5	(D)	-	-	-	(D)	-
355	SPECIAL INDUSTRY MACHINERY	8.7	2.9	.5	(D)	-	-	(D)	-
3551	FOOD PRODUCTS MACHINERY	(D)	(D)	(D)	-	-	-	(D)	-
3552	TEXTILE MACHINERY	(D)	(D)	(D)	-	-	-	(D)	-
356	GENERAL INDUSTRIAL MACHINERY	7.5	4.2	3.2	(D)	(D)	(D)	(D)	(Z)
3561	PUMPS AND PUMPING EQUIPMENT	1.8	.9	.9	(D)	-	-	(D)	(Z)
3562	BALL AND ROLLER BEARINGS	1.4	.8	.6	-	-	(D)	(D)	-
3563	AIR AND GAS COMPRESSORS	1.3	.9	.4	-	(D)	-	(D)	(Z)
3566	SPEED CHANGERS, DRIVES, AND GEARS	(D)	.3	(D)	-	-	-	-	(Z)
3568	POWER TRANSMISSION EQUIPMENT, NEC	1.9	1.1	(D)	-	-	-	(D)	(Z)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	(D)	.2	(D)	-	-	-	-	(D)
357	OFFICE AND COMPUTING MACHINES	18.2	9.0	6.8	(D)	(D)	-	1.6	.1
3573	ELECTRONIC COMPUTING EQUIPMENT	16.4	8.0	6.6	(D)	-	-	1.6	(D)
3574	CALCULATING, ACCOUNTING MACHINES	.7	(D)	-	(D)	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	(D)	(D)	(D)	(D)	(D)	-	(Z)	(D)
358	REFRIGERATION AND SERVICE MACH	6.9	5.1	(D)	(D)	-	-	(D)	-
3581	AUTOMATIC MERCHANDISING MACHINES	(D)	(D)	-	-	-	-	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	6.4	4.7	(D)	(D)	-	-	-	-
3586	MEASURING AND DISPENSING PUMPS	(D)	(D)	-	-	-	-	-	-
359	MISC. MACHINERY, EXC. ELEC	2.0	1.7	(D)	-	-	-	-	(D)

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments--Discharging to public sewers	Number of establishments--Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
35	MACHINERY, EXC. ELEC.--CON.												
359	MISC. MACH., EXC. ELEC.--CON.												
3592	CARBURETORS, PISTONS, RINGS, ETC	2.3	2.1	19	10	(D)	.3	(D)	-	-	-	-	-
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	.2	.2	5	4	(D)	(D)	-	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	116.0	111.9	511	279	30.4	18.0	11.8	.3	(D)	(D)	.4	(D)
361	ELECTRIC DISTRIBUTING EQUIPMENT.	5.3	5.0	42	24	2.0	.5	1.4	(D)	-	-	(D)	-
3612	TRANSFORMERS	2.7	2.7	19	10	(D)	(D)	1.0	(D)	-	-	(D)	-
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	2.6	2.3	23	14	(D)	(D)	.3	-	-	-	-	-
362	ELECTRICAL INDUSTRIAL APPARATUS.	9.7	8.9	62	29	1.9	.7	1.1	(D)	-	-	(D)	-
3621	MOTORS AND GENERATORS.	3.9	3.8	27	11	(D)	.2	.7	(D)	-	-	(D)	-
3622	INDUSTRIAL CONTROLS.	1.7	1.6	18	10	.2	.2	(Z)	(D)	-	-	(D)	-
3623	WELDING APPARATUS, ELECTRIC.	.3	.3	5	3	(D)	(D)	(D)	-	-	-	(D)	-
3624	CARBON AND GRAPHITE PRODUCTS	3.6	3.0	10	3	.6	(D)	.4	(D)	-	-	-	-
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	.2	.2	2	2	(D)	-	(D)	-	-	-	-	-
363	HOUSEHOLD APPLIANCES	17.3	16.6	73	37	6.2	(D)	3.7	-	(D)	-	-	-
3631	HOUSEHOLD COOKING EQUIPMENT.	4.6	4.3	19	11	.9	(D)	(D)	-	-	-	-	-
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	6.1	5.9	10	3	3.5	(D)	(D)	-	-	-	-	-
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	2.3	2.2	10	6	.9	(D)	(D)	-	-	-	-	-
3634	ELECTRIC HOUSEWARES AND FANS	1.8	1.7	16	10	.2	(D)	(D)	-	-	-	-	-
3635	HOUSEHOLD VACUUM CLEANERS.	(D)	(D)	4	2	(D)	(D)	(D)	-	-	-	-	-
3639	HOUSEHOLD APPLIANCES, NEC.	1.9	1.9	11	4	.5	(D)	(D)	-	-	-	-	-
364	ELEC. LIGHTING, WIRING EQUIP	11.6	11.9	52	33	1.5	1.1	.4	-	-	(D)	(D)	-
3641	ELECTRIC LAMPS	1.0	1.0	14	9	(D)	(Z)	(D)	-	-	-	-	-
3644	NONCURRENT-CARRYING WIR'G DEVICES.	1.6	1.6	14	11	.9	.6	(D)	-	-	(D)	(D)	-
3645	RESIDENTIAL LIGHTING FIXTURES.	.1	.1	4	4	(D)	(D)	(D)	-	-	-	-	-
3646	COMMERCIAL LIGHTING FIXTURES	(D)	(D)	3	2	(D)	(D)	(D)	-	-	-	(D)	-
3648	LIGHTING EQUIPMENT, NEC.	.5	.5	4	3	(D)	-	(D)	-	-	-	-	-
365	RADIO, TV RECEIVING EQUIPMENT.	2.1	1.8	19	11	.6	(D)	(D)	-	-	-	-	-
3651	RADIO AND TV RECEIVING SETS.	1.4	1.4	11	7	(D)	(D)	(D)	-	-	-	-	-
3652	PHONO. RECORDS, PRERECORDED TAPE	.7	.4	8	4	(D)	(D)	(D)	-	-	-	-	-
366	COMMUNICATION EQUIPMENT.	14.3	13.3	85	44	4.0	3.0	.9	(D)	-	-	(D)	-
3662	RADIO AND TV COMMUNICATION EQUIP	(D)	(D)	63	32	(D)	(D)	(D)	-	-	-	(D)	-
367	ELECTRONIC COMPONENTS, ACCESS.	23.1	22.2	115	64	10.9	7.0	3.9	-	(D)	-	(D)	(D)
3671	ELECTRON TUBES, RECEIVING TYPE	4.0	3.7	22	9	1.0	.6	.6	-	-	-	-	-
3674	SEMICONDUCTORS, RELATED DEVICES.	10.8	10.6	40	21	6.8	4.7	2.0	-	-	-	(D)	(D)
3675	ELECTRONIC CAPACITORS.	2.7	2.6	7	3	(D)	.2	(D)	-	-	-	(D)	-
3676	ELECTRONIC RESISTORS	.5	.5	9	5	(D)	(Z)	(D)	-	-	-	-	-
3678	ELECTRONIC CONNECTORS.	1.1	1.1	9	6	.4	.2	(D)	-	(D)	-	-	-
3679	ELECTRONIC COMPONENTS, NEC	4.0	3.8	28	20	2.1	1.2	.8	-	(D)	-	(D)	-
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	32.6	32.2	63	37	3.3	2.8	(D)	-	-	-	(D)	(D)
3691	STORAGE BATTERIES.	2.3	2.0	33	21	1.4	1.0	.2	-	-	-	(D)	(D)
3692	PRIMARY BATTERIES, DRY AND WET	.3	.3	4	4	(D)	(D)	-	-	-	-	-	-
3693	X-RAY APPARATUS AND TUBES.	.6	.6	5	2	(D)	(D)	(D)	-	-	-	-	-
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	(D)	(D)	5	5	(D)	(D)	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT	234.5	219.8	411	199	58.2	24.0	28.4	1.9	(D)	(D)	3.0	(Z)
371	MOTOR VEHICLES AND EQUIPMENT	169.8	158.3	243	132	35.1	19.4	14.8	(D)	-	(D)	.1	-
3711	MOTOR VEHICLES AND CAR BODIES.	29.5	28.1	63	28	11.5	9.6	(D)	-	-	-	(D)	-
3714	MOTOR VEHICLE PARTS, ACCESSORIES	139.9	131.3	175	100	23.5	9.6	12.7	(D)	-	(D)	(D)	-
372	AIRCRAFT AND PARTS	38.7	37.4	89	35	18.1	2.3	11.6	(D)	(D)	-	(D)	(Z)
3721	AIRCRAFT	10.4	10.1	27	10	5.5	1.4	1.0	(D)	-	-	(D)	(Z)
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	22.2	21.5	32	12	11.9	.3	10.4	(D)	(D)	-	(D)	-
3728	AIRCRAFT EQUIPMENT, NEC.	6.2	5.8	30	13	.8	.5	.2	(D)	(D)	-	-	-
373	SHIP, BOAT BUILDING, REPAIRING	14.7	14.5	25	3	(D)	(D)	1.0	-	(D)	-	(D)	-
3731	SHIP BUILDING AND REPAIRING.	(D)	(D)	25	3	(D)	(D)	.9	-	(D)	-	-	-
3743	RAILROAD EQUIPMENT	3.9	3.7	19	8	.8	(D)	(D)	(D)	-	-	(D)	-
3751	MOTORCYCLES, BICYCLES, AND PARTS	1.6	(D)	4	2	(D)	(D)	(D)	(D)	-	-	(D)	-
376	GUIDED MISSILES, SPACE VEHICLES.	4.9	3.8	24	15	1.4	.6	(D)	-	-	-	(D)	(Z)
3761	GUIDED MISSILES, SPACE VEHICLES.	2.5	1.9	15	10	.8	.6	(D)	-	-	-	(D)	(Z)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	(D)	7	4	.6	(Z)	(D)	-	-	-	(D)	-
379	MISC. TRANSPORTATION EQUIPMENT	.8	(D)	7	4	(D)	(D)	(D)	-	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	35.5	33.1	132	71	15.8	1.7	13.5	(D)	(D)	-	.2	-
3811	ENGINEERING, SCIENTIFIC INSTRU	.7	.6	12	7	.1	.1	(D)	-	-	-	(D)	-
382	MEASURING, CONTROLLING DEVICES	5.4	5.1	46	21	1.6	.7	.9	(D)	-	-	(D)	-
3822	ENVIRONMENTAL CONTROLS	1.9	1.8	11	6	.8	(D)	(D)	-	-	-	-	-
3823	PROCESS CONTROL INSTRUMENTS.	.5	.5	6	1	(D)	-	(D)	(D)	-	-	-	-
3824	FLUID METERS AND COUNTING DEVICES.	1.0	1.0	12	5	(D)	(D)	(D)	-	-	-	-	-
3825	INSTRU. TO MEASURE ELECTRICITY	1.8	1.6	11	7	.6	.4	(D)	-	-	-	(D)	-
3829	MEASUR'G, CONTROL'G DEVICES, NEC	.3	.3	6	2	(D)	(D)	(D)	-	-	-	(D)	-
3832	OPTICAL INSTRUMENTS AND LENSES	(D)	.5	7	5	(D)	-	(D)	-	-	-	-	-
384	MEDICAL INSTRUMENTS, SUPPLIES.	2.3	2.1	26	17	.5	.4	(D)	-	-	-	(D)	-
3841	SURGICAL AND MEDICAL INSTRUMENTS	(D)	(D)	8	3	(D)	(D)	(D)	-	-	-	(D)	-
3842	SURGICAL APPLIANCES AND SUPPLIES	1.6	1.5	15	11	.4	(D)	(D)	-	-	-	(D)	-

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and esutaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
35	MACHINERY, EXCEPT ELECTRICAL--CON.								
359	MISC. MACHINERY, EXC. ELEC.--CON.								
3592	CARBURETORS, PISTONS, RINGS, ETC	(D)	1.5	.3	-	-	-	-	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	(D)	.1	(D)	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	81.5	55.1	16.5	1.0	(D)	-	8.5	(D)
361	ELECTRIC DISTRIBUTING EQUIPMENT	3.0	2.2	.7	(D)	-	-	(D)	-
3612	TRANSFORMERS	(D)	.9	.5	(D)	-	-	-	-
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	(D)	1.3	.2	-	-	-	(D)	-
362	ELECTRICAL INDUSTRIAL APPARATUS	7.0	3.0	3.8	(D)	-	-	.2	(D)
3621	MOTORS AND GENERATORS	(D)	.9	1.9	(D)	-	-	(D)	(D)
3622	INDUSTRIAL CONTROLS	1.4	1.2	(D)	-	-	-	(D)	-
3623	WELDING APPARATUS, ELECTRIC	(D)	.2	(D)	-	-	-	-	-
3624	CARBON AND GRAPHITE PRODUCTS	2.4	(D)	1.7	-	-	-	(D)	-
3629	ELEC. INDUSTRIAL APPARATUS, NEC	(D)	(D)	-	-	-	-	(D)	-
363	HOUSEHOLD APPLIANCES	10.5	8.5	1.8	(D)	(D)	-	(D)	(D)
3631	HOUSEHOLD COOKING EQUIPMENT	3.4	3.3	(D)	(D)	-	-	-	-
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	2.4	2.0	(D)	(D)	-	-	-	-
3633	HOUSEHOLD LAUNDRY EQUIPMENT	1.4	(D)	(D)	-	-	-	-	-
3634	ELECTRIC HOUSEWARES AND FANS	1.5	1.3	.3	-	-	-	-	-
3635	HOUSEHOLD VACUUM CLEANERS	(D)	(D)	(D)	-	-	-	-	-
3639	HOUSEHOLD APPLIANCES, NEC	1.4	1.1	(D)	(D)	-	-	-	(D)
364	ELEC. LIGHTING, WIRING EQUIP	10.3	2.5	.9	(D)	-	-	(D)	-
3641	ELECTRIC LAMPS	(D)	.6	(D)	(D)	-	-	(D)	-
3644	NONCURRENT-CARRYING WIR'G DEVICES	.7	(D)	(D)	-	-	-	-	-
3645	RESIDENTIAL LIGHTING FIXTURES	(D)	.1	(D)	-	-	-	-	-
3646	COMMERCIAL LIGHTING FIXTURES	(D)	(D)	(D)	-	-	-	-	-
3648	LIGHTING EQUIPMENT, NEC	(D)	(D)	(D)	(D)	-	-	-	-
365	RADIO, TV RECEIVING EQUIPMENT	1.2	.9	(D)	-	-	-	(D)	(D)
3651	RADIO AND TV RECEIVING SETS	(D)	.7	(D)	-	-	-	(D)	-
3652	PHONO. RECORDS, PRERECORDED TAPE	(D)	.2	(D)	-	-	-	-	(D)
366	COMMUNICATION EQUIPMENT	9.3	5.9	2.2	(D)	-	-	1.1	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	5.9	3.3	1.5	(D)	-	-	1.1	(D)
367	ELECTRONIC COMPONENTS, ACCESS	11.3	5.3	5.2	(D)	-	-	.6	(D)
3671	ELECTRON TUBES, RECEIVING TYPE	2.6	1.2	1.3	-	-	-	(D)	(D)
3674	SEMICONDUCTORS, RELATED DEVICES	3.8	1.9	1.7	(D)	-	-	(D)	(D)
3675	ELECTRONIC CAPACITORS	(D)	.5	1.4	-	-	-	(D)	-
3676	ELECTRONIC RESISTORS	(D)	.3	(D)	-	-	-	-	-
3678	ELECTRONIC CONNECTORS	.8	.5	(D)	-	-	-	(D)	-
3679	ELECTRONIC COMPONENTS, NEC	1.7	.9	.5	-	-	-	(D)	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	28.9	27.0	1.7	(D)	-	-	.2	(D)
3691	STORAGE BATTERIES	.6	.4	(D)	-	-	-	(D)	(Z)
3692	PRIMARY BATTERIES, DRY AND WET	(D)	.2	(D)	-	-	-	-	-
3693	X-RAY APPARATUS AND TUBES	(D)	.1	(D)	-	-	-	(D)	-
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	.2	.2	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT	161.6	90.1	36.4	1.9	4.3	(D)	27.6	(D)
371	MOTOR VEHICLES AND EQUIPMENT	123.2	71.9	24.2	(D)	(D)	-	27.2	(D)
3711	MOTOR VEHICLES AND CAR BODIES	15.2	11.5	3.6	(D)	(D)	-	.3	-
3714	MOTOR VEHICLE PARTS, ACCESSORIES	107.8	60.2	20.6	(D)	-	-	27.0	(D)
372	AIRCRAFT AND PARTS	19.3	10.4	7.4	(D)	(D)	(D)	.2	(D)
3721	AIRCRAFT	4.6	2.5	1.5	(D)	-	(D)	.1	-
3724	AIRCRAFT ENGINES AND ENGINE PARTS	9.6	4.7	4.6	(D)	-	-	(Z)	(D)
3728	AIRCRAFT EQUIPMENT, NEC	5.1	3.3	1.3	-	(D)	(D)	.1	(D)
373	SHIP, BOAT BUILDING, REPAIRING	(D)	3.5	3.7	(D)	3.7	(D)	(Z)	.4
3731	SHIP BUILDING AND REPAIRING	12.2	3.5	3.7	(D)	3.7	(D)	(Z)	.4
3743	RAILROAD EQUIPMENT	2.9	1.4	.6	(D)	-	-	(D)	-
3751	MOTORCYCLES, BICYCLES, AND PARTS	(D)	(D)	(D)	-	-	-	(D)	-
376	GUIDED MISSILES, SPACE VEHICLES	2.5	1.6	.3	-	-	(D)	.1	(D)
3761	GUIDED MISSILES, SPACE VEHICLES	1.1	.9	(D)	-	-	-	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	.3	(D)	-	-	(D)	(D)	(D)
379	MISC. TRANSPORTATION EQUIPMENT	(D)	(D)	(D)	-	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS	17.3	7.9	8.7	(D)	(D)	-	.5	(D)
3811	ENGINEERING, SCIENTIFIC INSTRU	.4	.4	(D)	-	-	-	(D)	-
382	MEASURING, CONTROLLING DEVICES	3.5	2.3	1.1	(D)	-	-	(D)	(D)
3822	ENVIRONMENTAL CONTROLS	1.0	.7	.3	-	-	-	-	-
3823	PROCESS CONTROL INSTRUMENTS	(D)	.2	(D)	(D)	-	-	(D)	-
3824	FLUID METERS AND COUNTING DEVICES	(D)	.7	(D)	-	-	-	(D)	-
3825	INSTRU. TO MEASURE ELECTRICITY	1.0	(D)	(D)	-	-	-	-	-
3829	MEASUR'G, CONTROL'G DEVICES, NEC	(D)	(D)	(D)	-	-	-	-	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	(D)	(D)	(D)	-	-	-	-	-
384	MEDICAL INSTRUMENTS, SUPPLIES	1.6	1.3	(D)	-	-	-	.2	(D)
3841	SURGICAL AND MEDICAL INSTRUMENTS	.5	.3	(D)	-	-	-	.2	(D)
3842	SURGICAL APPLIANCES AND SUPPLIES	1.1	.9	.2	-	-	-	(Z)	-

See footnotes at end of table.

Table 6a. Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons, except where noted. For explanation of terms see appendix A)

SIC code	Industry group and industry	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
38	INSTRU., RELATED PROD.--CON.												
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	20.1	18.4	26	14	(D)	.4	11.9	(D)	(D)	-	(D)	-
3873	WATCHES, CLOCKS, AND WATCHCASES.	.6	(D)	8	4	(D)	(D)	-	-	-	-	-	-
39	MISC. MANUFACTURING INDUSTRIES.	7.7	7.1	76	30	2.0	.3	1.6	(D)	-	-	(D)	-
391	JEWELRY, SILVER AND PLATED WARE.	.7	.7	10	4	.2	.1	.1	-	-	-	-	-
3911	JEWELRY, PRECIOUS METAL.	(D)	(D)	3	2	(D)	(D)	(D)	-	-	-	-	-
3914	SILVERWARE AND PLATED WARE	.5	.5	6	2	.2	(D)	(D)	-	-	-	-	-
3931	MUSICAL INSTRUMENTS.	.2	.2	3	2	(D)	-	-	(D)	-	-	-	-
394	TOYS AND SPORTING GOODS.	1.6	1.5	17	4	.2	(D)	.2	-	-	-	(D)	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	1.0	1.0	9	1	(D)	(D)	(D)	-	-	-	-	-
3949	SPORTING AND ATHLETIC GOODS, NEC	.6	.6	8	3	(D)	(D)	(D)	-	-	-	(D)	-
395	PENS, OFFICE AND ART GOODS	.8	.8	7	3	(D)	(D)	(D)	-	-	-	-	-
3951	PENS AND MECHNICAL PENCILS	(D)	(D)	4	1	(D)	(D)	(D)	-	-	-	-	-
396	COSTUME JEWELRY AND NOTIONS.	1.2	1.2	20	9	.5	.1	.4	-	-	-	-	-
3961	COSTUME JEWELRY.	.3	.3	5	3	(D)	(D)	(D)	-	-	-	-	-
3964	NEEDLES, PINS, AND FASTENERS	.9	.9	15	6	(D)	(D)	(D)	-	-	-	-	-
399	MISCELLANEOUS MANUFACTURES	3.3	2.8	19	8	.7	(Z)	(D)	-	-	-	(D)	-
3996	HARD SURFACE FLOOR COVERINGS	1.6	1.1	6	3	(D)	(Z)	(D)	-	-	-	(D)	-
3999	MANUFACTURING INDUSTRIES, NEC.	1.4	1.5	10	5	(D)	(Z)	(D)	-	-	-	-	-

See footnotes at end of table.

Table 6a. **Water Discharged, Treated and Untreated, by Point of Discharge, for Industry Groups and Industries: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
38	INSTRUMENTS, RELATED PRODUCTS--CON.								
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	(D)	3.2	2.1	-	(D)	-	.2	-
3873	WATCHES, CLOCKS, AND WATCHCASES	(D)	(D)	(D)	-	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	5.2	2.7	2.1	(D)	-	-	(D)	-
391	JEWELRY, SILVER AND PLATED WARE	.5	(D)	(D)	-	-	-	-	-
3911	JEWELRY, PRECIOUS METAL	(D)	(D)	(D)	-	-	-	-	-
3914	SILVERWARE AND PLATED WARE	.3	(D)	(D)	-	-	-	-	-
3931	MUSICAL INSTRUMENTS	(D)	(D)	(D)	(D)	-	-	-	-
394	TOYS AND SPORTING GOODS	1.3	.4	.6	(D)	-	-	(D)	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	(D)	.2	.3	(D)	-	-	(D)	-
3949	SPORTING AND ATHLETIC GOODS, NEC	(D)	.2	(D)	-	-	-	(D)	-
395	PENS, OFFICE AND ART GOODS	(D)	.2	(D)	-	-	-	(D)	-
3951	PENS AND MECHNICAL PENCILS	(D)	(D)	(D)	-	-	-	(D)	-
396	COSTUME JEWELRY AND NOTIONS	.7	.5	(D)	(D)	-	-	(D)	-
3961	COSTUME JEWELRY	(D)	(D)	-	-	-	-	-	-
3964	NEEDLES, PINS, AND FASTENERS	(D)	(D)	(D)	(D)	-	-	(D)	-
399	MISCELLANEOUS MANUFACTURES	2.1	1.1	(D)	-	-	-	(D)	-
3996	HARD SURFACE FLOOR COVERINGS	(D)	.2	(D)	-	-	-	-	-
3999	MANUFACTURING INDUSTRIES, NEC	(D)	.8	(D)	-	-	-	(D)	-

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries, whether or not separate figures are shown for individual industries in the group.

Industries which have been omitted from the table have total water discharge of less than .05 or have data being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified.

(Z) Less than 50 million gallons.

Table 6b. Water Discharged, Treated and Untreated, by Point of Discharge, for States: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

State	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
UNITED STATES, TOTAL	12 991.7	11 682.2	7 259	3 981	4 709.2	388.8	3 172.0	280.9	688.7	54.0	76.7	48.1
ALABAMA	294.2	280.1	146	56	151.1	3.3	137.7	8.2	(D)	-	1.3	(D)
ARIZONA	21.5	13.5	28	15	2.3	1.5	(D)	-	-	-	.4	(D)
ARKANSAS	73.7	66.3	84	44	58.0	3.4	47.0	(D)	-	-	7.3	(D)
CALIFORNIA	307.6	242.8	526	379	105.7	25.9	19.1	.1	49.2	5.5	2.4	3.4
COLORADO	65.6	58.9	48	29	32.7	4.4	25.9	(D)	-	-	(D)	-
CONNECTICUT	87.7	85.4	141	40	33.2	1.7	14.4	(D)	16.7	(D)	.3	(D)
DELAWARE	169.3	167.2	25	8	97.8	2.1	19.2	-	(D)	-	(D)	(D)
FLORIDA	221.1	182.2	83	49	76.9	2.9	51.4	.5	15.4	-	4.9	1.7
GEORGIA	271.2	231.1	219	150	138.2	8.9	81.6	(D)	46.6	-	.8	(D)
HAWAII	111.4	88.1	15	7	64.0	(D)	(D)	-	-	34.5	15.7	12.8
IDAHO	32.6	35.1	31	8	12.4	(D)	8.0	-	-	-	2.3	(D)
ILLINOIS	430.9	367.5	529	350	114.8	37.1	75.0	(D)	-	-	2.3	(D)
INDIANA	634.8	598.7	299	180	238.1	8.5	149.4	77.6	-	(D)	2.4	(D)
IOWA	147.3	138.4	128	64	44.6	9.3	34.9	(D)	-	-	.3	(D)
KANSAS	37.0	30.7	64	37	14.0	1.7	10.3	(D)	-	-	.7	(D)
KENTUCKY	139.9	131.7	119	87	42.4	8.5	33.5	(D)	-	-	.3	(D)
LOUISIANA	1 280.2	1 224.7	55	28	249.6	(D)	239.2	1.5	(D)	-	4.4	1.3
MAINE	137.1	106.9	35	11	82.7	.7	81.7	-	(D)	-	(D)	-
MARYLAND	371.8	318.4	91	45	(D)	3.7	11.5	(D)	247.1	-	.3	(D)
MASSACHUSETTS	152.4	147.9	199	101	24.7	7.3	16.6	(D)	(D)	-	.2	(D)
MICHIGAN	874.3	797.8	395	188	374.8	34.5	319.6	18.6	(D)	-	1.5	(D)
MINNESOTA	160.9	111.3	169	93	23.5	3.8	18.5	.2	-	-	.8	.2
MISSISSIPPI	99.3	92.2	65	31	64.0	1.6	46.3	(D)	(D)	(D)	.2	-
MISSOURI	50.7	42.9	161	115	13.0	5.8	7.0	(D)	-	-	.1	(D)
MONTANA	32.2	26.8	7	2	11.7	(D)	7.6	(D)	-	-	.7	-
NEBRASKA	28.7	26.3	62	38	15.4	1.4	12.8	(D)	-	-	(D)	-
NEVADA	18.9	5.5	9	4	(D)	(D)	-	(D)	-	-	(D)	(D)
NEW HAMPSHIRE	26.2	26.1	32	15	17.0	.3	16.6	-	-	(D)	(D)	-
NEW JERSEY	331.5	323.9	307	154	105.9	12.5	38.6	-	52.1	(D)	(D)	.4
NEW MEXICO	4.8	2.5	9	5	.9	.4	-	(D)	-	-	(D)	-
NEW YORK	469.7	447.3	349	187	183.0	29.8	104.5	40.0	4.9	-	3.6	(Z)
NORTH CAROLINA	187.0	162.4	272	200	108.0	12.1	94.3	(D)	(D)	-	.5	(D)
NORTH DAKOTA	(D)	1.1	4	4	(D)	(D)	(D)	-	-	-	(D)	-
OHIO	584.7	501.7	526	281	194.8	18.3	170.7	2.2	.3	-	2.5	.5
OKLAHOMA	153.5	81.2	59	34	68.3	1.5	66.2	(D)	-	(D)	(D)	(D)
OREGON	135.5	135.2	108	34	77.1	10.8	54.9	(D)	.3	(D)	1.1	1.4
PENNSYLVANIA	1 190.1	1 141.3	490	207	445.2	23.2	413.0	(D)	(D)	-	1.4	6.4
RHODE ISLAND	19.1	18.7	47	28	2.4	.7	1.7	-	-	-	-	-
SOUTH CAROLINA	416.4	404.9	177	100	89.3	2.3	61.5	3.1	(D)	-	1.5	(D)
TENNESSEE	366.6	347.4	183	101	90.0	16.2	73.2	(D)	-	-	.5	(D)
TEXAS	1 395.7	1 155.6	280	203	361.7	52.2	144.1	99.6	47.5	-	6.9	10.8
UTAH	58.7	18.0	22	12	10.5	.8	(D)	(D)	(D)	-	.5	-
VERMONT	5.8	5.4	15	4	3.8	(D)	3.5	-	-	-	(D)	-
VIRGINIA	247.3	236.9	115	62	61.1	6.2	48.0	(D)	(D)	-	.1	.2
WASHINGTON	424.4	398.5	112	37	198.7	1.8	115.6	(D)	68.8	(D)	2.6	2.5
WEST VIRGINIA	456.9	436.0	33	13	230.0	(D)	226.1	-	-	-	(Z)	(D)
WISCONSIN	202.7	185.9	367	128	86.4	14.2	69.5	1.5	-	-	1.0	.2
WYOMING	10.7	5.1	5	1	3.7	-	(D)	(D)	-	-	(D)	(D)

See footnotes at end of table.

Table 6b. Water Discharged, Treated and Untreated, by Point of Discharge, for States: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State	Water untreated by point of discharge							
	Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
UNITED STATES, TOTAL	6 973.0	1 140.6	4 685.1	574.7	339.8	43.7	93.6	95.5
ALABAMA	129.0	20.5	102.7	5.3	-	(D)	.2	(D)
ARIZONA	11.1	1.7	.7	(D)	-	-	.2	4.0
ARKANSAS	8.3	2.1	4.8	(D)	-	-	.1	(D)
CALIFORNIA	137.1	47.0	7.7	.2	37.8	27.7	9.0	7.7
COLORADO	26.2	5.2	19.9	(D)	-	-	1.0	(D)
CONNECTICUT	52.2	8.9	21.6	4.9	10.3	(D)	(D)	(Z)
DELAWARE	69.4	1.5	23.1	-	(D)	(D)	.2	.3
FLORIDA	105.3	21.3	45.4	4.7	27.1	(D)	4.9	(D)
GEORGIA	92.9	29.6	48.9	1.2	(D)	(D)	.3	2.7
HAWAII	24.1	.3	(D)	-	(D)	(D)	3.0	(D)
IDAHO	22.6	.6	2.5	(D)	-	-	1.5	(D)
ILLINOIS	252.7	51.3	76.9	119.9	(D)	(D)	1.9	2.7
INDIANA	360.6	22.8	138.8	196.8	-	(D)	1.9	(D)
IOWA	93.8	21.1	71.5	(D)	-	-	.4	(D)
KANSAS	16.6	5.7	10.6	(D)	-	-	.4	(D)
KENTUCKY	89.3	39.5	48.2	(D)	-	-	(D)	1.2
LOUISIANA	975.1	2.1	951.9	3.8	(D)	-	(D)	9.3
MAINE	24.2	2.6	23.4	-	2.1	(D)	.1	(D)
MARYLAND	(D)	13.2	17.1	(D)	8.5	-	(D)	1.0
MASSACHUSETTS	123.2	28.6	51.1	7.7	28.8	-	6.7	.3
MICHIGAN	423.0	211.7	147.0	56.7	(D)	-	6.1	(D)
MINNESOTA	87.8	64.3	22.3	.8	(D)	-	.3	(D)
MISSISSIPPI	28.1	2.9	24.6	(D)	-	(D)	.2	(D)
MISSOURI	29.9	15.3	14.1	(D)	-	-	(D)	(Z)
MONTANA	15.1	(Z)	12.8	(D)	-	-	.5	(D)
NEBRASKA	10.9	7.3	3.6	(D)	-	-	(Z)	(D)
NEVADA	(D)	.1	(D)	(D)	-	-	.7	(D)
NEW HAMPSHIRE	9.2	1.6	7.3	-	(D)	-	(D)	-
NEW JERSEY	218.1	133.0	48.9	(D)	32.4	(D)	2.3	.6
NEW MEXICO	1.6	.3	(D)	(D)	-	-	(Z)	(D)
NEW YORK	264.3	50.5	188.8	17.1	4.7	-	2.5	.7
NORTH CAROLINA	54.4	28.0	23.1	(D)	(D)	-	.4	1.6
NORTH DAKOTA	(D)	.2	-	-	-	-	-	-
OHIO	306.9	83.4	207.2	11.1	(D)	-	(D)	2.1
OKLAHOMA	12.9	10.6	1.7	(D)	-	-	.4	(D)
OREGON	58.1	4.0	49.4	(D)	(D)	-	3.2	.4
PENNSYLVANIA	696.1	28.9	638.0	10.6	(D)	-	(D)	5.7
RHODE ISLAND	16.4	8.0	6.6	(D)	(D)	-	.1	(D)
SOUTH CAROLINA	315.6	10.4	199.3	71.1	(D)	-	27.2	(D)
TENNESSEE	257.4	39.0	214.5	1.6	-	-	1.8	.5
TEXAS	793.9	61.7	656.1	19.0	36.6	-	2.3	18.0
UTAH	7.5	.6	(D)	(D)	-	-	1.7	4.5
VERMONT	1.7	.6	1.0	(D)	-	-	(D)	-
VIRGINIA	175.8	16.1	124.9	(D)	30.4	(D)	.2	2.6
WASHINGTON	199.8	5.4	156.9	(D)	25.4	(D)	2.5	4.3
WEST VIRGINIA	206.0	1.8	201.8	-	-	-	(D)	(D)
WISCONSIN	99.5	36.8	56.7	3.0	-	-	1.1	1.8
WYOMING	1.4	(Z)	(D)	-	-	-	-	(D)

Note: States which do not appear above have data being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	UNITED STATES, TOTAL	12 991.7	11 682.2	7 259	3 981	4 709.2	388.8	3 172.0	280.9	688.7	54.0	76.7	48.1
	NEW ENGLAND.	424.6	386.7	461	195	161.5	10.6	132.5	.6	17.4	(D)	.7	(D)
20	FOOD AND KINDRED PRODUCTS. . .	10.7	8.5	33	23	1.3	.2	.7	-	(D)	-	(D)	-
22	TEXTILE MILL PRODUCTS.	18.6	18.4	49	38	3.6	2.0	1.6	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	209.5	178.4	43	13	113.0	3.6	109.2	-	-	-	(Z)	-
28	CHEMICALS AND ALLIED PRODUCTS.	55.3	52.7	31	7	21.9	2.2	3.7	(D)	(D)	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	.3	.2	1	-	(D)	-	(D)	-	-	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD. .	10.0	9.9	26	8	.3	.1	(D)	-	-	-	(D)	-
31	LEATHER AND LEATHER PRODUCTS .	2.6	2.6	8	7	(D)	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	3.2	2.8	9	-	.8	(D)	.7	-	-	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	24.3	23.9	47	9	2.2	.3	1.7	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	16.9	16.8	51	27	1.7	.5	1.0	(D)	-	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	22.1	21.6	45	15	.5	.3	(D)	-	(D)	-	(Z)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	11.4	11.7	42	22	2.3	.6	1.5	(D)	(D)	-	(D)	-
37	TRANSPORTATION EQUIPMENT . . .	29.4	29.1	26	6	11.5	(D)	10.3	-	(D)	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	8.3	8.1	24	13	1.4	.3	1.1	(D)	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1.8	1.7	23	7	.7	.2	.4	-	-	-	-	-
	MIDDLE ATLANTIC.	1 618.7	1 504.9	984	504	716.6	48.9	261.7	7.1	385.7	(D)	(D)	6.7
20	FOOD AND KINDRED PRODUCTS. . .	69.5	63.6	200	134	18.0	5.4	6.4	(D)	(D)	-	1.1	.2
21	TOBACCO PRODUCTS	1.4	1.2	3	2	(D)	-	(D)	-	-	-	(D)	-
22	TEXTILE MILL PRODUCTS.	13.3	11.9	67	55	6.6	4.4	2.2	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	.7	.2	4	-	(D)	-	(D)	-	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS. . .	159.3	145.5	65	38	56.3	11.4	33.8	(D)	(D)	-	(Z)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	491.6	443.2	176	82	133.8	16.7	59.5	(D)	54.7	(D)	.3	(Z)
29	PETROLEUM AND COAL PRODUCTS. .	271.0	261.3	12	4	182.6	(D)	105.7	-	(D)	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	25.0	22.2	64	27	4.9	.4	4.4	(D)	-	-	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS .	.9	.9	5	4	.5	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	26.4	26.6	54	17	9.9	.3	9.3	(D)	(D)	-	.2	(D)
34	FABRICATED METAL PRODUCTS. . .	10.5	9.6	57	33	2.5	(D)	1.2	-	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	26.0	25.4	47	20	1.7	.9	.8	-	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	17.1	16.2	77	35	5.7	1.7	4.1	-	(D)	-	(Z)	(D)
37	TRANSPORTATION EQUIPMENT . . .	15.7	15.3	41	19	6.5	2.4	1.2	(D)	-	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	4.7	4.7	24	6	1.2	.2	1.0	-	(D)	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	2.0	1.5	12	4	.2	(D)	.2	-	-	-	(D)	-
	SOUTH ATLANTIC	1 369.2	1 234.6	903	554	590.3	29.6	435.9	14.0	97.9	(D)	(D)	2.7
20	FOOD AND KINDRED PRODUCTS. . .	54.3	45.3	183	145	21.2	8.0	7.7	.8	(D)	-	4.4	(D)
21	TOBACCO PRODUCTS	2.6	1.6	8	4	(D)	(D)	(D)	-	-	-	-	-
22	TEXTILE MILL PRODUCTS.	117.8	105.3	354	259	43.0	11.2	29.2	2.0	-	-	.1	.9
24	LUMBER AND WOOD PRODUCTS . . .	9.2	2.0	12	3	1.0	(D)	.8	(D)	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	514.4	480.5	31	11	353.7	3.4	286.2	-	63.1	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	480.4	437.2	52	23	94.5	1.9	55.8	2.3	31.1	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	6.1	3.0	4	1	2.8	(D)	1.1	-	-	(D)	-	-
30	RUBBER, MISC. PLASTICS PROD. .	26.3	18.0	28	10	7.0	(D)	6.7	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	15.5	9.7	37	16	6.3	.3	2.3	(D)	(D)	-	(D)	-
33	PRIMARY METAL INDUSTRIES . . .	63.9	54.5	34	8	46.7	2.1	34.8	8.5	(D)	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	5.4	5.3	37	21	3.0	.9	2.1	(D)	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	9.1	8.9	40	15	1.9	.5	1.1	(D)	(D)	-	.3	-
37	TRANSPORTATION EQUIPMENT . . .	32.6	32.4	20	6	1.6	.4	(D)	(D)	(D)	-	(D)	-

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	UNITED STATES, TOTAL	6 973.0	1 140.6	4 685.1	574.7	339.8	43.7	93.6	95.5
	NEW ENGLAND	225.2	49.8	109.0	14.2	41.4	.9	7.3	2.6
20	FOOD AND KINDRED PRODUCTS	7.3	1.9	.3	(D)	3.9	(D)	(Z)	-
22	TEXTILE MILL PRODUCTS	14.8	11.0	(D)	-	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS	65.4	6.6	56.2	(D)	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	30.9	2.9	8.5	(D)	(D)	(D)	.2	(D)
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	(D)	-	-	-	-	-
30	RUBBER, MISC. PLASTICS PROD	9.7	.8	7.0	1.5	(D)	-	.1	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	2.1	.7	1.2	-	(D)	-	(D)	-
33	PRIMARY METAL INDUSTRIES	21.7	1.7	18.1	(D)	(D)	-	.1	(D)
34	FABRICATED METAL PRODUCTS	15.1	3.7	.7	(D)	(D)	-	(Z)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	21.1	3.7	1.1	(D)	14.2	-	.1	(D)
36	ELECTRIC, ELECTRONIC EQUIP	9.3	1.4	(D)	(D)	-	-	6.4	-
37	TRANSPORTATION EQUIPMENT	17.7	11.5	5.1	-	(D)	(D)	(Z)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	6.8	1.3	5.3	(D)	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	1.0	(D)	(D)	-	-	-	(D)	-
	MIDDLE ATLANTIC	788.2	188.9	432.0	16.4	128.5	(D)	(D)	10.3
20	FOOD AND KINDRED PRODUCTS	45.6	12.2	14.4	(D)	15.4	(D)	1.1	(D)
21	TOBACCO PRODUCTS	(D)	(D)	-	-	-	-	-	-
22	TEXTILE MILL PRODUCTS	5.3	5.3	(D)	-	-	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	(D)	(D)	(D)	-	(D)	-	-	-
26	PAPER AND ALLIED PRODUCTS	89.2	21.9	56.2	-	(D)	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	309.4	120.1	139.5	15.0	29.3	(D)	(D)	1.2
29	PETROLEUM AND COAL PRODUCTS	78.7	.7	12.8	-	(D)	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	17.3	5.0	6.5	.4	(D)	-	4.9	(D)
31	LEATHER AND LEATHER PRODUCTS	.4	.4	(D)	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	16.7	1.2	11.2	(D)	(D)	-	.2	(D)
34	FABRICATED METAL PRODUCTS	7.0	5.5	.8	(D)	(D)	-	(Z)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	23.8	2.1	21.3	(D)	-	-	.2	(D)
36	ELECTRIC, ELECTRONIC EQUIP	10.5	3.7	5.0	(D)	(D)	-	1.5	(Z)
37	TRANSPORTATION EQUIPMENT	8.8	2.9	3.1	(D)	(D)	-	.1	(D)
38	INSTRUMENTS, RELATED PRODUCTS	3.4	1.2	1.8	-	(D)	-	.4	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	1.3	(D)	1.0	-	-	-	(D)	-
	SOUTH ATLANTIC	644.2	110.5	366.9	82.2	37.9	(D)	33.0	(D)
20	FOOD AND KINDRED PRODUCTS	24.1	8.7	8.6	3.7	(D)	(D)	2.9	.2
21	TOBACCO PRODUCTS	(D)	1.5	(D)	-	-	-	(D)	-
22	TEXTILE MILL PRODUCTS	62.3	54.6	7.2	.3	-	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	1.0	.1	.3	(D)	-	-	(Z)	(D)
26	PAPER AND ALLIED PRODUCTS	126.7	11.9	80.2	-	(D)	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS	342.7	1.7	255.5	(D)	4.7	(D)	.2	(D)
29	PETROLEUM AND COAL PRODUCTS	.2	(D)	(D)	-	-	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD	11.0	1.7	7.7	(D)	-	-	.2	(D)
32	STONE, CLAY, GLASS PRODUCTS	3.4	.6	2.0	(D)	-	(D)	.7	(Z)
33	PRIMARY METAL INDUSTRIES	7.8	1.6	.7	5.2	-	-	(D)	(D)
34	FABRICATED METAL PRODUCTS	2.3	1.6	.3	(D)	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	7.1	3.9	2.9	(D)	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT	30.8	1.5	.7	(D)	(D)	-	(D)	-

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	SOUTH ATLANTIC--CON.												
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	.9	12	6	.4	(D)	(D)	(D)	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	10	5	(D)	(D)	(D)	-	-	-	-	-
	GREAT LAKES.	2 513.7	2 298.4	1 563	860	930.1	109.5	679.3	133.4	(D)	(D)	6.0	1.5
20	FOOD AND KINDRED PRODUCTS. . .	104.9	98.1	289	174	23.4	8.8	5.6	5.9	(D)	-	2.3	(D)
22	TEXTILE MILL PRODUCTS.	.7	.6	7	6	(D)	(D)	-	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	2.8	2.7	6	2	(D)	(D)	(D)	(D)	-	-	-	-
25	FURNITURE AND FIXTURES	1.2	(D)	12	4	(D)	(D)	(D)	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	219.7	197.6	87	28	134.2	50.8	75.7	6.4	(D)	-	.9	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	476.5	422.3	146	77	118.3	15.1	66.7	35.3	-	-	1.0	.1
29	PETROLEUM AND COAL PRODUCTS. .	154.3	134.1	21	9	107.4	1.6	60.8	(D)	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	49.7	45.9	84	35	22.9	1.9	20.7	(D)	(D)	-	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS .	2.6	(D)	19	16	1.6	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	55.1	53.2	63	30	6.9	.8	4.8	(D)	(D)	-	.2	(D)
33	PRIMARY METAL INDUSTRIES . . .	1 297.1	1 202.9	195	88	461.1	6.2	416.8	36.7	(D)	-	1.3	(D)
34	FABRICATED METAL PRODUCTS. . .	22.9	21.2	208	151	7.9	5.9	1.9	(D)	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	20.4	18.7	133	70	4.8	1.4	2.4	(D)	-	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	16.9	16.2	117	69	3.3	2.8	(D)	(D)	-	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	71.6	65.4	139	76	25.1	12.2	11.8	(D)	-	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	15.6	14.3	25	19	(D)	.2	(D)	(D)	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1.4	1.4	10	5	(D)	(D)	(D)	-	-	-	-	-
	OHIO	1 717.3	1 642.2	848	428	675.0	34.5	635.8	.8	-	-	2.6	1.0
20	FOOD AND KINDRED PRODUCTS. . .	31.3	25.6	148	110	7.9	5.2	2.5	-	-	-	(D)	(D)
21	TOBACCO PRODUCTS	(D)	(D)	2	2	(D)	-	(D)	-	-	-	-	-
22	TEXTILE MILL PRODUCTS.	2.0	1.8	12	11	(D)	(D)	(D)	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	.3	.3	7	3	(D)	(D)	-	-	-	-	-	-
25	FURNITURE AND FIXTURES	.8	.8	9	5	(D)	(D)	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	52.7	53.1	32	15	36.8	6.0	30.7	-	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	485.2	476.3	75	34	223.8	7.9	215.0	-	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	31.3	21.2	13	3	14.6	(D)	13.6	(D)	-	-	.1	-
30	RUBBER, MISC. PLASTICS PROD. .	22.8	22.5	56	29	5.5	.7	4.6	(D)	-	-	(D)	-
31	LEATHER AND LEATHER PRODUCTS .	(D)	(D)	4	3	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	27.5	21.5	68	18	5.8	1.1	4.5	-	-	-	.1	-
33	PRIMARY METAL INDUSTRIES . . .	971.6	931.8	115	29	359.1	2.3	354.1	(D)	-	-	1.1	(D)
34	FABRICATED METAL PRODUCTS. . .	9.5	9.5	95	69	2.8	1.5	1.2	(D)	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	14.5	13.1	66	33	3.9	1.2	2.7	(D)	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	40.9	40.3	73	32	8.2	4.7	(D)	(D)	-	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	24.4	22.4	58	29	5.7	3.1	(D)	-	-	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	1.1	.9	8	1	.3	(D)	(D)	-	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	.5	.5	7	2	(D)	(D)	(D)	-	-	-	-	-
	TENNESSEE.	428.0	409.6	164	89	128.2	5.9	121.4	(D)	-	-	.7	(D)
20	FOOD AND KINDRED PRODUCTS. . .	6.4	5.5	29	17	1.7	1.4	(D)	-	-	-	(D)	(D)
22	TEXTILE MILL PRODUCTS.	5.3	4.8	33	25	1.3	.7	(D)	(D)	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	80.0	77.3	6	4	63.3	(D)	(D)	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	302.1	293.3	18	7	51.4	.8	50.2	(D)	-	-	.4	(D)
30	RUBBER, MISC. PLASTICS PROD. .	8.6	7.9	9	6	.8	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	2.6	2.0	10	2	.8	(D)	.7	(D)	-	-	(D)	-
33	PRIMARY METAL INDUSTRIES . . .	9.5	8.6	13	3	5.0	(D)	4.8	-	-	-	(D)	(D)

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	SOUTH ATLANTIC--CON.								
38	INSTRUMENTS, RELATED PRODUCTS	.6	.4	(D)	-	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	.4	(D)	(D)	-	-	-	-
	GREAT LAKES	1 368.3	370.7	578.7	405.5	(D)	(D)	9.3	3.8
20	FOOD AND KINDRED PRODUCTS	74.8	48.5	20.0	.7	-	-	4.9	.5
22	TEXTILE MILL PRODUCTS	(D)	(D)	(D)	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS	(D)	.1	(D)	(D)	(D)	-	(D)	-
25	FURNITURE AND FIXTURES	(D)	.8	.1	-	(D)	-	(D)	-
26	PAPER AND ALLIED PRODUCTS	63.5	24.3	33.2	(D)	(D)	-	.1	(D)
28	CHEMICALS AND ALLIED PRODUCTS	303.9	165.9	109.3	27.1	-	-	.5	1.1
29	PETROLEUM AND COAL PRODUCTS	26.7	.4	(D)	-	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	22.9	13.3	7.4	1.8	(D)	-	.3	(D)
31	LEATHER AND LEATHER PRODUCTS	1.0	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	46.3	3.0	4.8	37.5	-	-	1.0	(Z)
33	PRIMARY METAL INDUSTRIES	741.8	30.8	377.9	331.3	-	-	1.8	.1
34	FABRICATED METAL PRODUCTS	13.3	11.0	2.0	(D)	-	-	(D)	.1
35	MACHINERY, EXCEPT ELECTRICAL	13.9	11.4	1.9	(D)	(D)	(D)	(Z)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	12.9	9.4	3.3	.1	-	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	40.2	24.7	14.5	(D)	-	-	.3	(D)
38	INSTRUMENTS, RELATED PRODUCTS	(D)	2.8	(D)	-	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	.8	(D)	-	-	-	(D)	-
	OHIO	967.1	122.2	835.2	2.9	-	-	4.5	2.3
20	FOOD AND KINDRED PRODUCTS	17.8	11.4	6.1	-	-	-	.1	.1
21	TOBACCO PRODUCTS	(D)	(D)	(D)	-	-	-	-	-
22	TEXTILE MILL PRODUCTS	(D)	(D)	(D)	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS	(D)	.2	(D)	-	-	-	(D)	-
25	FURNITURE AND FIXTURES	(D)	.5	(D)	-	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS	16.3	3.5	12.0	(D)	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	252.5	5.7	242.0	(D)	-	-	2.3	(D)
29	PETROLEUM AND COAL PRODUCTS	6.7	.6	5.1	(D)	-	-	.9	(D)
30	RUBBER, MISC. PLASTICS PROD	17.0	10.7	5.9	(D)	-	-	(D)	-
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	(D)	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	15.7	1.8	12.8	.8	-	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES	572.8	40.1	531.9	.5	-	-	.2	.1
34	FABRICATED METAL PRODUCTS	6.7	4.1	2.2	(D)	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	9.2	5.2	3.2	(D)	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	32.1	29.1	2.8	(D)	-	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	16.7	7.3	9.4	-	-	-	(Z)	-
38	INSTRUMENTS, RELATED PRODUCTS	.6	(D)	.5	-	-	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	.2	(D)	(D)	-	-	-	-
	TENNESSEE	281.4	14.7	263.7	.4	-	-	.4	2.2
20	FOOD AND KINDRED PRODUCTS	3.8	2.9	.3	(D)	-	-	(D)	(D)
22	TEXTILE MILL PRODUCTS	3.5	3.1	.4	(D)	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS	14.0	(D)	(D)	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS	241.8	.6	240.0	(D)	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	7.1	(D)	5.6	-	-	-	-	(D)
32	STONE, CLAY, GLASS PRODUCTS	1.2	.1	1.0	(D)	-	-	-	(D)
33	PRIMARY METAL INDUSTRIES	3.6	(D)	3.0	(D)	-	-	-	-

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	TENNESSEE--CON.												
34	FABRICATED METAL PRODUCTS. . .	.7	.6	7	4	.2	(D)	(D)	-	-	-	-	-
35	MACHINERY, EXCEPT ELECTRICAL .	.4	.4	5	3	.2	(D)	(D)	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	2.0	1.5	14	7	.7	.3	.5	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	.2	(D)	3	2	(D)	(D)	-	-	-	-	-	-
	UPPER MISSISSIPPI.	530.2	426.4	597	303	148.7	25.1	119.1	.4	-	-	3.6	.5
20	FOOD AND KINDRED PRODUCTS. . .	112.5	101.0	206	106	29.6	11.8	14.8	(D)	-	-	2.6	(D)
22	TEXTILE MILL PRODUCTS.	.6	.6	3	3	(D)	(D)	(D)	-	-	-	-	-
25	FURNITURE AND FIXTURES	.1	(D)	3	2	(D)	(D)	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	169.4	114.3	38	9	33.4	.9	32.6	-	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	67.3	58.6	44	23	37.4	5.4	31.8	-	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	8.7	5.9	1	1	(D)	(D)	(D)	-	-	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD. .	20.9	19.9	24	10	2.0	(D)	1.9	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	18.7	17.9	22	7	4.6	(D)	4.0	(D)	-	-	.3	-
33	PRIMARY METAL INDUSTRIES . . .	68.2	46.5	52	28	18.6	.8	17.6	(D)	-	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	6.7	6.4	56	38	1.7	1.1	.5	(D)	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	44.2	43.4	70	34	12.1	2.1	9.7	(D)	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	4.1	3.8	39	29	1.1	1.0	(D)	-	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT . . .	5.5	5.1	23	7	1.8	1.5	.3	-	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	.9	.9	7	4	(D)	(D)	-	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1.0	1.0	4	-	(D)	-	(D)	-	-	-	-	-
	LOWER MISSISSIPPI.	1 405.6	1 342.2	165	82	311.3	12.8	286.4	1.5	2.6	(D)	6.3	(D)
20	FOOD AND KINDRED PRODUCTS. . .	34.4	32.1	49	33	9.9	1.8	3.0	(D)	(D)	-	(D)	(D)
22	TEXTILE MILL PRODUCTS.	1.5	1.4	7	4	.6	(D)	(D)	(D)	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	6.7	2.3	12	5	(D)	(D)	(D)	-	-	-	(Z)	(D)
25	FURNITURE AND FIXTURES	.4	(D)	3	2	(D)	(D)	(D)	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	135.1	127.5	10	3	116.6	(D)	(D)	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	801.5	768.4	15	5	68.2	4.4	58.3	(D)	(D)	-	3.4	.7
29	PETROLEUM AND COAL PRODUCTS. .	235.3	221.0	5	2	(D)	(D)	103.2	-	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	6.8	6.7	11	4	(D)	(D)	(D)	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	2.9	2.1	5	4	.9	(D)	(D)	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	2.7	2.7	18	5	1.5	(D)	1.4	(D)	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	.9	.9	6	3	(D)	(D)	(D)	(D)	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	.5	.5	7	5	.2	(D)	.1	-	-	(D)	-	-
	SOURIS - RED - RAINY												
20	FOOD AND KINDRED PRODUCTS. . .	.9	.9	9	7	(D)	(D)	(D)	-	-	-	-	(D)
	MISSOURI	161.5	127.5	242	152	46.4	10.8	29.6	.4	-	-	5.2	.4
20	FOOD AND KINDRED PRODUCTS. . .	73.7	68.2	125	86	21.4	7.8	8.9	-	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	.5	.4	5	5	(D)	(D)	-	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	15.7	12.7	15	6	8.0	.7	7.1	(D)	-	-	(D)	-
29	PETROLEUM AND COAL PRODUCTS. .	43.5	20.9	5	1	8.2	-	7.3	(D)	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	4.4	4.1	10	2	1.3	(D)	(D)	(D)	-	-	-	-
33	PRIMARY METAL INDUSTRIES . . .	2.0	1.3	7	4	(D)	(D)	(D)	-	-	-	-	(D)
34	FABRICATED METAL PRODUCTS. . .	2.3	2.2	10	5	.6	(D)	(D)	(D)	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	1.6	1.5	16	11	.7	.6	(D)	-	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT . . .	2.5	2.2	10	3	.8	(D)	(D)	-	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	.8	.7	6	3	(D)	(D)	(D)	-	-	-	(D)	-
	ARKANSAS, WHITE AND RED.	322.1	218.2	196	116	168.4	6.8	119.2	34.5	-	(D)	7.2	(D)

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	TENNESSEE--CON.								
34	FABRICATED METAL PRODUCTS	.5	.4	(D)	-	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	.2	(D)	(D)	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	.8	.7	(D)	(D)	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	(D)	(D)	(D)	-	-	-	-
	UPPER MISSISSIPPI	277.6	112.6	155.7	4.0	-	-	2.3	3.1
20	FOOD AND KINDRED PRODUCTS	71.4	19.9	47.5	3.0	-	-	.7	.4
22	TEXTILE MILL PRODUCTS	(D)	(D)	(D)	-	-	-	-	-
25	FURNITURE AND FIXTURES	(D)	(D)	(D)	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	80.8	50.6	27.4	(D)	-	-	(D)	2.4
28	CHEMICALS AND ALLIED PRODUCTS	21.3	3.6	17.3	-	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	-	-	-	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD.	17.9	11.9	5.6	(D)	-	-	.2	(D)
32	STONE, CLAY, GLASS PRODUCTS	13.3	1.0	12.4	-	-	-	.1	-
33	PRIMARY METAL INDUSTRIES	27.9	(D)	25.2	-	-	-	-	(D)
34	FABRICATED METAL PRODUCTS	4.7	3.8	.8	(D)	-	-	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL	31.3	12.7	17.9	(D)	-	-	.7	(D)
36	ELECTRIC, ELECTRONIC EQUIP	2.8	2.3	.4	(D)	-	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	3.3	2.2	1.0	(D)	-	-	.1	(D)
38	INSTRUMENTS, RELATED PRODUCTS	(D)	.8	(D)	-	-	-	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	(D)	.3	(D)	(D)	-	-	(D)	-
	LOWER MISSISSIPPI	1 031.0	33.0	973.9	6.4	(D)	-	(D)	9.5
20	FOOD AND KINDRED PRODUCTS	22.1	3.4	14.4	(D)	-	-	(D)	(D)
22	TEXTILE MILL PRODUCTS	.7	(D)	(D)	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS	(D)	.1	.3	(D)	-	-	.2	(D)
25	FURNITURE AND FIXTURES	(D)	(D)	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	10.9	(D)	10.1	-	-	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS	700.2	.6	691.3	(D)	(D)	-	.2	.4
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	108.9	(D)	(D)	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	(D)	.5	(D)	-	-	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	1.1	(D)	(D)	-	-	-	-	-
34	FABRICATED METAL PRODUCTS	1.2	(D)	.7	(D)	-	-	-	-
35	MACHINERY, EXCEPT ELECTRICAL	(D)	(D)	(D)	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	.3	(D)	(D)	-	-	-	-	-
	SOURIS - RED - RAINY								
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	-	(D)	-	-	-	-
	MISSOURI	81.1	28.4	51.3	.1	-	-	.5	.9
20	FOOD AND KINDRED PRODUCTS	46.9	16.6	30.1	(D)	-	-	.1	(D)
26	PAPER AND ALLIED PRODUCTS	(D)	(D)	-	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS	4.7	.7	4.0	(D)	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	12.7	.2	(D)	-	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	2.8	.5	2.3	(D)	-	-	(D)	-
33	PRIMARY METAL INDUSTRIES	(D)	.3	(D)	-	-	-	(D)	-
34	FABRICATED METAL PRODUCTS	1.7	.8	(D)	-	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.8	.5	(D)	-	-	-	.1	(D)
37	TRANSPORTATION EQUIPMENT	1.4	1.1	.5	-	-	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	(D)	.3	(D)	-	-	-	(D)	-
	ARKANSAS, WHITE AND RED	49.8	21.1	14.2	11.2	-	-	2.2	.8

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	ARKANSAS, WHITE AND RED--CON.												
20	FOOD AND KINDRED PRODUCTS. . .	16.0	12.1	75	60	8.1	4.7	(D)	(D)	-	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	36.5	27.5	4	1	21.7	(D)	(D)	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	33.1	26.7	12	4	13.7	(D)	7.7	(D)	-	-	5.8	-
30	RUBBER, MISC. PLASTICS PROD. .	1.9	1.7	13	8	1.1	.4	(D)	(D)	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	5.5	3.0	9	4	.4	(D)	(D)	(D)	-	-	(D)	-
33	PRIMARY METAL INDUSTRIES . . .	75.7	71.5	14	10	(D)	(D)	21.6	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	1.5	1.2	7	3	.7	(D)	(D)	(D)	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	6.3	6.1	11	3	(D)	.2	(D)	-	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP . .	1.7	1.3	12	5	.5	(D)	.1	(D)	-	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	1.6	1.4	13	8	.3	.2	(D)	(D)	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	.5	.4	5	1	(D)	(D)	-	-	-	-	-	-
	TEXAS GULF	1 247.5	1 025.5	248	178	250.7	50.9	134.7	1.2	47.5	-	5.3	10.6
20	FOOD AND KINDRED PRODUCTS. . .	16.6	14.5	90	82	3.6	2.5	-	(D)	-	-	(D)	(D)
22	TEXTILE MILL PRODUCTS.	1.3	1.2	4	2	(D)	-	(D)	(D)	-	-	-	(D)
24	LUMBER AND WOOD PRODUCTS . . .	2.0	1.3	7	2	.5	-	(D)	-	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS. . .	51.0	47.3	2	-	33.7	-	33.7	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	853.8	684.8	32	19	112.8	42.6	45.5	(D)	20.9	-	2.5	(D)
29	PETROLEUM AND COAL PRODUCTS. .	193.2	159.3	19	6	46.9	(D)	7.9	-	26.3	-	(D)	9.9
30	RUBBER, MISC. PLASTICS PROD. .	4.0	2.4	7	4	(D)	(D)	(D)	-	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	5.5	1.6	17	12	.8	(Z)	(D)	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	7.2	7.1	20	18	.6	.4	(D)	-	-	-	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	1.4	1.2	20	14	.7	(D)	(D)	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	2.8	2.6	13	8	(D)	1.6	(D)	-	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT . . .	5.7	5.6	12	8	.7	(D)	-	(D)	-	-	-	-
	RIO GRANDE												
20	FOOD AND KINDRED PRODUCTS. . .	1.1	1.0	9	7	(D)	(D)	-	-	-	-	(D)	-
29	PETROLEUM AND COAL PRODUCTS. .	1.6	(D)	1	-	(D)	-	-	(D)	-	-	(D)	-
	LOWER COLORADO	26.3	15.7	36	19	3.9	1.6	(D)	(D)	-	-	.4	(D)
20	FOOD AND KINDRED PRODUCTS. . .	1.8	1.6	7	5	(D)	(D)	-	-	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	(D)	-	-	-	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	1.7	.6	4	-	(D)	-	-	-	-	-	-	(D)
33	PRIMARY METAL INDUSTRIES . . .	12.5	5.4	5	2	1.8	(D)	(D)	(D)	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	.6	(D)	3	2	(D)	(D)	-	-	-	-	-	-
	GREAT BASIN.	64.9	12.8	22	12	4.9	.7	.4	(D)	(D)	-	.5	(D)
20	FOOD AND KINDRED PRODUCTS. . .	2.4	1.5	8	6	.5	(D)	(D)	(D)	-	-	(D)	-
29	PETROLEUM AND COAL PRODUCTS. .	2.1	.9	3	1	(D)	(D)	(D)	-	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	(D)	.3	6	2	(D)	(D)	(D)	-	-	-	(D)	-
	COLUMBIA - NORTH PACIFIC	605.0	577.7	250	79	296.9	13.8	183.9	8.9	69.1	10.2	6.0	5.0
20	FOOD AND KINDRED PRODUCTS. . .	36.7	34.6	101	42	17.6	2.8	4.2	-	4.5	-	2.9	3.2
24	LUMBER AND WOOD PRODUCTS . . .	89.4	80.3	60	11	29.1	(Z)	25.5	1.6	(D)	-	.9	(D)
26	PAPER AND ALLIED PRODUCTS. . .	243.4	228.1	25	2	187.9	(D)	110.6	-	57.9	9.3	.2	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	161.8	152.5	13	3	9.8	.2	(D)	(D)	(D)	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	5.5	3.5	1	-	(D)	(D)	-	-	(D)	(D)	-	-
30	RUBBER, MISC. PLASTICS PROD. .	.1	(D)	3	3	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	5.9	19.8	7	3	3.0	(D)	(D)	-	(D)	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	57.3	54.1	13	5	45.0	(D)	39.0	(D)	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	.7	.7	6	4	(D)	(D)	-	-	-	-	-	-

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	ARKANSAS, WHITE AND RED--CON.								
20	FOOD AND KINDRED PRODUCTS.	4.0	2.7	1.3	-	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	5.7	1.1	(D)	-	-	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	13.0	.8	6.0	(D)	-	-	1.0	(D)
30	RUBBER, MISC. PLASTICS PROD.	.6	.3	(D)	(D)	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS.	2.6	(D)	1.2	(D)	-	-	1.0	-
33	PRIMARY METAL INDUSTRIES	(D)	10.7	(D)	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS.	.5	.2	(D)	(D)	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	(D)	3.2	.3	(D)	-	-	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.8	.6	(D)	-	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT	1.1	.8	(D)	-	-	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	(D)	(D)	-	-	-	-	-
	TEXAS GULF	774.8	55.2	656.0	8.0	36.6	-	1.7	17.1
20	FOOD AND KINDRED PRODUCTS.	10.9	5.2	(D)	(D)	-	-	(D)	(Z)
22	TEXTILE MILL PRODUCTS.	(D)	.1	-	-	-	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	.8	.2	(D)	(D)	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	13.6	(D)	-	-	-	-	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	572.1	1.2	527.0	(D)	32.2	-	(D)	2.8
29	PETROLEUM AND COAL PRODUCTS.	112.4	36.1	(D)	(D)	(D)	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	(D)	.2	(D)	-	-	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS.	.8	.3	(D)	(D)	-	-	(Z)	(D)
34	FABRICATED METAL PRODUCTS.	6.6	(D)	-	-	-	-	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	.6	.5	(D)	-	-	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	(D)	.6	-	-	-	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	4.9	4.1	(D)	-	(D)	-	-	-
	RIO GRANDE								
20	FOOD AND KINDRED PRODUCTS.	(D)	.3	(D)	(D)	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	(D)	(D)	-	(D)	-	-	-	-
	LOWER COLORADO	11.7	1.8	(D)	(D)	-	-	.3	4.1
20	FOOD AND KINDRED PRODUCTS.	(D)	.3	-	(D)	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS.	(D)	(D)	(D)	(D)	-	-	.1	(D)
33	PRIMARY METAL INDUSTRIES	3.5	(D)	(D)	-	-	-	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	(D)	(D)	-	-	-	-	-	(D)
	GREAT BASIN.	7.9	.6	(D)	(D)	-	-	2.3	4.5
20	FOOD AND KINDRED PRODUCTS.	1.1	.4	(D)	(D)	-	-	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	(D)	(D)	-	-	-	-	-	(D)
32	STONE, CLAY, GLASS PRODUCTS.	(D)	(Z)	-	-	-	-	.1	-
	COLUMBIA - NORTH PACIFIC	280.8	10.0	207.2	20.6	25.8	(D)	7.7	(D)
20	FOOD AND KINDRED PRODUCTS.	17.0	5.7	6.8	(D)	(D)	-	2.4	1.4
24	LUMBER AND WOOD PRODUCTS	51.3	1.1	38.4	2.5	1.8	-	4.0	3.5
26	PAPER AND ALLIED PRODUCTS.	40.2	.5	14.5	-	20.8	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	142.7	(D)	141.6	-	(D)	-	.7	.2
29	PETROLEUM AND COAL PRODUCTS.	(D)	(D)	(D)	-	-	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	(D)	(D)	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS.	16.9	(D)	(D)	16.1	-	-	.3	(D)
33	PRIMARY METAL INDUSTRIES	9.0	.5	5.1	(D)	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS.	(D)	(D)	(D)	-	-	-	-	-

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons, except where noted. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged	Number of establishments-- Discharging to public sewers	Number of establishments-- Discharging exclusively to public sewers	Water treated by point of discharge: Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	COLUMBIA - NORTH PACIFIC--CON.												
35	MACHINERY, EXCEPT ELECTRICAL .	.2	.2	5	3	-	-	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	3.1	2.9	13	5	(D)	(D)	(D)	(D)	-	-	-	-
	CALIFORNIA - SOUTH PACIFIC . . .	310.4	245.0	527	379	106.2	25.9	19.6	.1	49.2	5.5	2.4	3.4
20	FOOD AND KINDRED PRODUCTS. . .	56.5	48.3	193	148	12.8	9.1	(D)	(D)	(D)	(D)	.6	2.4
22	TEXTILE MILL PRODUCTS.	1.2	.9	9	8	(D)	(D)	-	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	37.4	16.0	6	2	11.3	(D)	11.0	-	-	-	(D)	-
26	PAPER AND ALLIED PRODUCTS. . .	39.0	38.1	17	13	14.2	1.1	(D)	-	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	26.1	13.9	51	38	(D)	2.5	(D)	(D)	1.8	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	80.6	69.1	20	13	42.8	5.0	(D)	-	37.1	(D)	.5	(D)
31	LEATHER AND LEATHER PRODUCTS .	.2	(D)	4	4	(D)	(D)	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	21.0	16.7	26	15	1.6	.3	(D)	-	-	(D)	.2	(D)
33	PRIMARY METAL INDUSTRIES . . .	17.8	13.1	24	16	(D)	1.1	(D)	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS. . .	2.9	2.7	42	37	1.7	1.6	-	-	-	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL .	2.0	1.8	19	9	.4	.4	-	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	5.5	5.3	51	34	2.8	2.8	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT . . .	6.4	5.2	39	23	1.6	1.4	(D)	-	(D)	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	.8	.7	13	9	.2	.1	(D)	-	-	-	(D)	-
	ALASKA												
20	FOOD AND KINDRED PRODUCTS. . .	1.3	1.3	4	1	(D)	(D)	-	-	(D)	(D)	-	-
	HAWAII	111.4	88.1	15	7	64.0	(D)	(D)	-	-	34.5	15.7	12.8
20	FOOD AND KINDRED PRODUCTS. . .	108.5	85.5	12	6	63.5	(D)	(D)	-	-	(D)	15.7	12.8
34	FABRICATED METAL PRODUCTS. . .	(D)	(D)	1	1	(D)	(D)	(D)	-	-	(D)	(D)	(D)

See footnotes at end of table.

Table 6c. Water Discharged, Treated and Untreated, by Point of Discharge, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water untreated by point of discharge							
		Total	Public utility sewer	Streams and rivers	Lakes and ponds	Bays and estuaries	Ocean	Ground (wells, spray, seepage)	Transferred to other users
	COLUMBIA - NORTH PACIFIC--CON.								
35	MACHINERY, EXCEPT ELECTRICAL	.2	.2	(D)	-	-	-	(D)	-
37	TRANSPORTATION EQUIPMENT	(D)	1.3	.3	(D)	(D)	-	(D)	(D)
	CALIFORNIA - SOUTH PACIFIC	138.8	47.0	9.3	.2	37.8	27.7	9.0	7.7
20	FOOD AND KINDRED PRODUCTS	35.5	14.3	1.0	(D)	(D)	(D)	3.9	6.1
22	TEXTILE MILL PRODUCTS	(D)	(D)	-	-	-	-	-	(D)
24	LUMBER AND WOOD PRODUCTS	4.7	.9	1.9	-	(D)	(D)	1.8	(D)
26	PAPER AND ALLIED PRODUCTS	23.9	3.2	(D)	-	(D)	(D)	-	(D)
28	CHEMICALS AND ALLIED PRODUCTS	(D)	2.3	(D)	(D)	1.2	(D)	1.9	(D)
29	PETROLEUM AND COAL PRODUCTS	26.3	2.1	-	(D)	(D)	-	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	15.1	.4	(D)	-	-	(D)	.7	1.2
33	PRIMARY METAL INDUSTRIES	(D)	4.4	-	(D)	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS	1.1	(D)	-	-	-	-	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL	1.4	.9	(D)	(D)	(D)	-	.1	(D)
36	ELECTRIC, ELECTRONIC EQUIP	2.5	1.8	(D)	-	-	-	.2	(D)
37	TRANSPORTATION EQUIPMENT	3.6	2.5	.5	-	(D)	(D)	(Z)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	.5	.5	(D)	-	-	-	(D)	-
	ALASKA								
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	(D)	-	(D)	-	-	-
	HAWAII	24.1	.3	(D)	-	(D)	(D)	3.0	(D)
20	FOOD AND KINDRED PRODUCTS	22.0	.3	(D)	-	(D)	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Water use regions or major industry groups which have been omitted from the table have total water discharge of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1]See appendix H for maps and appendix I for definitions.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	ALL INDUSTRIES, TOTAL	12 991.7	11 682.2	4 709.2	2 477.2	316.2	46.1	1 425.2	57.8	165.6	221.1
20	FOOD AND KINDRED PRODUCTS	739.6	649.2	242.9	123.5	22.2	1.1	36.1	7.7	9.5	42.8
201	MEAT PRODUCTS	112.5	104.9	52.4	42.1	.1	.2	2.8	2.4	2.4	2.1
2011	MEATPACKING PLANTS	77.5	72.5	31.4	24.9	(D)	.1	1.6	1.6	1.6	(D)
2013	SAUSAGES AND OTHER PREPARED MEATS	5.2	4.5	(D)	1.9	(D)	.1	.2	(D)	.1	(D)
2016	POULTRY DRESSING PLANTS	28.1	26.2	18.2	15.3	-	(Z)	.8	.6	.7	.6
2017	POULTRY AND EGG PROCESSING	1.7	1.7	(D)	.4	(D)	-	(Z)	(D)	(Z)	-
202	DAIRY PRODUCTS	42.2	35.9	5.0	2.7	(D)	(D)	.8	.2	.4	.5
2021	CREAMERY BUTTER	1.4	1.4	(D)	(D)	(D)	-	(Z)	(Z)	(Z)	-
2022	CHEESE, NATURAL AND PROCESSED	5.9	5.5	.8	.5	-	-	(Z)	.1	.1	.1
2023	CONDENSED AND EVAPORATED MILK	11.8	12.0	1.7	.9	(D)	(D)	.5	.1	.1	.1
2024	ICE CREAM AND FROZEN DESSERTS	2.0	1.4	(D)	(D)	-	(D)	(Z)	(Z)	(Z)	-
2026	FLUID MILK	21.1	15.5	2.3	1.3	-	(Z)	.3	.1	.2	.3
203	PRESERVED FRUITS AND VEGETABLES	112.7	100.7	41.5	33.5	(D)	(D)	3.1	.7	1.8	1.8
2032	CANNED SPECIALTIES	17.2	13.3	6.0	5.1	-	(Z)	.2	.1	.3	.4
2033	CANNED FRUITS AND VEGETABLES	43.1	38.8	15.0	11.1	(D)	(D)	1.9	.3	.8	.6
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	4.0	3.8	1.7	1.5	-	(D)	(D)	.1	(Z)	(D)
2035	PICKLES, SAUCES, SALAD DRESSINGS	2.7	2.3	1.1	.6	-	(Z)	.2	(Z)	.1	.3
2037	FROZEN FRUITS AND VEGETABLES	40.1	37.9	15.5	13.5	-	(Z)	.8	.1	.5	.3
2038	FROZEN SPECIALTIES	5.7	4.6	2.1	1.7	-	-	(D)	.1	.1	(D)
204	GRAIN MILL PRODUCTS	88.5	82.2	21.7	10.9	(D)	.6	7.3	(D)	1.5	1.0
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	.8	.6	(D)	(D)	-	-	(D)	(D)	(Z)	-
2043	CEREAL BREAKFAST FOODS	5.1	4.7	1.9	(D)	(D)	(D)	(D)	(D)	(Z)	(D)
2044	RICE MILLING	(D)	(D)	(D)	(D)	-	-	(D)	-	(Z)	-
2046	WET CORN MILLING	78.8	73.8	18.9	9.9	(D)	(D)	6.3	(D)	1.4	(D)
2047	DOG, CAT, AND OTHER PET FOOD	2.2	1.8	.7	.3	-	-	.3	(D)	.1	(D)
2048	PREPARED FEEDS, NEC	1.3	.9	(D)	(D)	-	-	-	(D)	-	(D)
205	BAKERY PRODUCTS	4.6	3.5	.4	.2	-	(D)	(D)	(Z)	.1	(D)
2051	BREAD, CAKE, AND RELATED PRODUCTS	2.7	2.1	.2	.1	-	(D)	(D)	(Z)	(D)	(D)
2052	COOKIES AND CRACKERS	1.9	1.5	.2	(Z)	-	(D)	(D)	(Z)	(D)	(D)
206	SUGAR, CONFECTIONERY PRODUCTS	207.1	175.3	89.3	16.9	19.9	.1	15.1	.3	1.8	35.3
2061	RAW CANE SUGAR	118.4	94.1	67.6	(D)	19.9	(D)	4.2	(D)	1.4	29.4
2062	CANE SUGAR REFINING	56.0	53.8	8.5	1.6	(D)	-	(D)	(D)	(D)	(D)
2063	BEET SUGAR	21.3	16.7	12.6	2.2	-	(D)	9.1	(D)	.2	1.1
2065	CONFECTIONERY PRODUCTS	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)
2066	CHOCOLATE AND COCOA PRODUCTS	6.2	6.1	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
207	FATS AND OILS	43.6	37.0	13.3	3.8	-	(Z)	3.8	3.2	1.1	1.2
2074	COTTONSEED OIL MILLS	(D)	(D)	(D)	(Z)	-	(Z)	(D)	(D)	(Z)	(Z)
2075	SOYBEAN OIL MILLS	20.9	15.7	6.1	2.8	-	-	2.4	.3	.6	.1
2077	ANIMAL AND MARINE FATS AND OILS	3.2	4.6	(D)	.2	-	-	(D)	(D)	.1	.1
2079	SHORTENING AND COOKING OILS	17.4	14.9	6.2	.5	-	(Z)	1.0	3.1	.5	.9
208	BEVERAGES	105.0	88.0	13.4	7.9	(D)	(D)	2.3	.6	.5	1.1
2082	MALT BEVERAGES	73.4	63.0	10.0	(D)	(D)	(D)	2.4	(Z)	.3	.6
2083	MALT	7.9	6.9	1.7	1.5	-	(D)	(D)	(D)	(D)	-
2084	WINES, BRANDY, AND BRANDY SPIRITS	2.0	1.7	.4	(Z)	-	(D)	.1	(D)	(D)	(D)
2085	DISTILLED LIQUOR, EXCEPT BRANDY	9.0	7.8	.6	.4	-	-	(D)	.2	(D)	-
2086	BOTTLED AND CANNED SOFT DRINKS	8.2	4.6	.5	.4	(D)	-	(Z)	.1	(D)	(D)
2087	FLAVORING EXTRACTS, SIRUPS, NEC	4.4	4.1	.1	.1	-	(D)	(D)	(D)	(D)	(D)
209	MISC. FOODS, KINDRED PRODUCTS	23.5	21.9	6.1	4.7	-	(D)	(D)	.1	.1	.1
2091	CANNED AND CURED SEAFOODS	4.2	4.2	1.3	1.4	-	(Z)	(D)	(Z)	(D)	(Z)
2092	FRESH OR FROZEN PACKAGED FISH	2.6	2.3	1.8	1.5	-	(D)	(Z)	.1	(D)	(Z)
2095	ROASTED COFFEE	(D)	1.4	(D)	(D)	-	(Z)	(D)	(Z)	(D)	(Z)
2097	MANUFACTURED ICE	1.7	(D)	(D)	(D)	-	-	(D)	-	-	-
2098	MACARONI AND SPAGHETTI	(D)	(D)	-	-	-	-	-	-	-	-
2099	FOOD PREPARATIONS, NEC	13.3	12.5	2.8	1.7	-	(Z)	1.0	(Z)	(Z)	.1
21	TOBACCO PRODUCTS	4.5	3.3	1.1	.8	-	(D)	.2	(D)	.1	.1
2111	CIGARETTES	3.2	2.2	(Z)	-	-	-	-	-	-	(Z)
2141	TOBACCO STEMMING AND REDRYING	(D)	(D)	1.1	.8	-	(D)	.2	(Z)	.1	(D)
22	TEXTILE MILL PRODUCTS	162.9	147.4	56.9	48.9	.1	.9	2.0	1.0	2.3	1.6
2211	WEAVING MILLS, COTTON	18.2	14.4	5.2	3.9	(D)	.2	.2	.2	(D)	.7
2221	WEAVING MILLS, MANMADE FIBER, SILK	30.0	25.7	6.0	4.9	(D)	.2	.3	.3	.2	(D)
2231	WEAVING AND FINISHING MILLS, WOOL	3.9	3.9	(D)	(D)	-	(Z)	(D)	(Z)	.1	(D)
2241	NARROW FABRIC MILLS	.4	.4	(D)	(D)	-	-	-	-	-	-
225	KNITTING MILLS	20.9	20.1	11.0	10.1	(D)	(D)	.1	.1	.4	.2
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	(D)	(D)	(D)	(D)	-	(D)	-	(Z)	(Z)	-
2252	HOSIERY, NEC	.9	(D)	(D)	(D)	-	-	-	(Z)	(Z)	-
2253	KNIT OUTERWEAR MILLS	1.5	1.5	(D)	(D)	-	-	-	(Z)	(Z)	-
2254	KNIT UNDERWEAR MILLS	1.5	1.5	(D)	(D)	-	-	-	(Z)	(Z)	(D)
2257	CIRCULAR KNIT FABRIC MILLS	12.8	12.9	7.9	7.6	-	(D)	(Z)	.1	.2	(D)
2258	WARP KNIT FABRIC MILLS	3.5	3.1	2.5	2.0	(D)	(Z)	.1	(Z)	.2	(D)
226	TEXTILE FINISHING, EXCEPT WOOL	50.8	47.2	23.0	19.8	(D)	(D)	1.0	.2	.9	.5
2261	FINISHING PLANTS, COTTON	11.9	10.9	4.5	4.3	-	(D)	(D)	(Z)	.1	-
2262	FINISH. PLTS, MANMADE FIBER, SILK	34.4	31.9	16.9	14.1	(D)	(D)	.8	.2	.7	.5
2269	FINISHING PLANTS, NEC	4.5	4.4	1.6	1.4	(D)	(Z)	(D)	(Z)	(Z)	(Z)
227	FLOOR COVERING MILLS	22.4	21.1	3.2	2.9	-	(D)	(D)	(Z)	.2	(D)
2272	TUFTED CARPETS AND RUGS	22.0	20.8	3.2	2.9	-	(D)	(D)	(Z)	.2	(D)
228	YARN AND THREAD MILLS	8.8	7.5	4.1	3.6	-	(D)	.3	.1	.1	(D)
2281	YARN MILLS, EXCEPT WOOL	5.3	4.5	1.9	1.5	-	(D)	.2	.1	.1	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
	ALL INDUSTRIES, TOTAL	6 973.0	1 018.7	1 366.7	140.2	3 932.4	204.6	108.7	201.8
20	FOOD AND KINDRED PRODUCTS	406.5	112.8	34.5	10.4	195.4	14.8	11.7	26.9
201	MEAT PRODUCTS	52.5	16.8	(D)	(D)	22.2	3.1	1.7	6.7
2011	MEATPACKING PLANTS	41.1	10.9	.1	1.3	19.5	1.7	1.3	6.3
2013	SAUSAGES AND OTHER PREPARED MEATS	(D)	.4	(D)	(Z)	1.0	.3	.1	(D)
2016	POULTRY DRESSING PLANTS	8.0	5.4	(D)	(D)	.5	1.1	.3	.4
2017	POULTRY AND EGG PROCESSING	(D)	.2	-	-	.7	(Z)	.2	(D)
202	DAIRY PRODUCTS	30.9	6.0	.3	.2	16.1	2.8	1.9	3.6
2021	CREAMERY BUTTER	(D)	.1	-	-	.9	(D)	.1	.2
2022	CHEESE, NATURAL AND PROCESSED	4.7	.4	(D)	(D)	3.1	.2	.4	.6
2023	CONDENSED AND EVAPORATED MILK	10.3	1.0	(D)	(D)	7.5	.8	.4	.6
2024	ICE CREAM AND FROZEN DESSERTS	(D)	.3	(D)	-	.5	(D)	.1	.2
2026	FLUID MILK	13.2	4.2	.3	.1	3.9	1.6	1.0	2.1
203	PRESERVED FRUITS AND VEGETABLES	59.2	27.9	(D)	(D)	22.2	1.7	2.3	4.0
2032	CANNED SPECIALTIES	7.3	3.2	(D)	(D)	2.8	.3	.2	.6
2033	CANNED FRUITS AND VEGETABLES	23.8	14.8	(D)	(D)	6.3	.8	1.1	.4
2034	DEHYD. FRUITS, VEGETABLES, SOUPS	2.1	1.5	-	(D)	.2	(D)	.1	.2
2035	PICKLES, SAUCES, SALAD DRESSINGS	1.2	.4	-	(D)	.4	(D)	.1	.1
2037	FROZEN FRUITS AND VEGETABLES	22.4	7.5	(D)	-	11.4	(D)	.7	2.6
2038	FROZEN SPECIALTIES	2.5	.6	(D)	(D)	1.2	.2	.1	.1
204	GRAIN MILL PRODUCTS	60.5	4.3	(D)	(D)	47.5	1.6	.8	1.1
2041	FLOUR, OTHER GRAIN MILL PRODUCTS	(D)	(D)	-	(D)	(D)	(Z)	(D)	(D)
2043	CEREAL BREAKFAST FOODS	2.8	.8	-	.4	.7	.4	.3	.2
2044	RICE MILLING	(D)	(D)	-	-	(D)	(D)	(D)	(D)
2046	WET CORN MILLING	54.8	2.9	(D)	(D)	45.2	.8	.3	.7
2047	DOG, CAT, AND OTHER PET FOOD	1.1	.1	-	(D)	.7	.2	(D)	.1
2048	PREPARED FEEDS, NEC	(D)	(D)	-	-	.7	(Z)	(Z)	-
205	BAKERY PRODUCTS	3.2	.9	(D)	.5	.8	.5	(D)	.4
2051	BREAD, CAKE, AND RELATED PRODUCTS	1.9	.8	(D)	(Z)	.2	.4	.1	(D)
2052	COOKIES AND CRACKERS	1.3	(D)	-	.5	.6	.2	(Z)	(D)
206	SUGAR, CONFECTIONERY PRODUCTS	86.1	29.8	15.7	2.7	34.3	1.0	.8	1.8
2061	RAW CANE SUGAR	26.6	5.4	14.7	(D)	(D)	.2	(D)	.5
2062	CANE SUGAR REFINING	45.3	22.8	(D)	.6	(D)	.2	.2	(D)
2063	BEET SUGAR	4.1	1.3	-	-	3.4	.1	(D)	(D)
2065	CONFECTIONERY PRODUCTS	4.0	(D)	(D)	2.4	.8	.4	.1	.9
2066	CHOCOLATE AND COCOA PRODUCTS	(D)	(D)	-	(D)	6.8	(D)	.1	(D)
207	FATS AND OILS	23.7	1.6	(D)	(D)	18.7	1.0	2.1	.6
2074	COTTONSEED OIL MILLS	(D)	(D)	-	(D)	(D)	(Z)	(D)	(D)
2075	SOYBEAN OIL MILLS	9.6	.4	-	(D)	8.9	(D)	.3	.4
2077	ANIMAL AND MARINE FATS AND OILS	3.8	(D)	(D)	-	3.7	(Z)	.2	(D)
2079	SHORTENING AND COOKING OILS	8.7	1.2	(D)	(D)	4.5	.9	1.6	.2
208	BEVERAGES	74.6	19.8	12.5	4.0	26.3	2.2	1.5	8.1
2082	MALT BEVERAGES	52.9	15.7	12.1	.2	18.0	.8	1.0	4.8
2083	MALT	5.2	1.0	-	3.5	.7	(Z)	(D)	(D)
2084	WINES, BRANDY, AND BRANDY SPIRITS	1.3	.2	-	(D)	.5	.1	(D)	.3
2085	DISTILLED LIQUOR, EXCEPT BRANDY	7.1	.2	(D)	.2	6.2	.2	.2	(D)
2086	BOTTLED AND CANNED SOFT DRINKS	4.1	2.2	(D)	(D)	.2	.9	.1	.4
2087	FLAVORING EXTRACTS, SIRUPS, NEC	4.0	.2	-	-	.9	.2	.1	2.4
209	MISC. FOODS, KINDRED PRODUCTS	15.8	5.8	(D)	(D)	7.7	.6	.3	.7
2091	CANNED AND CURED SEAFOODS	2.8	.6	-	-	2.0	(Z)	(D)	(D)
2092	FRESH OR FROZEN PACKAGED FISH	.6	(D)	-	(D)	(D)	(Z)	(D)	(D)
2095	ROASTED COFFEE	(D)	.2	(D)	(D)	.5	.1	.1	(D)
2097	MANUFACTURED ICE	1.4	.2	-	-	1.2	(D)	-	(D)
2098	MACARONI AND SPAGHETTI	(D)	(D)	-	(D)	(D)	(D)	-	-
2099	FOOD PREPARATIONS, NEC	9.8	4.6	(D)	(D)	3.7	.5	.2	.3
21	TOBACCO PRODUCTS	2.2	.9	-	.2	(D)	(D)	(Z)	(D)
2111	CIGARETTES	2.1	.9	-	.2	(D)	(D)	(Z)	(D)
2141	TOBACCO STEMMING AND REDRYING	(D)	-	-	-	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	90.5	58.8	(D)	4.0	(D)	3.3	2.7	10.3
2211	WEAVING MILLS, COTTON	9.2	3.3	(D)	1.8	.5	.6	(D)	.4
2221	WEAVING MILLS, MANMADE FIBER, SILK	19.7	7.2	(D)	1.0	.7	.7	(D)	9.7
2231	WEAVING AND FINISHING MILLS, WOOL	(D)	1.0	-	-	(D)	(Z)	(D)	-
2241	NARROW FABRIC MILLS	(D)	.2	-	(D)	(D)	(Z)	(Z)	(D)
225	KNITTING MILLS	9.1	7.1	-	(D)	(D)	.4	.5	.1
2251	WOMEN'S HOSIERY, EXCEPT SOCKS	.4	.2	-	(D)	(D)	.1	(D)	(D)
2252	HOSIERY, NEC	(D)	.5	-	(D)	(D)	(Z)	.1	-
2253	KNIT OUTERWEAR MILLS	(D)	.9	-	(D)	(D)	(Z)	.1	(D)
2254	KNIT UNDERWEAR MILLS	(D)	.8	-	(D)	(D)	.1	.1	(D)
2257	CIRCULAR KNIT FABRIC MILLS	5.0	4.2	-	.1	.4	.1	.2	.1
2258	WARP KNIT FABRIC MILLS	.6	.5	-	(Z)	.1	(Z)	(D)	(D)
226	TEXTILE FINISHING, EXCEPT WOOL	24.3	21.8	-	(D)	(D)	.4	.9	.2
2261	FINISHING PLANTS, COTTON	6.5	5.1	-	(D)	(D)	.1	.2	(D)
2262	FINISH. PLTS, MANMADE FIBER, SILK	15.0	13.7	-	.1	.3	.2	.6	.1
2269	FINISHING PLANTS, NEC	2.7	2.4	-	(Z)	(D)	.1	.2	(D)
227	FLOOR COVERING MILLS	17.9	17.0	-	(D)	(D)	.1	.3	(Z)
2272	TUFTED CARPETS AND RUGS	17.6	16.8	-	(D)	(D)	.1	.2	(Z)
228	YARN AND THREAD MILLS	3.5	2.1	(D)	.4	(D)	.4	.2	(D)
2281	YARN MILLS, EXCEPT WOOL	2.6	1.5	(D)	.3	(D)	.4	.2	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
22	TEXTILE MILL PRODUCTS--CON.										
228	YARN AND THREAD MILLS--CON.										
2282	THROWING AND WINDING MILLS	(D)	1.2	.6	(D)	-	(D)	(D)	(D)	-	(D)
2284	THREAD MILLS	2.0	(D)	1.6	(D)	-	(D)	(D)	(D)	(D)	-
229	MISCELLANEOUS TEXTILE GOODS	7.6	7.1	1.6	1.1	-	(D)	.1	.1	.2	(D)
2294	PROCESSED TEXTILE WASTE	.1	.1	(D)	-	-	-	-	(D)	-	-
2295	COATED FABRICS, NOT RUBBERIZED	3.9	3.7	.1	(D)	-	(D)	(D)	-	(D)	-
2296	TIRE CORD AND FABRIC	.4	.3	(D)	(D)	-	(D)	(D)	(D)	(D)	-
2297	NONWOVEN FABRICS	2.5	2.3	1.2	(D)	-	(D)	(D)	(D)	(D)	(D)
2298	CORDAGE AND TWINE	(D)	(D)	-	-	-	-	-	-	-	-
2299	TEXTILE GOODS, NEC	.3	.3	(D)	(D)	-	(D)	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	156.9	112.1	50.3	33.4	4.7	.1	2.1	.4	1.1	8.5
242	SAWMILLS AND PLANING MILLS	122.4	82.9	36.7	23.8	3.9	(D)	1.4	(D)	.7	6.5
2421	SAWMILLS, PLANING MILLS, GENERAL	(D)	(D)	36.7	23.8	3.9	(D)	1.4	(D)	.7	6.5
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	13.8	10.6	1.9	.5	(D)	(D)	.3	.2	.3	.9
2435	HARDWOOD VENEER AND PLYWOOD	2.0	1.5	(D)	(Z)	-	-	(D)	(D)	(D)	(Z)
2436	SOFTWOOD VENEER AND PLYWOOD	11.5	8.8	1.6	.5	(D)	(D)	(D)	(D)	(D)	.9
249	MISCELLANEOUS WOOD PRODUCTS	10.1	7.9	5.0	3.3	(D)	(D)	.4	(Z)	.1	.6
2492	PARTICLEBOARD	(D)	(D)	(D)	(D)	-	-	(D)	(Z)	(Z)	-
2499	WOOD PRODUCTS, NEC	9.4	7.5	4.7	(D)	(D)	(D)	(D)	(Z)	.1	.6
25	FURNITURE AND FIXTURES	24.0	23.8	.5	.3	(D)	(D)	(D)	(Z)	(Z)	(D)
251	HOUSEHOLD FURNITURE	(D)	9.5	.1	.1	(D)	(D)	(D)	(Z)	(D)	-
2514	METAL HOUSEHOLD FURNITURE	.5	.5	(D)	(D)	-	(D)	(D)	(D)	(D)	-
252	OFFICE FURNITURE	.6	.6	(D)	(D)	-	(D)	-	-	-	-
2522	METAL OFFICE FURNITURE	.6	.6	(D)	(D)	-	(D)	-	-	-	-
254	PARTITIONS AND FIXTURES	.8	.7	(D)	(D)	-	-	(D)	(D)	(D)	(D)
2542	METAL PARTITIONS AND FIXTURES	.8	.7	(D)	(D)	-	-	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	1 963.1	1 765.1	1 192.3	1 032.1	23.8	15.0	70.9	4.5	28.6	17.3
2611	PULPMILLS	287.3	268.2	215.9	177.7	(D)	3.7	14.5	.9	7.0	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER	878.1	826.6	582.3	518.0	2.6	6.7	37.0	.9	11.2	6.1
2631	PAPERBOARD MILLS	609.8	533.1	358.7	305.7	10.6	4.7	16.1	2.5	10.2	8.9
264	MISC. CONVERTED PAPER PRODUCTS	79.3	74.7	31.2	28.5	-	.1	1.2	.1	1.0	.4
2641	PAPER COATING AND GLAZING	5.3	5.0	.6	.6	-	(D)	(D)	(D)	(Z)	-
2643	BAGS, EXCEPT TEXTILE BAGS	10.0	9.8	(D)	4.9	-	(D)	.7	(Z)	(D)	(D)
2645	DIE-CUT PAPER AND BOARD	(D)	.1	-	-	-	-	-	-	-	-
2647	SANITARY PAPER PRODUCTS	24.7	25.8	22.9	21.5	-	.1	.2	(D)	.8	(D)
2649	CONVERTED PAPER PRODUCTS, NEC	.5	.5	(D)	(D)	-	-	-	-	-	-
265	PAPERBOARD CONTAINERS AND BOXES	(D)	9.7	(D)	.2	-	(D)	(D)	(D)	(Z)	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	.7	.4	(D)	(D)	-	-	-	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	4 325.5	3 910.3	967.4	309.8	47.0	6.7	487.8	14.7	66.6	34.8
281	INDUSTRIAL INORGANIC CHEMICALS	964.6	855.3	299.0	79.6	44.5	2.7	118.4	2.9	35.0	15.8
2812	ALKALIES AND CHLORINE	175.8	177.0	129.6	31.0	(D)	(D)	52.6	.2	1.7	1.6
2816	INORGANIC PIGMENTS	(D)	(D)	47.3	19.4	-	(D)	24.5	(D)	1.4	2.3
2819	INDUSTRIAL INORGANIC CHEM., NEC	653.8	595.9	121.9	29.2	(D)	2.6	41.3	(D)	31.9	11.8
282	PLASTICS MATERIALS, SYNTHETICS	481.6	454.9	110.1	72.4	(D)	(D)	23.8	2.4	5.0	4.9
2821	PLASTICS MATERIALS AND RESINS	150.7	139.1	27.2	15.2	-	.2	5.5	.9	3.4	2.1
2822	SYNTHETIC RUBBER	33.2	29.0	(D)	6.8	(D)	.2	(D)	.2	.6	1.4
2823	CELLULOSIC MANMADE FIBERS	109.0	103.9	(D)	34.6	-	(D)	(D)	.2	(D)	(D)
2824	ORGANIC FIBERS, NONCELLULOSIC	188.7	182.9	36.3	15.9	(D)	(D)	16.2	1.1	.9	(D)
283	DRUGS	90.1	87.2	28.8	6.2	(D)	(D)	20.1	.5	1.4	.5
2831	BIOLOGICAL PRODUCTS	.3	.3	(D)	(D)	-	-	-	(Z)	-	-
2833	MEDICINALS AND BOTANICALS	55.2	52.2	(D)	4.1	-	(D)	15.2	.1	.9	.3
2834	PHARMACEUTICAL PREPARATIONS	34.6	34.7	8.2	(D)	(D)	(D)	4.9	.4	.5	.2
284	SOAPS, CLEANERS, TOILET GOODS	(D)	(D)	(D)	2.7	-	(D)	4.6	.1	5.3	.8
2841	SOAP AND OTHER DETERGENTS	17.5	16.8	3.3	.4	-	(D)	2.2	(Z)	(Z)	(D)
2842	POLISHES AND SANITATION GOODS	1.5	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
2843	SURFACE ACTIVE AGENTS	15.0	14.3	9.9	1.9	-	(D)	2.3	(D)	5.2	.4
2844	TOILET PREPARATIONS	(D)	1.6	.2	.1	-	(D)	(D)	(Z)	(Z)	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	2 150.6	1 996.3	422.9	127.3	1.6	1.9	261.1	6.8	15.7	8.6
2865	CYCLIC CRUDES AND INTERMEDIATES	(D)	(D)	(D)	(D)	(D)	1.1	(D)	(D)	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC	1 909.9	1 764.9	362.4	107.3	(D)	(D)	228.4	5.3	12.1	7.1
287	AGRICULTURAL CHEMICALS	301.6	233.3	74.9	11.6	(D)	(D)	53.7	1.1	4.1	2.9
2873	NITROGENOUS FERTILIZERS	87.4	58.9	22.2	2.0	(D)	(D)	14.1	.5	3.4	1.6
2874	PHOSPHATIC FERTILIZERS	190.7	158.4	44.9	5.7	(D)	(D)	36.6	.6	.6	(D)
2879	AGRICULTURAL CHEMICALS, NEC	(D)	(D)	(D)	3.9	-	(D)	2.9	.1	.2	(D)
289	MISCELLANEOUS CHEMICAL PRODUCTS	188.7	137.3	17.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2891	ADHESIVES AND SEALANTS	4.1	3.9	.1	(Z)	-	-	(D)	(D)	(D)	(D)
2895	CARBON BLACK	4.4	1.4	.7	(D)	-	(D)	(D)	(D)	(D)	(D)
2899	CHEMICAL PREPARATIONS, NEC	140.9	93.9	13.3	5.0	(D)	(D)	5.8	.3	.3	1.0

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
22	TEXTILE MILL PRODUCTS--CON.								
228	YARN AND THREAD MILLS--CON.								
2282	THROWING AND WINDING MILLS	.6	.4	-	.1	(Z)	.1	(D)	(D)
2284	THREAD MILLS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
229	MISCELLANEOUS TEXTILE GOODS.	5.5	.8	-	.1	3.9	.4	.2	.1
2294	PROCESSED TEXTILE WASTE.	(D)	(D)	-	(D)	(D)	(D)	(D)	-
2295	COATED FABRICS, NOT RUBBERIZED	3.6	(D)	-	(D)	3.3	.2	(Z)	-
2296	TIRE CORD AND FABRIC	(D)	-	-	.1	.1	.1	(D)	(D)
2297	NONWOVEN FABRICS	1.1	.4	-	(D)	.1	.1	.1	(D)
2298	CORDAGE AND TWINE.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
2299	TEXTILE GOODS, NEC	(D)	(D)	-	-	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	61.8	12.6	20.3	(D)	13.9	(D)	6.4	7.5
242	SAWMILLS AND PLANING MILLS	46.2	10.7	18.0	-	(D)	(D)	5.7	6.7
2421	SAWMILLS, PLANING MILLS, GENERAL	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	8.6	1.6	(D)	-	5.2	.2	(D)	.7
2435	HARDWOOD VENEER AND PLYWOOD.	(D)	.9	-	-	(D)	(Z)	(D)	(D)
2436	SOFTWOOD VENEER AND PLYWOOD.	7.2	.7	(D)	-	(D)	.1	(D)	(D)
249	MISCELLANEOUS WOOD PRODUCTS.	3.0	.5	(D)	(D)	1.4	(D)	.1	(Z)
2492	PARTICLEBOARD.	(D)	(D)	-	-	.1	(D)	(Z)	(Z)
2499	WOOD PRODUCTS, NEC	2.8	(D)	(D)	(D)	1.2	(D)	.1	(Z)
25	FURNITURE AND FIXTURES	23.3	2.8	(D)	(D)	8.5	1.9	2.2	6.9
251	HOUSEHOLD FURNITURE.	9.4	.2	(D)	(Z)	.5	.5	.2	(D)
2514	METAL HOUSEHOLD FURNITURE.	(D)	.2	-	(Z)	.1	(Z)	(D)	(D)
252	OFFICE FURNITURE	(D)	.3	-	(D)	.1	.1	(D)	-
2522	METAL OFFICE FURNITURE	(D)	.3	-	(D)	.1	.1	(D)	-
254	PARTITIONS AND FIXTURES.	(D)	.3	-	(Z)	.1	.1	(D)	(D)
2542	METAL PARTITIONS AND FIXTURES.	(D)	.3	-	(Z)	.1	.1	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	572.8	168.6	226.7	3.7	107.3	20.2	14.8	31.5
2611	PULPMILLS.	52.3	29.9	(D)	(D)	13.3	.1	(D)	6.6
2621	PAPERMILLS, EXCEPT BUILDING PAPER.	244.3	75.7	102.8	2.1	53.6	1.9	1.7	6.9
2631	PAPERBOARD MILLS	174.4	23.4	91.0	.7	33.9	5.7	2.9	16.9
264	MISC. CONVERTED PAPER PRODUCTS	43.4	4.5	(D)	(D)	5.3	.7	.3	.7
2641	PAPER COATING AND GLAZING.	4.4	.4	(D)	(D)	3.6	.2	.1	(Z)
2643	BAGS, EXCEPT TEXTILE BAGS.	(D)	.4	(D)	.3	.9	.1	(Z)	(Z)
2645	DIE-CUT PAPER AND BOARD.	.1	-	-	-	(D)	(D)	-	-
2647	SANITARY PAPER PRODUCTS.	2.9	(D)	-	.2	.5	.3	.1	(D)
2649	CONVERTED PAPER PRODUCTS, NEC.	(D)	(D)	-	(D)	(D)	.1	-	(D)
265	PAPERBOARD CONTAINERS AND BOXES.	(D)	.1	-	.1	.7	8.5	.1	(D)
2653	CORRUGATED AND SOLID FIBER BOXES	(D)	.1	-	(D)	.1	(Z)	(Z)	-
28	CHEMICALS AND ALLIED PRODUCTS.	2 942.9	342.1	334.9	60.2	2 112.4	21.9	25.0	46.4
281	INDUSTRIAL INORGANIC CHEMICALS	556.3	19.4	43.3	.7	475.9	1.7	4.7	10.6
2812	ALKALIES AND CHLORINE.	47.4	(D)	(D)	(D)	32.0	.6	(D)	(D)
2816	INORGANIC PIGMENTS	(D)	(D)	(D)	(D)	(D)	(D)	2.7	(D)
2819	INDUSTRIAL INORGANIC CHEM., NEC.	474.0	13.3	37.5	(D)	416.7	.9	(D)	3.5
282	PLASTICS MATERIALS, SYNTHETICS	344.8	12.7	42.7	40.8	229.1	.9	5.5	13.1
2821	PLASTICS MATERIALS AND RESINS.	111.9	2.6	(D)	(D)	93.1	.5	(D)	1.6
2822	SYNTHETIC RUBBER	(D)	(D)	-	-	(D)	(D)	-	(D)
2823	CELLULOSIC MANMADE FIBERS.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2824	ORGANIC FIBERS, NONCELLULOSIC.	146.6	4.2	26.6	32.8	70.5	.3	2.8	9.5
283	DRUGS.	58.1	2.9	(D)	1.5	49.4	1.7	(D)	1.2
2831	BIOLOGICAL PRODUCTS.	(D)	.1	-	(D)	.1	(Z)	(Z)	(D)
2833	MEDICINALS AND BOTANICALS.	(D)	.3	(D)	(D)	29.1	.1	(D)	(D)
2834	PHARMACEUTICAL PREPARATIONS.	26.2	2.5	(D)	(D)	20.2	1.6	.5	1.2
284	SOAPS, CLEANERS, TOILET GOODS.	20.4	1.9	(D)	1.7	11.7	1.9	.7	(D)
2841	SOAP AND OTHER DETERGENTS.	13.5	1.6	(D)	1.2	7.7	.3	.6	(D)
2842	POLISHES AND SANITATION GOODS.	1.2	(D)	-	(D)	.2	.7	(Z)	(D)
2843	SURFACE ACTIVE AGENTS.	4.3	(D)	-	(D)	3.2	.7	.1	(D)
2844	TOILET PREPARATIONS.	1.4	.2	-	.3	.7	.2	(Z)	.1
286	INDUSTRIAL ORGANIC CHEMICALS	1 573.4	150.9	228.4	5.6	1 164.6	1.2	9.8	12.7
2865	CYCLIC CRUDES AND INTERMEDIATES.	(D)	112.1	(D)	(D)	(D)	(D)	.5	1.8
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	1 402.6	(D)	(D)	4.3	1 110.7	1.0	9.3	10.9
287	AGRICULTURAL CHEMICALS	158.4	39.8	(D)	.3	99.4	(D)	2.1	6.3
2873	NITROGENOUS FERTILIZERS.	36.7	.5	(D)	(D)	(D)	.1	(D)	.7
2874	PHOSPHATIC FERTILIZERS	113.5	(D)	(D)	(D)	64.0	(D)	1.7	(D)
2879	AGRICULTURAL CHEMICALS, NEC.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	119.8	8.4	3.1	9.7	81.1	14.5	1.6	1.5
2891	ADHESIVES AND SEALANTS	3.9	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
2895	CARBON BLACK	.7	(D)	-	-	(D)	(Z)	(D)	(D)
2899	CHEMICAL PREPARATIONS, NEC	80.6	4.4	(D)	(D)	50.7	14.7	.8	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
					Cooling and condensing						
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
29	PETROLEUM AND COAL PRODUCTS	1 172.5	963.7	580.8	58.3	1.2	1.1	418.1	13.3	30.2	58.6
2911	PETROLEUM REFINING	1 149.4	955.3	577.2	57.3	1.2	1.1	416.0	13.0	30.1	58.6
295	PAVING AND ROOFING MATERIALS	21.6	7.9	3.4	.9	-	(D)	2.1	(D)	(Z)	(Z)
2951	PAVING MIXTURES AND BLOCKS	(D)	2.7	(D)	(D)	-	-	-	-	-	(Z)
2952	ASPHALT FELTS AND COATINGS	(D)	5.2	(D)	.8	-	(D)	2.1	(D)	(Z)	-
299	MISC. PETROLEUM, COAL PRODUCTS	1.6	.6	.2	.1	-	-	(D)	(D)	(Z)	(D)
2992	LUBRICATING OILS AND GREASES	.4	.3	(D)	.1	-	-	(D)	-	(Z)	(D)
2999	PETROLEUM AND COAL PRODUCTS, NEC	1.2	.2	(D)	-	-	-	-	(D)	-	(D)
30	RUBBER, MISC. PLASTICS PROD.	187.0	167.5	51.5	10.2	1.0	1.9	33.2	1.9	2.8	.5
3011	TIRES AND INNER TUBES	41.5	38.7	23.1	2.6	(D)	.5	17.2	(D)	1.4	.3
3041	RUBBER, PLASTICS HOSE AND BELTING	10.2	9.0	(D)	.2	(D)	(D)	2.8	(D)	(Z)	(D)
3069	FABRICATED RUBBER PRODUCTS, NEC	18.9	17.7	1.5	.6	(D)	(D)	.7	.1	.1	(D)
3079	MISCELLANEOUS PLASTICS PRODUCTS	114.1	99.9	22.4	6.7	-	(D)	12.5	1.5	1.3	(D)
31	LEATHER AND LEATHER PRODUCTS	8.5	8.2	3.7	2.5	(D)	(D)	(Z)	(D)	(D)	.4
3111	LEATHER TANNING AND FINISHING	6.4	6.2	3.7	2.4	(D)	-	(D)	(Z)	.4	.4
32	STONE, CLAY, GLASS PRODUCTS	206.6	182.0	42.6	21.7	(D)	.5	(D)	1.2	.5	5.3
322	GLASS, PRESSED OR BLOWN	15.6	13.6	6.0	2.7	-	.2	2.7	.2	.2	.1
3221	GLASS CONTAINERS	8.1	7.2	2.6	.7	-	(D)	1.7	.1	.1	(D)
3229	PRESSED AND BLOWN GLASS, NEC	7.5	6.4	3.4	2.0	-	(D)	1.0	.1	.2	(D)
3231	PRODUCTS OF PURCHASED GLASS	1.6	1.6	.3	(D)	-	(D)	(D)	(D)	(D)	(D)
3241	CEMENT, HYDRAULIC	85.4	74.6	11.5	2.5	(D)	.1	6.1	.5	(D)	3.6
325	STRUCTURAL CLAY PRODUCTS	1.2	.8	.1	.1	(D)	(D)	(D)	(D)	-	-
3253	CERAMIC WALL AND FLOOR TILE	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	-
3255	CLAY REFRACTORIES	.8	.6	(D)	(D)	-	-	-	(D)	-	-
3259	STRUCTURAL CLAY PRODUCTS, NEC	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-
326	POTTERY AND RELATED PRODUCTS	2.0	1.7	.6	.4	(D)	(D)	(D)	(Z)	(D)	(D)
3261	VITREOUS PLUMBING FIXTURES	.9	.9	.3	.1	(D)	(D)	(D)	(D)	(D)	(D)
3262	VITREOUS CHINA FOOD UTENSILS	(D)	(D)	(D)	(D)	-	(D)	-	(D)	-	-
3263	FINE EARTHENWARE FOOD UTENSILS	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES	.5	.3	.1	.1	-	(D)	(D)	(D)	(D)	(D)
327	CONCRETE, GYPSUM, PLASTER PRODS.	34.1	27.5	6.3	5.3	-	(D)	(D)	.1	-	.6
3272	CONCRETE PRODUCTS, NEC	(D)	.5	(D)	(D)	-	-	(D)	-	-	(D)
3273	READY-MIXED CONCRETE	22.2	21.6	2.9	2.7	-	-	-	(D)	-	(D)
3274	LIME	7.5	4.6	3.0	(D)	-	(D)	(D)	(Z)	-	(D)
3275	GYPSUM PRODUCTS	2.5	(D)	(D)	.2	-	(D)	-	.1	-	(D)
3281	CUT STONE AND STONE PRODUCTS	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	(D)
329	MISC. NONMETALLIC MINERAL PRODS.	45.8	40.6	13.3	9.6	(D)	(D)	2.0	.3	.1	1.1
3291	ABRASIVE PRODUCTS	3.9	3.5	.6	.3	-	-	(D)	(D)	-	(D)
3292	ASBESTOS PRODUCTS	3.1	2.3	1.0	.7	-	(D)	(D)	(D)	.1	-
3295	MINERALS, GROUND OR TREATED	22.5	22.0	3.9	2.3	-	-	(D)	(D)	(D)	(D)
3296	MINERAL WOOL	8.3	5.5	1.3	1.1	-	-	.1	(D)	(Z)	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC	2.9	2.5	(D)	2.2	-	-	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	3 392.1	3 132.4	1 349.8	741.9	214.6	5.1	327.5	8.1	19.3	33.3
331	BLAST FURNACE, BASIC STEEL PROD.	2 839.5	2 649.7	1 197.7	656.9	214.1	3.1	284.5	4.8	18.1	16.5
3312	BLAST FURNACES AND STEEL MILLS	2 782.8	2 594.6	1 185.8	648.7	214.1	3.1	282.6	4.7	17.9	15.1
3315	STEEL WIRE AND RELATED PRODUCTS	(D)	(D)	(D)	(D)	-	(Z)	(D)	.1	(Z)	(D)
3316	COLD FINISHING OF STEEL SHAPES	13.8	13.6	5.0	3.6	-	-	(D)	(Z)	.1	(D)
3317	STEEL PIPE AND TUBES	5.3	5.0	3.3	(D)	-	(Z)	1.1	(Z)	(Z)	(D)
332	IRON AND STEEL FOUNDRIES	66.3	53.9	21.8	13.7	(D)	.6	5.2	.7	(D)	.9
3321	GRAY IRON FOUNDRIES	51.9	39.8	14.5	10.2	-	(D)	3.4	.3	(D)	(D)
3322	MALLEABLE IRON FOUNDRIES	7.2	7.1	5.4	(D)	-	(D)	.9	(D)	(D)	(D)
3325	STEEL FOUNDRIES, NEC	(D)	(D)	(D)	.5	(D)	(D)	.9	(D)	(D)	-
333	PRIMARY NONFERROUS METALS	391.1	339.6	87.4	52.3	(D)	1.0	14.1	1.7	(D)	15.4
3331	PRIMARY COPPER	29.3	22.0	7.8	2.1	(D)	(D)	2.4	.2	(D)	(D)
3334	PRIMARY ALUMINUM	200.5	193.3	34.0	6.7	-	.9	10.7	1.1	(D)	(D)
3341	SECONDARY NONFERROUS METALS	1.6	1.1	(D)	(D)	-	(D)	.2	(Z)	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING	87.1	82.1	40.6	17.1	(D)	.4	21.8	.7	.4	(D)
3351	COPPER ROLLING AND DRAWING	26.7	24.0	7.9	5.1	(D)	(D)	2.6	.2	.1	(D)
3353	ALUMINUM SHEET, PLATE, AND FOIL	36.1	34.8	22.7	7.4	-	.2	14.5	.4	(D)	(D)
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	(D)	(D)	1.3	-	-	(D)	(Z)	(D)	(D)
3356	NONFERROUS ROLLING & DRAWING, NEC	6.8	6.4	4.2	.7	-	(D)	3.2	.1	(D)	(D)
3357	NONFERROUS WIREDRAWING, INSULATING	10.5	10.1	1.5	.7	-	(D)	.5	(D)	.1	-
336	NONFERROUS FOUNDRIES	3.9	3.7	1.0	(D)	-	(D)	.2	(D)	(Z)	(D)
3361	ALUMINUM FOUNDRIES	2.1	1.9	.5	.3	-	(D)	(D)	(D)	(D)	(D)
3362	BRASS, BRONZE, COPPER FOUNDRIES	(D)	(D)	(D)	(D)	-	-	-	(D)	(D)	-
3369	NONFERROUS FOUNDRIES, NEC	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	-
339	MISC. PRIMARY METAL PRODUCTS	2.5	2.4	(D)	.6	-	(D)	(D)	(Z)	(D)	(D)
3398	METAL HEAT TREATING	1.3	1.2	.2	.2	-	-	-	(D)	(D)	-
3399	PRIMARY METAL PRODUCTS, NEC	1.2	1.2	(D)	.4	-	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978 —Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
29	PETROLEUM AND COAL PRODUCTS	382.9	3.6	72.0	.1	289.7	1.8	2.0	13.5
2911	PETROLEUM REFINING	378.1	1.1	(D)	(D)	288.5	.9	1.8	13.5
295	PAVING AND ROOFING MATERIALS	4.5	2.3	(D)	(D)	1.1	.8	.2	(D)
2951	PAVING MIXTURES AND BLOCKS	(D)	1.1	-	-	(D)	(D)	(D)	-
2952	ASPHALT FELTS AND COATINGS	(D)	1.2	(D)	(D)	.4	.1	(D)	(D)
299	MISC. PETROLEUM, COAL PRODUCTS	.4	(D)	-	(D)	.1	(Z)	(Z)	(D)
2992	LUBRICATING OILS AND GREASES	(D)	(D)	-	(D)	(D)	(Z)	(Z)	(D)
2999	PETROLEUM AND COAL PRODUCTS, NEC	(D)	(D)	-	(D)	(D)	(D)	-	(D)
30	RUBBER, MISC. PLASTICS PROD.	116.0	14.2	3.8	4.6	67.0	13.0	11.5	1.9
3011	TIRES AND INNER TUBES	15.5	1.5	(D)	(D)	11.0	1.4	1.0	(D)
3041	RUBBER, PLASTICS HOSE AND BELTING.	(D)	(D)	-	(D)	(D)	.4	(D)	(D)
3069	FABRICATED RUBBER PRODUCTS, NEC.	16.3	2.1	(D)	.7	6.4	(D)	1.0	.7
3079	MISCELLANEOUS PLASTICS PRODUCTS.	77.5	8.6	(D)	2.4	43.0	10.5	9.1	(D)
31	LEATHER AND LEATHER PRODUCTS	4.5	2.2	(D)	(D)	(Z)	2.1	.1	(D)
3111	LEATHER TANNING AND FINISHING.	2.5	2.2	(D)	(D)	(Z)	.1	.1	(D)
32	STONE, CLAY, GLASS PRODUCTS.	139.4	28.2	39.9	2.3	40.2	4.0	4.5	20.3
322	GLASS, PRESSED OR BLOWN.	7.6	2.3	(D)	.1	3.7	1.0	(D)	.3
3221	GLASS CONTAINERS	4.5	1.2	(D)	.1	2.2	.7	(D)	.3
3229	PRESSED AND BLOWN GLASS, NEC	3.0	1.1	-	.1	1.3	.4	(Z)	(Z)
3231	PRODUCTS OF PURCHASED GLASS.	1.3	.6	-	.2	.3	.1	(D)	(D)
3241	CEMENT, HYDRAULIC.	63.1	.4	(D)	.5	22.0	.4	(D)	2.6
325	STRUCTURAL CLAY PRODUCTS	.6	(D)	-	(D)	.4	(Z)	-	-
3253	CERAMIC WALL AND FLOOR TILE.	(D)	(D)	-	-	(D)	(Z)	-	-
3255	CLAY REFRACTORIES.	(D)	(D)	-	(D)	(D)	(Z)	-	-
3259	STRUCTURAL CLAY PRODUCTS, NEC.	(D)	(D)	-	-	-	(Z)	-	-
326	POTTERY AND RELATED PRODUCTS	1.1	.1	-	(D)	.6	.2	(D)	(D)
3261	VITREOUS PLUMBING FIXTURES	.6	(D)	-	(D)	(D)	(Z)	(D)	(D)
3262	VITREOUS CHINA FOOD UTENSILS	(D)	-	-	-	(D)	(D)	(D)	(D)
3263	FINE EARTHENWARE FOOD UTENSILS	(D)	(D)	-	-	(D)	(D)	-	-
3264	PORCELAIN ELECTRICAL SUPPLIES.	.2	-	-	(D)	(D)	(Z)	(D)	-
327	CONCRETE, GYPSUM, PLASTER PRODS.	21.2	4.0	(D)	(D)	.6	.2	(Z)	16.9
3272	CONCRETE PRODUCTS, NEC	(D)	(D)	-	(D)	-	(Z)	(D)	-
3273	READY-MIXED CONCRETE	18.7	2.6	-	-	(D)	(D)	(Z)	15.8
3274	LIME	1.6	.8	-	-	.5	(D)	-	(D)
3275	GYPSUM PRODUCTS.	.6	(D)	(D)	-	(D)	.1	-	(D)
3281	CUT STONE AND STONE PRODUCTS	-	-	-	-	-	-	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	27.3	19.2	-	.3	5.1	1.8	.6	.4
3291	ABRASIVE PRODUCTS.	2.9	1.5	-	.2	.9	.1	(D)	(D)
3292	ASBESTOS PRODUCTS.	1.3	(D)	-	(D)	.7	.1	(D)	.1
3295	MINERALS, GROUND OR TREATED.	18.1	16.5	-	(D)	(D)	(D)	(D)	(D)
3296	MINERAL WOOL	4.1	.4	-	(D)	2.2	1.2	.2	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	(D)	(D)	-	-	.3	(D)	-	-
33	PRIMARY METAL INDUSTRIES	1 782.6	170.8	582.9	24.0	942.4	29.4	11.5	21.6
331	BLAST FURNACE, BASIC STEEL PROD.	1 452.0	130.7	376.3	21.5	880.0	18.3	10.3	14.9
3312	BLAST FURNACES AND STEEL MILLS	1 408.7	126.5	358.2	21.1	860.1	17.7	10.1	14.8
3315	STEEL WIRE AND RELATED PRODUCTS.	1.5	.8	-	(D)	.5	.1	.1	(D)
3316	COLD FINISHING OF STEEL SHAPES	8.6	2.7	-	(D)	5.2	.2	.1	(D)
3317	STEEL PIPE AND TUBES	1.6	.7	-	(D)	.7	.2	.1	(D)
332	IRON AND STEEL FOUNDRIES	32.1	7.8	(D)	.3	16.0	7.4	(D)	.5
3321	GRAY IRON FOUNDRIES.	25.2	5.4	(D)	.3	12.2	7.0	(D)	.3
3322	MALLEABLE IRON FOUNDRIES	1.7	1.0	-	(D)	.6	.1	(D)	(D)
3325	STEEL FOUNDRIES, NEC	4.6	.8	-	(D)	3.0	.4	.1	.2
333	PRIMARY NONFERROUS METALS.	252.2	10.8	199.5	1.0	35.8	1.8	.5	2.7
3331	PRIMARY COPPER	14.2	5.5	(D)	-	6.5	.4	(D)	1.0
3334	PRIMARY ALUMINUM	159.3	2.9	(D)	.7	8.3	.3	(D)	1.5
3341	SECONDARY NONFERROUS METALS.	.8	.2	-	(D)	(D)	.1	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING	41.5	19.4	(D)	1.0	(D)	1.3	.5	3.8
3351	COPPER ROLLING AND DRAWING	16.2	5.5	(D)	.2	3.4	.3	(D)	2.5
3353	ALUMINUM SHEET, PLATE, AND FOIL.	12.0	7.7	-	.6	2.8	.2	(D)	.7
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	1.1	-	(D)	.9	.1	(D)	(D)
3356	NONFERROUS ROLLING & DRAWING, NEC.	2.2	.7	-	(D)	1.0	.1	(D)	.2
3357	NONFERROUS WIREDRAW'G, INSULATING.	8.6	4.4	(D)	.1	1.9	.5	.2	(D)
336	NONFERROUS FOUNDRIES	2.6	1.2	-	(Z)	1.0	.3	(Z)	(Z)
3361	ALUMINUM FOUNDRIES	1.3	(D)	-	(Z)	.6	.3	(Z)	(Z)
3362	BRASS, BRONZE, COPPER FOUNDRIES.	(D)	(D)	-	(Z)	(D)	(D)	(Z)	(Z)
3369	NONFERROUS FOUNDRIES, NEC.	(D)	.8	-	(Z)	(D)	(D)	(Z)	(Z)
339	MISC. PRIMARY METAL PRODUCTS	(D)	.5	-	(D)	.9	(Z)	(D)	(D)
3398	METAL HEAT TREATING.	1.0	(D)	-	(D)	.7	(Z)	(D)	-
3399	PRIMARY METAL PRODUCTS, NEC.	(D)	(D)	-	-	.2	(Z)	(D)	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
					Cooling and condensing						
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
34	FABRICATED METAL PRODUCTS	90.0	86.2	25.1	(D)	(D)	(D)	3.6	1.6	.9	.9
341	METAL CANS, SHIPPING CONTAINERS	4.1	4.0	1.7	1.5	-	-	.2	(D)	(D)	(D)
3411	METAL CANS	3.8	3.7	(D)	(D)	-	-	.2	(D)	(D)	(D)
3412	METAL BARRELS, DRUMS, AND PAILS	.3	.3	(D)	(D)	-	-	-	-	-	-
342	CUTLERY, HANDTOOLS AND HARDWARE	19.6	19.3	2.7	2.1	-	-	.1	(D)	.1	(D)
3423	HAND AND EDGE TOOLS, NEC	2.8	2.8	.3	(D)	-	-	-	-	(D)	-
3425	HANDSAWS AND SAW BLADES	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3429	HARDWARE, NEC	5.6	5.4	2.3	1.8	-	-	.1	(D)	(D)	(D)
343	PLUMBING, HEATING, EXCEPT ELEC	2.8	2.1	1.0	.6	(D)	(D)	(D)	(D)	(D)	(D)
3431	METAL SANITARY WARE	.8	.7	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS	.8	.8	.5	.5	-	(D)	(D)	(D)	(D)	(D)
3433	HEATING EQUIPMENT, EXC. ELECTRIC	1.2	.6	(D)	(D)	-	-	(D)	-	-	-
344	FABRICATED STRUC. METAL PRODS.	8.5	8.2	1.5	.8	-	(D)	.5	.1	(D)	(D)
3442	METAL DOORS, SASH, AND TRIM	.6	.6	.3	.2	-	-	(Z)	(Z)	-	-
3443	FABRICATED PLATEWORK, BOILER SHOP	3.1	3.0	1.0	.4	-	(D)	.5	.1	(D)	(D)
3444	SHEET METALWORK	.6	.6	.1	.1	-	-	-	(Z)	-	-
3446	ARCHITECTURAL METALWORK	.2	.2	(D)	(D)	-	-	(Z)	(Z)	-	-
3448	PREFABRICATED METAL BUILDINGS	(D)	(D)	(D)	(D)	-	-	-	-	-	-
345	SCREW MACHINE PROD., BOLTS, ETC.	4.1	3.8	1.1	(D)	-	(D)	(D)	(D)	(D)	(D)
3452	BOLTS, NUTS, RIVETS, AND WASHERS	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
346	METAL FORGINGS AND STAMPINGS	15.4	14.6	4.0	2.6	-	(D)	.5	(D)	.3	.2
3462	IRON AND STEEL FORGINGS	3.9	3.6	1.0	(D)	-	-	(D)	(D)	.2	(D)
3463	NONFERROUS FORGINGS	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(Z)	(D)
3465	AUTOMOTIVE STAMPINGS	6.0	5.5	1.5	1.1	-	(D)	.1	(D)	.1	(D)
3466	CROWNS AND CLOSURES	(D)	(D)	-	-	-	-	-	-	-	-
3469	METAL STAMPINGS, NEC	3.6	3.5	(D)	.8	-	-	(D)	(D)	(Z)	(D)
347	METAL SERVICES, NEC	10.8	10.4	6.8	6.3	-	(D)	.2	(Z)	.1	(D)
3471	PLATING AND POLISHING	9.3	9.0	6.1	5.6	-	-	.2	(D)	.1	(D)
3479	METAL COATING AND ALLIED SERVICES	1.5	1.5	.7	.7	-	(D)	(Z)	(Z)	(D)	-
348	ORDNANCE AND ACCESSORIES, NEC	9.6	9.0	3.5	1.5	-	.1	.5	1.2	.3	.2
3482	SMALL ARMS AMMUNITION	1.4	1.3	(D)	.6	-	(D)	(D)	.1	.1	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	4.0	3.9	1.9	.6	-	(D)	.3	.7	.2	(D)
3484	SMALL ARMS	1.6	1.5	(D)	.3	-	(D)	(D)	(D)	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	2.6	2.4	.5	.1	-	(D)	(D)	(D)	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS	15.2	14.7	2.7	1.0	-	.3	1.1	.1	(Z)	.1
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	.8	(D)	(D)	-	-	(D)	-	-	-
3494	VALVES AND PIPE FITTINGS	10.7	10.6	1.8	.5	-	(D)	1.0	(Z)	(Z)	(D)
3495	WIRE SPRINGS	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3496	MISC. FABRICATED WIRE PRODUCTS	2.2	1.6	.3	.2	-	(D)	-	-	(D)	-
3497	METAL FOIL AND LEAF	.4	.4	(D)	(D)	-	-	-	(D)	-	-
3498	FABRICATED PIPE AND FITTINGS	.3	(D)	(D)	(D)	-	-	-	(D)	-	-
3499	FABRICATED METAL PRODUCTS, NEC	1.1	.8	.2	.1	-	(D)	(D)	(D)	(Z)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	164.5	158.5	38.1	15.7	(D)	5.8	12.0	1.3	(D)	2.3
351	ENGINES AND TURBINES	38.0	36.7	8.9	.8	(D)	3.6	3.9	.2	(D)	.2
3519	INTERNAL COMBUSTION ENGINES, NEC	5.5	(D)	(D)	.8	(D)	(D)	.4	(D)	.1	(D)
352	FARM AND GARDEN MACHINERY	46.2	45.6	13.0	8.4	-	.5	1.9	.5	(D)	(D)
3523	FARM MACHINERY AND EQUIPMENT	45.7	45.1	(D)	(D)	-	(D)	1.8	.5	.1	(D)
3524	LAWN AND GARDEN EQUIPMENT	.5	.5	(D)	(D)	-	(D)	(D)	-	(D)	-
353	CONSTRUCTION, RELATED MACHINERY	16.6	15.8	6.7	1.9	-	.9	3.1	.4	(D)	(D)
3531	CONSTRUCTION MACHINERY	14.4	13.8	(D)	1.7	-	.9	3.0	(D)	.2	(D)
3532	MINING MACHINERY	.3	.3	-	-	-	-	-	-	-	-
3533	OILFIELD MACHINERY	1.1	.9	.5	(D)	-	(D)	(D)	(D)	(D)	-
3535	CONVEYORS AND CONVEYING EQUIPMENT	.1	(D)	-	-	-	-	-	-	-	-
3536	HOISTS, CRANES, AND MONORAILS	(D)	(D)	-	-	-	-	-	-	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS	.5	.5	(D)	(D)	-	(D)	(D)	-	(D)	(D)
354	METALWORKING MACHINERY	9.3	8.3	.8	.4	-	(D)	.2	(D)	(D)	(D)
3541	MACHINE TOOLS, METAL-CUTTING	3.1	2.7	.2	(D)	-	-	(D)	-	(D)	-
3542	MACHINE TOOLS, METAL-FORMING	(D)	(D)	-	-	-	-	-	-	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC	1.7	1.7	-	-	-	-	-	-	-	-
3545	MACHINE TOOL ACCESSORIES	2.3	2.2	(D)	(D)	-	-	-	(D)	-	-
3546	POWER DRIVEN HANDTOOLS	1.6	1.2	.5	.3	-	(D)	(D)	(D)	(D)	(D)
355	SPECIAL INDUSTRY MACHINERY	8.9	8.9	.2	.1	-	(D)	(D)	(D)	(D)	(D)
3551	FOOD PRODUCTS MACHINERY	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3552	TEXTILE MACHINERY	(D)	(D)	(D)	(D)	-	(D)	-	(D)	-	-
356	GENERAL INDUSTRIAL MACHINERY	10.9	9.7	2.2	.7	(D)	(D)	.9	.1	.1	.1
3561	PUMPS AND PUMPING EQUIPMENT	1.9	1.8	(Z)	(Z)	-	(D)	(D)	(D)	(D)	(D)
3562	BALL AND ROLLER BEARINGS	3.6	2.6	1.2	.4	-	(Z)	.6	.1	(Z)	.1
3563	AIR AND GAS COMPRESSORS	1.7	1.6	.4	(D)	(D)	-	(D)	-	(D)	-
3566	SPEED CHANGERS, DRIVES, AND GEARS	.7	.7	(D)	(D)	-	-	-	-	-	-
3568	POWER TRANSMISSION EQUIPMENT, NEC	2.4	2.3	.4	.1	-	-	(D)	(D)	(D)	(D)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	.3	.3	(D)	-	-	-	-	(D)	(D)	-
357	OFFICE AND COMPUTING MACHINES	20.1	19.7	1.4	1.4	-	(Z)	(D)	(Z)	(D)	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT	17.4	17.2	.8	.7	-	(Z)	(D)	(D)	(D)	(D)
3574	CALCULATING, ACCOUNTING MACHINES	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC	1.6	1.3	(D)	(D)	-	-	(D)	(D)	-	-
358	REFRIGERATION AND SERVICE MACH	11.9	11.5	4.6	2.0	-	.6	1.7	(D)	.2	(D)
3581	AUTOMATIC MERCHANDISING MACHINES	.1	.1	(D)	(D)	-	-	(D)	(D)	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	11.4	11.0	4.6	2.0	-	.6	1.7	(D)	.2	(D)
3586	MEASURING AND DISPENSING PUMPS	.3	.3	(D)	(D)	-	-	-	(D)	-	-
359	MISC. MACHINERY, EXC. ELEC	2.5	2.3	.3	.1	-	(D)	(D)	-	(D)	-

See footnotes at end of table.

Table 7a. **Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978**—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
34	FABRICATED METAL PRODUCTS	61.1	13.8	3.3	1.7	23.6	8.9	8.1	1.7
341	METAL CANS, SHIPPING CONTAINERS	2.3	.9	-	(Z)	1.1	.2	.1	(Z)
3411	METAL CANS	(D)	(D)	-	(Z)	.8	.2	(D)	(Z)
3412	METAL BARRELS, DRUMS, AND PAILS	(D)	(D)	-	(Z)	.1	(Z)	(D)	(Z)
342	CUTLERY, HANDTOOLS AND HARDWARE	16.6	3.3	(D)	.1	8.7	.7	.3	(D)
3423	HAND AND EDGE TOOLS, NEC	2.5	(D)	(D)	(D)	.6	.2	(D)	(D)
3425	HANDSAWS AND SAW BLADES	.5	(D)	-	(D)	.4	(Z)	(D)	(D)
3429	HARDWARE, NEC	3.1	1.7	-	.1	.5	.4	.2	(Z)
343	PLUMBING, HEATING, EXCEPT ELEC	1.1	.5	-	(Z)	.4	.2	(Z)	(Z)
3431	METAL SANITARY WARE	.3	(D)	-	-	(D)	(Z)	(D)	-
3432	PLUMBING FITTINGS AND BRASS GOODS	.3	(D)	-	(Z)	.1	(Z)	(Z)	(D)
3433	HEATING EQUIPMENT, EXC. ELECTRIC	(D)	.2	-	(Z)	(D)	.1	(D)	(D)
344	FABRICATED STRUC. METAL PRODS	6.7	.8	-	.1	1.3	4.0	.4	.2
3442	METAL DOORS, SASH, AND TRIM	.3	.1	-	(D)	.2	(Z)	(D)	(D)
3443	FABRICATED PLATEWORK, BOILER SHOP	2.0	.2	-	(Z)	.9	.3	.3	.2
3444	SHEET METALWORK	.5	.3	-	(D)	.1	(D)	(Z)	-
3446	ARCHITECTURAL METALWORK	(D)	(D)	-	(D)	(D)	.1	(D)	-
3448	PREFABRICATED METAL BUILDINGS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC	2.7	1.2	(D)	(D)	.7	.3	.1	.1
3452	BOLTS, NUTS, RIVETS, AND WASHERS	2.6	1.1	(D)	(D)	.7	.3	.1	.1
346	METAL FORGINGS AND STAMPINGS	10.6	2.5	(D)	.3	5.1	1.8	.5	(D)
3462	IRON AND STEEL FORGINGS	2.7	.5	-	(Z)	1.6	.3	.2	(Z)
3463	NONFERROUS FORGINGS	1.3	(D)	-	(D)	(D)	(D)	(D)	(D)
3465	AUTOMOTIVE STAMPINGS	4.0	.5	-	.2	1.8	1.3	.2	.1
3466	CROWNS AND CLOSURES	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3469	METAL STAMPINGS, NEC	(D)	.8	(D)	.1	1.2	.1	.1	(D)
347	METAL SERVICES, NEC	3.6	2.3	(D)	(Z)	.8	.2	.1	(D)
3471	PLATING AND POLISHING	2.8	1.9	(D)	(Z)	.6	.1	(D)	(D)
3479	METAL COATING AND ALLIED SERVICES	.7	.5	-	(Z)	.2	(Z)	(D)	(D)
348	ORDNANCE AND ACCESSORIES, NEC	5.5	1.1	-	.6	2.0	.4	.4	1.0
3482	SMALL ARMS AMMUNITION	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	1.9	(D)	-	.2	.6	(D)	.2	.6
3484	SMALL ARMS	(D)	.3	-	(D)	(D)	.2	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	1.9	(D)	-	(D)	.4	.1	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS	12.0	1.2	(D)	.3	3.2	1.0	6.3	(D)
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	(D)	(D)	-	(D)	(D)	-	-
3494	VALVES AND PIPE FITTINGS	8.8	.4	-	.3	1.2	.6	6.2	.1
3495	WIRE SPRINGS	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3496	MISC. FABRICATED WIRE PRODUCTS	1.4	.3	-	(Z)	.8	(D)	(Z)	(D)
3497	METAL FOIL AND LEAF	(D)	(D)	-	(D)	(D)	.1	(D)	-
3498	FABRICATED PIPE AND FITTINGS	.3	.2	-	(D)	(D)	(D)	(D)	(D)
3499	FABRICATED METAL PRODUCTS, NEC	.6	.1	-	.1	.3	.1	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	120.5	16.5	30.0	13.6	30.9	25.1	2.5	1.9
351	ENGINES AND TURBINES	28.0	1.2	(D)	1.5	14.8	1.0	(D)	.5
3519	INTERNAL COMBUSTION ENGINES, NEC	3.4	1.0	(D)	.3	1.3	.6	.1	(D)
352	FARM AND GARDEN MACHINERY	32.6	7.6	11.1	1.5	5.1	6.9	.2	.1
3523	FARM MACHINERY AND EQUIPMENT	(D)	7.2	(D)	(D)	(D)	6.8	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT	(D)	.2	(D)	(D)	(D)	.1	(D)	(D)
353	CONSTRUCTION, RELATED MACHINERY	9.0	1.4	(D)	(D)	1.0	1.2	.1	.4
3531	CONSTRUCTION MACHINERY	(D)	1.1	(D)	(D)	.6	.9	.1	.3
3532	MINING MACHINERY	.3	(D)	-	-	(D)	.1	(Z)	(D)
3533	OILFIELD MACHINERY	.4	.1	-	(D)	.2	.1	(Z)	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT	(D)	(D)	-	(D)	(D)	(D)	-	-
3536	HOISTS, CRANES, AND MONORAILS	(D)	(D)	-	(D)	(D)	(D)	-	(D)
3537	INDUSTRIAL TRUCKS AND TRACTORS	(D)	.1	-	(D)	.1	.1	(Z)	(D)
354	METALWORKING MACHINERY	7.6	.7	(D)	1.8	1.9	2.8	.2	(D)
3541	MACHINE TOOLS, METAL-CUTTING	2.5	.2	-	1.5	.4	.3	(D)	(D)
3542	MACHINE TOOLS, METAL-FORMING	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC	1.7	(D)	-	(D)	(D)	(D)	(D)	-
3545	MACHINE TOOL ACCESSORIES	(D)	.1	(D)	.1	.4	1.5	(Z)	(D)
3546	POWER DRIVEN HANDTOOLS	.7	.2	-	.1	.3	.1	(D)	(D)
355	SPECIAL INDUSTRY MACHINERY	8.7	.4	(D)	.4	.7	1.3	.6	(D)
3551	FOOD PRODUCTS MACHINERY	(D)	(D)	-	-	(D)	(D)	-	-
3552	TEXTILE MACHINERY	(D)	(D)	-	(D)	(D)	(D)	(D)	-
356	GENERAL INDUSTRIAL MACHINERY	7.5	1.4	(D)	.8	3.8	1.2	(D)	.2
3561	PUMPS AND PUMPING EQUIPMENT	1.8	.3	-	.1	1.1	.2	(Z)	.1
3562	BALL AND ROLLER BEARINGS	1.4	.3	-	.2	.5	.3	(D)	(D)
3563	AIR AND GAS COMPRESSORS	1.3	.1	-	.2	.5	.3	(D)	(D)
3566	SPEED CHANGERS, DRIVES, AND GEARS	(D)	(Z)	(D)	(D)	.4	.1	(Z)	(D)
3568	POWER TRANSMISSION EQUIPMENT, NEC	1.9	.5	-	.1	1.1	.4	(Z)	(Z)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	(D)	.2	(D)	(D)	.1	(Z)	(D)	(D)
357	OFFICE AND COMPUTING MACHINES	18.2	.6	-	6.7	.5	9.2	.6	.3
3573	ELECTRONIC COMPUTING EQUIPMENT	16.4	.3	-	6.7	(D)	8.9	(D)	.2
3574	CALCULATING, ACCOUNTING MACHINES	.7	(D)	-	(Z)	(D)	.1	(D)	(D)
3579	OFFICE MACHINES, TYPEWRITERS, ETC	(D)	(D)	-	(Z)	.3	.2	.1	(D)
358	REFRIGERATION AND SERVICE MACH	6.9	2.8	-	.5	1.8	1.2	.2	.2
3581	AUTOMATIC MERCHANDISING MACHINES	(D)	(D)	-	-	(D)	(D)	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	6.4	2.6	-	(D)	1.7	1.2	(D)	(D)
3586	MEASURING AND DISPENSING PUMPS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
359	MISC. MACHINERY, EXC. ELEC	2.0	.5	(D)	.3	.9	.2	(Z)	(D)

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
						Cooling and condensing					
				Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
35	MACHINERY, EXCEPT ELECTRICAL--CON.										
359	MISC. MACHINERY, EXC. ELEC.--CON.										
3592	CARBURETORS, PISTONS, RINGS, ETC	2.3	2.1	(D)	.2	-	(D)	(D)	-	(D)	-
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	.2	.2	(D)	(D)	-	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP	116.0	111.9	30.4	21.9	(D)	1.7	4.9	.9	.9	(D)
361	ELECTRIC DISTRIBUTING EQUIPMENT.	5.3	5.0	2.0	.9	-	.3	.8	.1	(D)	(D)
3612	TRANSFORMERS	2.7	2.7	(D)	.2	-	(D)	(D)	(D)	(D)	(D)
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	2.6	2.3	(D)	.6	-	(D)	(D)	(D)	(Z)	-
362	ELECTRICAL INDUSTRIAL APPARATUS.	9.7	8.9	1.9	1.3	(D)	(Z)	.3	.1	(D)	(Z)
3621	MOTORS AND GENERATORS.	3.9	3.8	(D)	.8	-	(Z)	(D)	(Z)	(D)	(Z)
3622	INDUSTRIAL CONTROLS.	1.7	1.6	.2	(D)	-	-	(D)	(D)	-	-
3623	WELDING APPARATUS, ELECTRIC.	.3	.3	(D)	(D)	-	(Z)	(D)	-	-	-
3624	CARBON AND GRAPHITE PRODUCTS	3.6	3.0	.6	.3	-	(Z)	(D)	.1	(D)	(Z)
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	.2	.2	(D)	-	(D)	(Z)	(D)	(D)	(D)	(Z)
363	HOUSEHOLD APPLIANCES	17.3	16.6	6.2	3.8	-	(D)	2.2	.1	.1	(D)
3631	HOUSEHOLD COOKING EQUIPMENT.	4.6	4.3	.9	.8	-	-	(D)	-	.1	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	6.1	5.9	3.5	1.3	-	(D)	(D)	(D)	(D)	-
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	2.3	2.2	.9	(D)	-	-	-	-	(D)	-
3634	ELECTRIC HOUSEWARES AND FANS	1.8	1.7	.2	(D)	-	-	-	(D)	-	-
3635	HOUSEHOLD VACUUM CLEANERS.	(D)	(D)	(D)	(D)	-	(D)	(D)	-	(D)	-
3639	HOUSEHOLD APPLIANCES, NEC.	1.9	1.9	.5	.4	-	-	(D)	(D)	(D)	(D)
364	ELEC. LIGHTING, WIRING EQUIP	11.6	11.9	1.5	1.1	(D)	(D)	.2	(Z)	.2	(D)
3641	ELECTRIC LAMPS	1.0	1.0	(D)	(Z)	-	-	-	(D)	-	(D)
3644	NONCURRENT-CARRYING WIR'G DEVICES.	1.6	1.6	.9	.5	(D)	(D)	(D)	(D)	(D)	(D)
3645	RESIDENTIAL LIGHTING FIXTURES.	.1	.1	(D)	(D)	-	-	(D)	-	(D)	-
3646	COMMERCIAL LIGHTING FIXTURES	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-
3648	LIGHTING EQUIPMENT, NEC.	.5	.5	(D)	(D)	-	-	(D)	-	(D)	-
365	RADIO, TV RECEIVING EQUIPMENT.	2.1	1.8	.6	.4	-	(D)	.1	-	(D)	(D)
3651	RADIO AND TV RECEIVING SETS.	1.4	1.4	(D)	(D)	-	(D)	(D)	-	(D)	(D)
3652	PHONO. RECORDS, PRERECORDED TAPE	.7	.4	(D)	(D)	-	(D)	(D)	-	(D)	-
366	COMMUNICATION EQUIPMENT.	14.3	13.3	4.0	2.8	(D)	.5	.1	.4	(Z)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	(D)	(D)	(D)	1.3	(D)	.5	(Z)	.3	(Z)	(D)
367	ELECTRONIC COMPONENTS, ACCESS.	23.1	22.2	10.9	9.0	-	.5	.9	.1	.2	.1
3671	ELECTRON TUBES, RECEIVING TYPE	4.0	3.7	1.0	.8	-	.2	(D)	(D)	(D)	-
3674	SEMICONDUCTORS, RELATED DEVICES.	10.8	10.6	6.8	5.8	-	.3	.5	.1	.1	.1
3675	ELECTRONIC CAPACITORS.	2.7	2.6	(D)	.5	-	(Z)	(D)	(D)	(D)	-
3676	ELECTRONIC RESISTORS	.5	.5	(D)	(D)	-	(Z)	(D)	(D)	-	-
3678	ELECTRONIC CONNECTORS.	1.1	1.1	.4	(D)	-	-	-	-	(D)	-
3679	ELECTRONIC COMPONENTS, NEC	4.0	3.8	2.1	1.9	-	(Z)	.1	(D)	.1	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	32.6	32.2	3.3	2.8	-	(Z)	.3	(D)	.1	(D)
3691	STORAGE BATTERIES.	2.3	2.0	1.4	1.0	-	(Z)	.3	(D)	(D)	(D)
3692	PRIMARY BATTERIES, DRY AND WET	.3	.3	(D)	(D)	-	-	-	-	-	-
3693	X-RAY APPARATUS AND TUBES.	.6	.6	(D)	(D)	-	-	-	-	-	-
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	(D)	(D)	(D)	(D)	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT	234.5	219.8	58.2	32.7	(D)	4.7	15.4	1.7	2.4	(D)
371	MOTOR VEHICLES AND EQUIPMENT	169.8	158.3	35.1	24.9	-	.6	9.1	.5	1.7	.6
3711	MOTOR VEHICLES AND CAR BODIES.	29.5	28.1	11.5	10.5	-	.2	1.8	(D)	.9	(D)
3714	MOTOR VEHICLE PARTS, ACCESSORIES	139.9	131.3	23.5	14.3	-	.4	7.1	(D)	.8	(D)
372	AIRCRAFT AND PARTS	38.7	37.4	18.1	6.4	(D)	4.4	5.8	.8	.4	(D)
3721	AIRCRAFT	10.4	10.1	5.5	3.1	-	1.1	(D)	(D)	.2	(Z)
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	22.2	21.5	11.9	2.7	(D)	3.3	5.7	.1	.1	(D)
3728	AIRCRAFT EQUIPMENT, NEC.	6.2	5.8	.8	.6	-	(Z)	(D)	(D)	.1	-
373	SHIP, BOAT BUILDING, REPAIRING	14.7	14.5	(D)	(D)	-	-	-	.2	(D)	-
3731	SHIP BUILDING AND REPAIRING.	(D)	(D)	(D)	(D)	-	-	-	.2	(D)	-
3743	RAILROAD EQUIPMENT	3.9	3.7	.8	(D)	-	-	(D)	(D)	(D)	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	1.6	(D)	(D)	.5	-	-	-	-	(D)	-
376	GUIDED MISSILES, SPACE VEHICLES.	4.9	3.8	1.4	.7	-	.2	(D)	.2	.2	(D)
3761	GUIDED MISSILES, SPACE VEHICLES.	2.5	1.9	.8	.6	-	.1	(D)	(D)	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	(D)	.6	.1	-	(D)	(D)	.1	(D)	(D)
379	MISC. TRANSPORTATION EQUIPMENT	.8	(D)	(D)	(D)	-	-	-	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	35.5	33.1	15.8	10.9	(D)	.7	(D)	.1	1.0	.6
3811	ENGINEERING, SCIENTIFIC INSTRU	.7	.6	.1	(D)	-	(D)	(D)	(D)	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	5.4	5.1	1.6	1.1	-	(D)	.3	.1	(D)	(D)
3822	ENVIRONMENTAL CONTROLS	1.9	1.8	.8	.4	-	(D)	(D)	-	-	-
3823	PROCESS CONTROL INSTRUMENTS.	.5	.5	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3824	FLUID METERS AND COUNTING DEVICES.	1.0	1.0	(D)	(D)	-	-	-	(D)	-	-
3825	INSTRU. TO MEASURE ELECTRICITY	1.8	1.6	.6	(D)	-	-	-	(D)	-	-
3829	MEASUR'G, CONTROL'G DEVICES, NEC	.3	.3	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	(D)	.5	(D)	(D)	-	-	-	-	-	-
384	MEDICAL INSTRUMENTS, SUPPLIES.	2.3	2.1	.5	.4	-	(D)	(D)	.1	-	-
3841	SURGICAL AND MEDICAL INSTRUMENTS	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-
3842	SURGICAL APPLIANCES AND SUPPLIES	1.6	1.5	.4	.4	-	(D)	(D)	(D)	-	-

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
35	MACHINERY, EXCEPT ELECTRICAL--CON.								
359	MISC. MACHINERY, EXC. ELEC.--CON.								
3592	CARBURETORS, PISTONS, RINGS, ETC	(D)	.4	(D)	.3	.8	.2	(Z)	.1
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	(D)	(Z)	(D)	(D)	(D)	.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	81.5	25.6	.9	6.5	23.3	20.7	1.2	3.1
361	ELECTRIC DISTRIBUTING EQUIPMENT	3.0	.5	-	.4	1.3	.6	.1	(Z)
3612	TRANSFORMERS	(D)	.2	-	.3	.7	.2	(D)	(Z)
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	(D)	.3	-	.1	.4	.5	.1	(D)
362	ELECTRICAL INDUSTRIAL APPARATUS	7.0	1.5	(D)	.7	3.1	.7	(D)	.8
3621	MOTORS AND GENERATORS	(D)	.5	(D)	.4	1.1	.3	(D)	.6
3622	INDUSTRIAL CONTROLS	1.4	.3	-	.3	.5	.2	(D)	(D)
3623	WELDING APPARATUS, ELECTRIC	(D)	(D)	-	(D)	(D)	.1	-	(D)
3624	CARBON AND GRAPHITE PRODUCTS	2.4	.7	-	(D)	1.3	.1	(Z)	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC	(D)	(D)	-	(D)	(D)	(Z)	-	-
363	HOUSEHOLD APPLIANCES	10.5	2.9	(D)	.3	2.8	2.3	(D)	1.4
3631	HOUSEHOLD COOKING EQUIPMENT	3.4	1.1	-	(D)	.1	.8	(D)	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	2.4	(D)	(D)	(D)	.6	.9	.1	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT	1.4	.4	(D)	(D)	.6	.1	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS	1.5	.4	-	(D)	.5	.2	.1	(D)
3635	HOUSEHOLD VACUUM CLEANERS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3639	HOUSEHOLD APPLIANCES, NEC	1.4	.4	(D)	(D)	.9	.1	(D)	(D)
364	ELEC. LIGHTING, WIRING EQUIP	10.3	1.1	(D)	.3	7.6	.6	(D)	.2
3641	ELECTRIC LAMPS	(D)	.1	-	.1	.5	.2	(Z)	(D)
3644	NONCURRENT-CARRYING WIR'G DEVICES	.7	.1	-	(D)	.3	.1	(Z)	(D)
3645	RESIDENTIAL LIGHTING FIXTURES	(D)	(D)	-	-	(D)	(D)	(D)	-
3646	COMMERCIAL LIGHTING FIXTURES	(D)	(D)	-	-	(D)	(D)	(D)	-
3648	LIGHTING EQUIPMENT, NEC	(D)	.1	-	(D)	(D)	(Z)	(D)	(D)
365	RADIO, TV RECEIVING EQUIPMENT	1.2	.1	(D)	(Z)	.3	.6	(D)	(D)
3651	RADIO AND TV RECEIVING SETS	(D)	(D)	(D)	(Z)	.2	.5	(D)	(D)
3652	PHONO. RECORDS, PRERECORDED TAPE	(D)	(D)	-	(Z)	(D)	.1	(D)	(D)
366	COMMUNICATION EQUIPMENT	9.3	1.9	(D)	3.1	1.0	2.7	.2	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	5.9	.9	(D)	2.5	.4	1.8	.1	(D)
367	ELECTRONIC COMPONENTS, ACCESS	11.3	2.2	-	1.4	4.7	2.5	.2	.3
3671	ELECTRON TUBES, RECEIVING TYPE	2.6	.6	-	.3	1.2	.4	(D)	(D)
3674	SEMICONDUCTORS, RELATED DEVICES	3.8	.5	-	.3	1.4	1.3	(Z)	.2
3675	ELECTRONIC CAPACITORS	(D)	.3	-	.4	1.0	.1	(Z)	(D)
3676	ELECTRONIC RESISTORS	(D)	.1	-	(Z)	.1	.1	(Z)	(D)
3678	ELECTRONIC CONNECTORS	.8	.2	-	.1	.2	.2	(D)	(D)
3679	ELECTRONIC COMPONENTS, NEC	1.7	.5	-	.3	.4	.4	(D)	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	28.9	15.1	(D)	.4	2.3	10.8	.2	(D)
3691	STORAGE BATTERIES	.6	.1	-	-	.3	.1	(D)	(D)
3692	PRIMARY BATTERIES, DRY AND WET	(D)	(D)	-	(D)	(D)	(D)	(D)	-
3693	X-RAY APPARATUS AND TUBES	(D)	(D)	(D)	(D)	.3	(Z)	-	(D)
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	.2	(D)	-	-	(D)	(Z)	(D)	(D)
37	TRANSPORTATION EQUIPMENT	161.6	40.5	8.7	6.3	62.2	33.0	3.7	7.2
371	MOTOR VEHICLES AND EQUIPMENT	123.2	30.8	8.6	2.6	51.5	25.8	2.8	2.6
3711	MOTOR VEHICLES AND CAR BODIES	15.2	5.6	(D)	(D)	4.7	3.6	1.2	1.0
3714	MOTOR VEHICLE PARTS, ACCESSORIES	107.8	25.3	(D)	(D)	46.6	22.1	1.7	1.5
372	AIRCRAFT AND PARTS	19.3	4.9	(D)	2.6	6.1	3.4	(D)	1.7
3721	AIRCRAFT	4.6	.9	-	.4	1.4	1.5	.1	.1
3724	AIRCRAFT ENGINES AND ENGINE PARTS	9.6	2.3	(D)	1.9	2.6	1.1	(D)	1.5
3728	AIRCRAFT EQUIPMENT, NEC	5.1	1.8	-	.2	2.1	.8	.1	.1
373	SHIP, BOAT BUILDING, REPAIRING	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
3731	SHIP BUILDING AND REPAIRING	12.2	3.5	-	.4	3.5	2.2	.2	2.3
3743	RAILROAD EQUIPMENT	2.9	.6	(D)	.1	1.0	.8	.1	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES	2.5	.4	(D)	.5	.6	.7	(D)	.1
3761	GUIDED MISSILES, SPACE VEHICLES	1.1	(D)	(D)	(D)	(D)	.5	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	.1	(D)	.3	.3	(D)	(D)	(D)
379	MISC. TRANSPORTATION EQUIPMENT	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	17.3	3.2	(D)	2.2	4.5	2.4	(D)	.8
3811	ENGINEERING, SCIENTIFIC INSTRU	.4	.1	-	.1	.1	.2	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	3.5	1.1	-	.4	.9	.7	.2	.1
3822	ENVIRONMENTAL CONTROLS	1.0	.5	-	.1	.2	.2	(D)	(D)
3823	PROCESS CONTROL INSTRUMENTS	(D)	(D)	-	(D)	.1	.1	(D)	(D)
3824	FLUID METERS AND COUNTING DEVICES	(D)	.2	-	(Z)	.3	.1	.1	(D)
3825	INSTRU. TO MEASURE ELECTRICITY	1.0	.2	-	(D)	.3	.2	(D)	(D)
3829	MEASUR'G, CONTROL'G DEVICES, NEC	(D)	(D)	-	(Z)	(Z)	.1	(D)	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	(D)	(D)	-	.2	.1	.1	(D)	-
384	MEDICAL INSTRUMENTS, SUPPLIES	1.6	.6	-	.1	.3	.3	(Z)	.1
3841	SURGICAL AND MEDICAL INSTRUMENTS	.5	.1	-	(Z)	.1	.1	(Z)	(Z)
3842	SURGICAL APPLIANCES AND SUPPLIES	1.1	.5	-	.1	.2	.1	(Z)	.1

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water intake	Water discharged								
				Treated water by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
38	INSTRUMENTS, RELATED PRODUCTS--CON.										
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	20.1	18.4	(D)	8.6	(D)	.6	1.9	(D)	1.0	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES	.6	(D)	(D)	(D)	-	-	(D)	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES	7.7	7.1	2.0	1.2	-	(D)	.6	(Z)	(Z)	(D)
391	JEWELRY, SILVER AND PLATED WARE	.7	.7	.2	(D)	-	-	-	(Z)	(Z)	(D)
3911	JEWELRY, PRECIOUS METAL	(D)	(D)	(D)	(D)	-	-	-	-	-	(D)
3914	SILVERWARE AND PLATED WARE	.5	.5	.2	(D)	-	-	-	(Z)	(Z)	(D)
3931	MUSICAL INSTRUMENTS	.2	.2	(D)	-	-	-	-	-	(Z)	-
394	TOYS AND SPORTING GOODS	1.6	1.5	.2	.2	-	-	(D)	(Z)	(Z)	(D)
3944	GAMES, TOYS, CHILDREN'S VEHICLES	1.0	1.0	(D)	(D)	-	-	(D)	(Z)	(Z)	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC	.6	.6	(D)	(D)	-	-	-	-	(Z)	(D)
395	PENS, OFFICE AND ART GOODS	.8	.8	(D)	(D)	-	(D)	(D)	(Z)	(Z)	-
3951	PENS AND MECHNICAL PENCILS	(D)	(D)	(D)	-	-	(D)	(D)	-	-	-
396	COSTUME JEWELRY AND NOTIONS	1.2	1.2	.5	.5	-	(D)	(D)	-	(Z)	-
3961	COSTUME JEWELRY	.3	.3	(D)	(D)	-	(D)	-	-	(Z)	-
3964	NEEDLES, PINS, AND FASTENERS	.9	.9	(D)	(D)	-	-	(D)	-	-	-
399	MISCELLANEOUS MANUFACTURES	3.3	2.8	.7	(D)	-	-	(D)	(Z)	(Z)	-
3996	HARD SURFACE FLOOR COVERINGS	1.6	1.1	(D)	(D)	-	-	(D)	(Z)	(Z)	-
3999	MANUFACTURING INDUSTRIES, NEC	1.4	1.5	(D)	(D)	-	-	(D)	-	(Z)	-

See footnotes at end of table.

Table 7a. Water Discharged, Treated and Untreated, by Last Use, for Industry Groups and Industries: 1978—Con.

(All figures in billion of gallons. For explanation of terms, see appendix A)

1977 code	Industry group and industry	Water discharged--Con.							
		Untreated water by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other
38	INSTRUMENTS, RELATED PRODUCTS--CON.								
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	(D)	1.1	(D)	1.3	1.4	.7	.2	.5
3873	WATCHES, CLOCKS, AND WATCHCASES	(D)	(D)	-	(D)	.3	.2	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	5.2	1.5	(D)	.3	2.4	.8	(D)	.1
391	JEWELRY, SILVER AND PLATED WARE	.5	.3	-	(D)	.1	(Z)	(D)	-
3911	JEWELRY, PRECIOUS METAL	(D)	(D)	-	(D)	(D)	(Z)	-	-
3914	SILVERWARE AND PLATED WARE	.3	(D)	-	(D)	.1	(Z)	(D)	-
3931	MUSICAL INSTRUMENTS	(D)	-	-	-	(D)	.1	(D)	-
394	TOYS AND SPORTING GOODS	1.3	.2	-	(Z)	.9	.1	(Z)	(Z)
3944	GAMES, TOYS, CHILDREN'S VEHICLES	(D)	(D)	-	(Z)	.7	.1	-	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC	(D)	(D)	-	(Z)	.2	(Z)	(Z)	(D)
395	PENS, OFFICE AND ART GOODS	(D)	(D)	-	(D)	.1	.2	(D)	(D)
3951	PENS AND MECHNICAL PENCILS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS	.7	.4	-	(D)	(D)	.1	(Z)	(D)
3961	COSTUME JEWELRY	(D)	-	-	(D)	(D)	(Z)	(Z)	-
3964	NEEDLES, PINS, AND FASTENERS	(D)	.4	-	(D)	(D)	(Z)	(Z)	(D)
399	MISCELLANEOUS MANUFACTURES	2.1	.6	(D)	(Z)	1.1	.3	(D)	(Z)
3996	HARD SURFACE FLOOR COVERINGS	(D)	(D)	-	(Z)	(D)	.1	(D)	(Z)
3999	MANUFACTURING INDUSTRIES, NEC	(D)	(D)	(D)	(Z)	.1	.1	(D)	(Z)

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries, whether or not separate figures are shown for individual industries in the group.

Industries which have been omitted from the table have total water discharge of less than .05 or have data withheld to avoid disclosure.

- Represent zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (Z) Less than 50 million gallons.

Table 7b. Water Discharged, Treated and Untreated, by Last Use, for States: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

State	Water intake	Water discharged								
			Treated by last use							
					Cooling and condensing					
		Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
UNITED STATES, TOTAL	12 991.7	11 682.0	4 709.2	2 477.2	316.2	46.1	1 425.2	57.8	165.6	221.1
ALABAMA	294.2	280.1	151.1	91.8	(D)	5.6	39.0	(D)	3.6	7.5
ARIZONA	21.5	13.5	2.3	1.2	(D)	.1	.6	.2	.1	(D)
ARKANSAS	73.7	66.3	58.0	48.5	(D)	(D)	2.4	.6	2.2	3.2
CALIFORNIA	307.6	242.8	105.7	42.5	3.1	.6	44.9	.8	3.8	10.0
COLORADO	65.6	58.9	32.7	14.2	(D)	(D)	12.6	3.6	.4	.7
CONNECTICUT	87.7	85.4	33.2	10.9	(D)	.2	20.7	(D)	.6	.2
DELAWARE	169.3	167.2	97.8	6.9	(D)	(D)	88.0	.2	1.3	.2
FLORIDA	221.1	182.2	76.9	60.1	(D)	(D)	9.9	1.2	2.5	2.2
GEORGIA	271.2	231.1	138.2	101.1	(D)	(D)	14.9	2.6	4.2	5.7
HAWAII	111.4	88.1	64.0	9.2	19.5	(D)	2.4	.1	1.2	(D)
IDAHO	32.6	35.1	12.4	8.5	(D)	(D)	1.3	.1	1.2	.2
ILLINOIS	430.9	367.5	114.8	60.3	2.8	1.4	29.1	2.0	13.6	5.6
INDIANA	634.8	598.7	238.1	155.5	(D)	(D)	75.8	1.3	3.4	.9
IOWA	147.3	138.4	44.6	13.5	-	.9	27.2	.4	.8	1.9
KANSAS	37.0	30.7	14.0	4.4	(D)	(Z)	3.0	1.0	2.9	(D)
KENTUCKY	139.9	131.7	42.4	26.4	-	.2	12.2	.7	1.2	1.7
LOUISIANA	1 280.2	1 224.7	249.6	102.2	.3	1.2	115.0	2.6	8.3	19.9
MAINE	137.1	106.9	82.7	66.0	(D)	2.8	6.9	(D)	2.6	.4
MARYLAND	371.8	318.4	(D)	53.6	(D)	1.5	117.8	.3	3.0	4.3
MASSACHUSETTS	152.4	147.9	24.7	16.6	(D)	3.5	3.3	(D)	.4	.2
MICHIGAN	874.3	797.8	374.8	208.8	109.4	2.5	46.8	1.0	4.9	1.4
MINNESOTA	160.9	111.3	23.5	17.0	(D)	(D)	3.5	.3	.5	1.0
MISSISSIPPI	99.3	92.2	64.0	36.8	(D)	1.5	18.4	(D)	2.6	3.5
MISSOURI	50.7	42.9	13.0	6.5	-	.5	4.0	.7	.7	.9
MONTANA	32.2	26.8	11.7	5.1	-	(D)	5.3	(D)	.1	.2
NEBRASKA	28.7	26.3	15.4	6.4	-	(D)	7.6	(D)	.4	.2
NEVADA	18.9	5.5	(D)	(D)	-	-	(D)	.2	(D)	(D)
NEW HAMPSHIRE	26.2	26.1	17.0	14.3	(D)	(D)	.3	(Z)	.5	(D)
NEW JERSEY	331.5	323.9	105.9	30.9	.2	1.6	63.8	1.7	4.2	3.5
NEW MEXICO	4.8	2.5	.9	.4	(D)	-	.2	(D)	(D)	(D)
NEW YORK	469.7	447.3	183.0	95.9	4.2	1.1	69.6	1.0	3.2	8.0
NORTH CAROLINA	187.0	162.4	108.0	84.1	1.5	5.0	9.1	1.6	4.4	2.5
NORTH DAKOTA	(D)	1.1	(D)	(D)	-	-	(D)	(D)	(D)	-
OHIO	584.7	501.7	194.8	104.9	3.8	3.1	68.2	1.5	5.9	7.4
OKLAHOMA	153.5	81.2	68.3	12.6	(D)	(D)	2.3	10.7	2.1	40.2
OREGON	135.5	135.2	77.1	61.8	(D)	(D)	5.7	.4	1.4	7.4
PENNSYLVANIA	1 190.1	1 141.3	445.2	240.9	24.5	.4	163.9	3.1	9.5	2.9
RHODE ISLAND	19.1	18.7	2.4	1.4	(D)	(D)	(D)	(D)	.2	-
SOUTH CAROLINA	416.4	404.9	89.3	58.2	(D)	1.2	24.5	(D)	1.7	2.3
TENNESSEE	366.6	347.4	90.0	55.1	(D)	2.6	23.0	(D)	2.8	2.1
TEXAS	1 395.7	1 155.6	361.7	140.1	8.1	2.5	132.0	9.0	45.3	24.7
UTAH	58.7	18.0	10.5	8.5	-	(D)	.6	(D)	.5	.2
VERMONT	5.8	5.4	3.8	3.3	-	(D)	(D)	(Z)	(D)	(D)
VIRGINIA	247.3	236.9	61.1	52.2	(D)	(D)	2.9	.8	1.6	1.2
WASHINGTON	424.4	398.5	198.7	150.2	(D)	(D)	30.4	.8	2.9	10.4
WEST VIRGINIA	456.9	436.0	230.0	83.1	(D)	(D)	101.3	2.4	10.9	1.5
WISCONSIN	202.7	185.9	86.4	73.4	.5	.8	6.2	.2	1.4	3.9
WYOMING	10.7	5.1	3.7	.6	-	-	1.0	(D)	(D)	.2

See footnotes at end of table.

Table 7b. Water Discharged, Treated and Untreated, by Last Use, for States: 1978 —Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

State	Water discharge--Con.							
	Untreated by last use							
			Cooling and condensing					
	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
UNITED STATES, TOTAL	6 973.0	1 018.7	1 366.7	140.2	3 932.4	204.6	108.7	201.8
ALABAMA	129.0	6.9	5.6	9.6	96.6	4.1	3.2	3.0
ARIZONA	11.1	3.5	(D)	(D)	1.1	5.3	.2	.3
ARKANSAS	8.3	1.4	(D)	(D)	3.6	.9	.3	.1
CALIFORNIA	137.1	48.0	9.2	1.4	48.1	8.5	3.5	18.4
COLORADO	26.2	1.2	(D)	(Z)	12.1	1.3	1.1	(D)
CONNECTICUT	52.2	8.4	9.4	2.8	25.3	3.2	.8	3.1
DELAWARE	69.4	1.2	(D)	1.6	8.8	.3	(D)	.6
FLORIDA	105.3	21.6	23.7	1.3	38.8	8.7	1.8	9.4
GEORGIA	92.9	25.4	34.9	1.3	19.1	3.1	1.4	7.7
HAWAII	24.1	4.7	13.8	(D)	1.6	(D)	.2	.8
IDAHO	22.6	2.6	(D)	(D)	1.9	.2	.2	15.9
ILLINOIS	252.7	18.2	127.4	3.0	86.0	10.0	5.7	2.4
INDIANA	360.6	8.5	78.2	3.6	255.8	6.7	3.4	4.1
IOWA	93.8	16.3	15.0	3.0	53.3	3.8	.9	1.5
KANSAS	16.6	2.7	-	.7	10.9	1.5	.4	.4
KENTUCKY	89.3	18.5	(D)	(D)	48.5	11.6	8.6	1.8
LOUISIANA	975.1	59.9	243.3	1.3	652.2	.9	4.2	13.3
MAINE	24.2	2.9	(D)	(D)	9.8	.4	.2	1.2
MARYLAND	(D)	18.1	(D)	.9	30.5	2.0	(D)	2.5
MASSACHUSETTS	123.2	16.9	52.8	3.2	34.0	6.3	1.9	8.1
MICHIGAN	423.0	171.9	49.5	12.7	155.6	25.1	3.8	4.5
MINNESOTA	87.8	42.8	10.5	.9	17.3	5.0	10.4	.9
MISSISSIPPI	28.1	2.1	(D)	.3	15.7	.6	(D)	.4
MISSOURI	29.9	10.1	(D)	.9	13.9	2.1	(D)	1.8
MONTANA	15.1	(D)	(D)	(D)	3.2	(Z)	.1	(D)
NEBRASKA	10.9	.8	(D)	1.0	5.0	2.3	.3	(D)
NEVADA	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
NEW HAMPSHIRE	9.2	1.1	(D)	.1	2.2	.2	(D)	5.5
NEW JERSEY	218.1	128.1	7.0	3.8	69.2	3.5	4.2	2.3
NEW MEXICO	1.6	1.2	-	(D)	(D)	(Z)	(D)	(D)
NEW YORK	264.3	46.7	9.2	14.8	162.2	14.5	4.8	12.0
NORTH CAROLINA	54.4	21.5	3.9	1.8	20.3	2.2	1.1	3.6
NORTH DAKOTA	(D)	.1	-	-	(D)	(Z)	(D)	-
OHIO	306.9	35.6	39.4	2.5	189.0	15.9	5.7	18.8
OKLAHOMA	12.9	3.2	(D)	(D)	7.7	1.6	.1	.2
OREGON	58.1	4.7	14.2	.3	27.1	.7	4.1	7.0
PENNSYLVANIA	696.1	80.4	154.1	13.0	421.2	15.9	7.1	4.4
RHODE ISLAND	16.4	6.5	.4	.1	3.0	5.9	.3	(Z)
SOUTH CAROLINA	315.6	15.7	(D)	13.8	260.5	1.8	(D)	6.2
TENNESSEE	257.4	23.4	41.5	11.7	159.3	11.5	4.3	5.7
TEXAS	793.9	33.9	214.4	4.6	515.0	5.3	10.7	9.8
UTAH	7.5	2.1	(D)	(Z)	3.8	(D)	(Z)	.3
VERMONT	1.7	.2	(D)	.2	.2	.2	(Z)	(D)
VIRGINIA	175.8	25.6	18.9	10.1	112.1	1.2	3.1	4.8
WASHINGTON	199.8	27.1	(D)	3.8	144.5	(D)	2.5	11.8
WEST VIRGINIA	206.0	9.0	36.4	7.5	147.4	.5	1.3	3.9
WISCONSIN	99.5	24.9	28.4	1.6	31.7	9.1	1.6	2.3
WYOMING	1.4	-	-	-	(D)	(D)	-	-

Note: States which do not appear above have data being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged								
				Treated by last use							
					Cooling and condensing						
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	UNITED STATES, TOTAL	12 991.7	11 682.2	4 709.2	2 477.2	316.2	46.1	1 425.2	57.8	165.6	221.2
	NEW ENGLAND	424.6	386.7	161.5	111.4	4.4	6.6	32.5	.6	4.2	1.8
20	FOOD AND KINDRED PRODUCTS	10.7	8.5	1.3	.9	-	(D)	.2	.1	.1	(D)
22	TEXTILE MILL PRODUCTS	18.6	18.4	3.6	3.1	(D)	(D)	(D)	(Z)	.1	-
26	PAPER AND ALLIED PRODUCTS	209.5	178.4	113.0	93.7	(D)	2.9	7.3	(D)	3.2	1.2
28	CHEMICALS AND ALLIED PRODUCTS	55.3	52.7	21.9	3.3	(D)	.2	16.3	.1	.3	(D)
29	PETROLEUM AND COAL PRODUCTS	.3	.2	(D)	(D)	-	-	-	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD	10.0	9.9	.3	.1	-	-	.2	(D)	(Z)	(D)
31	LEATHER AND LEATHER PRODUCTS	2.6	2.6	(D)	.3	-	-	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	3.2	2.8	.8	.5	-	(D)	(D)	(D)	-	(D)
33	PRIMARY METAL INDUSTRIES	24.3	23.9	2.2	1.6	-	(D)	.5	(Z)	.1	(D)
34	FABRICATED METAL PRODUCTS	16.9	16.8	1.7	1.1	-	(D)	.3	.2	(D)	.1
35	MACHINERY, EXCEPT ELECTRICAL	22.1	21.6	.5	.4	-	(D)	-	(Z)	.1	(D)
36	ELECTRIC, ELECTRONIC EQUIP	11.4	11.7	2.3	1.1	-	(D)	.7	.1	.1	(D)
37	TRANSPORTATION EQUIPMENT	29.4	29.1	11.5	3.2	-	(D)	5.2	(D)	.2	-
38	INSTRUMENTS, RELATED PRODUCTS	8.3	8.1	1.4	.9	-	(D)	(D)	(D)	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES	1.8	1.7	.7	.5	-	(D)	-	-	(D)	-
	MIDDLE ATLANTIC	1 618.7	1 504.9	716.6	209.2	91.3	4.5	375.2	4.4	14.8	17.2
20	FOOD AND KINDRED PRODUCTS	69.5	63.6	18.0	10.0	(D)	(D)	2.0	.5	.7	4.1
21	TOBACCO PRODUCTS	1.4	1.2	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	13.3	11.9	6.6	6.0	-	(D)	(D)	(Z)	.3	.1
24	LUMBER AND WOOD PRODUCTS	.7	.2	(D)	(D)	-	-	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS	159.3	145.5	56.3	49.2	.7	(D)	4.6	(D)	1.2	.3
28	CHEMICALS AND ALLIED PRODUCTS	491.6	443.2	133.8	41.7	(D)	(D)	74.4	1.9	4.4	3.9
29	PETROLEUM AND COAL PRODUCTS	271.0	261.3	182.6	4.7	(D)	(D)	171.8	.3	3.8	1.7
30	RUBBER, MISC. PLASTICS PROD	25.0	22.2	4.9	1.2	-	(D)	3.1	.1	.4	(D)
31	LEATHER AND LEATHER PRODUCTS	.9	.9	.5	.3	(D)	-	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	26.4	26.6	9.9	3.3	(D)	(D)	2.0	.2	.1	3.6
34	FABRICATED METAL PRODUCTS	10.5	9.6	2.5	1.7	-	(D)	.6	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	26.0	25.4	1.7	.4	-	.3	.7	(Z)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	17.1	16.2	5.7	4.7	(D)	(D)	.4	.2	.2	.2
37	TRANSPORTATION EQUIPMENT	15.7	15.3	6.5	3.7	-	(D)	(D)	.2	.2	(D)
38	INSTRUMENTS, RELATED PRODUCTS	4.7	4.7	1.2	.4	-	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	2.0	1.5	.2	.1	-	-	(D)	(D)	(D)	(D)
	SOUTH ATLANTIC	1 369.2	1 234.6	590.3	402.7	10.0	14.9	115.8	7.2	18.3	21.4
20	FOOD AND KINDRED PRODUCTS	54.3	45.3	21.2	15.7	-	(Z)	1.4	1.1	1.3	1.7
21	TOBACCO PRODUCTS	2.6	1.6	(D)	-	-	-	-	(D)	-	(D)
22	TEXTILE MILL PRODUCTS	117.8	105.3	43.0	36.3	(Z)	.7	1.7	.9	1.5	1.6
24	LUMBER AND WOOD PRODUCTS	9.2	2.0	1.0	.7	-	(D)	(D)	.1	.1	.1
26	PAPER AND ALLIED PRODUCTS	514.4	480.5	353.7	289.9	9.2	7.5	26.1	2.3	10.7	8.0
28	CHEMICALS AND ALLIED PRODUCTS	480.4	437.2	94.5	40.6	.5	1.6	45.0	1.7	2.3	2.8
29	PETROLEUM AND COAL PRODUCTS	6.1	3.0	2.8	1.1	-	(D)	.8	(D)	.2	(D)
30	RUBBER, MISC. PLASTICS PROD	26.3	18.0	7.0	1.6	-	.2	4.8	(D)	.3	(D)
32	STONE, CLAY, GLASS PRODUCTS	15.5	9.7	6.3	4.0	-	(D)	1.6	.2	(Z)	(D)
33	PRIMARY METAL INDUSTRIES	63.9	54.5	46.7	12.6	(D)	(D)	26.3	(D)	1.3	5.6
34	FABRICATED METAL PRODUCTS	5.4	5.3	3.0	1.3	-	(D)	(D)	(Z)	(Z)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	9.1	8.9	1.9	1.2	-	.2	.3	.2	(D)	(D)
37	TRANSPORTATION EQUIPMENT	32.6	32.4	1.6	.8	-	.1	(D)	.5	(D)	(D)

See footnotes at end of table.

Table 7c. **Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water discharged--Con.							
		Untreated by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	UNITED STATES, TOTAL	6 973.0	1 018.7	1 366.7	140.2	3 932.4	204.6	108.7	201.8
	NEW ENGLAND	225.2	33.4	79.3	6.3	69.9	15.2	3.2	17.9
20	FOOD AND KINDRED PRODUCTS	7.3	3.6	-	2.1	1.2	.1	.1	.2
22	TEXTILE MILL PRODUCTS	14.8	3.5	-	(D)	3.1	.3	(D)	7.6
26	PAPER AND ALLIED PRODUCTS	65.4	5.9	48.4	.1	4.0	.4	.2	6.4
28	CHEMICALS AND ALLIED PRODUCTS	30.9	2.9	(D)	.2	24.7	(D)	.4	.2
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	-	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	9.7	1.0	-	(D)	8.1	.1	.2	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	.3	-	(D)	(D)	1.8	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	2.1	.6	(D)	(D)	1.2	.1	(D)	(D)
33	PRIMARY METAL INDUSTRIES	21.7	7.9	(D)	(D)	4.6	.3	.3	2.2
34	FABRICATED METAL PRODUCTS	15.1	2.3	(D)	(D)	8.8	.5	.2	.1
35	MACHINERY, EXCEPT ELECTRICAL	21.1	.8	(D)	1.1	2.6	1.6	1.0	(D)
36	ELECTRIC, ELECTRONIC EQUIP	9.3	.8	(D)	.5	6.7	.5	(D)	.2
37	TRANSPORTATION EQUIPMENT	17.7	2.9	-	1.4	2.5	9.3	.3	.7
38	INSTRUMENTS, RELATED PRODUCTS	6.8	.6	(D)	.3	1.8	.5	.1	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	1.0	.3	-	(D)	.6	.1	(Z)	(D)
	MIDDLE ATLANTIC	788.2	198.8	110.0	36.7	402.1	15.0	10.5	15.0
20	FOOD AND KINDRED PRODUCTS	45.6	21.1	.2	.4	18.7	1.6	1.0	2.6
21	TOBACCO PRODUCTS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	5.3	3.8	(D)	.1	.4	.2	.4	(D)
24	LUMBER AND WOOD PRODUCTS	(D)	-	-	-	(D)	(Z)	(D)	-
26	PAPER AND ALLIED PRODUCTS	89.2	27.5	27.3	.7	30.1	.5	1.1	2.0
28	CHEMICALS AND ALLIED PRODUCTS	309.4	122.6	21.0	11.1	142.1	1.2	6.0	5.1
29	PETROLEUM AND COAL PRODUCTS	78.7	.4	(D)	(D)	32.0	.3	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD	17.3	5.6	(D)	(D)	9.6	.5	.7	.5
31	LEATHER AND LEATHER PRODUCTS	.4	(D)	-	-	-	(Z)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	16.7	4.8	(D)	(D)	7.9	.3	(Z)	.6
34	FABRICATED METAL PRODUCTS	7.0	1.0	-	.2	1.7	3.7	.2	.3
35	MACHINERY, EXCEPT ELECTRICAL	23.8	.9	-	8.6	13.0	.9	.1	.2
36	ELECTRIC, ELECTRONIC EQUIP	10.5	.9	(D)	3.5	3.6	1.9	(D)	.2
37	TRANSPORTATION EQUIPMENT	8.8	2.5	-	.5	3.1	.9	.2	1.7
38	INSTRUMENTS, RELATED PRODUCTS	3.4	.4	(D)	1.4	.8	.3	(D)	.2
39	MISC. MANUFACTUR'G INDUSTRIES	1.3	.4	-	(D)	.8	.1	(Z)	(D)
	SOUTH ATLANTIC	644.2	92.2	87.8	22.4	382.0	19.4	11.6	28.8
20	FOOD AND KINDRED PRODUCTS	24.1	5.4	.2	.3	10.7	1.0	1.4	2.8
21	TOBACCO PRODUCTS	(D)	.6	-	(D)	.6	.2	(D)	(Z)
22	TEXTILE MILL PRODUCTS	62.3	47.6	(D)	3.6	2.3	2.2	(D)	2.3
24	LUMBER AND WOOD PRODUCTS	1.0	.2	-	-	.5	.2	.1	(Z)
26	PAPER AND ALLIED PRODUCTS	126.7	13.9	68.9	.4	32.2	.7	.6	10.0
28	CHEMICALS AND ALLIED PRODUCTS	342.7	18.1	(D)	15.0	280.9	(D)	2.3	9.5
29	PETROLEUM AND COAL PRODUCTS	.2	-	-	-	(D)	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD	11.0	.6	-	2.3	6.4	1.1	.1	.6
32	STONE, CLAY, GLASS PRODUCTS	3.4	.6	-	(D)	1.8	(D)	(Z)	.3
33	PRIMARY METAL INDUSTRIES	7.8	.3	(D)	(D)	6.0	1.1	(D)	.3
34	FABRICATED METAL PRODUCTS	2.3	.5	-	(D)	1.5	.3	(Z)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	7.1	1.2	-	.3	2.7	1.1	.1	1.8
37	TRANSPORTATION EQUIPMENT	30.8	.3	-	.3	28.2	(D)	(D)	1.2

See footnotes at end of table.

Table 7c. **Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged								
				Treated by last use							
					Cooling and condensing						
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	SOUTH ATLANTIC--CON.										
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	.9	.4	(D)	-	-	-	(D)	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-
	GREAT LAKES.	2 513.7	2 298.4	930.1	546.2	117.0	5.4	225.7	3.7	21.5	10.6
20	FOOD AND KINDRED PRODUCTS.	104.9	98.1	23.4	12.1	.8	.5	6.9	.5	1.7	.9
22	TEXTILE MILL PRODUCTS.	.7	.6	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	2.8	2.7	(D)	(D)	(D)	-	-	(D)	-	-
25	FURNITURE AND FIXTURES	1.2	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	219.7	197.6	134.2	117.5	6.9	.7	6.4	.1	1.9	.7
28	CHEMICALS AND ALLIED PRODUCTS.	476.5	422.3	118.3	53.0	7.9	.1	44.7	1.0	9.9	1.7
29	PETROLEUM AND COAL PRODUCTS.	154.3	134.1	107.4	12.7	(D)	(D)	89.1	.2	3.2	1.8
30	RUBBER, MISC. PLASTICS PROD.	49.7	45.9	22.9	1.7	(D)	1.6	17.2	(D)	.6	.3
31	LEATHER AND LEATHER PRODUCTS	2.6	(D)	1.6	1.3	-	-	-	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	55.1	53.2	6.9	4.7	(D)	(D)	1.8	.1	(D)	.3
33	PRIMARY METAL INDUSTRIES	1 297.1	1 202.9	461.1	306.4	(D)	1.6	49.0	(D)	1.1	2.5
34	FABRICATED METAL PRODUCTS.	22.9	21.2	7.9	6.4	(D)	(D)	.5	.3	.3	.3
35	MACHINERY, EXCEPT ELECTRICAL	20.4	18.7	4.8	2.2	(D)	.1	1.4	(D)	.4	.8
36	ELECTRIC, ELECTRONIC EQUIP	16.9	16.2	3.3	2.5	-	.2	.6	(D)	.2	(D)
37	TRANSPORTATION EQUIPMENT	71.6	65.4	25.1	16.0	-	.5	6.7	.3	1.3	.4
38	INSTRUMENTS, RELATED PRODUCTS.	15.6	14.3	(D)	8.0	(D)	(D)	(D)	-	.9	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	1.4	1.4	(D)	(D)	-	-	(D)	-	-	-
	OHIO	1 717.3	1 642.2	675.0	369.3	55.4	1.8	209.4	6.7	22.9	9.5
20	FOOD AND KINDRED PRODUCTS.	31.3	25.6	7.9	3.9	-	(D)	2.0	(D)	.4	.7
21	TOBACCO PRODUCTS	(D)	(D)	(D)	-	-	-	-	(D)	-	-
22	TEXTILE MILL PRODUCTS.	2.0	1.8	(D)	(D)	-	(D)	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	.3	.3	(D)	(D)	-	-	-	-	-	-
25	FURNITURE AND FIXTURES	.8	.8	(D)	(D)	-	-	-	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS.	52.7	53.1	36.8	34.8	(D)	.1	.4	.1	1.0	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	485.2	476.3	223.8	66.1	(D)	(D)	116.0	1.6	5.2	3.2
29	PETROLEUM AND COAL PRODUCTS.	31.3	21.2	14.6	2.1	(D)	(D)	6.8	.5	2.5	(D)
30	RUBBER, MISC. PLASTICS PROD.	22.8	22.5	5.5	1.0	-	(D)	3.7	.1	.7	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	(D)	(D)	-	(D)	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS.	27.5	21.5	5.8	4.1	-	(Z)	1.4	(D)	.1	(D)
33	PRIMARY METAL INDUSTRIES	971.6	931.8	359.1	241.6	(D)	(D)	72.5	3.3	12.0	4.9
34	FABRICATED METAL PRODUCTS, ...	9.5	9.5	2.8	1.8	-	.1	.5	.3	.2	(Z)
35	MACHINERY, EXCEPT ELECTRICAL	14.5	13.1	3.9	1.3	(D)	(D)	1.6	.1	.1	-
36	ELECTRIC, ELECTRONIC EQUIP	40.9	40.3	8.2	5.2	(D)	.3	2.3	(D)	.3	(D)
37	TRANSPORTATION EQUIPMENT	24.4	22.4	5.7	3.0	(D)	.2	2.0	(D)	.2	.1
38	INSTRUMENTS, RELATED PRODUCTS.	1.1	.9	.3	(D)	-	(D)	(D)	(D)	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	.5	.5	(D)	(D)	-	-	(D)	(D)	(D)	(D)
	TENNESSEE.	428.0	409.6	128.2	86.4	(D)	2.9	29.8	(D)	3.1	4.0
20	FOOD AND KINDRED PRODUCTS.	6.4	5.5	1.7	1.2	-	(D)	.2	(Z)	.1	(D)
22	TEXTILE MILL PRODUCTS.	5.3	4.8	1.3	1.1	-	(D)	(D)	(Z)	(D)	-
26	PAPER AND ALLIED PRODUCTS.	80.0	77.3	63.3	58.2	(D)	(D)	(D)	.2	1.4	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	302.1	293.3	51.4	20.7	(D)	2.2	24.3	(D)	1.4	1.6
30	RUBBER, MISC. PLASTICS PROD.	8.6	7.9	.8	(D)	-	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	2.6	2.0	.8	.3	-	(D)	.4	(D)	-	-
33	PRIMARY METAL INDUSTRIES	9.5	8.6	5.0	1.3	-	(D)	2.3	.2	(D)	(D)

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water discharged--Con.							
		Untreated by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	SOUTH ATLANTIC--CON.								
38	INSTRUMENTS, RELATED PRODUCTS.	.6	.2	-	(D)	.2	.1	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	.3	-	(D)	(D)	.1	(D)	(D)
	GREAT LAKES.	1 368.3	246.2	301.9	22.2	697.3	60.6	15.1	25.0
20	FOOD AND KINDRED PRODUCTS.	74.8	27.0	2.5	1.2	34.7	2.3	2.4	4.6
22	TEXTILE MILL PRODUCTS.	(D)	.3	-	(D)	(D)	(Z)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	(D)	(D)	-	(D)	.6	.1	(D)	(D)
25	FURNITURE AND FIXTURES	(D)	.5	-	(Z)	.3	.1	(Z)	(D)
26	PAPER AND ALLIED PRODUCTS.	63.5	17.8	22.4	1.0	9.2	9.2	2.0	1.9
28	CHEMICALS AND ALLIED PRODUCTS.	303.9	117.7	8.4	10.8	140.2	16.9	2.2	7.7
29	PETROLEUM AND COAL PRODUCTS.	26.7	.1	-	(D)	25.1	.9	.2	(D)
30	RUBBER, MISC. PLASTICS PROD.	22.9	1.5	(D)	.3	14.3	4.4	.7	(D)
31	LEATHER AND LEATHER PRODUCTS	1.0	.9	(D)	(D)	(Z)	.1	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	46.3	2.0	(D)	.5	8.1	.7	(D)	1.0
33	PRIMARY METAL INDUSTRIES	741.8	55.0	229.4	4.0	433.7	9.3	3.5	6.9
34	FABRICATED METAL PRODUCTS.	13.3	4.1	(D)	(D)	5.2	2.2	.8	.4
35	MACHINERY, EXCEPT ELECTRICAL	13.9	3.9	(D)	1.0	3.9	4.3	(D)	.4
36	ELECTRIC, ELECTRONIC EQUIP	12.9	4.1	.1	.9	4.3	2.3	.3	.2
37	TRANSPORTATION EQUIPMENT	40.2	10.6	(D)	1.7	17.0	7.3	1.9	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	1.1	-	.1	.9	.7	(D)	.4
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	.1	(D)	(D)	.1	(Z)	.1	(D)
	OHIO	967.1	125.9	175.9	13.0	577.8	29.1	21.3	24.1
20	FOOD AND KINDRED PRODUCTS.	17.8	4.4	.1	.4	8.8	1.0	1.1	2.0
21	TOBACCO PRODUCTS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS.	(D)	.7	-	(D)	.3	.1	.1	(D)
24	LUMBER AND WOOD PRODUCTS	(D)	.1	-	-	(D)	(Z)	.1	(D)
25	FURNITURE AND FIXTURES	(D)	.2	-	(D)	.2	.2	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	16.3	3.1	(D)	.2	10.6	.2	(D)	.1
28	CHEMICALS AND ALLIED PRODUCTS.	252.5	9.7	8.5	1.4	218.7	1.1	3.3	9.8
29	PETROLEUM AND COAL PRODUCTS.	6.7	1.2	(D)	(D)	5.1	.1	.1	(D)
30	RUBBER, MISC. PLASTICS PROD.	17.0	1.3	(D)	(D)	6.5	.5	8.3	.3
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	-	-	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	15.7	2.4	(D)	1.1	10.6	.9	(D)	.2
33	PRIMARY METAL INDUSTRIES	572.8	77.8	164.7	8.0	299.4	8.5	5.9	8.2
34	FABRICATED METAL PRODUCTS.	6.7	2.2	(D)	(D)	2.8	.8	.3	.3
35	MACHINERY, EXCEPT ELECTRICAL	9.2	2.0	-	.5	4.4	1.2	.7	.3
36	ELECTRIC, ELECTRONIC EQUIP	32.1	16.0	(D)	.5	2.8	12.3	.3	(D)
37	TRANSPORTATION EQUIPMENT	16.7	4.5	(D)	(D)	6.9	2.0	.4	2.4
38	INSTRUMENTS, RELATED PRODUCTS.	.6	(Z)	-	(D)	.3	.1	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	-	(D)	.1	(Z)	(D)	-
	TENNESSEE.	281.4	12.6	33.6	18.3	203.7	4.5	5.3	3.4
20	FOOD AND KINDRED PRODUCTS.	3.8	2.0	-	(D)	.4	.6	(D)	.4
22	TEXTILE MILL PRODUCTS.	3.5	2.6	(D)	(D)	.1	.2	.4	(Z)
26	PAPER AND ALLIED PRODUCTS.	14.0	(D)	(D)	-	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	241.8	3.3	20.5	18.2	193.5	.4	3.0	2.8
30	RUBBER, MISC. PLASTICS PROD.	7.1	.9	-	-	4.9	.3	.1	-
32	STONE, CLAY, GLASS PRODUCTS.	1.2	.2	-	(D)	.9	.1	(D)	(D)
33	PRIMARY METAL INDUSTRIES	3.6	.2	(D)	(D)	.8	.3	(D)	(D)

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged								
				Treated by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	TENNESSEE--CON.										
34	FABRICATED METAL PRODUCTS.	.7	.6	.2	.1	-	(D)	(D)	(D)	(D)	-
35	MACHINERY, EXCEPT ELECTRICAL	.4	.4	.2	.2	-	-	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	2.0	1.5	.7	.6	-	-	(D)	(D)	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	.2	(D)	(D)	(D)	-	-	-	-	(D)	(D)
	UPPER MISSISSIPPI.	530.2	426.4	148.7	79.4	3.6	3.0	49.6	2.2	5.0	5.8
20	FOOD AND KINDRED PRODUCTS.	112.5	101.0	29.6	16.3	(D)	(D)	2.5	.2	.7	.6
22	TEXTILE MILL PRODUCTS.	.6	.6	(D)	(D)	-	-	-	(D)	-	-
25	FURNITURE AND FIXTURES	.1	(D)	(D)	(D)	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS.	169.4	114.3	33.4	30.9	(D)	.1	1.1	(Z)	.4	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	67.3	58.6	37.4	5.0	(D)	.3	29.2	(D)	1.0	.8
29	PETROLEUM AND COAL PRODUCTS.	8.7	5.9	(D)	.3	-	(D)	2.8	.2	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	20.9	19.9	2.0	(D)	-	-	1.0	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	18.7	17.9	4.6	.6	(D)	(D)	2.4	(Z)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	68.2	46.5	18.6	14.0	(D)	.1	2.1	.6	.3	(D)
34	FABRICATED METAL PRODUCTS.	6.7	6.4	1.7	1.3	-	(Z)	.2	(D)	.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	44.2	43.4	12.1	4.1	-	1.3	4.6	.6	.2	1.5
36	ELECTRIC, ELECTRONIC EQUIP	4.1	3.8	1.1	.8	-	(D)	(Z)	.1	(Z)	(D)
37	TRANSPORTATION EQUIPMENT	5.5	5.1	1.8	1.0	-	(D)	(D)	(D)	.1	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	.9	.9	(D)	(D)	-	-	(D)	-	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	1.0	1.0	(D)	(D)	-	(D)	(D)	-	(D)	-
	LOWER MISSISSIPPI.	1 405.6	1 342.2	311.3	154.1	.3	2.2	119.6	2.9	10.5	21.7
20	FOOD AND KINDRED PRODUCTS.	34.4	32.1	9.9	4.9	(D)	(D)	2.9	.2	.6	.9
22	TEXTILE MILL PRODUCTS.	1.5	1.4	.6	(D)	-	-	-	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	6.7	2.3	(D)	(D)	(D)	-	(D)	(D)	.1	(D)
25	FURNITURE AND FIXTURES	.4	(D)	(D)	(D)	-	-	-	(D)	-	-
26	PAPER AND ALLIED PRODUCTS.	135.1	127.5	116.6	101.2	(D)	1.6	2.1	.3	2.7	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	801.5	768.4	68.2	37.6	(D)	(D)	18.4	2.0	4.2	5.2
29	PETROLEUM AND COAL PRODUCTS.	235.3	221.0	(D)	8.0	(D)	(D)	91.4	.2	2.7	1.7
30	RUBBER, MISC. PLASTICS PROD.	6.8	6.7	(D)	1.4	-	(D)	(D)	(D)	.1	(D)
32	STONE, CLAY, GLASS PRODUCTS.	2.9	2.1	.9	.5	-	(D)	.3	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS.	2.7	2.7	1.5	1.1	-	-	.2	(D)	.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.9	.9	(D)	(D)	-	-	(D)	(D)	-	-
36	ELECTRIC, ELECTRONIC EQUIP	.5	.5	.2	.2	-	-	(D)	(D)	(D)	-
	SOURIS - RED - RAINY										
20	FOOD AND KINDRED PRODUCTS.	.9	.9	(D)	(D)	-	-	(D)	-	(D)	(D)
	MISSOURI	161.5	127.5	46.4	19.1	(D)	(D)	17.4	5.4	2.2	2.2
20	FOOD AND KINDRED PRODUCTS.	73.7	68.2	21.4	9.3	-	(D)	8.0	3.4	(D)	.6
26	PAPER AND ALLIED PRODUCTS.	.5	.4	(D)	(D)	-	-	-	(D)	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	15.7	12.7	8.0	.6	-	(D)	6.1	(D)	.4	.7
29	PETROLEUM AND COAL PRODUCTS.	43.5	20.9	8.2	2.2	-	(D)	2.1	(Z)	.9	(D)
30	RUBBER, MISC. PLASTICS PROD.	4.4	4.1	1.3	.7	(D)	(D)	(D)	(D)	(D)	-
33	PRIMARY METAL INDUSTRIES	2.0	1.3	(D)	(D)	-	-	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS.	2.3	2.2	.6	.2	-	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	1.6	1.5	.7	.7	-	(D)	(D)	-	(D)	(D)
37	TRANSPORTATION EQUIPMENT	2.5	2.2	.8	.7	-	(D)	(D)	(D)	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	.8	.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
	ARKANSAS, WHITE AND RED.	322.1	218.2	168.4	68.5	.8	.2	31.0	13.2	7.3	47.4

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water discharged--Con.							
		Untreated by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	TENNESSEE--CON.								
34	FABRICATED METAL PRODUCTS.	.5	(D)	-	-	.3	.1	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.2	(D)	-	(D)	.1	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.8	.1	-	(D)	.4	.2	(Z)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
	UPPER MISSISSIPPI.	277.6	75.1	46.8	6.4	110.6	18.3	15.8	4.2
20	FOOD AND KINDRED PRODUCTS.	71.4	12.4	5.1	1.7	47.4	2.1	1.2	1.8
22	TEXTILE MILL PRODUCTS.	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	(D)	(D)	-	(D)	(D)	(D)	-	-
26	PAPER AND ALLIED PRODUCTS.	80.8	37.5	23.4	.5	5.6	3.8	9.9	.2
28	CHEMICALS AND ALLIED PRODUCTS.	21.3	1.3	-	.3	18.1	.6	.2	1.1
29	PETROLEUM AND COAL PRODUCTS.	(D)	(D)	-	(D)	(D)	(D)	-	(D)
30	RUBBER, MISC. PLASTICS PROD.	17.9	1.4	-	.8	10.4	4.9	.4	.1
32	STONE, CLAY, GLASS PRODUCTS.	13.3	1.4	(D)	.2	3.5	.2	(D)	(D)
33	PRIMARY METAL INDUSTRIES	27.9	8.1	-	.8	18.2	.4	.1	.1
34	FABRICATED METAL PRODUCTS.	4.7	1.6	(D)	.4	1.3	.4	.2	(D)
35	MACHINERY, EXCEPT ELECTRICAL	31.3	7.6	13.9	1.0	3.7	4.6	.2	.1
36	ELECTRIC, ELECTRONIC EQUIP	2.8	1.2	(D)	.2	.7	.4	.1	(D)
37	TRANSPORTATION EQUIPMENT	3.3	1.2	-	.2	.8	.7	.1	.2
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	.5	-	(Z)	(Z)	.1	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	-	(D)	(D)	.2	(D)	-
	LOWER MISSISSIPPI.	1 031.0	74.2	250.1	2.0	675.6	9.1	5.5	13.5
20	FOOD AND KINDRED PRODUCTS.	22.1	8.6	(D)	(D)	11.7	.7	.4	.3
22	TEXTILE MILL PRODUCTS.	.7	(D)	-	(D)	(D)	(Z)	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	(D)	(Z)	(D)	-	.3	(Z)	.1	.2
25	FURNITURE AND FIXTURES	(D)	(D)	-	(D)	(D)	(D)	(D)	-
26	PAPER AND ALLIED PRODUCTS.	10.9	(D)	(D)	(D)	1.1	.2	.1	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	700.2	45.3	74.3	.7	571.7	.2	3.7	4.3
29	PETROLEUM AND COAL PRODUCTS.	(D)	-	(D)	(D)	85.3	(D)	(D)	7.9
30	RUBBER, MISC. PLASTICS PROD.	(D)	.5	-	(D)	2.4	.2	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	1.1	(D)	-	-	(D)	.1	-	-
34	FABRICATED METAL PRODUCTS.	1.2	.2	-	(D)	.8	.1	(Z)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	(D)	.1	-	(D)	.4	.2	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.3	(D)	-	(D)	.1	(Z)	-	-
	SOURIS - RED - RAINY								
20	FOOD AND KINDRED PRODUCTS.	(D)	.2	-	-	(D)	(D)	(D)	(D)
	MISSOURI	81.1	7.3	(D)	2.1	49.3	6.0	2.1	(D)
20	FOOD AND KINDRED PRODUCTS.	46.9	2.2	(D)	(D)	30.1	1.9	1.6	.7
26	PAPER AND ALLIED PRODUCTS.	(D)	(D)	-	-	-	(Z)	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	4.7	.3	-	(D)	3.1	.1	(Z)	(D)
29	PETROLEUM AND COAL PRODUCTS.	12.7	(D)	-	(D)	(D)	(Z)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	2.8	.5	-	.1	2.0	.1	(D)	(D)
33	PRIMARY METAL INDUSTRIES	(D)	(D)	-	(D)	.7	.1	-	(D)
34	FABRICATED METAL PRODUCTS.	1.7	.6	-	(D)	.3	.1	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.8	.1	-	(Z)	.3	.3	(Z)	.1
37	TRANSPORTATION EQUIPMENT	1.4	.6	-	(D)	.4	.2	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	(D)	-	(D)	(D)	.2	(D)	-
	ARKANSAS, WHITE AND RED.	49.8	8.3	2.4	1.4	27.3	6.1	1.4	2.9

See footnotes at end of table.

Table 7c. **Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged								
				Treated by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	ARKANSAS, WHITE AND RED--CON.										
20	FOOD AND KINDRED PRODUCTS.	16.0	12.1	8.1	4.9	(D)	(D)	.6	.7	.5	.2
26	PAPER AND ALLIED PRODUCTS.	36.5	27.5	21.7	19.4	-	(D)	(D)	.5	1.0	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	33.1	26.7	13.7	6.4	(D)	(D)	1.4	.1	2.0	3.2
30	RUBBER, MISC. PLASTICS PROD.	1.9	1.7	1.1	.3	(D)	(D)	.1	(D)	.2	(D)
32	STONE, CLAY, GLASS PRODUCTS.	5.5	3.0	.4	.2	-	(D)	(D)	.1	(D)	(D)
33	PRIMARY METAL INDUSTRIES	75.7	71.5	(D)	24.3	-	(D)	24.7	.7	(D)	(D)
34	FABRICATED METAL PRODUCTS.	1.5	1.2	.7	.2	-	(D)	(D)	.4	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	6.3	6.1	(D)	2.5	-	(D)	(D)	-	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	1.7	1.3	.5	.5	-	(D)	-	(D)	(D)	-
37	TRANSPORTATION EQUIPMENT	1.6	1.4	.3	.2	(D)	-	(D)	-	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	.5	.4	(D)	(D)	-	-	-	(D)	-	-
	TEXAS GULF	1 247.5	1 025.5	250.7	118.6	7.9	2.4	48.6	7.7	44.3	21.2
20	FOOD AND KINDRED PRODUCTS.	16.6	14.5	3.6	2.7	(D)	(Z)	.4	(D)	.3	.3
22	TEXTILE MILL PRODUCTS.	1.3	1.2	(D)	(D)	-	(D)	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	2.0	1.3	.5	(D)	(D)	-	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	51.0	47.3	33.7	29.8	(D)	(D)	(D)	(D)	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS.	853.8	684.8	112.8	23.9	(D)	(D)	32.7	4.8	34.0	11.0
29	PETROLEUM AND COAL PRODUCTS.	193.2	159.3	46.9	12.8	.3	.5	12.9	1.0	9.1	9.5
30	RUBBER, MISC. PLASTICS PROD.	4.0	2.4	(D)	.1	-	-	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	5.5	1.6	.8	.2	-	-	.5	(D)	-	(D)
34	FABRICATED METAL PRODUCTS.	7.2	7.1	.6	.4	-	(D)	(D)	(D)	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL	1.4	1.2	.7	.3	-	(D)	(D)	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	2.8	2.6	(D)	1.7	-	(D)	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT	5.7	5.6	.7	.4	-	(D)	(D)	(D)	(D)	(D)
	RIO GRANDE										
20	FOOD AND KINDRED PRODUCTS.	1.1	1.0	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	1.6	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)
	LOWER COLORADO	26.3	15.7	3.9	1.2	(D)	.1	1.9	.4	.1	(D)
20	FOOD AND KINDRED PRODUCTS.	1.8	1.6	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	(D)	-	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS.	1.7	.6	(D)	-	-	-	-	(D)	-	-
33	PRIMARY METAL INDUSTRIES	12.5	5.4	1.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.6	(D)	(D)	(D)	-	(D)	(D)	-	-	-
	GREAT BASIN.	64.9	12.8	4.9	.8	-	(D)	.6	(D)	.5	.2
20	FOOD AND KINDRED PRODUCTS.	2.4	1.5	.5	.2	-	-	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	2.1	.9	(D)	.1	-	-	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS.	(D)	.3	(D)	(D)	-	-	(D)	(D)	-	(D)
	COLUMBIA - NORTH PACIFIC	605.0	577.7	296.9	227.1	1.6	1.0	41.8	1.3	6.3	17.8
20	FOOD AND KINDRED PRODUCTS.	36.7	34.6	17.6	12.6	-	(D)	1.3	(D)	.6	.4
24	LUMBER AND WOOD PRODUCTS	89.4	80.3	29.1	25.7	(D)	-	.6	(D)	.3	1.7
26	PAPER AND ALLIED PRODUCTS.	243.4	228.1	187.9	165.5	(D)	(D)	15.3	.3	4.6	2.0
28	CHEMICALS AND ALLIED PRODUCTS.	161.8	152.5	9.8	2.7	(D)	(D)	6.6	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS.	5.5	3.5	(D)	.8	-	-	(D)	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	.1	(D)	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS.	5.9	19.8	3.0	2.8	-	-	(D)	(D)	-	-
33	PRIMARY METAL INDUSTRIES	57.3	54.1	45.0	13.4	-	(D)	17.5	.5	(D)	12.7
34	FABRICATED METAL PRODUCTS.	.7	.7	(D)	(D)	-	-	-	-	(D)	-

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water discharged--Con.							
		Untreated by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	ARKANSAS, WHITE AND RED--CON.								
20	FOOD AND KINDRED PRODUCTS	4.0	1.8	(D)	(D)	1.3	.4	.2	.2
26	PAPER AND ALLIED PRODUCTS	5.7	(D)	-	(D)	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	13.0	.7	(D)	(D)	10.5	.1	.5	.9
30	RUBBER, MISC. PLASTICS PROD	.6	.1	-	-	.3	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	2.6	.6	-	(D)	.8	.1	(D)	.9
33	PRIMARY METAL INDUSTRIES	(D)	1.5	(D)	(D)	11.6	2.5	(Z)	(D)
34	FABRICATED METAL PRODUCTS	.5	(Z)	-	(D)	(D)	.2	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	(D)	(Z)	(D)	.5	.8	1.4	.1	(D)
36	ELECTRIC, ELECTRONIC EQUIP	.8	.2	-	(D)	.3	.2	(D)	(D)
37	TRANSPORTATION EQUIPMENT	1.1	.2	(D)	(D)	.5	.4	(D)	(Z)
38	INSTRUMENTS, RELATED PRODUCTS	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)
	TEXAS GULF	774.8	35.8	211.1	2.4	503.1	2.2	10.6	9.4
20	FOOD AND KINDRED PRODUCTS	10.9	3.0	(D)	(Z)	5.0	.4	(D)	.7
22	TEXTILE MILL PRODUCTS	(D)	(D)	-	(D)	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	.8	.5	-	-	(D)	(Z)	.1	(D)
26	PAPER AND ALLIED PRODUCTS	13.6	(D)	-	(D)	(D)	.1	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS	572.1	8.9	(D)	1.8	368.2	(D)	3.1	5.0
29	PETROLEUM AND COAL PRODUCTS	112.4	(D)	(D)	(D)	(D)	.2	(D)	2.6
30	RUBBER, MISC. PLASTICS PROD	(D)	.1	-	(D)	.2	(Z)	(Z)	(D)
32	STONE, CLAY, GLASS PRODUCTS	.8	.2	-	(D)	(D)	.1	(D)	.4
34	FABRICATED METAL PRODUCTS	6.6	.2	-	(Z)	(D)	.1	6.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	.6	.3	(D)	(Z)	.1	.2	(Z)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	(D)	.2	-	.1	.1	.3	(D)	(D)
37	TRANSPORTATION EQUIPMENT	4.9	4.2	-	(D)	(D)	.5	(D)	(D)
	RIO GRANDE								
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	-	-	(D)	(Z)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	(D)	-	-	-	(D)	(D)	-	-
	LOWER COLORADO	11.7	3.6	(D)	.4	1.4	5.4	(D)	.4
20	FOOD AND KINDRED PRODUCTS	(D)	.1	-	(D)	(D)	.1	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS	(D)	.3	-	(D)	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	3.5	3.1	(D)	(D)	(D)	(Z)	-	(D)
35	MACHINERY, EXCEPT ELECTRICAL	(D)	(D)	-	(D)	(D)	(D)	-	(D)
	GREAT BASIN	7.9	4.0	(D)	(Z)	2.2	.3	(D)	1.1
20	FOOD AND KINDRED PRODUCTS	1.1	.4	-	-	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS	(D)	-	-	-	(D)	(D)	-	(D)
32	STONE, CLAY, GLASS PRODUCTS	(D)	(D)	-	-	-	(D)	(D)	(D)
	COLUMBIA - NORTH PACIFIC	280.8	35.6	24.6	5.1	171.5	2.5	6.6	34.9
20	FOOD AND KINDRED PRODUCTS	17.0	7.3	(D)	3.5	3.1	(D)	.6	1.7
24	LUMBER AND WOOD PRODUCTS	51.3	9.0	17.2	-	12.5	.5	5.4	6.7
26	PAPER AND ALLIED PRODUCTS	40.2	15.0	(D)	(D)	12.9	.5	.2	9.9
28	CHEMICALS AND ALLIED PRODUCTS	142.7	.5	(D)	(D)	135.5	(Z)	.1	.1
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	-	-	(D)	(D)	-	-
30	RUBBER, MISC. PLASTICS PROD	(D)	-	-	-	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	16.9	1.3	-	-	(D)	.1	(D)	14.9
33	PRIMARY METAL INDUSTRIES	9.0	1.5	-	(D)	5.5	(D)	.2	1.4
34	FABRICATED METAL PRODUCTS	(D)	(D)	-	(D)	.2	(D)	-	(D)

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water intake	Water discharged								
				Treated by last use							
						Cooling and condensing					
			Total	Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	COLUMBIA - NORTH PACIFIC--CON.										
35	MACHINERY, EXCEPT ELECTRICAL	.2	.2	-	-	-	-	-	-	-	-
37	TRANSPORTATION EQUIPMENT	3.1	2.9	(D)	(D)	-	-	(D)	(D)	(D)	-
	CALIFORNIA - SOUTH PACIFIC	310.4	245.0	106.2	41.4	3.3	.6	45.9	.8	3.9	10.3
20	FOOD AND KINDRED PRODUCTS	56.5	48.3	12.8	9.8	(D)	(Z)	1.5	.3	.4	.7
22	TEXTILE MILL PRODUCTS	1.2	.9	(D)	(D)	-	-	-	-	(D)	(D)
24	LUMBER AND WOOD PRODUCTS	37.4	16.0	11.3	.8	(D)	(D)	.9	.2	.3	6.6
26	PAPER AND ALLIED PRODUCTS	39.0	38.1	14.2	13.1	-	(D)	(D)	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	26.1	13.9	(D)	3.1	(D)	(Z)	3.7	.1	.6	.2
29	PETROLEUM AND COAL PRODUCTS	80.6	69.1	42.8	4.6	(D)	(D)	32.4	(Z)	2.0	1.3
31	LEATHER AND LEATHER PRODUCTS	.2	(D)	(D)	(D)	-	-	(D)	-	(D)	-
32	STONE, CLAY, GLASS PRODUCTS	21.0	16.7	1.6	.8	-	(D)	.6	.1	(D)	.1
33	PRIMARY METAL INDUSTRIES	17.8	13.1	(D)	1.8	-	(D)	5.1	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS	2.9	2.7	1.7	1.6	-	(D)	(Z)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	2.0	1.8	.4	.3	-	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	5.5	5.3	2.8	2.2	(D)	(Z)	.1	(D)	(Z)	(D)
37	TRANSPORTATION EQUIPMENT	6.4	5.2	1.6	1.0	-	.3	.1	(D)	(Z)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	.8	.7	.2	.1	-	(D)	(D)	(D)	(D)	(D)
	ALASKA										
20	FOOD AND KINDRED PRODUCTS	1.3	1.3	(D)	1.1	-	-	-	(D)	(D)	(D)
	HAWAII	111.4	88.1	64.0	9.2	19.5	(D)	2.4	.1	1.2	(D)
20	FOOD AND KINDRED PRODUCTS	108.5	85.5	63.5	8.8	19.5	(D)	2.4	.1	1.1	(D)
34	FABRICATED METAL PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 7c. Water Discharged, Treated and Untreated, by Last Use, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Water discharged--Con.							
		Untreated by last use							
				Cooling and condensing					
		Total	Process	Steam electric power generation	Air conditioning	Other	Sanitary service	Boiler feed	Other uses
	COLUMBIA - NORTH PACIFIC--CON.								
35	MACHINERY, EXCEPT ELECTRICAL	.2	.1	-	(D)	(D)	.1	(D)	(D)
37	TRANSPORTATION EQUIPMENT	(D)	.8	-	(D)	1.1	.5	(D)	(D)
	CALIFORNIA - SOUTH PACIFIC	138.8	47.0	11.2	1.4	48.5	8.5	3.6	18.4
20	FOOD AND KINDRED PRODUCTS	35.5	10.1	.4	.1	14.5	1.2	.9	7.8
22	TEXTILE MILL PRODUCTS	(D)	.4	-	-	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	4.7	2.1	(D)	-	(D)	.1	.4	.2
26	PAPER AND ALLIED PRODUCTS	23.9	13.7	(D)	(D)	4.1	(Z)	.4	(D)
28	CHEMICALS AND ALLIED PRODUCTS	(D)	3.5	-	(Z)	2.1	.2	.2	(D)
29	PETROLEUM AND COAL PRODUCTS	26.3	1.2	-	-	23.7	(D)	1.2	(D)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	-	-	-	(D)	-	-
32	STONE, CLAY, GLASS PRODUCTS	15.1	12.6	-	.1	.4	.2	.3	1.5
33	PRIMARY METAL INDUSTRIES	(D)	.3	(D)	(D)	.4	4.0	(D)	.2
34	FABRICATED METAL PRODUCTS	1.1	.8	(D)	(Z)	(D)	.2	(Z)	(Z)
35	MACHINERY, EXCEPT ELECTRICAL	1.4	.2	-	.1	(D)	.4	(D)	.6
36	ELECTRIC, ELECTRONIC EQUIP	2.5	.3	-	.1	.6	.9	(Z)	.6
37	TRANSPORTATION EQUIPMENT	3.6	1.1	(D)	.6	.6	.9	(D)	.2
38	INSTRUMENTS, RELATED PRODUCTS	.5	.2	-	(Z)	(Z)	(D)	(D)	(Z)
	ALASKA								
20	FOOD AND KINDRED PRODUCTS	(D)	(D)	-	-	(D)	-	(D)	(D)
	HAWAII	24.1	4.7	13.8	(D)	1.6	(D)	.2	.8
20	FOOD AND KINDRED PRODUCTS	22.0	4.2	13.9	(D)	1.0	(D)	.1	.4
34	FABRICATED METAL PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Water use regions or major industry groups which have been omitted from table have total water discharge of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1] See appendix H for maps and appendix I for definitions.

Table 8a. Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
	ALL INDUSTRIES, TOTAL. . . .	4 709.2	2 049.0	1 360.7	533.3	230.3	2 527.7	1 642.0	1 391.9	290.7	475.0	554.8
20	FOOD AND KINDRED PRODUCTS. . .	242.9	46.9	27.6	17.3	31.5	105.3	77.7	67.1	45.6	43.5	31.6
201	MEAT PRODUCTS.	52.4	27.9	4.3	8.0	25.4	20.3	23.8	16.4	4.5	13.7	8.0
2011	MEATPACKING PLANTS	31.4	17.4	.6	4.9	16.0	12.9	15.2	10.2	1.2	6.4	5.9
2013	SAUSAGES AND OTHER PREPARED MEATS.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2016	POULTRY DRESSING PLANTS.	18.2	9.1	3.1	2.8	8.2	6.6	8.3	5.9	3.2	7.0	1.4
202	DAIRY PRODUCTS	5.0	(D)	1.1	(D)	(D)	(D)	2.4	(D)	.4	.8	.6
2021	CREAMERY BUTTER.	(D)	-	(D)	-	-	-	(D)	-	-	-	-
2022	CHEESE, NATURAL AND PROCESSED. . .	.8	(D)	.1	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2023	CONDENSED AND EVAPORATED MILK. . .	1.7	-	.7	(D)	-	.3	.7	.4	(D)	(D)	.4
2024	ICE CREAM AND FROZEN DESSERTS. . .	(D)	-	(D)	-	-	-	-	-	(D)	-	(D)
2026	FLUID MILK	2.3	(D)	.2	(D)	(D)	(D)	.9	(D)	.2	.3	.2
203	PRESERVED FRUITS AND VEGETABLES.	41.5	7.1	3.2	.8	2.5	10.2	15.6	5.6	3.8	8.1	13.9
2032	CANNED SPECIALTIES	6.0	2.0	(D)	-	(D)	(D)	.6	(D)	.4	(D)	2.4
2033	CANNED FRUITS AND VEGETABLES . . .	15.0	(D)	1.5	(D)	(D)	1.8	7.5	1.3	1.2	6.5	4.5
2034	DEHYD. FRUITS, VEGETABLES, SOUPS .	1.7	(D)	-	-	(D)	1.3	(D)	-	(D)	(D)	(D)
2035	PICKLES, SAUCES, SALAD DRESSINGS .	1.1	.4	.6	-	(D)	(D)	.4	(D)	(D)	(D)	(D)
2037	FROZEN FRUITS AND VEGETABLES . . .	15.5	3.2	(D)	-	(D)	5.7	6.7	2.2	1.6	.6	4.9
2038	FROZEN SPECIALTIES	2.1	1.1	.5	(D)	2.0	.9	(D)	(D)	(D)	.6	.8
204	GRAIN MILL PRODUCTS.	21.7	.5	5.5	2.4	.3	2.2	3.9	3.3	1.8	9.5	1.5
2041	FLOUR, OTHER GRAIN MILL PRODUCTS .	(D)	-	(D)	-	-	(D)	-	-	(D)	-	-
2043	CEREAL BREAKFAST FOODS	1.9	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)	-
2045	BLENDED AND PREPARED FLOUR	-	-	-	-	-	-	-	-	-	-	-
2046	WET CORN MILLING	18.9	(D)	5.2	(D)	-	1.2	3.6	3.2	1.6	(D)	(D)
2047	DOG, CAT, AND OTHER PET FOOD . . .	.7	.4	(D)	(D)	(D)	.3	.2	(D)	(D)	.3	(D)
205	BAKERY PRODUCTS.	.4	.2	.2	.1	.2	(D)	.2	(D)	(D)	(D)	(D)
2051	BREAD, CAKE, AND RELATED PRODUCTS.	.2	(D)	(D)	(D)	(D)	(D)	.2	(D)	(D)	(D)	-
2052	COOKIES AND CRACKERS	.2	(D)	(D)	(D)	(D)	-	-	-	(D)	-	(D)
206	SUGAR, CONFECTIONERY PRODUCTS. .	89.3	2.3	2.6	4.7	.3	64.6	22.8	34.4	32.2	5.2	(D)
2061	RAW CANE SUGAR	67.6	(D)	.1	(D)	(D)	58.5	8.1	32.4	(D)	(D)	(D)
2062	CANE SUGAR REFINING.	8.5	(D)	(D)	(D)	-	1.1	2.6	(D)	(D)	(D)	(D)
2063	BEET SUGAR	12.6	(D)	1.8	1.8	(D)	4.8	11.9	1.3	-	-	(D)
2065	CONFECTIONERY PRODUCTS	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)
2066	CHOCOLATE AND COCOA PRODUCTS . . .	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	-	-	-
207	FATS AND OILS.	13.3	7.1	3.2	.6	1.8	2.1	1.6	1.0	.8	1.2	1.4
2075	SOYBEAN OIL MILLS.	6.1	1.5	1.8	.3	.7	1.0	1.3	.5	.5	.7	.9
2077	ANIMAL AND MARINE FATS AND OILS. .	(D)	.3	(D)	(D)	.1	(D)	.1	(D)	(D)	(D)	(D)
2079	SHORTENING AND COOKING OILS. . . .	6.2	5.3	1.3	(D)	1.0	1.0	(D)	(D)	(D)	(D)	(D)
208	BEVERAGES.	13.4	(D)	6.3	.3	(D)	3.4	6.2	4.9	1.4	4.1	4.9
2082	MALT BEVERAGES	10.0	(D)	5.4	(D)	(D)	(D)	4.2	3.7	(D)	2.6	3.5
2083	MALT	1.7	-	(D)	-	(D)	-	(D)	(D)	-	(D)	1.4
2084	WINES, BRANDY, AND BRANDY SPIRITS.	.4	-	(D)	-	-	-	.2	-	-	(D)	(D)
2085	DISTILLED LIQUOR, EXCEPT BRANDY. .	.6	-	.3	-	-	(D)	.6	(D)	-	.3	-
2086	BOTTLED AND CANNED SOFT DRINKS . .	.5	(D)	.2	.3	-	(Z)	.1	(D)	.1	.2	(Z)
2087	FLAVORING EXTRACTS, SIRUPS, NEC. .	.1	-	(D)	(D)	-	-	(D)	-	(D)	(D)	(D)
209	MISC. FOODS, KINDRED PRODUCTS. .	6.1	1.1	1.3	(D)	.9	1.8	1.2	.5	(D)	(D)	.9
2091	CANNED AND CURED SEAFOODS.	1.3	.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	(D)
2092	FRESH OR FROZEN PACKAGED FISH. . .	1.8	(D)	(D)	-	(D)	.7	(D)	(D)	.3	.2	.3
2095	ROASTED COFFEE	(D)	-	(D)	-	-	(D)	-	-	(D)	(D)	(D)
2098	MACARONI AND SPAGHETTI	-	-	-	-	-	-	-	-	-	-	-
2099	FOOD PREPARATIONS, NEC	2.8	.5	(D)	-	(D)	.7	.6	.4	(D)	(D)	.4
21	TOBACCO PRODUCTS	1.1	(D)	(D)	(D)	(D)	(D)	1.0	1.0	(D)	.3	(D)
2121	CIGARS	-	-	-	-	-	-	-	-	-	-	-
2141	TOBACCO STEMMING AND REDRYING. . .	1.1	(D)	-	(D)	(D)	(D)	1.0	1.0	(D)	.3	(D)
22	TEXTILE MILL PRODUCTS.	56.9	4.7	14.1	4.6	.7	12.8	40.6	28.1	7.0	21.7	10.6
2211	WEAVING MILLS, COTTON.	5.2	-	(D)	(D)	(D)	3.3	4.3	4.4	(D)	2.4	1.0
2221	WEAV'G MILLS, MANMADE FIBER, SILK.	6.0	(D)	2.6	(D)	(D)	2.6	4.9	4.0	(D)	2.7	.8
2231	WEAVING AND FINISHING MILLS, WOOL.	(D)	-	.8	-	-	(D)	2.1	1.6	(D)	(D)	(D)
225	KNITTING MILLS	11.0	(D)	3.7	1.2	(D)	1.5	5.5	3.5	1.4	4.8	3.6
2254	KNIT UNDERWEAR MILLS	(D)	-	(D)	-	-	(D)	(D)	-	-	-	-
2257	CIRCULAR KNIT FABRIC MILLS	7.9	(D)	(D)	(D)	(D)	(D)	3.1	2.5	(D)	3.8	3.3
2258	WARP KNIT FABRIC MILLS	2.5	(D)	(D)	(D)	(D)	(D)	2.1	(D)	(D)	(D)	(D)
226	TEXTILE FINISHING, EXCEPT WOOL .	23.0	2.7	3.3	(D)	(D)	3.4	19.1	13.3	2.9	8.7	2.1
2261	FINISHING PLANTS, COTTON	4.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2262	FINISH. PLTS, MANMADE FIBER, SILK.	16.9	(D)	2.6	-	(D)	2.1	15.5	11.5	(D)	6.7	(D)
2269	FINISHING PLANTS, NEC.	1.6	-	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
227	FLOOR COVERING MILLS	3.2	(D)	1.4	-	-	(D)	1.5	.9	1.4	1.1	1.1
2271	WOVEN CARPETS AND RUGS	-	-	-	-	-	-	-	-	-	-	-
2272	TUFTED CARPETS AND RUGS.	3.2	(D)	1.4	-	-	(D)	1.5	.9	1.4	1.1	1.1
2279	CARPETS AND RUGS, NEC.	-	-	-	-	-	-	-	-	-	-	-
228	YARN AND THREAD MILLS.	4.1	-	1.4	-	-	(D)	2.5	(D)	(D)	1.6	.7
2281	YARN MILLS, EXCEPT WOOL.	1.9	-	(D)	-	-	(D)	1.2	(D)	(D)	(D)	(D)
2282	THROWING AND WINDING MILLS	.6	-	(D)	-	-	-	(D)	(D)	-	(D)	(D)
2283	WOOL YARN MILLS.	-	-	-	-	-	-	-	-	-	-	-
2284	THREAD MILLS	1.6	-	(D)	-	-	-	(D)	(D)	(D)	(D)	(D)
229	MISCELLANEOUS TEXTILE GOODS. . .	1.6	(D)	.3	(D)	(D)	.4	(D)	(D)	(D)	(D)	(D)
2293	PADDINGS AND UPHOLSTERY FILLING. .	-	-	-	-	-	-	-	-	-	-	-
2295	COATED FABRICS, NOT RUBBERIZED . .	.1	(D)	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)

See footnotes at end of table.

Table 8a. **Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
22	TEXTILE MILL PRODUCTS--CON.											
229	MISCELLANEOUS TEXTILE GOODS--CON.											
2297	NONWOVEN FABRICS	1.2	-	(D)	(D)	-	(D)	(D)	-	-	(D)	-
2298	CORDAGE AND TWINE	-	-	-	-	-	-	-	-	-	-	-
2299	TEXTILE GOODS, NEC	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
24	LUMBER AND WOOD PRODUCTS	50.3	19.1	.9	.2	1.6	18.2	22.3	1.8	3.0	.9	.7
242	SAWMILLS AND PLANING MILLS	36.7	12.5	.3	.2	(D)	10.9	15.3	.7	.4	.2	.4
2421	SAWMILLS, PLANING MILLS, GENERAL	36.7	12.5	.3	.2	(D)	10.9	15.3	.7	.4	.2	.4
2426	HARDWOOD DIMENSION AND FLOORING	-	-	-	-	-	-	-	-	-	-	-
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	1.9	.6	.2	(D)	(D)	.5	1.1	.4	(D)	.1	.1
2436	SOFTWOOD VENEER AND PLYWOOD	1.6	.6	.1	(D)	(D)	.5	1.0	.4	(D)	(Z)	(Z)
2441	NAILED WOOD BOXES AND SHOOK	-	-	-	-	-	-	-	-	-	-	-
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	-	-	-	-	-	-	-	-	-
2452	PREFABRICATED WOOD BUILDINGS	-	-	-	-	-	-	-	-	-	-	-
249	MISCELLANEOUS WOOD PRODUCTS	5.0	.4	.3	-	-	3.4	2.1	.8	2.2	.7	.2
2499	WOOD PRODUCTS, NEC	4.7	.4	.3	-	-	3.3	2.0	.7	(D)	.7	.2
25	FURNITURE AND FIXTURES	.5	(D)	.3	(D)	-	.2	(D)	(D)	(D)	(D)	(D)
251	HOUSEHOLD FURNITURE	.1	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	-
2511	WOOD HOUSEHOLD FURNITURE	(D)	(D)	-	(D)	-	(D)	(D)	-	-	(D)	-
2512	UPHOLSTERED HOUSEHOLD FURNITURE	-	-	-	-	-	-	-	-	-	-	-
2514	METAL HOUSEHOLD FURNITURE	(D)	-	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-
2517	WOOD TV AND RADIO CABINETS	-	-	-	-	-	-	-	-	-	-	-
2519	HOUSEHOLD FURNITURE, NEC	-	-	-	-	-	-	-	-	-	-	-
2531	PUBLIC BLDG., RELATED FURNITURE	(D)	-	(D)	-	-	-	-	-	-	-	-
254	PARTITIONS AND FIXTURES	(D)	-	(D)	-	-	(D)	-	(D)	-	-	-
2542	METAL PARTITIONS AND FIXTURES	(D)	-	(D)	-	-	(D)	-	(D)	-	-	-
26	PAPER AND ALLIED PRODUCTS	1 192.3	336.1	398.8	108.0	21.5	959.9	944.7	563.6	33.4	40.4	93.9
2611	PULPMILLS	215.9	(D)	79.8	(D)	(D)	154.3	175.8	51.7	(D)	7.1	(D)
2621	PAPERMILLS, EXCEPT BUILDING PAPER	582.3	182.1	253.5	96.1	17.4	491.6	461.3	337.0	20.3	15.2	66.4
2631	PAPERBOARD MILLS	358.7	95.8	58.2	9.1	1.9	286.4	278.1	166.3	6.8	17.4	18.9
264	MISC. CONVERTED PAPER PRODUCTS	31.2	4.4	7.2	1.8	(D)	25.8	27.0	7.2	1.7	.6	1.1
2641	PAPER COATING AND GLAZING	.6	-	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2642	ENVELOPES	-	-	-	-	-	-	-	-	-	-	-
2645	DIE-CUT PAPER AND BOARD	-	-	-	-	-	-	-	-	-	-	-
2647	SANITARY PAPER PRODUCTS	22.9	(D)	(D)	(D)	(D)	(D)	19.4	(D)	(D)	(D)	(D)
2648	STATIONERY PRODUCTS	-	-	-	-	-	-	-	-	-	-	-
2651	FOLDING PAPERBOARD BOXES	-	-	-	-	-	-	-	-	-	-	-
2661	BUILDING PAPER AND BOARD MILLS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.7	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS	967.4	215.6	472.3	94.3	24.3	336.2	202.0	191.2	33.5	215.8	175.8
281	INDUSTRIAL INORGANIC CHEMICALS	299.0	26.4	125.5	19.0	(D)	103.7	3.2	29.2	11.4	92.5	17.4
2812	ALKALIES AND CHLORINE	129.6	(D)	58.6	(D)	-	(D)	.4	(D)	(D)	(D)	2.3
2813	INDUSTRIAL GASES	.2	(Z)	.2	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2816	INORGANIC PIGMENTS	47.3	(D)	23.0	10.5	-	20.4	(D)	21.4	2.7	(D)	(D)
2819	INDUSTRIAL INORGANIC CHEM., NEC	121.9	6.4	43.6	(D)	(D)	65.7	1.9	7.5	5.0	5.2	10.2
282	PLASTICS MATERIALS, SYNTHETICS	110.1	37.3	73.1	17.7	5.4	32.7	77.0	40.2	5.3	10.7	17.4
2821	PLASTICS MATERIALS AND RESINS	27.2	13.4	16.8	5.7	2.1	16.3	13.5	11.9	2.6	2.1	(D)
2822	SYNTHETIC RUBBER	(D)	(D)	(D)	3.7	2.5	(D)	(D)	(D)	(D)	(D)	5.3
2824	ORGANIC FIBERS, NONCELLULOSIC	36.3	17.6	13.5	(D)	(D)	5.4	20.7	12.7	1.3	7.2	4.5
283	DRUGS	28.8	16.4	8.1	1.7	.5	4.6	4.3	3.6	.7	3.4	2.8
2833	MEDICINALS AND BOTANICALS	(D)	(D)	(D)	(D)	(D)	3.0	(D)	2.0	(D)	(D)	(D)
2834	PHARMACEUTICAL PREPARATIONS	8.2	(D)	4.2	.8	(D)	(D)	2.2	(D)	.7	2.8	2.3
284	SOAPS, CLEANERS, TOILET GOODS	(D)	2.9	12.4	8.5	(D)	2.5	3.5	.2	(D)	2.4	(D)
2841	SOAP AND OTHER DETERGENTS	3.3	2.8	2.6	-	(D)	(D)	2.6	(D)	-	(D)	(D)
2843	SURFACE ACTIVE AGENTS	9.9	.1	9.6	(D)	(D)	.1	.8	(D)	(D)	(D)	(D)
2844	TOILET PREPARATIONS	.2	(D)	(D)	(D)	(D)	.1	(D)	(D)	(D)	(D)	(Z)
2851	PAINTS AND ALLIED PRODUCTS	(D)	.1	.2	(D)	(D)	.3	(Z)	-	(D)	-	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	422.9	87.7	217.2	44.7	7.7	144.3	100.2	108.8	14.8	80.6	129.8

See footnotes at end of table.

Table 8a. **Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
28	CHEMS. AND ALLIED PRODS.--CON.											
286	INDUSTRIAL ORGANIC CHEMS.--CON.											
2865	CYCLIC CRUDES AND INTERMEDIATES. .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	8.4	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC.	362.4	60.6	178.3	24.9	6.3	92.4	70.9	80.1	(D)	70.7	108.4
287	AGRICULTURAL CHEMICALS	74.9	40.7	30.2	1.5	(D)	39.1	11.7	6.8	.7	25.9	6.2
2873	NITROGENOUS FERTILIZERS.	22.2	9.1	10.2	(D)	(D)	7.2	4.3	1.4	.7	4.3	5.8
2874	PHOSPHATIC FERTILIZERS	44.9	(D)	15.0	(D)	-	29.6	(D)	(D)	(D)	21.4	(D)
2879	AGRICULTURAL CHEMICALS, NEC. . . .	(D)	(D)	(D)	(D)	-	(D)	5.0	5.1	(D)	(D)	(D)
289	MISCELLANEOUS CHEMICAL PRODUCTS.	17.5	4.1	5.6	(D)	1.4	8.9	2.2	2.3	.4	.4	2.2
2891	ADHESIVES AND SEALANTS	.1	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2892	EXPLOSIVES	(D)	.5	2.5	(D)	(D)	.7	.9	.6	(D)	.3	(D)
2895	CARBON BLACK	.7	(D)	-	(D)	(D)	.4	(Z)	(D)	(D)	(D)	(D)
2899	CHEMICAL PREPARATIONS, NEC	13.3	3.2	3.0	1.0	1.4	7.5	1.2	1.2	.3	(D)	.6
29	PETROLEUM AND COAL PRODUCTS. .	580.8	494.0	93.6	64.6	69.9	274.8	140.1	95.9	36.7	32.5	29.3
2911	PETROLEUM REFINING	577.2	493.2	93.5	64.4	(D)	271.8	139.8	95.7	36.5	32.4	29.8
295	PAVING AND ROOFING MATERIALS . .	3.4	(D)	(D)	(D)	-	3.0	(D)	(D)	(D)	(D)	(D)
2952	ASPHALT FELTS AND COATINGS	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
299	MISC. PETROLEUM, COAL PRODUCTS .	.2	(D)	(D)	(D)	(D)	.1	(D)	(D)	(D)	(D)	(D)
2992	LUBRICATING OILS AND GREASES . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
2999	PETROLEUM AND COAL PRODUCTS, NEC .	(D)	-	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	51.5	32.2	11.3	2.8	.3	18.3	9.0	10.8	1.7	3.7	1.5
3011	TIRES AND INNER TUBES.	23.1	18.2	3.9	.6	(D)	11.3	1.9	5.9	1.0	.7	(D)
3031	RECLAIMED RUBBER	(D)	-	-	-	-	(D)	-	-	-	-	-
3069	FABRICATED RUBBER PRODUCTS, NEC. .	1.5	.4	.7	.1	.1	.3	.1	(Z)	.2	.1	.1
3079	MISCELLANEOUS PLASTICS PRODUCTS. .	22.4	11.4	6.6	2.1	.2	4.7	6.8	4.9	.4	2.9	1.2
31	LEATHER AND LEATHER PRODUCTS .	3.7	.4	.8	.5	(D)	1.2	(D)	.7	(D)	(D)	1.3
3111	LEATHER TANNING AND FINISHING. . .	3.7	.4	.8	.5	(D)	1.2	(D)	.7	(D)	(D)	1.3
314	FOOTWEAR, EXCEPT RUBBER.	-	-	-	-	-	-	-	-	-	-	-
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC. .	-	-	-	-	-	-	-	-	-	-	-
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC.	-	-	-	-	-	-	-	-	-	-	-
3161	LUGGAGE.	-	-	-	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	42.6	9.7	9.5	5.9	1.5	29.2	8.7	12.1	2.9	5.3	5.2
322	GLASS, PRESSED OR BLOWN.	6.0	3.8	.9	1.0	.2	3.5	.7	1.2	.3	.3	.2
3221	GLASS CONTAINERS	2.6	1.7	.3	(D)	(D)	1.1	.4	.4	(D)	.1	(D)
3229	PRESSED AND BLOWN GLASS, NEC . . .	3.4	2.1	.5	(D)	(D)	2.4	.3	.8	(D)	.2	(D)
3231	PRODUCTS OF PURCHASED GLASS. . . .	.3	(D)	.1	(D)	-	.3	(D)	(D)	(D)	(D)	-
3241	CEMENT, HYDRAULIC.	11.5	.9	1.2	2.5	-	8.4	1.1	2.9	(D)	2.2	.2
325	STRUCTURAL CLAY PRODUCTS	.1	(D)	-	(D)	(D)	(D)	(D)	(D)	-	-	(D)
3251	BRICK AND STRUCTURAL CLAY TILE . .	-	-	-	-	-	-	-	-	-	-	-
3253	CERAMIC WALL AND FLOOR TILE. . . .	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-	-	-
326	POTTERY AND RELATED PRODUCTS . .	.6	-	(D)	.3	(D)	.5	(Z)	.2	(D)	(D)	(D)
3261	VITREOUS PLUMBING FIXTURES	.3	-	(D)	(D)	-	.2	(D)	(D)	(D)	(D)	-
3262	VITREOUS CHINA FOOD UTENSILS . . .	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3264	PORCELAIN ELECTRICAL SUPPLIES. . .	.1	-	(D)	(Z)	-	.1	(D)	(D)	(D)	(D)	(D)
327	CONCRETE, GYPSUM, PLASTER PRODS.	6.3	(D)	1.9	(D)	-	5.5	.3	4.1	(D)	.1	2.8
3271	CONCRETE BLOCK AND BRICK	-	-	-	-	-	-	-	-	-	-	-
3273	READY-MIXED CONCRETE	2.9	-	(D)	-	-	2.1	.2	1.9	-	-	(D)
3274	LIME	3.0	-	-	(D)	-	2.9	(Z)	(D)	-	-	(D)
3275	GYPSUM PRODUCTS.	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	.1	(D)
3281	CUT STONE AND STONE PRODUCTS . . .	(D)	-	-	-	-	(D)	(D)	-	-	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	13.3	4.3	5.2	.9	(D)	10.6	4.2	1.5	1.5	2.5	2.0
3291	ABRASIVE PRODUCTS.	.6	-	(D)	(D)	-	.2	(D)	(D)	-	(D)	(D)
3292	ASBESTOS PRODUCTS.	1.0	(D)	(D)	(D)	-	.7	(D)	(D)	(D)	(D)	.3
3293	GASKETS, PACKING, SEALING DEVICES.	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)	-	-
3295	MINERALS, GROUND OR TREATED. . . .	3.9	(D)	(D)	(D)	-	3.2	(D)	(D)	(D)	-	(D)
3296	MINERAL WOOL	1.3	(D)	(D)	(D)	(D)	.7	(D)	(D)	(D)	(D)	.4
33	PRIMARY METAL INDUSTRIES . . .	1 349.8	823.5	245.6	192.4	60.6	701.7	156.0	386.0	111.6	85.6	172.8
331	BLAST FURNACE, BASIC STEEL PROD.	1 197.7	754.4	166.1	172.0	48.8	625.5	134.1	360.6	104.1	78.3	163.7
3312	BLAST FURNACES AND STEEL MILLS . .	1 185.8	751.8	161.3	168.2	48.6	619.7	133.6	355.0	102.4	78.0	163.3
3313	ELECTROMETALLURGICAL PRODUCTS. . .	(D)	-	(D)	(D)	-	(D)	.1	(D)	(D)	(D)	-
3315	STEEL WIRE AND RELATED PRODUCTS. .	(D)	(D)	1.0	.7	(D)	.6	(D)	(D)	(D)	(D)	(D)
3316	COLD FINISHING OF STEEL SHAPES . .	5.0	(D)	2.9	(D)	-	(D)	(D)	(D)	(D)	(D)	-
3317	STEEL PIPE AND TUBES	3.3	1.5	(D)	(D)	(D)	2.5	(D)	2.6	(D)	(D)	(D)
332	IRON AND STEEL FOUNDRIES	21.8	15.2	1.4	14.9	(D)	16.4	7.5	14.6	3.0	.2	.7
3321	GRAY IRON FOUNDRIES.	14.5	11.2	1.2	11.1	(D)	11.7	5.5	11.5	1.7	.2	.4
3322	MALLEABLE IRON FOUNDRIES	5.4	(D)	(D)	(D)	(D)	3.4	(D)	(D)	-	(D)	-
3325	STEEL FOUNDRIES, NEC	(D)	(D)	(Z)	1.1	(D)	(D)	-	(D)	(D)	(D)	(D)
333	PRIMARY NONFERROUS METALS. . . .	87.4	24.0	70.5	2.0	(D)	33.1	3.2	7.7	1.1	1.6	4.2
3331	PRIMARY COPPER	7.8	(D)	3.9	-	-	4.7	.3	(D)	-	.2	(D)
3333	PRIMARY ZINC	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
3334	PRIMARY ALUMINUM	34.0	23.2	22.0	.9	(D)	26.2	2.3	2.3	(D)	1.4	(D)

See footnotes at end of table.

Table 8a. Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
33	PRIMARY METAL INDUSTRIES--CON.											
3341	SECONDARY NONFERROUS METALS. . . .	(D)	-	.1	(D)	-	.2	(D)	(D)	(D)	(D)	(D)
335	NONFERROUS ROLLING AND DRAWING .	40.6	29.1	6.8	2.9	4.3	25.6	10.9	2.4	2.9	5.1	3.6
3351	COPPER ROLLING AND DRAWING	7.9	2.5	3.3	1.9	(D)	3.7	(D)	1.1	2.1	(D)	(D)
3353	ALUMINUM SHEET, PLATE, AND FOIL. .	22.7	21.2	1.5	.4	4.0	20.6	7.1	.7	.3	1.4	.9
3354	ALUMINUM EXTRUDED PRODUCTS	(D)	.4	.9	.3	(D)	(D)	(D)	.4	(D)	(D)	.2
3356	NONFERROUS ROLLING & DRAWING, NEC.	4.2	2.4	(D)	.2	(D)	.3	.2	.2	.2	(D)	1.0
3357	NONFERROUS WIREDRAW'G, INSULATING.	1.5	(D)	.6	(D)	(D)	.5	(Z)	(D)	(D)	.3	.1
336	NONFERROUS FOUNDRIES	1.0	.4	.7	.5	-	.5	(D)	(D)	.5	.3	(D)
3361	ALUMINUM FOUNDRIES	.5	(D)	(D)	(D)	-	.4	(D)	(D)	(D)	(D)	(D)
3369	NONFERROUS FOUNDRIES, NEC.	(D)	(D)	.4	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
339	MISC. PRIMARY METAL PRODUCTS . .	(D)	.5	.1	(D)	-	.4	(D)	-	(D)	(D)	.5
3398	METAL HEAT TREATING.	.2	(D)	(D)	-	-	(D)	-	-	(D)	(D)	(D)
3399	PRIMARY METAL PRODUCTS, NEC. . . .	(D)	(D)	(D)	(D)	-	(D)	(D)	-	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	25.1	6.8	15.7	5.6	1.2	9.5	3.0	4.2	3.3	3.3	2.0
341	METAL CANS, SHIPPING CONTAINERS.	1.7	1.3	1.6	.3	.2	.5	(D)	(D)	(D)	(D)	(D)
3411	METAL CANS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE.	2.7	.4	2.0	1.3	(D)	1.1	(D)	.7	.6	.2	.3
3423	HAND AND EDGE TOOLS, NEC	.3	(D)	.2	(D)	(D)	.1	(D)	(D)	(D)	-	-
3429	HARDWARE, NEC.	2.3	.4	1.7	1.3	-	1.0	(D)	.7	.6	.2	.3
343	PLUMBING, HEATING, EXCEPT ELEC .	1.0	.1	.5	.1	-	.6	(D)	(D)	(D)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS.	.5	-	.4	.1	-	.2	(D)	(D)	(D)	(D)	(D)
344	FABRICATED STRUC. METAL PRODS. .	1.5	.6	1.2	(D)	(D)	.8	.5	.2	.4	.1	(D)
3442	METAL DOORS, SASH, AND TRIM. . . .	.3	-	.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3443	FABRICATED PLATEWORK, BOILER SHOP.	1.0	.6	.8	(D)	(D)	.7	(D)	(D)	(D)	(D)	-
3444	SHEET METALWORK.	.1	-	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC.	1.1	.4	.9	(D)	-	.7	(D)	(D)	.2	.1	.1
3452	BOLTS, NUTS, RIVETS, AND WASHERS .	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
346	METAL FORGINGS AND STAMPINGS . .	4.0	1.0	2.2	.6	.2	1.2	.8	.3	.5	.5	.3
3462	IRON AND STEEL FORGINGS.	1.0	.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
3465	AUTOMOTIVE STAMPINGS	1.5	.4	.8	.4	(Z)	.8	.7	(D)	.2	(D)	.2
3466	CROWNS AND CLOSURES.	-	-	-	-	-	-	-	-	-	-	-
3469	METAL STAMPINGS, NEC	(D)	(D)	.9	(D)	-	.2	(D)	(D)	(D)	(D)	(D)
347	METAL SERVICES, NEC.	6.8	.5	3.9	1.3	-	1.7	.2	.7	.6	.6	.5
3471	PLATING AND POLISHING.	6.1	.3	3.4	.9	-	1.2	(D)	(D)	(D)	(D)	(D)
3479	METAL COATING AND ALLIED SERVICES.	.7	.2	.5	.4	-	.5	(D)	(D)	(D)	(D)	(D)
348	ORDNANCE AND ACCESSORIES, NEC. .	3.5	1.3	2.0	.8	.6	1.7	1.2	1.1	.5	1.2	.2
3482	SMALL ARMS AMMUNITION.	(D)	(D)	.5	.5	(D)	(D)	(D)	(D)	-	(D)	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC .	1.9	.6	1.1	(D)	(D)	.9	.8	.5	.2	.9	.1
3484	SMALL ARMS	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-
3489	ORDNANCE AND ACCESSORIES NEC . . .	.5	-	(D)	(D)	-	.3	(D)	(D)	(D)	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS.	2.7	1.2	1.4	.9	(D)	1.2	.3	.9	.3	.3	.4
3494	VALVES AND PIPE FITTINGS	1.8	(D)	1.0	.8	-	.8	(D)	(D)	(D)	(D)	.2
3496	MISC. FABRICATED WIRE PRODUCTS . .	.3	(D)	.2	(D)	-	(D)	-	(D)	(D)	(D)	(D)
3499	FABRICATED METAL PRODUCTS, NEC . .	.2	(D)	(D)	(D)	(D)	.1	(D)	(D)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	38.1	16.3	12.2	7.3	4.9	16.2	5.8	3.1	4.7	5.3	17.7
351	ENGINES AND TURBINES	8.9	1.2	.9	.5	.6	.6	(D)	.5	.5	.1	13.1
3519	INTERNAL COMBUSTION ENGINES, NEC .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
352	FARM AND GARDEN MACHINERY. . . .	13.0	5.0	1.8	1.2	.3	5.9	3.6	1.1	.1	1.2	.8
3523	FARM MACHINERY AND EQUIPMENT . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
353	CONSTRUCTION, RELATED MACHINERY.	6.7	5.8	3.9	3.8	3.7	5.5	.4	.5	3.5	3.3	(D)
3532	MINING MACHINERY	-	-	-	-	-	-	-	-	-	-	-
3533	OILFIELD MACHINERY	.5	.1	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)
3534	ELEVATORS AND MOVING STAIRWAYS . .	-	-	-	-	-	-	-	-	-	-	-
3535	CONVEYORS AND CONVEYING EQUIPMENT.	-	-	-	-	-	-	-	-	-	-	-
3536	HOISTS, CRANES, AND MONORAILS. . .	-	-	-	-	-	-	-	-	-	-	-
354	METALWORKING MACHINERY	.8	(D)	.6	(D)	(D)	.2	(D)	(D)	(D)	.2	.1
3541	MACHINE TOOLS, METAL-CUTTING . . .	.2	-	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
3542	MACHINE TOOLS, METAL-FORMING . . .	-	-	-	-	-	-	-	-	-	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC . .	-	-	-	-	-	-	-	-	-	-	-
3545	MACHINE TOOL ACCESSORIES	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	(D)	-
3546	POWER DRIVEN HANDTOOLS	.5	-	.4	-	-	(Z)	(D)	-	(D)	.1	-
355	SPECIAL INDUSTRY MACHINERY . . .	.2	(D)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3554	PAPER INDUSTRIES MACHINERY	-	-	-	-	-	-	-	-	-	-	-
3559	SPECIAL INDUSTRY MACHINERY, NEC. .	(D)	(D)	(Z)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
356	GENERAL INDUSTRIAL MACHINERY . .	2.2	1.5	.5	.3	.2	1.1	.3	.4	.2	.3	(Z)
3561	PUMPS AND PUMPING EQUIPMENT. . . .	(Z)	(D)	(D)	-	-	-	(D)	-	-	(D)	-
3562	BALL AND ROLLER BEARINGS	1.2	1.1	.4	.3	.2	1.0	.2	(D)	.2	.3	(D)
3563	AIR AND GAS COMPRESSORS.	.4	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	-	(D)
3564	BLOWERS AND FANS	(D)	-	(D)	-	-	-	-	-	-	-	-
3568	POWER TRANSMISSION EQUIPMENT, NEC.	.4	.1	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(D)	-
357	OFFICE AND COMPUTING MACHINES. .	1.4	(D)	1.3	.4	(D)	.4	.2	.3	.3	(Z)	.1
3573	ELECTRONIC COMPUTING EQUIPMENT . .	.8	-	.7	.3	-	.3	(D)	.3	.2	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY.	-	-	-	-	-	-	-	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8a. Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
35	MACHINERY, EXCEPT ELEC.--CON.											
358	REFRIGERATION AND SERVICE MACH .	4.6	2.6	2.6	.9	.1	2.2	1.2	.1	.1	(D)	.2
3582	COMMERCIAL LAUNDRY EQUIPMENT . . .	-	-	-	-	-	-	-	-	-	-	-
3585	REFRIGERATION, HEATING EQUIPMENT .	4.6	2.6	2.5	.9	.1	2.2	1.2	.1	(D)	(D)	.2
3589	SERVICE INDUSTRY MACHINERY, NEC. .	-	-	-	-	-	-	-	-	-	-	-
359	MISC. MACHINERY, EXC. ELEC . . .	.3	.2	.2	(D)	-	(D)	(D)	(D)	(Z)	(D)	.2
3592	CARBURETORS, PISTONS, RINGS, ETC .	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(Z)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	30.4	7.7	20.1	7.1	1.6	11.0	4.9	4.8	2.6	3.2	4.2
361	ELECTRIC DISTRIBUTING EQUIPMENT.	2.0	(D)	.7	.2	(D)	1.5	.2	(D)	.1	.2	.2
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(Z)
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.9	.2	.6	.9	(D)	.6	.2	.3	.1	(Z)	(D)
3622	INDUSTRIAL CONTROLS.	.2	(D)	.2	(D)	(D)	.1	-	(D)	(D)	(D)	(D)
3624	CARBON AND GRAPHITE PRODUCTS . . .	.6	(D)	(D)	(D)	(D)	.2	(D)	(D)	(D)	(D)	-
363	HOUSEHOLD APPLIANCES	6.2	4.2	3.0	1.1	(D)	4.4	(D)	.3	.4	(D)	.3
3631	HOUSEHOLD COOKING EQUIPMENT. . . .	.9	(D)	.9	.4	(D)	.4	-	(D)	(D)	(D)	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	3.5	(D)	.7	(D)	-	(D)	(D)	-	-	-	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT. . . .	.9	.5	.8	(D)	(D)	.7	-	(D)	(D)	-	-
3634	ELECTRIC HOUSEWARES AND FANS . . .	.2	(D)	.2	(D)	-	.2	-	(D)	.1	-	(D)
3635	HOUSEHOLD VACUUM CLEANERS.	(D)	(D)	(D)	(D)	-	(D)	-	-	(D)	(D)	-
3639	HOUSEHOLD APPLIANCES, NEC.	.5	(D)	(D)	(D)	-	.2	-	(D)	(D)	-	-
364	ELEC. LIGHTING, WIRING EQUIP . .	1.5	.6	.8	.3	(D)	.5	.2	.2	.4	(D)	.7
3643	CURRENT-CARRYING WIRING DEVICES. .	(D)	(D)	.1	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
3644	NONCURRENT-CARRYING WIR'G DEVICES.	.9	.4	.4	.1	(D)	.2	.2	(D)	(D)	(D)	.4
365	RADIO, TV RECEIVING EQUIPMENT. .	.6	(D)	.5	(D)	-	(D)	-	(D)	-	-	(D)
366	COMMUNICATION EQUIPMENT.	4.0	.4	3.1	1.0	(D)	(D)	.5	.6	.5	.7	1.1
3662	RADIO AND TV COMMUNICATION EQUIP .	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
367	ELECTRONIC COMPONENTS, ACCESS. .	10.9	.7	9.5	3.0	(D)	2.7	1.0	2.3	.7	.8	1.2
3671	ELECTRON TUBES, RECEIVING TYPE . .	1.0	(D)	.7	.2	-	.3	(D)	(D)	.2	(D)	.3
3674	SEMICONDUCTORS, RELATED DEVICES. .	6.8	(D)	5.9	1.5	-	.7	.6	1.2	(D)	.4	.7
3678	ELECTRONIC CONNECTORS.	.4	(D)	.3	(D)	(D)	(D)	-	(D)	(D)	.2	(D)
3679	ELECTRONIC COMPONENTS, NEC	2.1	(D)	1.8	1.2	-	.9	(D)	(D)	.3	(D)	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	3.3	.4	1.9	(D)	(D)	.7	(D)	.6	.5	1.0	.7
3691	STORAGE BATTERIES.	1.4	(D)	1.3	.1	(D)	.3	(D)	.3	.5	(D)	(D)
3693	X-RAY APPARATUS AND TUBES.	(D)	-	(D)	(D)	-	(D)	-	-	-	-	(D)
3694	ENGINE ELECTRICAL EQUIPMENT. . . .	(D)	(D)	.4	(D)	-	.4	-	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	58.2	23.5	25.1	20.4	10.4	19.3	6.3	9.3	3.2	6.6	6.4
371	MOTOR VEHICLES AND EQUIPMENT . .	35.1	19.6	15.5	14.9	8.6	14.6	4.5	5.8	1.2	.7	4.4
3711	MOTOR VEHICLES AND CAR BODIES. . .	11.5	4.9	7.0	5.4	2.3	6.5	2.2	2.4	.6	.5	1.3
3714	MOTOR VEHICLE PARTS, ACCESSORIES .	23.5	14.6	8.3	9.3	6.3	7.9	2.3	3.3	.6	.2	3.1
3715	TRUCK TRAILERS	-	-	-	-	-	-	-	-	-	-	-
372	AIRCRAFT AND PARTS	18.1	2.9	6.2	4.4	1.5	3.3	1.3	2.8	1.8	5.6	1.8
3721	AIRCRAFT	5.5	(D)	1.5	(D)	(D)	(D)	1.1	(D)	1.0	1.1	1.3
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	11.9	1.7	4.1	2.9	(D)	1.7	(D)	1.5	(D)	4.2	(D)
3728	AIRCRAFT EQUIPMENT, NEC.	.8	(D)	.7	(D)	-	(D)	(D)	(D)	(D)	.3	(D)
3743	RAILROAD EQUIPMENT	(D)	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-
3751	MOTORCYCLES, BICYCLES, AND PARTS .	(D)	(D)	.5	(D)	(D)	.1	(D)	(D)	-	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES.	1.4	.3	.7	.3	(D)	.6	.4	.5	.3	.3	(Z)
3761	GUIDED MISSILES, SPACE VEHICLES. .	.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)
3764	SPACE PROPULSION UNITS AND PARTS .	.6	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	-
3769	SPACE VEHICLE EQUIPMENT, NEC . . .	-	-	-	-	-	-	-	-	-	-	-
3799	TRANSPORTATION EQUIPMENT, NEC. . .	-	-	-	-	-	-	-	-	-	-	(D)
38	INSTRUMENTS, RELATED PRODUCTS.	15.8	12.2	13.4	1.6	(D)	12.4	12.6	11.8	.7	5.9	.6
3811	ENGINEERING, SCIENTIFIC INSTRU . .	.1	-	.1	-	-	(D)	(D)	(D)	-	(D)	(D)
382	MEASURING, CONTROLLING DEVICES .	1.6	(D)	1.1	.5	(D)	.5	(D)	.2	.2	.1	.4
3822	ENVIRONMENTAL CONTROLS	.8	(D)	.5	(D)	-	(D)	-	(D)	(D)	(D)	(D)
3825	INSTRU. TO MEASURE ELECTRICITY . .	.6	-	.5	.1	(D)	.3	(D)	(D)	(D)	(Z)	.2
384	MEDICAL INSTRUMENTS, SUPPLIES. .	.5	-	.2	-	-	(D)	.2	(D)	(D)	.1	(D)
3841	SURGICAL AND MEDICAL INSTRUMENTS .	(D)	-	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3842	SURGICAL APPLIANCES AND SUPPLIES .	.4	-	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)
3851	OPHTHALMIC GOODS	(D)	-	(D)	(D)	-	(D)	(D)	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	2.0	.2	(D)	.4	(D)	(D)	.3	(D)	.3	.5	.4
391	JEWELRY, SILVER AND PLATED WARE.	.2	(D)	.2	.1	-	(D)	(D)	(D)	(D)	(D)	(D)
3914	SILVERWARE AND PLATED WARE	.2	(D)	.1	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
394	TOYS AND SPORTING GOODS.	.2	(D)	.2	(D)	(D)	.1	(D)	(Z)	(D)	(D)	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC .	(D)	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS. . .	.5	(D)	.4	.1	-	.2	.2	(D)	(D)	.1	(D)
3961	COSTUME JEWELRY.	(D)	-	(D)	-	-	(D)	-	-	-	(D)	(D)
3964	NEEDLES, PINS, AND FASTENERS . . .	(D)	(D)	(D)	.1	-	(D)	.2	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8a. Water Discharged, by Method of Treatment, for Industry Groups and Industries: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Industry group and industry	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
39	MISC. MANUFACTUR'G INDUS.--CON.											
399	MISCELLANEOUS MANUFACTURES . . .	.7	(D)	(D)	(D)	(D)	.3	-	(D)	(D)	(D)	(D)
3991	BROOMS AND BRUSHES	-	-	-	-	-	-	-	-	-	-	-
3995	BURIAL CASKETS	-	-	-	-	-	-	-	-	-	-	-
3999	MANUFACTURING INDUSTRIES, NEC. . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries whether or not separate figures are shown for individual industries in the group.

Industries omitted from table, have total treated water discharge of less than .05 or have data withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (Z) Less than 50 million gallons.

Table 8b. Water Discharged, by Method of Treatment, for States: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

State	Total water discharged (treated)	Water treated before discharge by method of treatment									
		Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
UNITED STATES, TOTAL .	4 709.2	2 049.0	1 360.7	533.3	230.3	2 527.7	1 642.0	1 391.9	290.7	475.0	554.8
ALABAMA.	151.1	77.0	79.2	5.2	1.6	132.9	110.3	86.7	1.8	4.6	8.6
ARIZONA.	2.3	(D)	1.4	(D)	(D)	1.0	.8	.4	.2	.4	(D)
ARKANSAS	58.0	5.6	13.3	2.2	2.8	49.7	41.2	9.7	2.1	.8	1.5
CALIFORNIA	105.7	55.3	24.6	14.3	7.8	62.9	52.5	25.5	4.6	6.1	8.1
COLORADO	32.7	25.8	3.3	1.9	(D)	23.2	7.1	23.6	.7	2.7	21.8
CONNECTICUT.	33.2	20.3	7.5	6.4	1.4	5.0	3.1	3.6	2.9	4.7	.9
DELAWARE	97.8	79.8	20.4	5.1	1.2	8.4	5.7	7.9	.3	12.3	1.4
DISTRICT OF COLUMBIA . . .	-	-	-	-	-	-	-	-	-	-	-
FLORIDA.	76.9	18.4	17.6	1.0	.6	56.3	62.3	20.4	.9	2.5	3.3
GEORGIA.	138.2	62.4	41.0	1.2	2.7	96.3	115.3	34.8	3.0	4.7	3.4
HAWAII	64.0	2.5	.2	(D)	(D)	58.0	(D)	(D)	31.7	-	(D)
IDAHO.	12.4	1.3	3.5	(D)	(D)	9.4	8.9	(D)	(D)	(D)	1.4
ILLINOIS	114.8	51.9	52.5	39.4	26.6	60.7	30.1	36.5	32.6	14.5	25.5
INDIANA.	238.1	174.2	56.1	64.7	10.6	195.9	21.1	102.0	27.1	10.1	5.1
IOWA	44.6	33.3	6.4	3.4	3.9	29.8	6.0	5.2	.9	24.5	3.2
KANSAS	14.0	5.3	6.1	2.2	4.8	6.3	9.5	5.4	.6	.7	1.5
KENTUCKY	42.4	20.4	33.0	2.8	5.0	30.8	17.0	23.1	.2	1.7	6.2
LOUISIANA.	249.0	128.3	61.2	27.5	17.9	170.3	94.2	50.2	5.1	9.2	24.9
MAINE.	82.7	21.5	48.5	(D)	(D)	66.3	65.7	55.0	.5	.3	7.8
MASSACHUSETTS.	24.7	3.8	9.3	6.0	1.3	9.3	2.0	2.3	2.5	1.2	1.8
MICHIGAN	374.8	149.5	66.3	57.6	14.5	188.6	80.9	146.0	15.6	11.4	124.4
MINNESOTA.	23.5	3.1	3.0	1.3	.9	15.8	5.5	3.9	1.6	.9	3.2
MISSISSIPPI.	64.0	29.5	33.3	2.6	2.2	34.1	40.2	25.9	1.7	4.6	8.2
MISSOURI	13.0	1.3	4.8	2.9	1.0	4.8	4.2	3.8	2.0	1.4	1.4
MONTANA.	11.7	1.2	7.7	.7	.7	10.4	1.4	9.8	-	(D)	8.9
NEBRASKA	15.4	6.1	1.2	.5	2.3	4.2	7.2	2.3	.1	1.5	.5
NEW HAMPSHIRE.	17.0	(D)	13.3	.6	(D)	14.1	13.3	13.0	(D)	.8	.1
NEW JERSEY	105.9	52.8	44.1	23.1	7.1	75.3	36.8	32.7	14.0	17.2	34.0
NEW MEXICO	.9	(D)	(D)	(D)	(D)	.6	(D)	-	-	-	(D)
NEW YORK	183.0	61.5	72.7	28.2	9.8	114.4	48.0	82.8	23.1	45.7	20.4
NORTH CAROLINA	108.0	44.3	23.3	30.2	1.2	75.3	91.0	64.7	2.5	15.0	17.3
NORTH DAKOTA	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
OHIO	194.8	116.8	26.3	19.1	12.8	133.7	36.8	46.2	10.3	4.7	6.4
OKLAHOMA	68.3	12.6	2.6	.1	1.8	13.4	12.1	2.9	(D)	.9	.6
OREGON	77.1	35.4	40.5	.2	(D)	60.5	50.2	30.5	11.3	1.5	6.8
PENNSYLVANIA	445.2	198.2	74.5	63.0	33.3	188.6	68.2	81.4	51.0	82.9	38.4
RHODE ISLAND	2.4	(D)	1.0	(D)	(D)	.9	(D)	(D)	-	.8	(D)
SOUTH CAROLINA	89.3	18.3	30.3	2.9	.9	41.5	60.5	35.0	3.7	6.6	3.8
TENNESSEE.	90.0	11.2	28.5	10.1	1.5	42.9	38.8	16.7	3.6	23.1	13.1
TEXAS.	361.7	105.0	134.7	30.5	14.4	116.2	99.9	79.3	16.6	84.3	26.3
UTAH	10.5	9.2	1.0	(D)	(D)	9.6	1.3	8.9	(D)	(D)	.1
VERMONT.	3.8	(D)	1.8	(D)	(D)	3.0	2.8	(D)	(D)	(D)	(D)
VIRGINIA	61.1	4.8	30.4	8.7	3.8	35.7	51.5	31.8	1.0	6.5	19.9
WASHINGTON	198.7	111.3	78.9	4.5	2.1	142.3	105.8	64.0	5.2	6.6	17.2
WEST VIRGINIA.	230.0	17.8	97.6	5.1	.6	21.0	53.6	21.0	2.5	48.7	68.9
WISCONSIN.	86.4	17.4	19.8	17.1	1.4	49.0	48.7	38.5	.7	2.8	4.0
WYOMING.	3.7	1.0	(D)	(D)	(D)	1.3	(D)	(D)	(D)	-	(D)

Note: States not shown above discharge no treated water or have data which is being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

Table 8c. Water Discharged, by Method of Treatment, for Water Use Regions and Major Industry Groups: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
	UNITED STATES, TOTAL	4 709.2	2 049.0	1 360.7	533.3	230.3	2 527.7	1 642.0	1 391.9	290.7	475.0	554.8
	NEW ENGLAND	161.5	47.7	81.0	20.6	6.5	96.9	86.6	75.7	6.0	7.9	10.9
20	FOOD AND KINDRED PRODUCTS	1.3	.5	.1	(D)	(D)	.4	.7	(D)	.4	.4	(D)
22	TEXTILE MILL PRODUCTS	3.6	(D)	1.4	(D)	(D)	.8	1.5	(D)	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS	113.0	23.1	67.8	13.1	3.9	86.0	81.4	71.3	3.1	1.5	7.8
28	CHEMICALS AND ALLIED PRODUCTS	21.9	18.1	3.5	1.6	(D)	3.3	2.0	1.9	(D)	.9	.7
29	PETROLEUM AND COAL PRODUCTS	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-
30	RUBBER, MISC. PLASTICS PROD.	.3	.3	(Z)	(D)	-	(D)	(D)	(D)	-	(D)	(Z)
31	LEATHER AND LEATHER PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(D)
32	STONE, CLAY, GLASS PRODUCTS	.8	(D)	(D)	.1	(D)	.5	(D)	(D)	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES	2.2	.8	1.0	.6	(D)	.7	(D)	.1	.5	(D)	.3
34	FABRICATED METAL PRODUCTS	1.7	.3	1.2	.4	(D)	.4	.2	.1	.2	.1	.3
35	MACHINERY, EXCEPT ELECTRICAL	.5	.4	.5	.2	(D)	.3	(Z)	(Z)	.2	.1	.1
36	ELECTRIC, ELECTRONIC EQUIP	2.3	1.1	1.0	.3	(D)	1.4	.2	.2	.3	.2	.2
37	TRANSPORTATION EQUIPMENT	11.5	2.0	2.8	3.2	(D)	2.0	(D)	1.1	.7	4.2	.3
38	INSTRUMENTS, RELATED PRODUCTS	1.4	(D)	.9	.7	(D)	.4	(D)	.2	(D)	.1	.1
39	MISC. MANUFACTUR'G INDUSTRIES	.7	-	.4	.1	-	.2	.1	(D)	(D)	.1	.1
	MIDDLE ATLANTIC	716.6	531.2	175.2	127.9	65.6	236.2	150.3	139.8	30.0	50.6	68.2
20	FOOD AND KINDRED PRODUCTS	18.0	3.9	4.9	3.6	4.8	5.0	6.1	4.3	1.1	10.0	2.6
21	TOBACCO PRODUCTS	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS	6.6	(D)	3.8	(D)	(D)	(D)	2.3	1.3	(D)	3.5	2.8
24	LUMBER AND WOOD PRODUCTS	(D)	-	(D)	-	-	(D)	(D)	-	(D)	(D)	(D)
25	FURNITURE AND FIXTURES	(D)	-	-	-	-	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	56.3	7.2	46.0	30.2	7.7	53.7	51.4	47.7	4.6	4.9	8.4
28	CHEMICALS AND ALLIED PRODUCTS	133.8	55.0	75.8	30.3	1.9	80.4	40.7	51.3	8.9	9.5	38.4
29	PETROLEUM AND COAL PRODUCTS	182.6	179.6	9.0	9.2	8.1	18.4	14.2	11.3	10.2	16.6	8.6
30	RUBBER, MISC. PLASTICS PROD.	4.9	3.6	.5	(D)	(D)	1.3	(D)	(D)	.4	.5	(D)
31	LEATHER AND LEATHER PRODUCTS	.5	(D)	(D)	(D)	-	.3	(D)	(D)	-	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS	9.9	.7	.2	.8	(Z)	8.7	.4	1.9	(Z)	2.7	.2
34	FABRICATED METAL PRODUCTS	2.5	1.5	1.6	.6	(D)	.8	(D)	.7	.4	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL	1.7	.7	.5	.4	(D)	.9	(D)	.3	(D)	(D)	.1
36	ELECTRIC, ELECTRONIC EQUIP	5.7	.4	4.3	3.6	(D)	1.8	.8	1.4	.6	1.1	1.6
37	TRANSPORTATION EQUIPMENT	6.5	.7	.9	.5	(D)	1.4	.9	.3	.5	.4	.3
38	INSTRUMENTS, RELATED PRODUCTS	1.2	(D)	.3	(D)	-	.1	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES	.2	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	SOUTH ATLANTIC	590.3	212.1	189.0	14.4	9.5	388.9	441.3	214.5	12.0	35.0	56.0
20	FOOD AND KINDRED PRODUCTS	21.2	6.4	2.3	.8	5.0	5.3	10.9	5.2	1.3	4.7	5.2
22	TEXTILE MILL PRODUCTS	43.0	3.2	8.0	3.9	(D)	10.3	34.5	24.4	5.8	17.5	5.5
24	LUMBER AND WOOD PRODUCTS	1.0	(Z)	.1	-	-	.7	1.1	.5	(D)	.1	(D)
26	PAPER AND ALLIED PRODUCTS	353.7	112.2	87.4	(D)	1.3	289.5	334.3	133.3	(D)	3.6	(D)
28	CHEMICALS AND ALLIED PRODUCTS	94.5	33.9	55.8	6.6	.9	26.1	29.3	36.5	2.6	6.0	14.2
29	PETROLEUM AND COAL PRODUCTS	2.8	1.4	(D)	-	1.2	.2	1.5	(D)	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	7.0	5.8	.3	.1	(D)	4.9	.9	5.4	(D)	.4	-
32	STONE, CLAY, GLASS PRODUCTS	6.3	3.9	4.8	.4	(D)	5.1	4.0	.5	.2	.4	(D)
33	PRIMARY METAL INDUSTRIES	46.7	42.6	24.6	.5	(D)	43.4	22.4	6.1	.3	(D)	.2
34	FABRICATED METAL PRODUCTS	3.0	1.5	2.1	1.0	(D)	1.2	.2	(D)	.2	.3	.2
36	ELECTRIC, ELECTRONIC EQUIP	1.9	.4	1.6	.1	-	1.0	.7	.7	.3	.2	.4

See footnotes at end of table.

Table 8c. **Water Discharged, by Method of Treatment, for Water Use Regions and Major Industry Groups: 1978**—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Surface skimming	Neutrali-zation	Coagula-tion	Flotation	Primary settling	Biolog-ical oxidation	Secondary settling	Filtra-tion	Chlorina-tion	Other
	SOUTH ATLANTIC--CON.											
37	TRANSPORTATION EQUIPMENT . . .	1.6	.3	.7	.5	.2	.8	.9	.9	(D)	.9	1.1
38	INSTRUMENTS, RELATED PRODUCTS.	.4	-	.1	.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	.1	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
	GREAT LAKES.	930.1	543.1	221.9	169.4	57.1	652.4	241.1	421.4	79.5	66.7	142.8
20	FOOD AND KINDRED PRODUCTS. . .	23.4	2.3	5.9	2.4	2.2	5.6	5.8	5.6	3.1	10.3	5.3
25	FURNITURE AND FIXTURES	(D)	-	(D)	(D)	-	(D)	-	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	134.2	24.1	33.7	14.7	6.1	105.0	66.5	62.1	2.8	12.2	10.4
28	CHEMICALS AND ALLIED PRODUCTS.	118.3	19.1	79.2	12.5	10.2	33.4	9.4	11.5	4.8	27.5	17.7
29	PETROLEUM AND COAL PRODUCTS. .	107.4	106.5	16.5	16.7	17.7	71.6	19.5	19.5	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD. .	22.9	17.0	1.4	(D)	-	7.4	1.3	1.3	.1	.2	.2
31	LEATHER AND LEATHER PRODUCTS .	1.6	.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	1.0
32	STONE, CLAY, GLASS PRODUCTS. .	6.9	1.2	1.3	1.8	(D)	3.0	1.2	1.8	1.2	.1	1.6
33	PRIMARY METAL INDUSTRIES . . .	461.1	265.1	51.2	104.6	11.9	319.3	43.2	223.1	53.7	6.2	99.7
34	FABRICATED METAL PRODUCTS. . .	7.9	1.0	4.1	1.4	(Z)	2.9	.8	1.1	1.1	.9	.4
35	MACHINERY, EXCEPT ELECTRICAL .	4.8	2.7	3.0	2.6	.8	3.1	.6	1.6	.2	1.3	.2
36	ELECTRIC, ELECTRONIC EQUIP . .	3.3	1.2	2.0	.6	.4	1.0	.2	.5	.5	.3	.8
37	TRANSPORTATION EQUIPMENT . . .	25.1	13.8	11.9	11.7	7.2	9.8	3.3	4.4	.6	.1	3.9
	OHIO	675.0	166.2	190.3	45.0	14.2	270.6	140.4	147.0	50.8	135.3	109.0
20	FOOD AND KINDRED PRODUCTS. . .	7.9	1.6	1.5	.6	1.0	1.1	2.5	1.1	.4	1.1	1.2
25	FURNITURE AND FIXTURES	(D)	(D)	(D)	(D)	-	(D)	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	36.8	(D)	(D)	(D)	(D)	32.9	30.8	25.6	(D)	4.2	1.1
28	CHEMICALS AND ALLIED PRODUCTS.	223.8	12.0	103.3	10.2	1.2	31.7	47.9	19.5	3.0	51.1	76.0
29	PETROLEUM AND COAL PRODUCTS. .	14.6	8.9	5.0	2.1	4.0	8.6	5.9	6.0	1.4	.7	(D)
30	RUBBER, MISC. PLASTICS PROD. .	5.5	1.8	2.3	.2	.1	2.8	3.2	.9	.1	.8	1.1
31	LEATHER AND LEATHER PRODUCTS .	-	-	-	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	5.8	2.2	2.3	.5	(D)	4.0	.4	2.0	.3	.1	.1
33	PRIMARY METAL INDUSTRIES . . .	359.1	119.8	53.8	23.6	4.8	180.7	44.9	89.0	43.4	75.4	26.1
34	FABRICATED METAL PRODUCTS. . .	2.8	.5	1.4	.7	.2	.6	.2	.2	.6	.2	.2
35	MACHINERY, EXCEPT ELECTRICAL .	3.9	2.6	1.9	.2	(D)	1.3	1.0	.2	.1	(D)	.2
36	ELECTRIC, ELECTRONIC EQUIP . .	8.2	4.1	3.8	1.2	(D)	4.4	2.7	1.0	.5	.8	.6
37	TRANSPORTATION EQUIPMENT . . .	5.7	2.8	2.0	1.7	1.0	2.3	.1	.9	.1	.2	.2
38	INSTRUMENTS, RELATED PRODUCTS.	.3	-	.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
	TENNESSEE.	128.2	44.5	50.9	36.7	.5	87.9	79.2	63.5	2.3	25.7	12.8
20	FOOD AND KINDRED PRODUCTS. . .	1.7	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	.5
22	TEXTILE MILL PRODUCTS.	1.3	-	(D)	-	-	-	.7	(D)	(D)	(D)	.5
26	PAPER AND ALLIED PRODUCTS. . .	63.3	33.9	(D)	(D)	-	60.2	62.2	37.4	(D)	.1	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	51.4	5.3	24.0	5.1	(D)	23.7	14.2	23.4	1.6	23.8	3.8
30	RUBBER, MISC. PLASTICS PROD. .	.8	(D)	.8	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	.8	(D)	(D)	(D)	-	(D)	(D)	(D)	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	5.0	2.9	1.5	.1	.1	1.7	.4	.2	(D)	.8	1.5
34	FABRICATED METAL PRODUCTS. . .	.2	-	(D)	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	.2	(D)	.1	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	.7	.2	.5	.3	(D)	.4	(D)	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	(D)	(D)	(D)	-	-	-	-	-	-	(D)	(D)

See footnotes at end of table.

Table 8c. Water Discharged, by Method of Treatment, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
	TENNESSEE--CON.											
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	(D)	(D)	-	(D)	(D)	-	(D)	-	(D)	-
	UPPER MISSISSIPPI.	148.7	67.3	43.1	28.1	14.6	89.1	52.8	40.7	22.1	31.7	30.2
20	FOOD AND KINDRED PRODUCTS. . .	29.6	7.2	4.4	3.1	5.3	6.2	8.4	6.0	.7	3.4	6.8
26	PAPER AND ALLIED PRODUCTS. . .	33.4	8.0	6.8	5.9	(D)	19.9	24.5	15.4	2.5	.5	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	37.4	26.2	7.8	4.3	(D)	32.4	2.6	3.8	.2	21.7	1.7
29	PETROLEUM AND COAL PRODUCTS. .	(D)	4.7	(D)	-	(D)	(D)	(D)	(D)	(D)	-	(D)
30	RUBBER, MISC. PLASTICS PROD. .	2.0	(D)	1.2	-	-	(D)	(D)	(D)	(D)	(D)	(D)
31	LEATHER AND LEATHER PRODUCTS .	(D)	-	-	-	-	(D)	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	4.6	(D)	(D)	(D)	-	2.7	1.4	2.3	(D)	1.0	(D)
33	PRIMARY METAL INDUSTRIES . . .	18.6	9.3	12.3	7.8	(D)	14.6	8.3	5.9	10.5	.2	15.0
34	FABRICATED METAL PRODUCTS. . .	1.7	.4	1.3	.4	-	.9	.2	(D)	(D)	.3	.2
35	MACHINERY, EXCEPT ELECTRICAL .	12.1	9.3	4.6	3.5	3.7	5.9	.2	.7	3.7	3.6	3.9
36	ELECTRIC, ELECTRONIC EQUIP . .	1.1	-	.7	(D)	-	(D)	-	-	(D)	(D)	.1
37	TRANSPORTATION EQUIPMENT . . .	1.8	1.1	.5	1.0	(D)	1.3	(D)	(D)	(D)	(D)	.1
	LOWER MISSISSIPPI.	311.3	136.5	88.9	24.0	20.3	219.6	145.6	76.1	9.4	4.8	28.8
20	FOOD AND KINDRED PRODUCTS. . .	9.9	1.6	1.0	(D)	1.1	2.9	6.9	.9	.9	.6	(D)
22	TEXTILE MILL PRODUCTS.	.6	-	(D)	(D)	-	(D)	(D)	(D)	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS. . .	116.6	(D)	(D)	(D)	(D)	86.3	102.6	47.9	(D)	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	68.2	20.0	51.5	10.3	6.9	22.2	21.6	14.3	3.6	1.5	7.2
32	STONE, CLAY, GLASS PRODUCTS. .	.9	(D)	(D)	(D)	-	.9	(D)	(D)	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	(D)	5.5	(D)	(D)	-	5.4	.3	(D)	(D)	(D)	-
34	FABRICATED METAL PRODUCTS. . .	1.5	(D)	1.2	.3	(D)	.9	.6	.3	(D)	.8	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	.2	(D)	(D)	(D)	(D)	.1	(D)	-	-	(D)	(D)
	SOURIS - RED RAINY											
35	MACHINERY, EXCEPT ELECTRICAL .	-	-	-	-	-	-	-	-	-	-	-
	MISSOURI	46.4	16.5	9.9	4.7	6.9	14.4	24.7	10.4	1.4	4.3	1.6
20	FOOD AND KINDRED PRODUCTS. . .	21.4	6.0	3.6	1.8	4.5	5.4	13.9	5.2	.5	3.5	.8
22	TEXTILE MILL PRODUCTS.	-	-	-	-	-	-	-	-	-	-	-
25	FURNITURE AND FIXTURES	-	-	-	-	-	-	-	-	-	-	-
28	CHEMICALS AND ALLIED PRODUCTS.	8.0	5.9	1.9	(D)	-	2.0	1.8	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	8.2	3.6	.7	(D)	2.1	3.0	5.4	1.6	(D)	(D)	-
30	RUBBER, MISC. PLASTICS PROD. .	1.3	(D)	1.2	(D)	-	(D)	(D)	(D)	(D)	(D)	-
32	STONE, CLAY, GLASS PRODUCTS. .	(D)	-	-	-	-	-	(Z)	-	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	.6	(D)	.5	(D)	(D)	(D)	(D)	(D)	(D)	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	.7	(D)	.7	.5	-	.2	-	(D)	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	.8	(D)	.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTUR'G INDUSTRIES.	-	-	-	-	-	-	-	-	-	-	-
	ARKANSAS, WHITE AND RED.	168.4	75.5	20.1	11.8	8.6	67.1	35.8	32.8	3.9	11.7	26.8
20	FOOD AND KINDRED PRODUCTS. . .	8.1	5.5	1.1	1.1	4.8	3.3	4.3	3.1	1.2	.8	2.5
22	TEXTILE MILL PRODUCTS.	-	-	-	-	-	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS. . .	21.7	(D)	-	(D)	-	21.7	14.6	-	(D)	(D)	1.0
28	CHEMICALS AND ALLIED PRODUCTS.	13.7	(D)	12.6	(D)	-	8.9	3.6	1.5	(D)	.3	1.1
30	RUBBER, MISC. PLASTICS PROD. .	1.1	(D)	.2	(D)	(D)	.8	(D)	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	.4	(D)	(D)	(D)	-	.4	.1	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	.7	(D)	.3	.1	(D)	.6	.5	.4	.3	.5	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	.5	(D)	.4	(D)	-	.1	(D)	(D)	-	-	(D)

See footnotes at end of table.

Table 8c. Water Discharged, by Method of Treatment, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
	ARKANSAS, WHITE AND RED--CON.											
37	TRANSPORTATION EQUIPMENT . . .	.3	(D)	.3	(D)	-	.2	(D)	.2	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	(D)	-	(D)	(D)	-	(D)	-	-	(D)	(D)	(D)
	TEXAS GULF	250.7	69.1	130.1	28.7	13.2	106.5	89.5	74.7	14.4	17.6	24.8
20	FOOD AND KINDRED PRODUCTS. . .	3.6	2.4	.5	(D)	.9	1.5	.7	.6	1.1	.6	.3
24	LUMBER AND WOOD PRODUCTS . . .	.5	(D)	(D)	-	(D)	(D)	.3	(D)	(D)	-	(D)
26	PAPER AND ALLIED PRODUCTS. . .	33.7	(D)	-	-	-	17.9	27.7	(D)	-	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS.	112.8	17.0	46.8	9.1	1.9	62.2	28.5	22.9	5.0	5.8	10.2
29	PETROLEUM AND COAL PRODUCTS. .	46.9	39.9	36.3	18.3	10.0	21.5	30.7	21.4	7.7	9.3	13.5
32	STONE, CLAY, GLASS PRODUCTS. .	.8	(D)	-	(D)	-	.2	.1	-	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	.6	(D)	.3	(D)	(D)	.1	(D)	(D)	(D)	(D)	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	.7	(D)	.2	(D)	(D)	(D)	-	-	(D)	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	.7	(D)	(D)	(D)	(D)	.3	(D)	(D)	(D)	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	-	-	-	-	-	-	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	-	-	-	-	-	-	-	-	-	-	-
	RIO GRANDE											
22	TEXTILE MILL PRODUCTS.	-	-	-	-	-	-	-	-	-	-	-
24	LUMBER AND WOOD PRODUCTS . . .	-	-	-	-	-	-	-	-	-	-	-
29	PETROLEUM AND COAL PRODUCTS. .	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	-	-	-	-	-	-	-	-	-	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	-	-	-	-	-	-	-	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	(D)	-	(D)	(D)	-	(D)	-	-	-	-	-
	LOWER COLORADO	3.9	1.4	1.4	(D)	(D)	1.2	1.2	.4	.2	.4	(D)
26	PAPER AND ALLIED PRODUCTS. . .	-	-	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-
28	CHEMICALS AND ALLIED PRODUCTS.	(D)	-	-	-	-	-	-	-	-	(D)	-
29	PETROLEUM AND COAL PRODUCTS. .	-	-	-	-	-	-	-	-	-	-	-
33	PRIMARY METAL INDUSTRIES . . .	1.8	(D)	(D)	-	-	(D)	(D)	-	-	(D)	-
34	FABRICATED METAL PRODUCTS. . .	-	-	-	-	-	-	-	-	-	-	-
	GREAT BASIN.	4.9	.7	.9	(D)	(D)	1.0	1.2	.4	(D)	.4	.1
20	FOOD AND KINDRED PRODUCTS. . .	.5	(D)	(D)	-	-	(D)	(D)	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	(D)	-	(D)	(D)	-	(D)	(D)	-	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	(D)	.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
	COLUMBIA - NORTH PACIFIC	296.9	147.6	129.6	4.9	3.9	220.7	164.6	104.0	16.7	8.2	34.3
20	FOOD AND KINDRED PRODUCTS. . .	17.6	4.1	1.0	(D)	.4	5.8	9.2	1.7	.9	5.8	2.8
24	LUMBER AND WOOD PRODUCTS . . .	29.1	17.9	.1	(Z)	(D)	9.1	8.1	.1	(D)	(D)	.2
26	PAPER AND ALLIED PRODUCTS. . .	187.9	94.3	99.8	(D)	(D)	159.0	141.9	89.8	(D)	.4	21.1
28	CHEMICALS AND ALLIED PRODUCTS.	9.8	(D)	7.0	(D)	(D)	6.1	.1	(D)	(D)	(D)	(D)
29	PETROLEUM AND COAL PRODUCTS. .	(D)	1.9	1.8	(D)	(D)	2.0	(D)	(D)	-	(D)	-
30	RUBBER, MISC. PLASTICS PROD. .	-	-	-	-	-	-	-	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS. .	3.0	(D)	(D)	-	-	2.4	-	(D)	-	(D)	2.8
33	PRIMARY METAL INDUSTRIES . . .	45.0	29.2	19.2	(D)	(D)	35.8	3.5	5.2	(D)	.9	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	-	-	-	-	-	-	-	-	-	-	-
36	ELECTRIC, ELECTRONIC EQUIP . .	-	-	-	-	-	-	-	-	-	-	-
	CALIFORNIA - SOUTH PACIFIC . . .	106.2	55.7	24.7	14.3	7.8	63.2	52.9	25.9	4.6	6.2	8.1
20	FOOD AND KINDRED PRODUCTS. . .	12.8	3.0	1.1	.6	.9	3.5	2.7	.3	1.9	1.9	2.9
24	LUMBER AND WOOD PRODUCTS . . .	11.3	(D)	.2	(D)	-	1.0	7.5	.8	(D)	.2	(D)

See footnotes at end of table.

Table 8c. Water Discharged, by Method of Treatment, for Water Use Regions and Major Industry Groups: 1978—Con.

(All figures in billions of gallons. For explanation of terms, see appendix A)

SIC code	Water use region[1] and major industry group	Total	Surface skimming	Neutralization	Coagulation	Flotation	Primary settling	Biological oxidation	Secondary settling	Filtration	Chlorination	Other
	CALIFORNIA - SOUTH PACIFIC--CON.											
26	PAPER AND ALLIED PRODUCTS. . .	14.2	(D)	4.3	(D)	(D)	7.7	(D)	(D)	(D)	(D)	2.4
29	PETROLEUM AND COAL PRODUCTS. .	42.8	39.9	4.1	4.2	5.5	38.2	36.4	11.9	(D)	.1	.8
32	STONE, CLAY, GLASS PRODUCTS. .	1.6	.3	(D)	-	(D)	.8	.8	(D)	-	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	1.7	.5	1.4	.2	(D)	.6	(D)	(D)	(D)	.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL .	.4	(Z)	.4	(D)	(D)	(D)	-	-	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	2.8	(D)	2.2	(D)	-	.2	(D)	(D)	.2	(D)	.1
37	TRANSPORTATION EQUIPMENT . . .	1.6	.3	.7	.5	(D)	.7	(D)	.3	(D)	(D)	.1
38	INSTRUMENTS, RELATED PRODUCTS.	.2	(D)	.1	(D)	-	-	-	(D)	-	(D)	(D)
	ALASKA											
20	FOOD AND KINDRED PRODUCTS. . .	(D)	-	-	-	-	(D)	(D)	-	(D)	(D)	(D)
	HAWAII	64.0	2.5	.2	(D)	(D)	58.0	(D)	(D)	31.7	-	(D)
20	FOOD AND KINDRED PRODUCTS. . .	63.5	(D)	.1	(D)	(D)	57.6	(D)	(D)	31.7	-	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	-	-	-	-	-	-	-	-	-	-	-
34	FABRICATED METAL PRODUCTS. . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Note: Figures shown for water use regions include data for all major industry groups whether or not separate figures are shown for individual major industry groups in the region. Water use regions or major industry groups omitted from the table discharge no treated water or have data being withheld to avoid disclosure.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than 50 million gallons.

[1]See appendix H for maps and appendix I for definitions.

Table 9. Water Discharged by Last Use, by Method of Treatment: 1978

(All figures in billions of gallons. For explanation of terms, see appendix A)

Method of treatment	Total treated water	Process	Cooling and condensing			Sanitary service	Boiler feed	Other
			Steam electric power generation	Air conditioning	Other			
ALL INDUSTRIES, TOTAL.	4 709.2	2 477.2	316.2	46.1	1 425.2	57.8	165.6	221.1
SURFACE SKIMMING	2 049.0	989.7	99.4	11.6	828.4	12.5	47.8	59.6
NEUTRALIZATION	1 360.7	924.6	12.0	11.4	274.7	11.5	71.4	55.0
COAGULATION.	533.3	415.3	1.8	3.6	52.8	5.1	35.5	19.3
FLOTATION.	230.3	152.7	.7	2.2	39.3	2.9	22.0	10.5
PRIMARY SETTLING	2 527.7	1 672.1	53.5	22.0	534.6	19.5	108.0	117.9
BIOLOGICAL OXIDATION	1 642.0	1 267.1	28.0	15.8	196.1	27.7	64.9	42.4
SECONDARY SETTLING	1 391.9	1 093.6	13.4	12.3	154.0	15.4	46.7	56.3
FILTRATION	290.7	194.4	4.5	2.6	36.4	3.8	15.2	33.7
CHLORINATION	475.0	135.9	61.2	4.4	226.9	17.7	15.4	13.5
OTHER.	554.8	248.0	99.9	14.9	158.1	6.1	16.4	11.3

Table 10a. Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants												
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
							Rented land			Kind of cost				
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
	ALL INDUSTRIES, TOTAL. . . .	1 248.7	100	8 124.1	100	189 808	22 830	5.2	2 118.7	415.2	454.6	204.5	894.7	149.8
20	FOOD AND KINDRED PRODUCTS. . .	112.7	8	619.6	13	65 111	11 807	3.4	129.2	28.9	31.3	14.2	47.8	7.0
201	MEAT PRODUCTS.	25.3	2	108.2	1	10 498	1 006	.1	27.2	7.2	6.3	3.6	8.8	1.2
2011	MEATPACKING PLANTS	13.8	1	60.7	1	7 608	883	.1	14.3	3.6	3.5	1.9	4.4	.6
2013	SAUSAGES AND OTHER PREPARED MEATS.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	3.0	.9	.6	.9	.5	(D)
2016	POULTRY DRESSING PLANTS.	9.9	1	40.6	(Z)	2 499	(D)	(D)	(D)	(D)	2.1	(D)	(D)	(D)
2017	POULTRY AND EGG PROCESSING	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(Z)	(D)	(D)	-
202	DAIRY PRODUCTS	12.1	1	25.7	(Z)	3 100	379	(Z)	6.9	(D)	1.3	1.4	2.4	(D)
2021	CREAMERY BUTTER.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-
2022	CHEESE, NATURAL AND PROCESSED. . .	3.0	(Z)	9.3	(Z)	1 562	(D)	(D)	2.0	.5	.2	.5	.6	.1
2023	CONDENSED AND EVAPORATED MILK. . .	4.4	(Z)	8.4	(Z)	(D)	(D)	(D)	2.5	.3	.6	.6	.8	.1
2024	ICE CREAM AND FROZEN DESSERTS. . .	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2026	FLUID MILK	4.6	(Z)	7.9	(Z)	1 071	239	(Z)	2.3	.4	.5	(D)	.9	(D)
203	PRESERVED FRUITS AND VEGETABLES.	21.7	(X)	150.3	7	25 971	3 934	.4	27.6	5.1	9.3	2.2	9.7	1.3
2032	CANNED SPECIALTIES	1.7	(Z)	6.9	(Z)	1 489	(D)	(D)	5.5	.6	3.3	.3	.9	.5
2033	CANNED FRUITS AND VEGETABLES . . .	(D)	(X)	(D)	(X)	11 601	1 888	.3	8.7	1.9	1.9	.8	3.7	.4
2034	DEHYD. FRUITS, VEGETABLES, SOUPS .	1.3	(Z)	(D)	(X)	1 873	(D)	(D)	1.1	.2	.3	.1	.4	(Z)
2035	PICKLES, SAUCES, SALAD DRESSINGS .	1.6	(Z)	9.0	(Z)	158	(D)	(D)	2.5	.5	.6	(D)	1.1	(D)
2037	FROZEN FRUITS AND VEGETABLES . . .	5.4	(Z)	33.6	(Z)	10 497	1 269	.1	8.6	1.7	2.5	.8	3.2	.3
2038	FROZEN SPECIALTIES	(D)	(X)	5.5	(Z)	353	(D)	(D)	1.1	.2	.5	(D)	.3	(D)
204	GRAIN MILL PRODUCTS.	9.1	1	50.0	1	(D)	-	-	16.3	3.3	2.7	2.7	6.2	1.4
2041	FLOUR, OTHER GRAIN MILL PRODUCTS .	(D)	(X)	.9	(Z)	(D)	-	-	.3	.1	(D)	(D)	(D)	-
2043	CEREAL BREAKFAST FOODS	.3	(Z)	1.7	(Z)	(D)	-	-	.5	(D)	(Z)	(D)	.4	(D)
2044	RICE MILLING	(D)	(X)	(D)	(X)	(D)	-	-	(D)	-	(D)	(D)	(D)	-
2045	BLENDED AND PREPARED FLOUR	-	-	-	-	-	-	-	-	-	-	-	-	-
2046	WET CORN MILLING	8.0	1	41.4	(Z)	64	-	-	14.2	2.7	2.3	2.4	5.4	1.4
2047	DOG, CAT, AND OTHER PET FOOD . . .	.3	(Z)	2.7	(Z)	(D)	-	-	(D)	.2	.3	.2	.2	(D)
2048	PREPARED FEEDS, NEC.	(D)	(X)	(D)	(X)	29	-	-	.4	(D)	(D)	(D)	.1	(D)
205	BAKERY PRODUCTS.	(Z)	(Z)	6.2	(Z)	(D)	(D)	(D)	.5	(D)	.2	.1	.2	(D)
2051	BREAD, CAKE, AND RELATED PRODUCTS.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	.3	(D)	.1	(D)	(D)	(D)
2052	COOKIES AND CRACKERS	(D)	(X)	(D)	(X)	(D)	-	-	.2	(D)	.1	(D)	(D)	-
206	SUGAR, CONFECTIONERY PRODUCTS. .	9.3	(X)	79.7	1	19 522	5 974	2.6	13.7	3.2	3.4	1.2	4.8	1.2
2061	RAW CANE SUGAR	(D)	(X)	(D)	(X)	14 906	5 892	2.6	5.5	.6	1.5	.4	2.0	1.0
2062	CANE SUGAR REFINING.	1.5	(Z)	11.3	(Z)	519	(D)	(D)	2.3	1.1	.5	(D)	.5	(D)
2063	BEET SUGAR	.6	(Z)	32.0	(Z)	3 999	(D)	(D)	3.3	1.1	.4	.3	1.4	(Z)
2065	CONFECTIONERY PRODUCTS	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	.4	.7	(D)	.4	-
2066	CHOCOLATE AND COCOA PRODUCTS . . .	(D)	(X)	(D)	(X)	(D)	(D)	(D)	.8	(D)	(D)	(D)	(D)	(D)
2067	CHEWING GUM.	-	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
207	FATS AND OILS.	8.4	1	40.9	(Z)	874	(D)	(D)	11.4	2.2	2.8	.8	4.9	.7
2074	COTTONSEED OIL MILLS	(D)	(X)	(D)	(X)	107	-	-	(D)	(D)	(Z)	(Z)	(D)	-
2075	SOYBEAN OIL MILLS.	2.4	(Z)	12.8	(Z)	535	(D)	(D)	4.6	(D)	.9	.3	2.0	(D)
2076	VEGETABLE OIL MILLS, NEC	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2077	ANIMAL AND MARINE FATS AND OILS. .	1.4	(Z)	8.8	(Z)	55	(D)	(D)	1.4	.3	(D)	(D)	.6	(D)
2079	SHORTENING AND COOKING OILS. . . .	4.6	(Z)	18.7	(Z)	176	(D)	(D)	5.2	.9	1.3	.3	2.2	.5
208	BEVERAGES.	23.1	2	134.6	2	1 429	(D)	(D)	20.4	5.6	4.3	1.0	8.8	.7
2082	MALT BEVERAGES	21.5	2	115.6	2	303	-	-	16.8	4.0	3.7	.7	7.6	.7
2083	MALT	(D)	(X)	3.5	(Z)	(D)	-	-	.3	.2	(D)	(D)	(Z)	-
2084	WINES, BRANDY, AND BRANDY SPIRITS.	(D)	(X)	2.7	(Z)	712	(D)	(D)	(D)	.1	.1	(D)	.3	-
2085	DISTILLED LIQUOR, EXCEPT BRANDY. .	.3	(Z)	5.8	(Z)	91	-	-	1.1	.4	.1	.1	.5	-
2086	BOTTLED AND CANNED SOFT DRINKS . .	.6	(Z)	6.2	(Z)	138	-	-	1.3	.4	.3	(Z)	.5	(Z)
2087	FLAVORING EXTRACTS, SIRUPS, NEC. .	(D)	(X)	.8	(Z)	(D)	-	-	(D)	.1	(D)	(D)	(Z)	(Z)
209	MISC. FOODS, KINDRED PRODUCTS. .	3.7	(Z)	23.9	(Z)	3 592	249	(D)	5.2	1.1	1.0	1.1	1.9	.2
2091	CANNED AND CURED SEAFOODS.	1.5	(Z)	3.6	(Z)	(D)	(D)	(D)	1.4	.2	.2	(D)	.4	(D)
2092	FRESH OR FROZEN PACKAGED FISH. . .	(D)	(X)	(D)	(X)	647	(D)	(D)	(D)	.1	.2	(D)	.1	(D)
2095	ROASTED COFFEE	(D)	(X)	(D)	(X)	(D)	-	-	(D)	.2	.1	.1	.7	(D)
2097	MANUFACTURED ICE	-	-	-	-	-	-	-	-	-	-	-	-	-
2098	MACARONI AND SPAGHETTI	-	-	-	-	-	-	-	-	-	-	-	-	-
2099	FOOD PREPARATIONS, NEC	1.3	(Z)	12.1	(Z)	2 809	(D)	(D)	2.1	.5	.5	.4	.7	(Z)
21	TOBACCO PRODUCTS	(D)	(X)	13.8	(Z)	76	-	-	1.7	.5	(D)	.1	.4	(D)
2111	CIGARETTES	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2121	CIGARS	-	-	-	-	-	-	-	-	-	-	-	-	-
2141	TOBACCO STEMMING AND REDRYING. . .	(D)	(X)	(D)	(X)	76	-	-	(D)	(D)	(D)	(D)	(D)	(D)
22	TEXTILE MILL PRODUCTS.	17.7	1	125.8	1	2 796	52	(Z)	23.8	6.2	4.7	2.0	10.4	.6
2211	WEAVING MILLS, COTTON.	.4	(Z)	16.1	(Z)	362	-	-	2.5	.5	.6	(D)	1.4	(D)
2221	WEAVING MILLS, MANMADE FIBER, SILK.	2.0	(Z)	18.3	(Z)	685	-	-	3.2	.4	1.0	.1	1.6	(Z)
2231	WEAVING AND FINISHING MILLS, WOOL.	(D)	(X)	(D)	(X)	(D)	-	-	1.1	(D)	(D)	.1	(D)	(D)
2241	NARROW FABRIC MILLS.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
225	KNITTING MILLS	3.1	(Z)	17.7	(Z)	224	14	(Z)	2.7	.9	.7	.3	1.0	.1
2251	WOMEN'S HOSIERY, EXCEPT SOCKS. . .	(D)	(X)	(D)	(X)	-	-	-	(D)	-	-	(D)	(D)	-
2252	HOSIERY, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
2253	KNIT OUTERWEAR MILLS	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
2254	KNIT UNDERWEAR MILLS	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
2257	CIRCULAR KNIT FABRIC MILLS	.8	(Z)	9.5	(Z)	91	(D)	(D)	1.8	.5	.5	(D)	.6	(D)
2258	WARP KNIT FABRIC MILLS	(D)	(X)	5.3	(Z)	121	(D)	(D)	.8	.3	.1	(Z)	.4	-
2259	KNITTING MILLS, NEC.	-	-	(D)	(X)	(D)	(D)	(D)	(D)	(D)	-	-	(D)	-
226	TEXTILE FINISHING, EXCEPT WOOL .	7.0	1	46.7	(Z)	910	-	-	10.0	3.4	1.3	.5	4.5	.3
2261	FINISHING PLANTS, COTTON	1.2	(Z)	15.2	(Z)	182	-	-	2.5	.5	.4	.2	1.2	.2
2262	FINISH. PLTS, MANMADE FIBER, SILK.	5.4	(Z)	29.6	(Z)	707	-	-	6.6	2.6	.8	.2	3.0	.1
2269	FINISHING PLANTS, NEC.	.4	(Z)	1.9	(Z)	22	-	-	.8	.3	.1	.1	.3	-

See footnotes at end of table.

Table 10a. Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants												
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
							Rented land			Kind of cost				
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials supplies (million dollars)	Equipment leasing and other costs (million dollars)
22	TEXTILE MILL PRODUCTS--CON.													
227	FLOOR COVERING MILLS	1.6	(Z)	5.6	(Z)	170	(D)	(D)	2.0	(D)	.4	.8	.6	(D)
2271	WOVEN CARPETS AND RUGS	-	-	-	-	-	-	-	-	-	-	-	-	-
2272	TUFTED CARPETS AND RUGS	1.6	(Z)	5.6	(Z)	170	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2279	CARPETS AND RUGS, NEC	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
228	YARN AND THREAD MILLS	(D)	(X)	6.6	(Z)	56	-	-	1.0	.3	.2	(D)	.3	(D)
2281	YARN MILLS, EXCEPT WOOL	(D)	(X)	1.1	(Z)	39	-	-	.4	(Z)	.1	(D)	.1	(D)
2282	THROWING AND WINDING MILLS	(D)	(X)	1.3	(Z)	(D)	-	-	(D)	(D)	(D)	(D)	.1	(D)
2283	WOOL YARN MILLS	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	-	-	(D)	-
2284	THREAD MILLS	(D)	(X)	4.2	(Z)	(D)	-	-	.4	.2	(D)	(D)	(D)	(D)
229	MISCELLANEOUS TEXTILE GOODS	.2	(Z)	6.0	(Z)	238	(D)	(D)	1.2	.2	.3	(D)	.5	(D)
2291	FELT GOODS, EXC. WOVEN FELT, HATS	-	-	-	-	-	-	-	(D)	(D)	(D)	-	(D)	-
2292	LACE GOODS	(D)	(X)	(D)	(X)	-	-	-	(D)	-	(D)	-	(D)	-
2293	PADDINGS AND UPHOLSTERY FILLING	-	-	-	-	-	-	-	-	-	-	-	-	-
2294	PROCESSED TEXTILE WASTE	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	-	-
2295	COATED FABRICS, NOT RUBBERIZED	(D)	(X)	(D)	(X)	(D)	-	-	.3	(D)	.1	(D)	.1	-
2296	TIRE CORD AND FABRIC	-	-	(D)	(X)	(D)	-	-	.2	(D)	.1	(D)	.1	-
2297	NONWOVEN FABRICS	(D)	(X)	(D)	(X)	56	(D)	(D)	.5	(Z)	(D)	.1	.3	(D)
2298	CORDAGE AND TWINE	-	-	-	-	-	-	-	-	-	-	-	-	-
2299	TEXTILE GOODS, NEC	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
24	LUMBER AND WOOD PRODUCTS	14.4	1	72.8	1	2 181	15	(Z)	8.6	2.6	1.9	.6	3.3	.1
2411	LOGGING CAMPS, LOG CONTRACTORS	(D)	(X)	(D)	(X)	106	-	-	(D)	(D)	(D)	(D)	(D)	-
242	SAWMILLS AND PLANING MILLS	1.2	(Z)	(D)	(X)	760	(D)	(D)	1.8	(D)	(D)	(D)	(D)	.1
2421	SAWMILLS, PLANING MILLS, GENERAL	1.2	(Z)	(D)	(Z)	760	(D)	(D)	1.8	(D)	(D)	(D)	(D)	.1
2426	HARDWOOD DIMENSION AND FLOORING	-	-	-	-	-	-	-	-	-	-	-	-	-
243	MILLWORK, PLYWOOD, STRUC. MEMBS.	(D)	(X)	14.2	(X)	313	(D)	(D)	1.9	.9	.5	.1	.3	(Z)
2431	MILLWORK	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	-	-	-
2434	WOOD KITCHEN CABINETS	-	-	-	-	-	-	-	-	-	-	-	-	-
2435	HARDWOOD VENEER AND PLYWOOD	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2436	SOFTWOOD VENEER AND PLYWOOD	(D)	(X)	14.0	(Z)	(D)	-	-	1.9	.9	.5	(D)	(D)	(D)
244	WOOD CONTAINERS	-	-	-	-	-	-	-	(D)	-	-	-	(D)	-
2441	NAILED WOOD BOXES AND SHOOK	-	-	-	-	-	-	-	-	-	-	-	-	-
2449	WOOD CONTAINERS, NEC	-	-	-	-	-	-	-	(D)	-	-	-	(D)	-
245	WOOD BUILDINGS AND MOBILE HOMES	-	-	-	-	-	-	-	(D)	-	-	-	(D)	-
2452	PREFABRICATED WOOD BUILDINGS	-	-	-	-	-	-	-	(D)	-	-	-	(D)	-
249	MISCELLANEOUS WOOD PRODUCTS	11.3	1	31.6	(Z)	1 003	(D)	(D)	4.3	1.1	.6	.2	2.3	(Z)
2491	WOOD PRESERVING	-	-	(D)	(X)	12	-	-	(D)	(D)	(D)	-	(D)	-
2492	PARTICLEBOARD	(D)	(X)	(D)	(X)	170	-	-	(D)	(D)	(D)	(Z)	(D)	(D)
2499	WOOD PRODUCTS, NEC	(D)	(X)	29.4	(Z)	821	(D)	(D)	4.1	1.0	(D)	.2	2.3	(D)
25	FURNITURE AND FIXTURES	.7	(Z)	2.4	(Z)	26	-	-	.5	.1	(D)	.1	.2	(D)
251	HOUSEHOLD FURNITURE	(D)	(X)	1.2	(Z)	23	-	-	.2	(Z)	.1	(D)	.1	(D)
2511	WOOD HOUSEHOLD FURNITURE	(D)	(X)	.7	(Z)	22	-	-	(D)	(D)	(Z)	(D)	(Z)	-
2512	UPHOLSTERED HOUSEHOLD FURNITURE	-	-	-	-	-	-	-	-	-	-	-	-	-
2514	METAL HOUSEHOLD FURNITURE	-	-	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2517	WOOD TV AND RADIO CABINETS	-	-	-	-	-	-	-	-	-	-	-	-	-
2519	HOUSEHOLD FURNITURE, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-
252	OFFICE FURNITURE	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
2522	METAL OFFICE FURNITURE	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
2531	PUBLIC BLDG., RELATED FURNITURE	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
254	PARTITIONS AND FIXTURES	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2542	METAL PARTITIONS AND FIXTURES	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
259	MISC. FURNITURE AND FIXTURES	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2591	DRAPERY HARDWARE, BLINDS, SHADES	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2599	FURNITURE AND FIXTURES, NEC	(D)	(X)	(D)	(X)	-	-	-	-	-	-	-	-	-
26	PAPER AND ALLIED PRODUCTS	177.4	13	1 347.9	15	49 652	7 812	.9	291.5	72.3	46.8	14.8	142.2	15.4
2611	PULPMILLS	28.1	2	224.2	2	2 062	-	-	54.4	14.2	7.4	1.2	29.4	3.1
2621	PAPERMILLS, EXCEPT BUILDING PAPER	85.7	6	692.0	4	18 820	3 165	.5	142.0	36.4	23.5	7.7	65.1	9.2
2631	PAPERBOARD MILLS	58.3	4	388.4	2	26 936	4 447	.4	83.5	18.8	14.2	5.0	43.1	2.3
264	MISC. CONVERTED PAPER PRODUCTS	4.7	(Z)	26.6	(Z)	1 318	(D)	(D)	7.3	2.2	.9	(D)	2.8	(D)
2641	PAPER COATING AND GLAZING	.5	(Z)	(D)	(X)	8	-	-	.3	(D)	(D)	(D)	(D)	(D)
2642	ENVELOPES	-	-	-	-	-	-	-	-	-	-	-	-	-
2643	BAGS, EXCEPT TEXTILE BAGS	(D)	(X)	(D)	(X)	51	-	-	(D)	1.1	.3	(Z)	.8	(D)
2645	DIE-CUT PAPER AND BOARD	-	-	-	-	-	-	-	-	-	-	-	-	-
2646	PRESSED AND MOLDED PULP GOODS	1.0	(Z)	4.7	(Z)	34	-	-	(D)	.2	(D)	(D)	.3	(D)
2647	SANITARY PAPER PRODUCTS	1.6	(Z)	8.6	(Z)	1 224	(D)	(D)	3.8	.7	(D)	.5	1.5	(D)
2648	STATIONERY PRODUCTS	-	-	-	-	-	-	-	-	-	-	-	-	-
2649	CONVERTED PAPER PRODUCTS, NEC	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	-	-	(D)	-
265	PAPERBOARD CONTAINERS AND BOXES	(D)	(X)	.3	(Z)	(D)	-	-	(D)	(Z)	(D)	.1	(Z)	-
2651	FOLDING PAPERBOARD BOXES	-	-	(Z)	(Z)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
2653	CORRUGATED AND SOLID FIBER BOXES	(D)	(X)	.3	(Z)	(D)	-	-	(D)	(Z)	(Z)	(D)	(D)	-

See footnotes at end of table.

Table 10a. **Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants												
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
							Rented land			Kind of cost				
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
26	PAPER AND ALLIED PRODUCTS--CON.													
265	PAPERBOARD CONTAINERS AND BOXES--CON.													
2654	SANITARY FOOD CONTAINERS	-	-	(D)	(x)	-	-	-	(D)	-	(D)	(D)	-	-
2661	BUILDING PAPER AND BOARD MILLS	(D)	(X)	16.3	(z)	(D)	-	-	4.1	.8	(D)	(D)	2.2	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	408.6	36	2 753.1	31	39 658	1 571	.3	734.2	135.7	143.9	62.2	312.5	79.9
281	INDUSTRIAL INORGANIC CHEMICALS	75.4	6	660.1	7	15 867	162	.1	110.0	18.4	23.4	14.7	45.8	7.6
2812	ALKALIES AND CHLORINE	23.3	2	361.7	4	2 020	(D)	(D)	10.5	2.0	2.6	.4	4.6	.9
2813	INDUSTRIAL GASES	(D)	(x)	(D)	(x)	65	-	-	.5	.2	.1	.1	.2	-
2816	INORGANIC PIGMENTS	(D)	(x)	(D)	(x)	605	(D)	(D)	29.7	4.8	5.1	5.3	10.7	3.7
2819	INDUSTRIAL INORGANIC CHEM., NEC	44.8	3	215.7	2	13 176	(D)	(D)	69.4	11.4	15.6	8.9	30.3	3.0
282	PLASTICS MATERIALS, SYNTHETICS	60.5	6	428.7	5	3 301	(D)	(D)	121.5	23.9	27.1	6.6	56.5	13.7
2821	PLASTICS MATERIALS AND RESINS	27.3	3	216.6	2	1 169	(D)	(D)	60.9	12.8	13.8	5.0	28.9	6.9
2822	SYNTHETIC RUBBER	(D)	(x)	38.3	(z)	440	-	-	11.1	(D)	2.8	1.0	4.1	(D)
2823	CELLULOSIC MANMADE FIBERS	(D)	(x)	44.0	(z)	133	(D)	(D)	17.9	(D)	2.0	(D)	13.2	(D)
2824	ORGANIC FIBERS, NONCELLULOSIC	12.5	1	129.8	1	1 559	(D)	(D)	31.6	7.1	8.5	(D)	10.2	(D)
283	DRUGS	6.6	(z)	100.8	1	985	(D)	(D)	25.2	3.4	5.3	2.7	12.7	1.1
2831	BIOLOGICAL PRODUCTS	-	-	(D)	(x)	(D)	-	-	(D)	(D)	-	-	-	-
2833	MEDICINALS AND BOTANICALS	2.4	(z)	69.1	1	554	-	-	16.0	2.1	(D)	(D)	8.6	(D)
2834	PHARMACEUTICAL PREPARATIONS	4.2	(z)	(D)	(x)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.1	(D)
284	SOAPS, CLEANERS, TOILET GOODS	(D)	(x)	(D)	(x)	123	(D)	(D)	(D)	1.8	1.4	1.5	2.0	(D)
2841	SOAP AND OTHER DETERGENTS	2.3	(z)	27.2	(z)	37	-	-	3.1	.8	.5	.5	.8	.2
2842	POLISHES AND SANITATION GOODS	(D)	(x)	(D)	(x)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2843	SURFACE ACTIVE AGENTS	(D)	(x)	10.3	(z)	49	(D)	(D)	2.6	.8	.5	.2	.8	.2
2844	TOILET PREPARATIONS	1.9	(z)	(D)	(x)	(D)	-	-	1.6	(D)	(D)	(D)	(D)	(D)
2851	PAINTS AND ALLIED PRODUCTS	(D)	(x)	(D)	(x)	10	-	-	(D)	.3	1.1	1.2	.6	(D)
286	INDUSTRIAL ORGANIC CHEMICALS	159.6	17	1 105.7	12	5 876	399	.1	354.4	65.9	65.6	27.2	148.8	47.0
2861	GUM AND WOOD CHEMICALS	(D)	(x)	(D)	(x)	31	(D)	(D)	(D)	.1	(Z)	(D)	(D)	(D)
2865	CYCLIC CRUDES AND INTERMEDIATES	(D)	(x)	(D)	(x)	912	(D)	(D)	(D)	17.2	14.1	(D)	(D)	(D)
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC	125.5	15	858.7	10	4 933	379	.1	268.7	48.5	51.2	20.6	112.0	36.4
287	AGRICULTURAL CHEMICALS	79.2	6	357.2	4	11 815	(D)	(D)	95.0	19.8	17.1	6.6	42.2	9.2
2873	NITROGENOUS FERTILIZERS	37.7	3	131.9	1	1 655	(D)	(D)	30.9	7.0	4.8	.9	16.8	1.5
2874	PHOSPHATIC FERTILIZERS	21.2	2	(D)	(x)	9 829	(D)	(D)	(D)	(D)	(D)	2.4	(D)	2.7
2875	FERTILIZERS, MIXING ONLY	(D)	(x)	(D)	(x)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
2879	AGRICULTURAL CHEMICALS, NEC	(D)	(x)	127.4	1	(D)	-	-	38.8	7.8	9.5	3.6	12.6	5.3
289	MISCELLANEOUS CHEMICAL PRODUCTS	9.4	1	51.3	1	1 682	(D)	(D)	10.7	2.2	2.9	1.4	3.7	.5
2891	ADHESIVES AND SEALANTS	.2	(z)	(D)	(x)	(D)	-	-	.8	.1	.1	.5	.1	-
2892	EXPLOSIVES	2.6	(z)	27.0	(z)	236	-	-	3.4	(D)	1.4	(Z)	1.5	(D)
2893	PRINTING INK	-	-	(D)	(x)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
2895	CARBON BLACK	.4	(z)	2.6	(z)	123	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)
2899	CHEMICAL PREPARATIONS, NEC	6.1	(z)	19.5	(z)	1 308	(D)	(D)	6.0	1.6	1.2	.9	2.0	.3
29	PETROLEUM AND COAL PRODUCTS	93.5	7	957.0	10	9 445	499	.1	296.4	46.4	64.0	27.5	140.8	17.5
2911	PETROLEUM REFINING	92.4	7	942.9	10	9 196	489	.1	294.9	46.0	63.5	27.4	140.3	17.4
295	PAVING AND ROOFING MATERIALS	.7	(z)	4.0	(z)	214	(D)	(D)	.6	.2	.1	(D)	.3	(D)
2951	PAVING MIXTURES AND BLOCKS	(D)	(x)	(D)	(x)	130	(D)	(D)	.1	(Z)	(D)	(D)	(Z)	-
2952	ASPHALT FELTS AND COATINGS	(D)	(x)	(D)	(x)	84	-	-	.5	.1	(D)	(D)	.3	(D)
299	MISC. PETROLEUM, COAL PRODUCTS	.4	(z)	10.1	(z)	35	(D)	(D)	.9	.2	.3	(D)	.2	(D)
2992	LUBRICATING OILS AND GREASES	(D)	(x)	(D)	(x)	12	-	-	.6	(D)	(D)	(D)	(D)	(D)
2999	PETROLEUM AND COAL PRODUCTS, NEC	(D)	(x)	(D)	(x)	(D)	(D)	(D)	.3	(D)	(D)	(D)	(D)	(D)
30	RUBBER, MISC. PLASTICS PROD.	5.0	(z)	46.2	1	682	15	(Z)	18.6	3.8	5.8	1.4	7.2	.4
3011	TIRES AND INNER TUBES	(D)	(X)	9.1	(z)	(D)	-	-	6.1	(D)	(D)	(D)	(D)	.1
3021	RUBBER AND PLASTICS FOOTWEAR	(D)	(x)	(D)	(x)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
3031	RECLAIMED RUBBER	-	-	(D)	(x)	-	-	-	(D)	-	-	(D)	-	-
3041	RUBBER, PLASTICS HOSE AND BELTING	(D)	(x)	3.0	(z)	(D)	-	-	.4	(D)	(D)	(D)	(D)	(D)
3069	FABRICATED RUBBER PRODUCTS, NEC	(D)	(X)	3.7	(z)	(D)	(D)	(D)	1.8	(D)	(D)	.1	(D)	(Z)
3079	MISCELLANEOUS PLASTICS PRODUCTS	2.4	(z)	29.9	(z)	446	(D)	(D)	10.1	2.0	2.4	(D)	4.6	(D)
31	LEATHER AND LEATHER PRODUCTS	6.2	(z)	14.5	(z)	426	(D)	(D)	5.2	1.2	1.1	.5	1.4	1.0
3111	LEATHER TANNING AND FINISHING	6.2	(z)	14.5	(z)	426	(D)	(D)	5.2	1.2	1.1	.5	1.4	1.0
314	FOOTWEAR, EXCEPT RUBBER	(D)	(x)	(D)	(x)	-	-	-	(D)	(D)	(Z)	(Z)	(D)	-
3143	MEN'S FOOTWEAR, EXCEPT ATHLETIC	-	-	-	-	-	-	-	-	-	-	-	-	-
3144	WOMEN'S FOOTWEAR, EXCEPT ATHLETIC	(D)	(x)	(D)	(x)	-	-	-	(D)	(D)	(Z)	(Z)	(D)	-
3161	LUGGAGE	(D)	(x)	(D)	(x)	-	-	-	(D)	(D)	-	-	(D)	-

See footnotes at end of table.

Table 10a. **Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants											
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs				
							Rented land			Kind of cost			
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
32	STONE, CLAY, GLASS PRODUCTS. .	30.2	2	103.6	1	5 526	796	.1	24.1	5.5	6.1	1.2	11.0	.5
3211	FLAT GLASS	(D)	(X)	3.7	(Z)	39	(D)	(D)	.5	.1	.2	.1	(D)	(D)
322	GLASS, PRESSED OR BLOWN.	4.0	(Z)	25.3	(Z)	118	-	-	6.3	1.6	1.4	(D)	2.8	(D)
3221	GLASS CONTAINERS	1.4	(Z)	8.0	(Z)	55	-	-	1.6	.3	.4	.2	.7	(Z)
3229	PRESSED AND BLOWN GLASS, NEC . . .	2.5	(Z)	17.4	(Z)	63	-	-	4.7	1.3	1.1	(D)	2.2	(D)
3231	PRODUCTS OF PURCHASED GLASS. . . .	1.5	(Z)	1.9	(Z)	2	-	-	.3	(D)	(D)	(Z)	(D)	(D)
3241	CEMENT, HYDRAULIC.	3.0	(Z)	13.2	(Z)	832	(D)	(D)	1.8	.3	.5	.2	.7	(Z)
325	STRUCTURAL CLAY PRODUCTS	(D)	(X)	.3	(Z)	70	-	-	(D)	(D)	(Z)	(D)	(Z)	(D)
3251	BRICK AND STRUCTURAL CLAY TILE . .	-	-	-	-	(D)	-	-	(D)	(D)	-	-	(D)	-
3253	CERAMIC WALL AND FLOOR TILE. . . .	-	-	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3255	CLAY REFRACTORIES.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	(D)
3259	STRUCTURAL CLAY PRODUCTS, NEC. . .	-	-	(D)	(X)	(D)	-	-	(D)	-	(D)	-	-	-
326	POTTERY AND RELATED PRODUCTS . .	.4	(Z)	3.1	(Z)	43	(D)	(D)	.9	.3	.3	.1	.2	.1
3261	VITREOUS PLUMBING FIXTURES	(D)	(X)	1.3	(Z)	19	(D)	(D)	.4	.1	.2	(D)	(D)	(D)
3262	VITREOUS CHINA FOOD UTENSILS . . .	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3263	FINE EARTHENWARE FOOD UTENSILS . .	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3264	PORCELAIN ELECTRICAL SUPPLIES. . .	(D)	(X)	.5	(Z)	12	(D)	(D)	.2	(Z)	(Z)	(Z)	(D)	(D)
327	CONCRETE, GYPSUM, PLASTER PRODS.	2.7	(Z)	10.5	(Z)	421	60	(Z)	1.7	.3	.5	(Z)	.7	.1
3271	CONCRETE BLOCK AND BRICK	-	-	-	-	-	-	-	-	-	-	-	-	-
3272	CONCRETE PRODUCTS, NEC	(D)	(X)	(D)	(X)	4	-	-	.2	(Z)	(D)	(D)	(D)	(D)
3273	READY-MIXED CONCRETE	1.0	(Z)	2.6	(Z)	204	60	(Z)	.6	(D)	.2	(D)	.2	.1
3274	LIME	(D)	(X)	6.8	(Z)	201	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3275	GYPSUM PRODUCTS.	(D)	(X)	(D)	(X)	12	-	-	(D)	(Z)	(Z)	(D)	(Z)	-
3281	CUT STONE AND STONE PRODUCTS . . .	-	-	(D)	(X)	(D)	-	-	(D)	-	(D)	-	(D)	-
329	MISC. NONMETALLIC MINERAL PRODS.	17.4	1	45.5	1	3 998	(D)	(D)	12.5	2.7	3.0	.4	6.4	.1
3291	ABRASIVE PRODUCTS.	.5	(Z)	1.5	(Z)	10	-	-	1.4	.3	.3	(D)	.8	(D)
3292	ASBESTOS PRODUCTS.	.9	(Z)	3.3	(Z)	200	-	-	.6	.1	.1	(D)	.2	(D)
3293	GASKETS, PACKING, SEALING DEVICES.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3295	MINERALS, GROUND OR TREATED. . . .	(D)	(X)	9.7	(Z)	1 187	(D)	(D)	2.4	(D)	.5	(Z)	1.4	(D)
3296	MINERAL WOOL	12.4	1	28.6	(Z)	2 547	-	-	7.6	1.8	2.0	(D)	3.8	(D)
3297	NONCLAY REFRACTORIES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	(D)	(X)	1.3	(Z)	38	-	-	(D)	.1	.1	(D)	(D)	(D)
33	PRIMARY METAL INDUSTRIES . . .	213.0	16	1 201.0	13	11 142	150	.1	331.3	64.5	78.0	28.0	143.4	17.4
331	BLAST FURNACE, BASIC STEEL PROD.	181.1	13	994.8	11	2 390	(D)	(D)	265.1	52.2	58.8	22.9	116.2	15.1
3312	BLAST FURNACES AND STEEL MILLS . .	177.8	13	963.5	11	2 238	(D)	(D)	255.8	50.9	56.8	20.2	113.0	15.0
3313	ELECTROMETALLURGICAL PRODUCTS. . .	(D)	(X)	2.7	(Z)	37	-	-	1.4	(D)	(D)	(D)	.9	-
3315	STEEL WIRE AND RELATED PRODUCTS. .	.7	(Z)	7.4	(Z)	33	(D)	(D)	2.2	.4	.5	.4	.9	.1
3316	COLD FINISHING OF STEEL SHAPES . .	.9	(Z)	14.0	(Z)	43	-	-	3.9	(D)	1.0	1.4	1.1	(D)
3317	STEEL PIPE AND TUBES	(D)	(X)	7.1	(Z)	39	-	-	1.8	(D)	(D)	(D)	.4	(D)
332	IRON AND STEEL FOUNDRIES	10.9	1	38.8	(Z)	337	(D)	(D)	19.9	3.9	5.4	1.8	8.1	.7
3321	GRAY IRON FOUNDRIES.	10.3	1	34.3	(Z)	279	(D)	(D)	16.8	3.3	4.8	1.3	6.9	.5
3322	MALLEABLE IRON FOUNDRIES	(D)	(X)	2.8	(Z)	(D)	-	-	(D)	.3	.2	(D)	.4	(D)
3324	STEEL INVESTMENT FOUNDRIES	(D)	(X)	-	-	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3325	STEEL FOUNDRIES, NEC	(D)	(X)	1.6	(Z)	36	-	-	2.1	(D)	(D)	.4	(D)	(D)
333	PRIMARY NONFERROUS METALS. . . .	9.8	1	74.0	1	7 322	(D)	(D)	24.2	3.7	6.7	1.1	11.4	1.1
3331	PRIMARY COPPER	.8	(Z)	14.3	(Z)	5 849	(D)	(D)	4.3	.5	1.1	(D)	2.4	(D)
3332	PRIMARY LEAD	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3333	PRIMARY ZINC	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3334	PRIMARY ALUMINUM	3.2	(Z)	34.6	(Z)	482	(D)	(D)	10.4	1.5	3.1	.1	5.2	.4
3339	PRIMARY NONFERROUS METALS, NEC . .	1.4	(Z)	11.0	(Z)	862	-	-	6.3	1.0	1.5	.6	2.7	.6
3341	SECONDARY NONFERROUS METALS. . . .	(D)	(X)	10.2	(Z)	40	-	-	.7	.3	.1	(D)	.1	(D)
335	NONFERROUS ROLLING AND DRAWING .	6.9	1	68.4	1	1 019	-	-	18.4	3.4	6.1	2.2	6.2	.5
3351	COPPER ROLLING AND DRAWING	1.3	(Z)	16.6	(Z)	563	-	-	4.6	1.2	1.0	.3	2.0	.1
3353	ALUMINUM SHEET, PLATE, AND FOIL. .	2.3	(Z)	20.9	(Z)	65	-	-	6.6	1.3	2.6	(D)	2.0	(D)
3354	ALUMINUM EXTRUDED PRODUCTS	1.3	(Z)	5.7	(Z)	130	-	-	1.9	.3	.6	(D)	.6	(D)
3355	ALUMINUM ROLLING AND DRAWING, NEC.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3356	NONFERROUS ROLLING & DRAWING, NEC.	1.7	(Z)	20.4	(Z)	236	-	-	3.7	.4	1.3	.7	1.2	.1
3357	NONFERROUS WIREDRAWING, INSULATING.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
336	NONFERROUS FOUNDRIES	1.3	(X)	13.0	(Z)	27	(D)	(D)	2.5	.7	.8	(Z)	1.0	-
3361	ALUMINUM FOUNDRIES	(D)	(Z)	(D)	(X)	(D)	-	-	1.7	.7	.6	(D)	(D)	-
3362	BRASS, BRONZE, COPPER FOUNDRIES. .	-	-	-	-	-	-	-	-	-	-	-	-	-
3369	NONFERROUS FOUNDRIES, NEC.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	.8	.1	.2	(D)	(D)	-
339	MISC. PRIMARY METAL PRODUCTS . .	(D)	(X)	1.7	(Z)	8	(D)	(D)	.5	.1	.1	(D)	.2	(D)
3398	METAL HEAT TREATING.	.4	(Z)	.8	(Z)	(D)	(D)	(D)	.3	.1	(Z)	(D)	.2	(D)
3399	PRIMARY METAL PRODUCTS, NEC. . . .	(D)	(X)	.9	(Z)	(D)	-	-	.2	.1	(Z)	(D)	.1	(D)
34	FABRICATED METAL PRODUCTS. . .	25.9	3	149.2	2	721	22	(Z)	41.0	7.9	12.6	5.6	13.5	1.3
341	METAL CANS, SHIPPING CONTAINERS.	(D)	(X)	3.6	(Z)	9	-	-	2.1	(D)	.4	(D)	.6	-
3411	METAL CANS	(D)	(X)	(D)	(X)	9	-	-	(D)	(D)	(D)	(D)	(D)	-
3412	METAL BARRELS, DRUMS, AND PAILS. .	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
342	CUTLERY, HANDTOOLS AND HARDWARE.	3.6	(Z)	21.1	(Z)	69	(D)	(D)	6.8	1.2	2.3	.2	3.0	.1
3421	CUTLERY.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3423	HAND AND EDGE TOOLS, NEC	.7	(Z)	4.2	(Z)	(D)	-	-	.8	.1	.2	(D)	.4	(D)
3425	HANDSAWS AND SAW BLADES.	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3429	HARDWARE, NEC.	2.8	(Z)	16.3	(Z)	55	(D)	(D)	5.7	1.0	2.1	.2	2.4	.1
343	PLUMBING, HEATING, EXCEPT ELEC .	(D)	(X)	3.9	(Z)	47	(D)	(D)	2.0	(D)	.4	(D)	.6	(D)
3431	METAL SANITARY WARE.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS.	.2	(Z)	3.1	(Z)	32	(D)	(D)	1.3	.4	.3	(D)	.6	(D)
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 10a. **Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants												
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
							Rented land			Kind of cost				
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
34	FABRICATED METAL PRODUCTS--CON.													
344	FABRICATED STRUC. METAL PRODS.	.8	(Z)	17.5	(Z)	107	(D)	(D)	3.8	.6	1.5	.4	1.1	.2
3441	FABRICATED STRUCTURAL METAL	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
3442	METAL DOORS, SASH, AND TRIM	(D)	(X)	1.6	(Z)	63	(D)	(D)	.6	.1	.1	.1	.2	(Z)
3443	FABRICATED PLATEWORK, BOILER SHOP	(D)	(X)	14.5	(Z)	38	-	-	2.4	.5	1.0	(D)	.6	(D)
3444	SHEET METALWORK	-	-	.8	(Z)	(D)	-	-	.4	(D)	.1	(D)	.2	-
3446	ARCHITECTURAL METALWORK	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
3448	PREFABRICATED METAL BUILDINGS	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
3449	MISCELLANEOUS METALWORK	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC.	1.6	(Z)	15.1	(Z)	8	-	-	3.4	1.1	.9	(D)	1.0	(D)
3451	SCREW MACHINE PRODUCTS	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
3452	BOLTS, NUTS, RIVETS, AND WASHERS	1.6	(Z)	(D)	(X)	8	-	-	(D)	(D)	(D)	(D)	(D)	(D)
346	METAL FORGINGS AND STAMPINGS	4.9	(Z)	(D)	(X)	90	(D)	(D)	6.5	1.6	2.1	1.1	1.5	.2
3462	IRON AND STEEL FORGINGS	1.6	(Z)	7.0	(Z)	7	-	-	1.2	.4	.4	(D)	.2	(D)
3463	NONFERROUS FORGINGS	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	.1	(D)	(D)	(D)
3465	AUTOMOTIVE STAMPINGS	2.4	(Z)	19.3	(Z)	56	(D)	(D)	3.8	1.0	1.3	.7	.7	.1
3466	CROWNS AND CLOSURES	-	-	-	-	-	-	-	-	-	-	-	-	-
3469	METAL STAMPINGS, NEC	(D)	(X)	(D)	(X)	24	-	-	(D)	(D)	.3	(D)	(D)	(D)
347	METAL SERVICES, NEC	7.9	1	18.3	(Z)	101	12	(Z)	7.6	1.2	2.1	.7	3.2	.4
3471	PLATING AND POLISHING	7.8	1	15.6	(Z)	(D)	12	(Z)	7.0	1.0	2.0	.6	2.9	.4
3479	METAL COATING AND ALLIED SERVICES	.1	(Z)	2.6	(Z)	(D)	-	-	.6	.2	.1	.1	.3	-
348	ORDNANCE AND ACCESSORIES, NEC	5.3	(Z)	31.0	(Z)	177	(D)	(D)	4.2	.9	1.8	.2	1.1	.1
3482	SMALL ARMS AMMUNITION	(Z)	(Z)	(D)	(X)	(D)	-	-	1.2	.6	.2	(D)	.3	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	(D)	(X)	17.5	(Z)	114	-	-	1.6	(D)	1.0	(D)	.4	-
3484	SMALL ARMS	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	(D)	(X)	5.0	(Z)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS	.9	(Z)	(D)	(X)	112	-	-	4.6	.6	.9	1.8	1.2	.1
3493	STEEL SPRINGS, EXCEPT WIRE	-	-	(D)	(X)	-	-	-	(D)	(D)	-	(D)	-	-
3494	VALVES AND PIPE FITTINGS	.4	(Z)	(D)	(X)	69	-	-	2.7	.2	.4	1.6	.5	-
3495	WIRE SPRINGS	-	-	(D)	(X)	-	-	-	(D)	-	(D)	(D)	-	-
3496	MISC. FABRICATED WIRE PRODUCTS	(D)	(X)	1.5	(Z)	(D)	-	-	.7	.1	(D)	(Z)	.4	(D)
3497	METAL FOIL AND LEAF	(D)	(X)	(D)	(X)	15	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3498	FABRICATED PIPE AND FITTINGS	(D)	(X)	.2	(Z)	-	-	-	(D)	(D)	(D)	-	(D)	-
3499	FABRICATED METAL PRODUCTS, NEC	(D)	(X)	.8	(Z)	25	-	-	.3	(D)	.1	.1	.1	(D)
35	MACHINERY, EXCEPT ELECTRICAL	28.8	2	127.4	2	431	(D)	(D)	40.4	7.1	12.6	6.7	10.1	3.9
351	ENGINES AND TURBINES	7.3	1	27.5	(Z)	63	-	-	7.6	1.3	2.0	1.3	2.8	.1
3511	TURBINES, TURBINE GENERATOR SETS	(D)	(X)	2.9	(Z)	23	-	-	.6	.1	(D)	(Z)	.3	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	(D)	(X)	24.7	(Z)	40	-	-	7.0	1.2	(D)	1.3	2.5	(D)
352	FARM AND GARDEN MACHINERY	1.9	(Z)	12.7	(Z)	33	-	-	2.9	.7	1.0	(D)	.7	(D)
3523	FARM MACHINERY AND EQUIPMENT	(D)	(X)	12.5	(Z)	(D)	-	-	2.9	(D)	(D)	(D)	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT	(D)	(X)	.1	(Z)	(D)	-	-	(Z)	(D)	(D)	(D)	(D)	-
353	CONSTRUCTION, RELATED MACHINERY	2.9	(Z)	30.3	(Z)	78	-	-	6.5	1.7	2.0	1.3	1.4	.1
3531	CONSTRUCTION MACHINERY	(D)	(X)	(D)	(X)	56	-	-	5.8	1.5	1.7	1.2	1.2	.1
3532	MINING MACHINERY	(D)	(X)	-	-	-	-	-	(D)	-	(D)	(D)	(D)	(D)
3533	OILFIELD MACHINERY	(D)	(X)	(D)	(X)	(D)	-	-	.4	(D)	.1	(Z)	(D)	(D)
3534	ELEVATORS AND MOVING STAIRWAYS	-	-	-	-	-	-	-	-	-	-	-	-	-
3535	CONVEYORS AND CONVEYING EQUIPMENT	-	-	-	-	-	-	-	(D)	-	(D)	(D)	(D)	-
3536	HOISTS, CRANES, AND MONORAILS	-	-	-	-	-	-	-	-	-	-	-	-	-
3537	INDUSTRIAL TRUCKS AND TRACTORS	-	-	(D)	(X)	-	-	-	.3	(D)	(D)	(D)	(D)	-
354	METALWORKING MACHINERY	(D)	(X)	3.3	(Z)	59	-	-	(D)	.2	.3	.2	.5	(Z)
3541	MACHINE TOOLS, METAL-CUTTING	(D)	(X)	.4	(Z)	(D)	-	-	.1	(Z)	(Z)	(D)	(Z)	(D)
3542	MACHINE TOOLS, METAL-FORMING	-	-	-	-	-	-	-	-	-	-	-	-	-
3544	SPECIAL DIES, TOOLS, JIGS, ETC	-	-	-	-	-	-	-	(D)	(D)	(D)	-	(D)	-
3545	MACHINE TOOL ACCESSORIES	(D)	(X)	.5	(Z)	(D)	-	-	(D)	(D)	(Z)	(D)	(D)	-
3546	POWER DRIVEN HANDTOOLS	(D)	(X)	2.4	(Z)	42	-	-	.9	(D)	(D)	.2	.4	(D)
3547	ROLLING MILL MACHINERY	-	-	-	-	-	-	-	-	-	-	-	-	-
355	SPECIAL INDUSTRY MACHINERY	(D)	(X)	(D)	(X)	(D)	-	-	(D)	.1	2.6	(D)	.1	(D)
3551	FOOD PRODUCTS MACHINERY	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	-	(D)	-
3552	TEXTILE MACHINERY	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	-	(D)	(D)
3554	PAPER INDUSTRIES MACHINERY	-	-	-	-	-	-	-	-	-	-	-	-	-
3555	PRINTING TRADES MACHINERY	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	.1	(D)	(D)	(D)	(D)
356	GENERAL INDUSTRIAL MACHINERY	1.0	(Z)	7.9	(Z)	98	-	-	3.1	.6	1.1	.3	1.0	.1
3561	PUMPS AND PUMPING EQUIPMENT	.4	(Z)	1.1	(Z)	(D)	-	-	.3	(Z)	.2	(D)	.1	(D)
3562	BALL AND ROLLER BEARINGS	(D)	(X)	2.7	(Z)	48	-	-	(D)	.2	.4	(Z)	.4	(D)
3563	AIR AND GAS COMPRESSORS	(D)	(X)	1.3	(Z)	5	-	-	.3	.1	.1	.1	.1	-
3564	BLOWERS AND FANS	-	-	(D)	(X)	-	-	-	(D)	-	(D)	(D)	(D)	-
3566	SPEED CHANGERS, DRIVES, AND GEARS	-	-	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3567	INDUSTRIAL FURNACES AND OVENS	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
3568	POWER TRANSMISSION EQUIPMENT, NEC	(D)	(X)	2.2	(Z)	(D)	-	-	1.0	.2	.4	(D)	.3	(D)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	(D)	(X)	(D)	(X)	-	-	-	(D)	-	(D)	(D)	(D)	-
357	OFFICE AND COMPUTING MACHINES	2.5	(Z)	22.9	(Z)	20	(D)	(D)	5.4	1.2	1.3	(D)	1.6	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT	2.3	(Z)	16.7	(Z)	16	(D)	(D)	3.4	.6	.8	.7	1.1	.1
3574	CALCULATING, ACCOUNTING MACHINES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(Z)	(D)	(D)	-
3576	SCALES, BALANCES, EXC. LABORATORY	-	-	-	-	-	-	-	-	-	-	-	-	-
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	.5	(D)	(D)	(D)
358	REFRIGERATION AND SERVICE MACH	7.9	1	12.5	(Z)	55	-	-	5.0	1.1	1.6	.8	1.0	.4
3581	AUTOMATIC MERCHANDISING MACHINES	-	-	(D)	(X)	(D)	-	-	(D)	-	(D)	-	-	-
3582	COMMERCIAL LAUNDRY EQUIPMENT	-	-	-	-	-	-	-	-	-	-	-	-	-
3585	REFRIGERATION, HEATING EQUIPMENT	(D)	(X)	12.1	(Z)	35	-	-	4.9	1.1	(D)	(D)	1.0	.4
3586	MEASURING AND DISPENSING PUMPS	-	-	(D)	(X)	-	-	-	(D)	(D)	-	(D)	(D)	-
3589	SERVICE INDUSTRY MACHINERY, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-

See footnotes at end of table.

Table 10a. **Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants												
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
							Rented land			Kind of cost				
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
35	MACHINERY, EXCEPT ELEC.--CON.													
359	MISC. MACHINERY, EXC. ELEC	(D)	(X)	6.4	(Z)	4	-	-	(D)	.3	.5	.1	.7	(D)
3592	CARBURETORS, PISTONS, RINGS, ETC	(D)	(X)	(D)	(X)	4	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
36	ELECTRIC, ELECTRONIC EQUIP	25.4	3	173.6	6	620	38	.1	50.3	10.3	14.6	6.9	16.6	1.7
361	ELECTRIC DISTRIBUTING EQUIPMENT.	(D)	(X)	6.6	(Z)	47	(D)	(D)	3.4	.5	.6	.7	1.5	(Z)
3612	TRANSFORMERS	(D)	(X)	(D)	(X)	40	(D)	(D)	(D)	.3	.4	(D)	1.1	-
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	.3	(Z)	(D)	(X)	7	(D)	(D)	(D)	.2	.2	(D)	.4	(Z)
362	ELECTRICAL INDUSTRIAL APPARATUS.	1.0	(Z)	15.2	(Z)	65	(D)	(D)	3.2	1.1	.5	.3	.7	.5
3621	MOTORS AND GENERATORS.	(D)	(X)	(D)	(X)	28	-	-	1.3	.7	.2	(D)	.2	(D)
3622	INDUSTRIAL CONTROLS.	(D)	(X)	2.2	(Z)	19	(D)	(D)	.4	.2	(D)	(Z)	.1	(D)
3623	WELDING APPARATUS, ELECTRIC.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3624	CARBON AND GRAPHITE PRODUCTS	(D)	(X)	1.2	(Z)	13	(D)	(D)	.4	.1	(D)	(Z)	.2	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
363	HOUSEHOLD APPLIANCES	3.5	(Z)	23.1	(Z)	66	(D)	(D)	6.0	1.2	1.7	.9	1.9	.2
3631	HOUSEHOLD COOKING EQUIPMENT.	.2	(Z)	3.6	(Z)	18	-	-	1.4	.4	(D)	(Z)	.5	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	(D)	(X)	3.7	(Z)	(D)	-	-	1.5	.1	(D)	.5	.4	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT.	(D)	(X)	8.2	(Z)	(D)	(D)	(D)	1.2	.2	.3	(D)	.5	(D)
3634	ELECTRIC HOUSEWARES AND FANS	.5	(Z)	3.7	(Z)	6	(D)	(D)	.7	.1	.3	(D)	.2	(D)
3635	HOUSEHOLD VACUUM CLEANERS.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3636	SEWING MACHINES.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3639	HOUSEHOLD APPLIANCES, NEC.	(D)	(X)	2.0	(Z)	(D)	-	-	.5	.1	.2	(D)	.2	(D)
364	ELEC. LIGHTING, WIRING EQUIP	1.9	(Z)	10.9	(Z)	177	-	-	2.6	(D)	.6	(D)	1.3	(D)
3641	ELECTRIC LAMPS	(D)	(X)	(D)	(X)	(D)	-	-	.1	(Z)	(D)	(D)	.1	-
3643	CURRENT-CARRYING WIRING DEVICES.	(D)	(X)	.5	(Z)	(D)	-	-	.3	(Z)	.1	(D)	.1	(D)
3644	NONCURRENT-CARRYING WIRING DEVICES.	1.2	(Z)	3.0	(Z)	9	-	-	.9	.2	.2	(D)	.3	(D)
3645	RESIDENTIAL LIGHTING FIXTURES.	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3646	COMMERCIAL LIGHTING FIXTURES	-	-	(D)	(X)	(D)	-	-	(D)	-	(D)	-	(D)	-
3647	VEHICULAR LIGHTING EQUIPMENT	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3648	LIGHTING EQUIPMENT, NEC.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
365	RADIO, TV RECEIVING EQUIPMENT.	(D)	(X)	(D)	(X)	(D)	-	-	1.9	(D)	.3	(D)	.8	(D)
3651	RADIO AND TV RECEIVING SETS.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3652	PHONO. RECORDS, PRERECORDED TAPE	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
366	COMMUNICATION EQUIPMENT.	1.6	(Z)	(D)	(X)	85	(D)	(D)	9.7	1.5	3.7	1.9	2.1	.4
3661	TELEPHONE AND TELEGRAPH APPARATUS.	(D)	(X)	(D)	(X)	46	(D)	(D)	(D)	.9	2.8	.2	1.6	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	(D)	(X)	12.8	(Z)	39	(D)	(D)	(D)	.6	1.0	1.6	.5	(D)
367	ELECTRONIC COMPONENTS, ACCESS.	8.9	1	58.5	1	120	4	.1	16.6	3.2	5.8	2.1	5.3	.4
3671	ELECTRON TUBES, RECEIVING TYPE	.4	(Z)	6.9	(Z)	16	(D)	(D)	2.3	.3	.9	(D)	1.0	(D)
3674	SEMICONDUCTORS, RELATED DEVICES.	3.9	(Z)	28.6	(Z)	49	(D)	(D)	9.3	1.7	3.7	(D)	2.9	(D)
3675	ELECTRONIC CAPACITORS.	(D)	(X)	(D)	(X)	15	-	-	.3	.1	.1	(D)	(Z)	(D)
3676	ELECTRONIC RESISTORS	(D)	(X)	.2	(Z)	(D)	-	-	(D)	(D)	(Z)	(D)	(Z)	-
3678	ELECTRONIC CONNECTORS.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	(D)	.1	(D)	.1	(D)
3679	ELECTRONIC COMPONENTS, NEC	3.6	(Z)	20.4	(Z)	34	(D)	(D)	4.4	1.1	1.0	1.0	1.1	.2
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	6.9	2	(D)	(X)	49	-	-	6.9	1.5	1.4	(D)	3.0	(D)
3691	STORAGE BATTERIES.	(D)	(X)	(D)	(X)	39	-	-	(D)	.9	.7	.3	2.0	(D)
3692	PRIMARY BATTERIES, DRY AND WET	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
3693	X-RAY APPARATUS AND TUBES.	(D)	(X)	(D)	(X)	(D)	-	-	.3	(D)	(Z)	(D)	(D)	(D)
3694	ENGINE ELECTRICAL EQUIPMENT.	(D)	(X)	5.1	(Z)	(D)	-	-	2.3	.6	.6	(D)	.8	(D)
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
37	TRANSPORTATION EQUIPMENT	70.0	5	327.4	4	1 095	28	.1	100.5	17.6	24.5	31.0	25.9	1.5
371	MOTOR VEHICLES AND EQUIPMENT	52.1	4	121.1	1	439	-	-	79.4	14.6	15.9	28.8	19.0	1.1
3711	MOTOR VEHICLES AND CAR BODIES.	(D)	(X)	(D)	(X)	197	-	-	26.1	5.6	8.1	(D)	8.8	(D)
3713	TRUCK AND BUS BODIES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3714	MOTOR VEHICLE PARTS, ACCESSORIES	31.2	2	118.7	1	240	-	-	53.2	8.9	7.7	25.8	10.1	.6
3715	TRUCK TRAILERS	(D)	(X)	-	-	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3716	MOTOR HOMES.	(D)	(X)	(D)	(X)	-	-	-	-	-	-	-	-	-
372	AIRCRAFT AND PARTS	4.8	(Z)	58.0	1	198	(D)	(D)	13.2	1.0	5.9	(D)	4.8	(D)
3721	AIRCRAFT	2.3	(Z)	30.7	(Z)	54	(D)	(D)	5.7	.3	2.2	(D)	2.4	(D)
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	.9	(Z)	13.4	(Z)	125	(D)	(D)	4.7	.5	2.2	(D)	1.6	(D)
3728	AIRCRAFT EQUIPMENT, NEC.	1.6	(Z)	13.9	(Z)	20	(D)	(D)	2.9	.2	1.5	(D)	.7	(D)
373	SHIP, BOAT BUILDING, REPAIRING	1.8	(Z)	7.2	(Z)	(D)	(D)	(D)	1.2	.2	(D)	.2	.4	(D)
3731	SHIP BUILDING AND REPAIRING.	(D)	(X)	(D)	(X)	(D)	(D)	(D)	(D)	.2	(D)	.2	(D)	(D)
3732	BOAT BUILDING AND REPAIRING.	(D)	(X)	(D)	(X)	-	-	-	(D)	-	(D)	-	(D)	-
3743	RAILROAD EQUIPMENT	(D)	(X)	12.1	(Z)	10	-	-	3.0	1.1	1.0	(D)	.5	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES.	(D)	(X)	(D)	(X)	274	(D)	(D)	2.1	.2	1.0	.2	.5	(Z)
3761	GUIDED MISSILES, SPACE VEHICLES.	(D)	(X)	(D)	(X)	154	(D)	(D)	1.5	(D)	.6	.1	.4	(D)
3764	SPACE PROPULSION UNITS AND PARTS	.1	(Z)	1.6	(Z)	120	-	-	.6	(D)	.4	.1	.1	(D)
3769	SPACE VEHICLE EQUIPMENT, NEC	-	-	-	-	-	-	-	-	-	-	-	-	-
379	MISC. TRANSPORTATION EQUIPMENT	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3792	TRAVEL TRAILERS AND CAMPERS.	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3795	TANKS AND TANK COMPONENTS.	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3799	TRANSPORTATION EQUIPMENT, NEC.	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	-	(D)	-
38	INSTRUMENTS, RELATED PRODUCTS.	9.5	1	77.7	1	155	(D)	(D)	18.5	3.7	5.0	1.5	6.7	1.5
3811	ENGINEERING, SCIENTIFIC INSTRU	(D)	(X)	.3	(Z)	(D)	-	-	.1	(D)	(Z)	(D)	(Z)	-

See footnotes at end of table.

Table 10a. **Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for Industry Groups and Industries: 1978**—Con.

(For explanation of terms, see appendix A)

SIC code	Industry group and industry	For the abatement of water pollutants											
		Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs				
							Rented land			Kind of cost			
		Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
38	INSTRUMENTS, RELATED PRODUCTS--CON.													
382	MEASURING, CONTROLLING DEVICES	1.3	(Z)	11.4	(Z)	21	-	-	4.1	1.1	1.1	.4	1.4	(Z)
3822	ENVIRONMENTAL CONTROLS	(D)	(X)	3.7	(Z)	(D)	-	-	1.3	.6	(D)	(D)	.3	-
3823	PROCESS CONTROL INSTRUMENTS	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3824	FLUID METERS AND COUNTING DEVICES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
3825	INSTRU. TO MEASURE ELECTRICITY	1.0	(Z)	6.0	(Z)	12	-	-	2.3	.5	.6	(D)	1.0	(D)
3829	MEASUR'G, CONTROL'G DEVICES, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3832	OPTICAL INSTRUMENTS AND LENSES	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	-
384	MEDICAL INSTRUMENTS, SUPPLIES	(D)	(X)	4.3	(Z)	24	-	-	.7	.2	(D)	.1	.3	(D)
3841	SURGICAL AND MEDICAL INSTRUMENTS	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(Z)	(D)	(D)	-
3842	SURGICAL APPLIANCES AND SUPPLIES	(D)	(X)	(D)	(X)	(D)	-	-	.6	(D)	(D)	(D)	(D)	(D)
3843	DENTAL EQUIPMENT AND SUPPLIES	(D)	(X)	-	-	-	-	-	(D)	-	-	-	(D)	-
3851	OPHTHALMIC GOODS	(D)	(X)	(D)	(X)	(D)	(D)	(D)	.2	(D)	.1	(D)	.1	(D)
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	7.4	1	59.6	1	80	(D)	(D)	13.0	2.3	3.5	.9	4.8	1.4
3873	WATCHES, CLOCKS, AND WATCHCASES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
39	MISC. MANUFACTUR'G INDUSTRIES.	4.7	(Z)	10.9	(Z)	64	-	-	3.1	.6	.9	.2	1.3	.1
391	JEWELRY, SILVER AND PLATED WARE	1.1	(Z)	2.4	(Z)	(D)	-	-	.8	.1	.4	(Z)	(D)	(D)
3911	JEWELRY, PRECIOUS METAL	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3914	SILVERWARE AND PLATED WARE	(D)	(X)	2.2	(Z)	(D)	-	-	.6	.1	(D)	(D)	.2	(D)
3915	JEWELERS' MATS., LAPIDARY WORK	(D)	(X)	(D)	(X)	-	-	-	(D)	(D)	-	-	(D)	-
3931	MUSICAL INSTRUMENTS	-	-	(D)	(X)	(D)	-	-	-	-	-	-	-	-
394	TOYS AND SPORTING GOODS	(D)	(X)	1.4	(Z)	13	-	-	(D)	(D)	.1	.1	.2	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3949	SPORTING AND ATHLETIC GOODS, NEC	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
395	PENS, OFFICE AND ART GOODS	-	-	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3951	PENS AND MECHNICAL PENCILS	-	-	(D)	(X)	-	-	-	(D)	(D)	(D)	-	(D)	-
3952	LEAD PENCILS AND ART GOODS	-	-	(D)	(X)	(D)	-	-	(D)	-	(D)	(D)	(D)	-
396	COSTUME JEWELRY AND NOTIONS	(D)	(X)	3.4	(Z)	39	-	-	.9	.2	.2	(D)	.5	(D)
3961	COSTUME JEWELRY	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
3964	NEEDLES, PINS, AND FASTENERS	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
399	MISCELLANEOUS MANUFACTURES	1.2	(Z)	3.0	(Z)	6	-	-	.8	.2	(D)	(D)	.3	(D)
3991	BROOMS AND BRUSHES	(D)	(X)	(D)	(X)	-	-	-	(D)	-	(D)	-	(D)	-
3995	BURIAL CASKETS	-	-	-	-	-	-	-	-	-	-	-	-	-
3996	HARD SURFACE FLOOR COVERINGS	(D)	(X)	1.6	(Z)	(D)	-	-	.4	(D)	(D)	(D)	.2	(D)
3999	MANUFACTURING INDUSTRIES, NEC	(D)	(X)	1.4	(Z)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-

Note: Figures shown for industry groups (3-digit) and major industry groups (2-digit) include data for all component industries whether or not separate figures are shown for individual industries in the group.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. N.E.C. Not elsewhere classified. (X) Not applicable. (Z) Less than 50 million gallons, less than 50 thousand dollars, or under .5 percent.

Table 10b. Capital Expenditures, Gross Value of Assets of In-Place Plant and Equipment, Land Used, and Annual Operating Costs for the Abatement of Water Pollutants, for States: 1978

(For explanation of terms, see appendix A)

State	For the abatement of water pollutants												
	Capital expenditures		Gross value of assets of in-place plant and equipment		Land used			Annual operating costs					
						Rented land			Kind of cost				
	Value (million dollars)	Total capital expenditures (percent)	Value (million dollars)	Total gross value of assets (percent)	Number of acres	Number of acres	Rental cost of land (million dollars)	Total cost (million dollars)	Depreciation (million dollars)	Labor (million dollars)	Private contractor services (million dollars)	Materials and supplies (million dollars)	Equipment leasing and other costs (million dollars)
UNITED STATES, TOTAL	1 248.7	100	8 124.1	100	189 808	22 830	5.2	2 118.7	415.2	454.6	204.5	894.7	149.8
ALABAMA	51.3	4	221.2	3	4 662	(D)	(D)	52.6	12.1	9.9	3.4	24.3	2.8
ALASKA	7.7	1	42.4	(Z)	(D)	-	-	13.5	4.1	1.3	.2	7.9	-
ARIZONA	6.6	1	18.2	(Z)	2 441	(D)	(D)	4.8	.5	1.0	.5	2.6	.2
ARKANSAS	7.7	1	68.8	1	8 289	(D)	(D)	16.5	4.4	3.9	.5	7.2	.5
CALIFORNIA	36.3	3	371.3	5	11 296	1 016	.1	124.1	20.0	28.6	8.3	60.0	7.2
COLORADO	6.7	1	(D)	(X)	859	(D)	(D)	7.5	1.9	2.0	(D)	2.1	(D)
CONNECTICUT	12.5	1	63.4	1	181	7	.1	18.1	3.7	4.1	1.9	7.5	.9
DELAWARE	10.3	1	71.0	1	845	(D)	(D)	23.4	3.3	5.7	2.8	8.9	2.7
DISTRICT OF COLUMBIA	-	-	-	-	-	-	-	-	-	-	-	-	-
FLORIDA	28.0	2	135.6	2	13 951	558	.1	43.6	7.2	6.2	3.6	23.8	2.8
GEORGIA	38.8	3	172.5	2	5 778	(D)	(D)	35.6	6.8	6.8	2.5	18.1	1.3
HAWAII	(D)	(X)	29.0	(Z)	6 862	5 278	2.6	4.9	.4	1.2	.1	2.3	1.0
IDAHO	3.1	(Z)	20.6	(Z)	4 236	(D)	(D)	5.3	1.3	1.6	.2	1.9	.2
ILLINOIS	43.8	4	346.3	4	4 258	228	.1	90.8	18.5	22.4	10.6	34.0	5.2
INDIANA	66.3	5	421.9	5	3 356	378	.2	108.9	22.7	24.3	5.6	50.7	5.6
IOWA	15.7	1	99.4	1	1 412	(D)	(D)	27.4	8.3	5.7	1.2	11.2	.8
KANSAS	13.7	1	72.2	1	1 286	(D)	(D)	14.5	1.8	3.7	1.5	6.9	.5
KENTUCKY	9.9	1	90.3	1	1 078	(D)	(D)	25.5	5.1	6.2	2.0	9.5	2.6
LOUISIANA	110.6	9	869.6	11	27 178	6 953	.8	158.3	30.2	29.9	15.6	66.8	15.8
MAINE	5.7	(Z)	132.5	2	554	(D)	(D)	21.1	7.1	2.6	1.3	7.3	2.7
MARYLAND	17.7	1	(D)	(X)	1 214	(D)	(D)	32.8	8.9	9.4	2.9	11.3	.3
MASSACHUSETTS	11.7	1	63.1	1	195	(D)	(D)	25.1	4.1	6.4	4.8	6.1	3.8
MICHIGAN	92.5	7	391.1	5	7 131	73	.2	145.7	20.1	33.4	41.9	42.4	7.9
MINNESOTA	24.1	2	44.4	(Z)	2 150	289	(D)	10.7	2.8	2.0	.5	5.2	.2
MISSISSIPPI	14.5	1	80.8	1	1 805	(D)	(D)	32.0	10.1	5.4	.8	15.4	.4
MISSOURI	19.6	1	76.7	1	629	(D)	(D)	23.7	4.2	5.7	2.8	9.8	1.3
MONTANA	.4	(Z)	13.1	(Z)	5 901	(D)	(D)	6.9	.4	1.1	4.1	1.3	-
NEBRASKA	3.5	(Z)	19.1	(Z)	813	(D)	(D)	3.6	1.3	.8	.3	1.1	(Z)
NEVADA	.3	(Z)	4.2	(Z)	393	(D)	(D)	.6	.3	.2	(D)	.1	-
NEW HAMPSHIRE	8.9	1	43.0	1	215	(D)	(D)	7.9	1.8	1.5	.2	4.3	.2
NEW JERSEY	41.1	3	304.0	4	1 329	57	(Z)	87.8	16.4	18.0	6.9	35.6	10.8
NEW MEXICO	.4	(Z)	3.9	(Z)	247	(D)	(D)	.6	.2	.2	.1	.1	(D)
NEW YORK	52.5	4	460.3	6	3 464	292	(Z)	91.2	22.7	20.1	9.0	34.3	5.0
NORTH CAROLINA	19.7	2	162.7	2	4 936	452	(Z)	34.0	7.9	7.6	2.4	13.1	3.0
NORTH DAKOTA	(D)	(X)	1.4	(Z)	255	-	-	(D)	(D)	.2	(D)	(D)	(D)
OHIO	63.7	5	323.3	4	2 903	210	(Z)	129.1	24.0	27.3	12.9	56.5	8.4
OKLAHOMA	6.6	1	38.6	1	1 380	(D)	(D)	17.9	3.3	4.1	2.0	8.0	.5
OREGON	9.6	1	89.5	1	4 109	645	.1	21.0	4.2	4.9	.9	9.9	1.0
PENNSYLVANIA	118.0	9	514.3	6	4 842	147	(Z)	126.6	22.7	30.8	12.4	50.3	10.1
RHODE ISLAND	1.4	(Z)	14.8	(Z)	57	-	-	3.6	1.2	.5	.5	1.0	.4
SOUTH CAROLINA	22.9	2	148.9	2	5 092	(D)	(D)	36.0	8.2	9.0	1.7	15.4	1.7
SOUTH DAKOTA	(D)	(X)	(D)	(X)	(D)	-	-	(D)	(D)	(D)	-	(D)	-
TENNESSEE	32.1	3	186.6	2	2 940	(D)	(D)	55.8	8.5	12.1	1.8	26.1	7.3
TEXAS	80.1	6	859.0	11	18 473	446	.1	226.9	39.9	44.2	19.9	102.8	20.1
UTAH	.6	(Z)	6.0	(Z)	1 681	(D)	(D)	3.1	.5	.8	.8	.9	(Z)
VERMONT	(D)	(X)	6.8	(Z)	53	-	-	2.2	.6	.5	.4	.6	(D)
VIRGINIA	31.3	3	191.7	2	4 319	(D)	(D)	48.0	8.5	8.9	1.4	24.6	4.4
WASHINGTON	45.5	4	303.5	4	5 656	1 524	.1	35.9	14.5	6.6	.9	13.1	.8
WEST VIRGINIA	22.9	2	200.8	2	669	(D)	(D)	62.1	9.2	15.6	3.7	30.1	3.5
WISCONSIN	25.1	2	170.1	2	5 150	964	.1	49.0	8.5	9.8	5.8	20.2	4.7
WYOMING	1.4	(Z)	10.0	(Z)	3 231	(D)	(D)	.8	.1	.3	.1	.2	.2

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (X) Not applicable. (Z) Less than 50 million gallons, less than 50 thousand dollars, or under .5 percent.

Concentration Ratios in Manufacturing

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EXPLANATORY TEXT

GENERAL

This report provides ratios on the share of industrial activity accounted for by the largest companies, both for the United States as a whole and for each of approximately 450 manufacturing industries. It brings forward the information published in the 1972 Census of Manufactures report, Concentration Ratios in Manufacturing.

The first presentation of concentration ratios in manufacturing by the Bureau of the Census was made in 1939 and was based on the 1935 Census of Manufactures. Ratios for all manufacturing industries were presented in the National Resources Committee publication, The Structure of the American Economy. From the 1937 Census, concentration ratios were presented for a large sample of individual products. Beginning in 1947, with the first full census following World War II, concentration ratios have been presented as a part of every census of manufactures. In 1954, 1958, and 1963, the Bureau conducted the project in cooperation with the Senate Subcommittee on Antitrust and Monopoly. The Census Bureau has continued to present this widely-used report in the censuses of 1967, 1972, and, now, 1977 for the benefit of data users in the industrial, educational, and governmental communities.

As in previous reports, no attempt is made to interpret the significance of the concentration ratios. The ratios are not used as the basis for an analysis of either the causes or effects of concentration. The report consists merely of a presentation of the ratios themselves.

Through years of usage, the term "concentration ratio" has come to mean the share of the total activity or resources of a given segment of the economy accounted for by its largest companies. In order to avoid disclosure of the operations of any individual firms, concentration ratios based on census data are presented in groups of four or more companies, that is, the four largest, the eight largest, and so forth.

CONCENTRATION RATIOS AND THE ESTABLISHMENT BASIS OF REPORTING

The concentration ratios based on census of manufactures data have consistently been prepared from establishment reports. Under the establishment system, the shipments of a given company are distributed among all of the industries in which it has establishments. In tables 1 through 4 in this report, which reflect the activity of the largest companies in the industrial sector as a whole, the establishment approach means that only the manufacturing establishments of these companies are taken into account in determining their size. In table 7, a "company" is defined as the total of the individual establishments under one ownership within an industry. Consequently, the same company may appear in several industries, if it has diversified activities.

CONCENTRATION RATIOS AND THE SIC SYSTEM

In essence, the SIC system seeks to establish spheres of economic activity which are unique and distinguishable because of a composite of similar characteristics which they have in common. These characteristics include similarity of products in terms of their uses and the bringing together of plants which specialize in making these products and account for a significant proportion of their total shipments. They also include similarity of processes, similarity of materials used, and the bringing together of a group of plants which are economically significant in terms of their number, value added by manufacture, value of shipments, and number of employees. These standards flow very largely from the actual structure into which American businesses have grouped themselves, and it is these characteristics that make it the best single system for the largest number of uses. In the great majority of instances, an industry is comprised of producers of similar goods or services. Usually, but not always, the products are made of similar materials and by similar processes and the producers usually compete with one another.

For the purpose of measuring concentration, the fact that the classification system is not based exclusively on the usage of the product is somewhat of a limitation, since in the economic concept of the market, it is immaterial whether products which are substitutable for each other are produced by the same processes or made from the same materials. In some cases, the industry and product definitions are too broad; that is, there are included in the same category products which do not serve the same function and are, thus, not substitutable for each other; in other cases they are too narrow; that is, a single category fails to include products which are substitutable—for example, metal and glass containers. Another limitation is the fact that the classification's industries and products are regularly being redefined. The need for redefinition arises particularly from the introduction of new products, the declining importance of older products, the introduction of new technologies, the growth of small fields into important industries, and similar dynamic developments. While necessary to keep the classification abreast of the changing nature of the economy, an inevitable cost of redefinition is the loss of comparability for many categories over time.

LIMITATIONS IN USE OF CONCENTRATION RATIOS

Like all bodies of statistical data, the concentration ratios must be used with an awareness of both their attributes and limitations. The preceding discussion has described, in some detail, the nature of the data and the classification system used to aggregate the data. There are also other considerations which must be kept in mind as the late Senator Estes Kefauver discussed in his letter

to the Honorable James O. Eastland, Chairman of the Senate Committee on Judiciary, transmitting the 1958 report. The following is a quotation from that letter:[1]

"At this point, it may be useful to discuss the principal sources of understatement and overstatement of the concentration ratios.

"From the point of view of the economic concept of the market, there are several sources of possible understatement of the concentration ratios. The identification of which plants are controlled by which companies is based on census reports and available public records. As part of each census, the known large companies are sent a questionnaire requiring them to list the plants which they operate directly or through their subsidiaries and affiliates. For census purposes the company consists of those establishments which it owns or admits control over and which have been classified as chiefly manufacturing. Obviously, any instances in which there exists control not reported to the Census Bureau results in an understatement of the concentration ratios.

"A second source of understatement stems from the fact that the concentration ratios presented herein relate to the Nation as a whole. Where the market area is limited by the perishability of the product, by relatively high transportation costs or other factors, concentration in the individual geographic markets may be considerably higher than is shown by national concentration ratios. Thus, for the Nation as a whole the share of the value of shipments of the bread and related products industry accounted for in 1954 by the four largest companies was 20 percent. Yet, a special tabulation based on the same data showed that in only three individual States was the share of the value of shipments of the 4 largest companies in that State less than 30 percent, while in 23 States the figure was over 50 percent, and in the actual individual market areas represented by cities, the level of concentration tended to be even higher.[2]

"A third source of understatement arises from the defining of many of the industries and some of the product classes in terms so broad as to include non-substitutable products. The extent to which the industry and product definitions conform to the actual character of the market differs considerably from industry to industry and product to product. On the one hand is a four-digit industry, cigarettes, which would appear to be an adequate representation of the market. At the other extreme is steel works and rolling mills, also a four-digit industry, which produces many individual products. With few exceptions, these products are generally not substitutable for each other. There is no market for steel, as such; there are individual product markets for structural shapes, tinplate, rails, etc. Although in some cases the more expensive forms of cold-rolled sheet and strip can be substituted for cheaper hot-rolled products, this occurs only when the buyer is forced to do so during periods of tight supply. Since the level of concentration usually tends to rise as the definition is narrowed, it follows that in such cases the concentration ratio for the industry may significantly understate the concentration in the individual product markets. In 1954 the concentration ratio for steelworks and rolling mills was 54 percent. Yet, according to a separate study, for all but 6 of the industry's 39 individual products, the 4 largest companies in 1957 accounted for over 60 percent of the production, while the average concentration ratio of the 39 products was 69 percent.[3] There is, however, a limit on the extent to which concentration in the market can be approached by progressively narrowing the definitions of industries and products. This is the limit imposed by product substitutability.

"Where the definition of the industry or the product is so narrow as to exclude substitutable products, the concentration ratio will overstate the concentration in the market. Thus, because metal cans are classified in one industry and glass containers in another, the concentration ratios for each will overstate the concentration in those markets for which metal cans and glass containers are in fact substitutable.

"What makes one product substitutable for another depends not only on physical characteristics but also on the critical matter of price. Thus, it could be said that for some uses, platinum is substitutable for steel, but the difference in price is so vast that they are not in fact economically substitutable. Because the question of what makes one product substitutable for another depends on price, changes in buyers' tastes, and other highly variable factors, substitutability varies over time and it is impossible to set forth any mechanical means of arbitrarily determining degrees of substitutability.

"A second source of overstatement in the domestic market is the exclusion of imports. While imports into the United States of manufactured goods taken as a whole are relatively small, amounting in 1958 to only $8 billion, or less than 5 percent of the $141 billion of value added by manufacture of all domestic American establishments, they are important for a

[1] 87th Congress, 2nd Session. Report of Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, "Concentration Ratios in Manufacturing Industry, 1958,". Part I, page IV.

[2] S. Rept. 1923, 86th Cong., 2d sess. (1960), "Administered Prices: Bread"; report of the Senate Subcommittee on Antitrust and Monopoly, pp. 120-125.

[3] S. Rept. 1387 85th Cong., 2d sess. (1958), "Administered Prices: Steel"; report of the Senate Subcommittee on Antitrust and Monopoly, pp. 69.

number of individual industries. Thus, considerable proportions of the total sales in the United States of such products as sewing machines and typewriters consist of imports. In such cases, the concentration ratios applicable to domestic manufacturing will tend to overstate the concentration in the market. The overstatement would be reduced, however, to the extent that the imports were produced in overseas factories of the largest domestic companies.

"While these limitations must be borne in mind in any use of the concentration ratios, their importance should not be overstressed. For one thing, the limitations will generally tend to have less effect on the use of the ratios to show changes in concentration over time than in depicting the level of concentration in the market at a given point of time. This is because the factors making for under- or over-statement are usually present both at the beginning and the end of the time span for which the change is measured. The use of the ratios to show change in concentration is, thus, affected only where the factors making for under- or over-statement are relatively more important in one year than in another. Moreover, many of the product classes and a not inconsiderable number of the industries do represent reasonably adequate representations of concentration in that market. And, where this is not so, they provide, at the very least, a starting point to which appropriate adjustments to allow for the various sources of under- and over-statement can be made."

EXPLANATION FOR TABLES 1 TO 4

These four tables reflect the activity of the largest companies in the industrial sector as a whole. A "company" is defined, for this purpose, as the total of its industrial establishments, including not only its manufacturing plants but also auxiliary establishments such as warehouses and central administrative offices.

Concentration at this level is measured in terms of value added by manufacture. In these census tabulations, value added is preferable to sales or shipments in measuring total company size, since an aggregation of shipments from the census establishment records would contain duplication owing to intracompany transfers of products. Value added for all manufacturing establishments of a given company was aggregated irrespective of the industry classification of the individual establishments. The companies were then arrayed by magnitude of value added in each specified year and totals computed for the 50, 100, 150, and 200 largest companies.

The standard formula for calculating value added by manufacture since 1958 differs from the one used for the 1954 census and earlier years. During the earlier period, the value added of an establishment was calculated by subtracting the cost of materials, supplies, containers, fuels, purchased electric energy, and contract work from the value of shipments for products manufactured plus miscellaneous receipts for services rendered. This is known as unadjusted value added in census publications. Beginning with 1958, the measure of value added has been adjusted for each establishment in two respects. Value added now includes: (1) Value added by merchandising (that is, the difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly); and (2) an adjustment for the net change in finished goods and work-in-process inventories between the beginning and the end of the year. The resulting figure is the adjusted value added.

Thus, the rankings of the 200 largest companies in 1947 and 1954 were based on unadjusted value added; those for later years were based on adjusted value added. The use of these different measures for determining size should have little effect on the ranking and relative shares of individual companies or on the aggregate shares of the 50, 100, 150, or 200 largest companies in each year.

Except for tables 2 and 3, companies were classified in size groups in each particular year based on their size in that year. Thus, a size group (such as the top four) does not necessarily include the same companies from year to year. The extent to which large companies have grown or declined over the years is reflected in tables 2 and 3. Table 3 shows, for example, that, of the companies which constituted the 50 largest in 1972, only 33 were among the 50 largest in the 1954 census.

EXPLANATION FOR TABLES 5 AND 6

Tables 5 and 6 are frequency distributions of the 4-company concentration ratio data in table 7. In table 5, the 4-digit industries and their associated value of shipments (value added for selected industries) are distributed by 2-digit major industry group and, within each group, by concentration ratio size class. In table 6, the 4-digit industries are distributed by 2-digit major industry group and within each group by size of change in 4 largest company ratios: 1972 to 1977.

In using the distribution in table 5 by the major 2-digit industry groups, it should be recognized that the latter are broader than the concept of the market. Food and kindred products, for example, encompass a wide range of discrete industries, the products of which are often not substitutable for each other. The value of the table lies in showing the distribution of differing concentration ratios of the individual industries and the amount of the value of shipments of a major group accounted for by industries with high, medium, and low concentration ratios.

EXPLANATION FOR TABLE 7

This table is based on the establishment approach described in the Introduction. A "company" is defined as the total of the individual establishments under one ownership within an

industry. Consequently, the same company may appear in several industries if it has diversified activities. In addition, the following points should be kept in mind:

(1) The top 4, 8, 20, and 50 companies are the largest for any particular year based on their value of shipments in that year and are, therefore, not necessarily the same companies from year to year.

(2) For a few industries, as indicated by footnotes, value added by manufacture rather than value of shipments has been used to determine the size of companies. This is considered necessary for industries in which the aggregate value of shipments contains a large amount of duplication because of shipments of semifinished products between establishments. An example is SIC 3585, Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment, in which there are extensive intraindustry sales and transfers of components and subassemblies to producers of complete refrigerators and air conditioners. (The historical changes in the method for calculating value added by manufacture are described in the discussion of tables 1 through 4.)

(3) Ratios are shown for years prior to 1972 only if the SIC industry definitions were considered comparable. As noted in the Introduction, there were extensive revisions in the SIC in 1972 which, in table 7, result in suppression of data for earlier years for a substantial number of industries. In general, the criteria used for judging the comparability of definitions was the effect of the change on number of employees in the industry under the old and new definitions. If the new definition caused more than a 2-percent change, the historical data were suppressed.

(4) The 1966, 1970, and 1976 concentration ratios are based on data developed in the Annual Survey of Manufactures. Since the industry aggregates which provide the denominators in the concentration ratios are based on a sample, they are subject to sampling errors. Sampling errors for each industry, as well as a more complete description of the Annual Survey of Manufactures sample, are shown in appendix B.

EXPLANATION FOR TABLE 8

In this table, a "company" is defined as the total of the individual establishments under one ownership within an industry. Consequently, the same enterprise may appear in several industries if it has diversified activities. It may be large in some industries and small in others.

Company size within an industry is determined by the total value of shipments and other receipts of its establishments. In addition to sales to customers, this total includes the value of products transferred between establishments of the same company (intracompany transfers). For a few industries, as indicated by footnotes, value added by manufacture rather than value of shipments has been used to determine company size. This was considered necessary for industires in which the aggregate value of shipments contains a large amount of duplication because of shipments of products between establishments.

Within an industry, each line of the table was based on the same companies throughout the line. The ranking of the four largest companies, for example, was determined by their value of shipments (or value added) and the other percentages represent the proportions of employment, payrolls, etc., accounted for by the same four companies.

EXPLANATION FOR TABLES 9 AND 10.

The product classes (5-digit) and product groups (4-digit) shown in these tables are those developed by the Census Bureau within the framework of the Standard Industrial Classification. In general, the first four digits of the product code numbers refer to the SIC industry in which the product is primarily made. For example, in the product class number 20232, Canned Milk products, the first four digits (2023) identify the Condensed and Evaporated Milk industry. The four-digit code numbers shown in these tables (followed by a hypen) identify product groups rather than industries. The number 2023 identifies the total shipments of condensed and evaporated milk products, whether made in industry 2023 or in other industries. Complications occur in the few SIC industries defined in terms of processes or equipment used, as well as products made. As an example, processed pork as a product of slaughtering plants is coded 20126, but if made in meat processing plants, is coded 20136. Since these products are similar despite the SIC distinction, data for them have been brought together in this publication in table 10.

Within each product class or group shown in tables 9 and 10, a "company" is represented by the sum of the shipments of that product by all of its manufacturing plants. Consequently, the same company often appears in several different product classes or groups.

As discussed in the section on Census Report Forms, establishments with fewer than 10 employees were excused from filing census reports. Limited data on payrolls, sales, and industry classification were made available to the Census Bureau from administrative records of the Social Security Administration and the Internal Revenue Service. For total manufacturing, these establishments account for less than 3 percent of the payrolls and value added, but this proportion is somewhat larger for industries characterized by small establishments such as lumber, printing, and apparel. The effect of using administrative records for these establishments generally increases the proportional size of the "not specified by kind" (n.s.k.) product classes, because their shipments could not be assigned to specific 5-digit product classes. Also included in this n.s.k. category are those establishments with 10 employees or more which, for various reasons, did not report the product class detail.

Concentration ratios are not shown for the n.s.k. product classes since they would be of little or no significance. However, if there is a significant increase in the value of shipments of an n.s.k. product class, the establishments comprising the n.s.k. are analyzed and some or all of their value of shipments prorated to the specific 5-digit classes affected. Their concentration ratios are then recalculated.

Table 1. **Share of Total Value Added by Manufacture Accounted for by the 50, 100, 150, and 200 Largest Manufacturing Companies: 1977 and Earlier Years**

Company rank group	Percent of value added by manufacture										
	1977	1976	1972	1970	1967	1966	1963	1962	1958	1954	1947
Largest 50 companies	[1]24	[1]24	25	24	25	25	25	24	23	23	17
Largest 100 companies	33	33	33	33	33	33	33	32	30	30	23
Largest 150 companies	39	39	39	38	38	38	37	36	35	34	27
Largest 200 companies	44	44	43	43	42	42	41	40	38	37	30

Note: 1962, 1966, 1970, and 1976 data are based on the annual survey of manufactures. "Largest companies" are those which were the largest in each of the specified years.

[1]As a result of rounding these percentages to whole numbers, the 1977 and 1976 largest 50 companies ratios show a significant decrease from 1972 levels. The decrease is actually much smaller; see table 4 for unrounded percentages for 1972. The 1976 unrounded figures are available in the 1976 Annual Survey of Manufactures publication, "Concentration Ratios in Manufacturing: 200 Largest Companies."

Table 2. **Share of Total Value Added by Manufacture Accounted for by the 50 and 100 Largest Identical Manufacturing Companies as Ranked in Each Year: 1977 and Earlier Years**

Year of company ranking and company rank group	Percent of value added by manufacture									
	1977	1972	1970	1967	1966	1963	1962	1958	1954	1947
1977										
Largest 50 companies	24	24	23	23	24	23	22	21	20	14
Largest 100 companies	33	32	31	30	30	29	28	26	25	18
1972										
Largest 50 companies	24	25	23	23	23	22	22	20	19	12
Largest 100 companies	33	33	31	30	30	29	28	26	25	17
1970										
Largest 50 companies	23	23	24	23	24	23	22	20	19	12
Largest 100 companies	33	32	33	31	31	29	29	26	25	18
1967										
Largest 50 companies	23	22	24	25	25	24	24	22	21	15
Largest 100 companies	31	30	32	33	33	32	31	29	28	20
1966										
Largest 50 companies	23	22	23	24	25	24	24	22	21	14
Largest 100 companies	31	30	31	32	33	32	31	29	28	21
1963										
Largest 50 companies	22	21	23	24	24	25	24	23	22	15
Largest 100 companies	30	29	31	32	33	33	32	30	29	21
1962										
Largest 50 companies	23	22	23	24	25	25	24	23	22	15
Largest 100 companies	30	29	31	33	33	32	32	30	29	21
1958										
Largest 50 companies	22	20	22	23	24	24	24	23	23	16
Largest 100 companies	29	27	29	31	31	32	31	30	29	22
1954										
Largest 50 companies	21	20	21	23	23	24	23	23	23	16
Largest 100 companies	28	27	28	31	31	31	30	30	30	21
1947										
Largest 50 companies	19	17	19	20	21	21	21	20	21	17
Largest 100 companies	25	24	26	27	27	28	27	27	27	23

Note: The 100 largest companies in each specified year were selected and their proportion of total value added by manufacture in each of the other years was computed. Thus, this table measures the changes in concentration ratios for a fixed group of companies from one year to another. In case of mergers, the larger of the two at the time of merger was considered to be the predecessor company.

Table 3. **Changes in Rank Group of the 50 Largest Identical Companies: 1977 and Earlier Years**

Year of company ranking and company rank group	Number of companies									
	1977	1972	1970	1967	1966	1963	1962	1958	1954	1947
1977										
Among 50 largest	50	43	41	39	38	34	36	32	30	23
Among 51st to 100th largest	-	7	9	9	8	9	7	8	12	10
Among 101st to 200th largest	-	-	-	1	2	4	4	6	1	10
Not among 200 largest	-	-	-	1	2	3	3	4	7	7
1972										
Among 50 largest	43	50	45	42	43	40	40	37	33	25
Among 51st to 100th largest	7	-	5	8	5	6	6	6	11	10
Among 101st to 200th largest	-	-	-	-	2	3	3	4	1	10
Not among 200 largest	-	-	-	-	-	1	1	3	5	5
1970										
Among 50 largest	41	45	50	45	44	41	41	36	33	25
Among 51st to 100th largest	7	4	-	5	5	6	6	5	10	10
Among 101st to 200th largest	1	1	-	-	1	3	3	7	3	9
Not among 200 largest	1	-	-	-	-	-	-	2	4	6
1967										
Among 50 largest	38	42	45	50	46	43	41	35	32	24
Among 51st to 100th largest	9	7	5	-	3	6	8	8	12	10
Among 101st to 200th largest	2	1	-	-	1	1	1	6	4	12
Not among 200 largest	1	-	-	-	-	-	-	1	2	4
1966										
Among 50 largest	39	43	45	46	50	42	43	36	33	25
Among 51st to 100th largest	8	4	4	3	-	8	6	9	12	10
Among 101st to 200th largest	1	1	-	-	-	-	1	4	3	12
Not among 200 largest	2	2	1	1	-	-	-	1	2	3
1963										
Among 50 largest	35	40	41	43	42	50	46	42	38	30
Among 51st to 100th largest	12	9	8	7	8	-	4	6	10	10
Among 101st to 200th largest	2	-	-	-	-	-	-	2	2	10
Not among 200 largest	1	1	1	-	-	-	-	-	-	-
1962										
Among 50 largest	37	40	41	41	43	46	50	42	38	29
Among 51st to 100th largest	9	9	8	9	7	4	-	7	11	10
Among 101st to 200th largest	3	-	-	-	-	-	-	1	1	10
Not among 200 largest	1	1	1	-	-	-	-	-	-	1
1958										
Among 50 largest	33	36	36	35	36	42	42	50	45	34
Among 51st to 100th largest	11	10	10	14	14	8	8	-	5	10
Among 101st to 200th largest	4	2	3	1	-	-	-	-	-	6
Not among 200 largest	2	2	1	-	-	-	-	-	-	-
1954										
Among 50 largest	31	33	33	32	33	38	38	45	50	35
Among 51st to 100th largest	11	9	11	16	16	11	11	4	-	11
Among 101st to 200th largest	5	5	4	1	-	1	1	1	-	3
Not among 200 largest	3	3	2	1	1	-	-	-	-	1
1947										
Among 50 largest	24	25	24	24	25	30	29	34	35	50
Among 51st to 100th largest	13	13	13	17	18	16	16	12	12	-
Among 101st to 200th largest	5	6	8	5	4	3	5	4	3	-
Not among 200 largest	8	6	5	4	3	1	-	-	-	-

Note: 1962, 1966, and 1970 data are based on the annual survey of manufactures--other years on the census of manufactures. The 50 largest companies in each specified year were selected and the rank group of the same companies determined in other years. Thus, this table measures the shifting of position of a fixed group of companies from one year to another. In case of mergers, the larger of the two at the time of the merger was considered to be the predecessor company.

- Represents zero.

Table 4. **Share of Value Added, Employment, Payroll, Value of Shipments, and Capital Expenditures Accounted for by the 200 Largest Companies: 1977, 1972, 1967, and 1963**

(Percent)

Company rank group based on value added by manufacture		Value added by manufacture	All employees		Total payroll		Production workers			Value of shipments[3]	New capital expenditures
			With CAO's[1]	Without CAO's[2]	With CAO's[1]	Without CAO's[2]	Number	Hours	Wages		
50 largest	1977	24.4	17.9	17.1	24.8	23.7	16.2	16.8	23.6	25.3	28.0
	1972	24.5	19.4	18.3	25.1	24.0	17.5	17.9	23.6	24.3	25.8
	1967	24.6	20.2	(NA)	25.2	(NA)	17.8	17.9	22.5	24.7	27.4
	1963	25.0	18.8	(NA)	24.0	(NA)	16.7	17.2	21.9	24.6	28.1
51st to 100th largest	1977	9.0	7.1	6.7	8.1	7.6	6.7	6.8	7.8	9.2	10.5
	1972	8.6	6.4	6.1	7.3	6.9	5.9	6.1	6.9	8.2	9.3
	1967	8.2	6.2	(NA)	7.2	(NA)	5.7	5.7	6.7	8.8	13.3
	1963	7.7	6.5	(NA)	7.5	(NA)	5.9	5.9	6.9	8.9	10.4
101st to 150th largest	1977	6.1	4.8	4.6	5.3	5.1	4.6	4.7	5.3	6.2	5.8
	1972	5.7	5.3	5.1	5.5	5.3	5.2	5.3	5.6	6.1	6.1
	1967	5.1	4.3	(NA)	4.6	(NA)	4.0	4.1	4.4	5.3	6.0
	1963	4.7	3.4	(NA)	3.7	(NA)	3.0	3.1	3.6	4.4	4.3
151st to 200th largest	1977	4.3	3.7	3.5	4.0	3.7	3.4	3.5	3.8	4.5	4.9
	1972	4.3	3.4	3.3	3.8	3.6	3.2	3.2	3.6	4.5	4.6
	1967	3.8	3.1	(NA)	3.4	(NA)	2.9	2.9	3.2	3.8	4.4
	1963	3.5	2.8	(NA)	3.1	(NA)	2.7	2.6	3.1	3.7	4.2
200 largest	1977	43.7	33.4	31.9	42.1	40.0	31.0	31.8	40.4	45.3	49.2
	1972	43.1	34.6	32.7	41.8	39.8	31.7	32.5	39.6	43.2	45.8
	1967	41.6	33.7	(NA)	40.3	(NA)	30.4	30.7	36.8	42.6	51.5
	1963	40.8	31.5	(NA)	38.5	(NA)	28.3	28.9	35.6	41.6	46.4

Note: All percentages are independently rounded and do not necessarily add to totals.

(NA) Not available.

[1]Includes employees in central administrative offices and auxiliaries serving manufacturing establishments.

[2]Excludes employees in central administrative offices and auxiliaries serving manufacturing establishments, and, thus, represents operating manufacturing establishments.

[3]Includes a substantial but unmeasurable amount of duplication because of shipments of materials and products among manufacturing establishments for further processing.

Table 5. **Distribution of 4 Largest Company Concentration Ratios by Industry Group: 1977**

(Value figures in millions of dollars)

Code	Industry group	Total		Value of shipments concentration ratio for 4 largest companies[1]					
				80 to 100		70 to 79		60 to 69	
		Number of industries	Value of shipments	Number of industries	Value of shipments	Number of industries	Value of shipments	Number of industries	Value of shipments
	All industries	449	1,358,526.4	22	101,889.8	16	51,323.3	33	105,700.0
20	Food and kindred products	47	192,911.6	2	3,064.0	1	1,629.2	7	23,066.0
21	Tobacco products	4	9,050.6	1	354.3	-	-	1	2,076.2
22	Textile mill products	30	40,550.5	1	1,013.2	-	-	3	2,658.2
23	Apparel and related products	33	40,245.1	-	-	1	2,166.3	1	419.8
24	Lumber and wood products	17	39,919.4	-	-	-	-	-	-
25	Furniture and fixtures	13	16,978.0	-	-	-	-	-	-
26	Paper and allied products	17	52,085.7	1	240.3	-	-	1	4,921.2
27	Printing and publishing	17	49,716.2	-	-	1	1,072.1	-	-
28	Chemicals and allied products	28	118,153.6	-	-	2	6,848.1	5	7,308.9
29	Petroleum and coal products	5	97,452.7	-	-	-	-	1	463.3
30	Rubber and plastics products, n.e.c.	6	39,552.8	-	-	2	9,012.6	-	-
31	Leather and leather products	11	7,607.4	-	-	-	-	-	-
32	Stone, clay, and glass products	27	35,476.6	1	1,576.6	3	2,961.2	4	2,865.3
33	Primary metal industries	26	103,179.4	4	6,049.4	2	10,618.5	1	930.6
34	Fabricated metal products	36	90,023.5	1	436.2	1	456.7	1	9,739.2
35	Machinery, except electrical	44	122,187.7	1	2,729.7	-	-	2	3,227.1
36	Electric and electronic equipment	37	88,433.1	7	8,366.9	-	-	1	3,647.2
37	Transportation equipment	18	166,954.0	2	77,452.0	2	6,611.7	4	43,018.3
38	Instruments and related products	13	28,897.8	-	-	1	9,946.9	1	1,358.7
39	Miscellaneous manufacturing	20	19,150.7	1	607.2	-	-	-	-

Code	Industry group	Value of shipments concentration ratio for 4 largest companies[1]--Con.									
		50 to 59		40 to 49		30 to 39		20 to 29		Less than 20	
		Number of industries	Value of shipments	Number of industries	Value of shipments	Number of industries	Value of shipments	Number of industries	Value of shipments	Number of industries	Value of shipments
	All industries	56	103,842.8	67	202,316.5	69	249,631.1	96	266,940.6	86	260,734.7
20	Food and kindred products	10	23,495.6	6	11,255.6	7	28,575.7	10	69,621.3	4	32,204.4
21	Tobacco products	1	242.7	-	-	-	-	-	-	-	-
22	Textile mill products	5	1,854.1	4	8,663.3	8	8,448.2	6	11,029.6	3	6,883.7
23	Apparel and related products	-	-	3	4,303.1	3	1,022.8	14	13,628.9	11	18,704.0
24	Lumber and wood products	-	-	1	452.9	2	4,767.4	5	12,884.2	9	21,814.8
25	Furniture and fixtures	-	-	3	2,377.3	2	913.9	2	2,185.9	6	11,500.9
26	Paper and allied products	2	1,484.8	3	5,197.2	2	4,043.7	5	26,789.4	3	9,409.1
27	Printing and publishing	1	13.8	1	1,122.6	3	4,265.5	4	9,817.2	7	33,425.0
28	Chemicals and allied products	3	7,322.6	5	19,076.8	6	40,056.9	5	32,587.0	1	3,950.6
29	Petroleum and coal products	-	-	1	2,077.6	1	91,688.8	1	1,644.7	1	1,578.3
30	Rubber and plastics products, n.e.c.	2	2,282.7	-	-	-	-	-	-	2	28,257.6
31	Leather and leather products	-	-	2	856.1	3	2,279.3	4	2,731.8	2	1,740.3
32	Stone, clay, and glass products	2	5,620.0	5	2,751.6	3	2,713.9	4	6,044.4	5	10,943.6
33	Primary metal industries	3	2,093.3	4	55,203.9	3	12,151.9	8	15,578.4	1	553.3
34	Fabricated metal products	7	11,803.4	3	2,129.4	3	7,306.1	7	18,182.7	13	39,969.6
35	Machinery, except electrical	7	7,162.9	10	50,826.1	5	17,708.1	6	9,749.2	13	30,784.0
36	Electric and electronic equipment	7	17,958.7	8	19,050.6	3	3,385.7	9	27,257.6	-	-
37	Transportation equipment	2	19,112.5	4	14,730.3	3	4,206.6	-	-	1	1,822.6
38	Instruments and related products	1	1,594.7	2	1,622.2	6	11,330.5	2	3,044.8	-	-
39	Miscellaneous manufacturing	3	1,801.0	2	619.9	6	4,766.1	4	4,163.5	4	7,192.9

Note: Detail may not add to totals because of independent rounding. Industries for which the four-company concentration ratio was not published in table 7 have not been included in this table.

- Represents zero.

[1]For the following industries, value added by manufacture, rather than value of shipments, is the basis for determining company rank: 2011--Meat packing plants; 2013--Sausages and other prepared meats; 2084--Wines, brandy, and brandy spirits; 2271--Woven carpets and rugs; 3312--3312--Blast furnaces and steel mills; 3331--Primary copper; 3332--Primary lead; 3573--Electronic computing equipment; 3585--Refrigeration and heating equipment; and 3661--Telephone and telegraph apparatus.

Table 6. **Changes in 4 Largest Company Concentration Ratios by Industry Group Between 1972 and 1977**

Code	Industry group	Total	Number of industries with percentage change of[1]--								
			-21 or more	-11 to -20	-6 to -10	-1 to -5	No change	+1 to +5	+6 to +10	+11 to +20	+21 more
	All industries	449	3	12	39	156	43	125	47	16	1
20	Food and kindred products	47	-	2	5	15	7	11	4	2	1
21	Tobacco products	4	-	-	-	-	2	-	1	-	-
22	Textile mill products	30	1	2	3	9	-	8	4	2	-
23	Apparel and related products	33	-	-	4	6	3	13	4	3	-
24	Lumber and wood products	17	-	2	2	4	2	6	-	1	-
25	Furniture and fixtures	13	-	-	-	2	2	6	2	1	-
26	Paper and allied products	17	-	1	1	6	2	6	-	1	-
27	Printing and publishing	17	-	-	1	5	1	6	3	1	-
28	Chemicals and allied products	28	-	-	2	12	1	8	3	-	-
29	Petroleum and coal products	5	-	-	1	3	-	1	-	-	-
30	Rubber and plastics products, n.e.c.	6	-	-	-	4	1	1	-	-	-
31	Leather and leather products	11	-	-	1	3	1	5	1	-	-
32	Stone, clay, and glass products	27	-	-	2	16	-	7	2	-	-
33	Primary metal industries	26	-	-	-	10	4	6	4	2	-
34	Fabricated metal products	36	-	-	3	12	2	14	5	-	-
35	Machinery, except electrical	44	-	2	7	18	7	9	1	-	-
36	Electric and electronic equipment	37	2	-	3	14	5	7	4	-	-
37	Transportation equipment	18	-	-	2	5	1	3	5	1	-
38	Instruments and related products	13	-	3	-	5	1	4	-	-	-
39	Miscellaneous manufacturing	20	-	-	2	7	1	4	4	2	-

Note: This table does not include industries for which the four-company concentration ratio was disclosed or not presented in table 7 for either 1977 or 1972.

- Represents zero.

[1]For the following industries, value added by manufacture, rather than value of shipments, is the basis for determining company rank: 2011--Meat packing plants; 2013--Sausages and other prepared meats; 2084--Wines, brandy, and brandy spirits; 2271--Woven carpets and rugs; 3312--Blast furnaces and steel mills; 3331--Primary copper; 3332--Primary lead; 3573--Electronic computing equipment; 3585--Refrigeration and heating equipment; and 3661--Telephone and telegraph apparatus.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS									
2011	Meat packing plants[8] 1977	2,404	[9]4,010.1	19	37	49	62	98	84	(X)
	1972	2,291	[9]2,968.1	22	37	51	66	98	84	(X)
	1970	(NA)	[9]2,630.1	23	37	(NA)	(NA)	(NA)	(NA)	1
	1967	2,529	[9]2,220.5	26	38	50	62	98	85	(X)
	1966	(NA)	[9]2,025.5	27	39	(NA)	(NA)	(NA)	(NA)	2
	1963	2,833	[9]1,908.3	31	42	54	64	98	86	(X)
	1958	2,646	[9]1,677.1	34	46	57	65	98	88	(X)
	1954	2,228	[9]1,394.5	39	51	60	(NA)	98	87	(X)
	1947	1,999	[9]977.1	41	54	63	(NA)	(NA)	(NA)	(X)
2013	Sausages and other prepared meats[8] 1977	1,213	[9]2,039.0	23	30	39	57	97	60	(X)
	1972	1,207	[9]1,099.9	19	26	38	54	97	52	(X)
	1970	(NA)	[9]917.0	16	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967	1,294	[9]742.5	15	22	34	51	96	46	(X)
	1966	(NA)	[9]624.6	16	23	(NA)	(NA)	(NA)	(NA)	3
	1963	1,273	[9]563.4	16	23	35	51	94	38	(X)
2016	Poultry dressing plants[10] 1977	313	5,746.1	16	27	48	72	99	92	(X)
	1972	407	3,254.1	17	26	42	62	97	97	(X)
2017	Poultry and egg processing[10] 1977	124	856.6	21	35	58	88	99	73	(X)
	1972	110	588.1	23	36	65	91	84	88	(X)
	1967 industry 2015, Poultry and small game dressing and packing, wholesale (1972 industry 2016 and 2017)[10] 1970	(NA)	3,463.8	16	25	(NA)	(NA)	(NA)	(NA)	1
	1967	709	2,936.1	15	23	35	51	99	98	(X)
	1966	(NA)	2,754.1	17	24	(NA)	(NA)	(NA)	(NA)	4
	1963	842	2,240.9	14	20	30	47	98	98	(X)
2021	Creamery butter 1977	123	900.5	49	66	85	95	80	61	(X)
	1972	201	808.3	45	58	78	92	71	70	(X)
	1970	(NA)	806.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	510	958.8	15	22	36	60	71	75	(X)
	1966	(NA)	975.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963	725	988.8	11	19	31	48	69	77	(X)
	1958	997	947.4	11	18	28	45	70	80	(X)
	1954	1,172	926.4	16	24	34	(NA)	74	77	(X)
	[11]1947	1,482	844.7	18	24	32	(NA)	79	84	(X)
2022	Cheese, natural and processed 1977	660	6,126.0	35	48	62	76	91	93	(X)
	1972	739	3,195.0	42	53	65	77	89	98	(X)
	1970	(NA)	2,175.7	43	52	(NA)	(NA)	(NA)	(NA)	2
	1967	891	1,707.8	44	51	61	72	93	98	(X)
	1966	(NA)	1,552.3	44	51	(NA)	(NA)	(NA)	(NA)	9
	1963	982	1,170.8	44	51	59	69	93	96	(X)
2023	Condensed and evaporated milk 1977	167	3,188.5	30	46	71	92	79	76	(X)
	1972	172	1,667.8	39	58	76	92	80	68	(X)
	1970	(NA)	1,352.0	39	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967	179	1,263.0	41	56	74	90	82	71	(X)
	1966	(NA)	1,099.5	45	59	(NA)	(NA)	(NA)	(NA)	3
	1963	167	937.9	40	53	71	90	80	66	(X)
2024	Ice cream and frozen desserts 1977	507	2,008.6	28	40	60	79	94	75	(X)
	1972	561	1,244.7	29	40	58	75	96	70	(X)
	1970	(NA)	1,146.2	30	41	(NA)	(NA)	(NA)	(NA)	3
	1967	713	1,059.4	33	43	60	73	97	73	(X)
	1966	(NA)	1,142.2	33	44	(NA)	(NA)	(NA)	(NA)	4
	1963	901	1,076.5	37	48	64	74	93	74	(X)
	1958	1,171	877.7	38	48	59	69	94	71	(X)
	1954	1,375	727.4	36	45	57	(NA)	93	70	(X)
	[11]1947	1,273	611.8	40	48	57	(NA)	90	87	(X)
2026	Fluid milk 1977	1,516	13,786.2	18	28	43	60	88	94	(X)
	1972	2,025	9,395.7	18	26	42	56	88	96	(X)
	1970	(NA)	8,253.3	20	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967	2,988	7,826.0	22	30	42	51	90	96	(X)
	1966	(NA)	7,434.9	23	30	(NA)	(NA)	(NA)	(NA)	3
	1963	4,030	7,025.9	23	30	40	48	90	95	(X)
	1958	5,008	5,802.0	23	29	37	45	90	95	(X)
	[12]1954	(NA)	4,586.8	22	28	(NA)	(NA)	(NA)	(NA)	(X)
2032	Canned specialties[8] 1977	172	[13]2,829.2	63	77	92	98	80	89	(X)
	1972	178	[13]1,876.6	67	81	94	98	81	91	(X)
	1970	(NA)	[13]1,634.2	66	81	(NA)	(NA)	(NA)	(NA)	1
	1967	150	[13]1,361.9	69	83	94	99	82	91	(X)
	1966	(NA)	[13]1,456.9	63	79	(NA)	(NA)	(NA)	(NA)	2
	1963	154	[13]1,169.3	67	83	94	99	80	91	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.								
2033	Canned fruits and vegetables.....1977..	648	[13]6,662.8	22	35	55	75	90	89	(X)
	1972..	765	[13]4,043.8	20	31	53	71	89	94	(X)
	1970..	(NA)	[13]3,629.1	21	33	(NA)	(NA)	(NA)	(NA)	1
	1967..	930	[13]3,467.8	22	34	52	70	90	93	(X)
	1966..	(NA)	[13]3,215.8	24	35	(NA)	(NA)	(NA)	(NA)	2
	1963..	1,135	[13]2,742.8	24	34	50	68	89	91	(X)
2034	Dehydrated fruits, vegetables, soups.....1977..	143	1,142.4	37	53	77	94	94	88	(X)
	1972..	133	607.3	33	51	76	94	95	88	(X)
	1970..	(NA)	464.3	33	52	(NA)	(NA)	(NA)	(NA)	2
	1967..	134	420.8	32	50	75	96	94	86	(X)
	1966..	(NA)	395.2	31	50	(NA)	(NA)	(NA)	(NA)	4
	1963..	126	318.7	37	56	80	96	96	89	(X)
	1958..	130	267.3	45	66	82	98	97	93	(X)
	1954..	119	192.2	48	69	87	(NA)	95	97	(X)
	1947..	120	51.1	56	71	86	(NA)	96	90	(X)
2035	Pickles, sauces, and salad dressing[14].....1977..	380	[13]2,996.5	55	62	73	86	69	86	(X)
	1972..	429	[13]1,166.7	33	46	62	81	80	78	(X)
	1970..	(NA)	[13]1,114.5	38	51	(NA)	(NA)	(NA)	(NA)	2
	1967..	479	[13]818.9	33	44	62	80	81	80	(X)
	1966..	(NA)	[13]817.5	33	44	(NA)	(NA)	(NA)	(NA)	3
	1963..	541	[13]677.3	36	46	64	79	79	82	(X)
2037	Frozen fruits and vegetables[15].....1977..	187	[13]3,297.5	22	40	65	86	89	89	(X)
	1972..	136	[13]1,848.8	29	43	69	91	86	91	(X)
	1970..	(NA)	[13]2,810.2	26	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	495	[13]2,081.6	24	36	55	74	92	90	(X)
	1966..	(NA)	[13]1,884.6	24	37	(NA)	(NA)	(NA)	(NA)	2
	1963..	566	[13]1,548.7	24	37	54	70	89	89	(X)
2038	Frozen specialties[15].....1977..	330	[13]3,404.4	40	55	73	88	93	93	(X)
	1972..	388	[13]1,935.5	42	54	70	86	94	92	(X)
2041	Flour and other grain mill products.....1977..	301	3,683.3	33	54	76	91	98	71	(X)
	1972..	340	2,380.0	33	53	75	91	97	74	(X)
	1970..	(NA)	2,410.1	30	46	(NA)	(NA)	(NA)	(NA)	1
	1967..	438	2,457.4	30	46	70	89	93	78	(X)
	1966..	(NA)	2,344.9	31	47	(NA)	(NA)	(NA)	(NA)	4
	1963..	510	2,176.5	35	50	71	88	94	78	(X)
	1958..	703	1,970.0	38	51	68	85	93	85	(X)
	1954..	692	1,858.9	40	52	68	(NA)	94	84	(X)
	1947..	1,084	2,526.6	29	41	57	(NA)	92	92	(X)
	1935..	(NA)	853.2	29	37	(NA)	(NA)	(NA)	(NA)	(X)
2043	Cereal breakfast foods.....1977..	32	2,497.5	89	98	99+	100	74	93	(X)
	1972..	34	1,125.5	90	98	99+	100	77	84	(X)
	1970..	(NA)	953.1	90	(D)	(NA)	(NA)	(NA)	(NA)	1
	1967..	30	793.0	88	97	99+	100	81	82	(X)
	1966..	(NA)	742.9	87	(S)	(NA)	(NA)	(NA)	(NA)	2
	1963..	35	625.1	86	96	99+	100	80	86	(X)
	1958..	34	433.0	83	95	99+	100	80	81	(X)
	1954..	37	345.8	88	95	99+	100	77	80	(X)
	1947..	55	284.3	79	91	98	(NA)	68	87	(X)
	1935..	(NA)	(NA)	68	82	(NA)	(NA)	(NA)	(NA)	(X)
2044	Rice milling.....1977..	47	1,263.4	51	76	95	100	100	96	(X)
	1972..	48	680.6	43	68	92	100	100	98	(X)
	1970..	(NA)	550.8	50	73	(NA)	(NA)	(NA)	(NA)	1
	1967..	54	548.4	46	68	89	99+	100	98	(X)
	1966..	(NA)	457.6	45	(S)	(NA)	(NA)	(NA)	(NA)	3
	1963..	62	423.0	44	66	86	99+	100	100	(X)
	1958..	61	282.3	43	64	84	99	100	100	(X)
	1954..	65	266.9	41	60	81	(NA)	99	100	(X)
	1947..	75	224.7	33	48	72	(NA)	100	100	(X)
	1935..	(NA)	(NA)	38	52	(NA)	(NA)	(NA)	(NA)	(X)
2045	Blended and prepared flour.....1977..	111	1,011.7	51	69	87	98	94	75	(X)
	1972..	115	704.6	68	81	92	98	77	65	(X)
	1970..	(NA)	549.8	(S)	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967..	126	547.5	68	82	93	98	78	63	(X)
	1966..	(NA)	502.9	69	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963..	140	434.0	70	82	92	98	78	62	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years** – Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.								
2046	Wet corn milling....1977..	24	2,014.8	63	89	99+	100	94	93	(X)
	1972..	26	832.3	63	86	99+	100	93	97	(X)
	1970..	(NA)	830.5	64	88	(NA)	(NA)	(NA)	(NA)	1
	1967..	32	751.3	68	89	99+	100	84	96	(X)
	1966..	(NA)	755.3	67	90	(NA)	(NA)	(NA)	(NA)	3
	1963..	49	622.4	71	93	99	100	83	93	(X)
	1958..	53	522.0	73	92	99	99+	91	96	(X)
	1954..	54	458.4	75	93	99	99+	91	96	(X)
	1947..	47	460.0	77	95	99+	100	88	96	(X)
	1935..	(NA)	(NA)	79	95	(NA)	(NA)	(NA)	(NA)	(X)
2047	Dog, cat, and other pet food[16].....1977..	218	3,086.7	58	74	86	93	92	88	(X)
	1972..	147	1,401.9	51	71	86	95	94	87	(X)
2048	Prepared feeds, n.e.c.[16].....1977..	1,435	8,786.8	22	30	45	60	96	95	(X)
	1972..	1,579	5,037.1	23	31	43	58	96	96	(X)
	1967 industry 2042, Prepared feeds for animals and fowls (1972 industries 2047 and 2048)[16].....1970..	(NA)	5,465.3	24	34	(NA)	(NA)	(NA)	(NA)	2
	1967..	1,835	4,796.9	23	31	42	58	97	94	(X)
	1966..	(NA)	4,438.4	23	31	(NA)	(NA)	(NA)	(NA)	3
	1963..	2,150	3,880.1	22	28	40	54	96	93	(X)
	1958..	2,016	2,942.0	22	30	43	56	97	91	(X)
	1954..	2,037	2,702.3	21	29	43	(NA)	95	90	(X)
	1947..	2,372	2,112.2	19	27	40	(NA)	95	89	(X)
	1935..	(NA)	(NA)	23	34	(NA)	(NA)	(NA)	(NA)	(X)
2051	Bread, cake, and related products...1977..	2,549	9,274.9	33	40	54	68	99	98	(X)
	1972..	2,800	6,132.0	29	39	50	62	98	99	(X)
	1970..	(NA)	5,607.2	29	39	(NA)	(NA)	(NA)	(NA)	1
	1967..	3,445	5,102.7	26	38	47	58	97	99	(X)
	1966..	(NA)	5,007.2	25	37	(NA)	(NA)	(NA)	(NA)	2
	1963..	4,339	4,506.0	23	35	45	56	98	99	(X)
	1958..	5,305	3,699.5	22	33	42	51	98	99	(X)
	1954..	5,470	3,067.0	20	31	40	(NA)	98	99	(X)
	1947..	5,985	2,403.6	16	26	36	(NA)	98	99	(X)
2052	Cookies and crackers.....1977..	263	2,960.5	59	68	83	93	94	94	(X)
	1972..	257	1,763.5	59	69	83	93	98	95	(X)
	1970..	(NA)	1,545.6	59	70	(NA)	(NA)	(NA)	(NA)	1
	1967..	286	1,363.8	59	70	82	91	97	93	(X)
	1966..	(NA)	1,327.3	59	68	(NA)	(NA)	(NA)	(NA)	2
	1963..	286	1,150.1	59	68	80	91	97	95	(X)
2061	Raw cane sugar[17].....1977..	49	704.0	42	62	86	100	100	99	(X)
	1972..	61	406.5	44	62	84	99+	100	96	(X)
	1970..	(NA)	364.4	45	63	(NA)	(NA)	(NA)	(NA)	1
	1967..	61	368.5	43	65	82	99+	100	100	(X)
	1966..	(NA)	313.5	50	72	(NA)	(NA)	(NA)	(NA)	7
	1963..	50	378.7	47	65	82	100	99	100	(X)
2062	Cane sugar refining[17].....1977..	27	2,260.0	63	90	99+	100	99	100	(X)
	1972..	22	1,742.7	59	85	99+	100	99	98	(X)
	1970..	(NA)	1,583.8	59	86	(NA)	(NA)	(NA)	(NA)	1
	1967..	22	1,375.7	59	82	99+	100	100	100	(X)
	1966..	(NA)	1,219.9	63	87	(NA)	(NA)	(NA)	(NA)	2
	1963..	16	1,271.2	63	83	100	(X)	100	100	(X)
2063	Beet sugar.....1977..	14	1,181.7	67	95	100	(X)	99	99	(X)
	1972..	16	880.2	66	96	100	(X)	99	100	(X)
	1970..	(NA)	726.6	65	(D)	(NA)	(NA)	(NA)	(NA)	1
	1967..	15	560.7	66	96	100	(X)	100	100	(X)
	1966..	(NA)	579.5	68	97	(NA)	(NA)	(NA)	(NA)	2
	1963..	11	564.1	66	97	100	(X)	100	100	(X)
	1958..	15	382.1	64	94	100	(X)	100	100	(X)
	1954..	15	291.2	66	96	100	(X)	100	100	(X)
	1947..	17	262.9	68	94	100	(X)	100	100	(X)
	1935..	(NA)	(NA)	68	89	(NA)	(NA)	(NA)	(NA)	(X)
2065	Confectionery products (1967 industry 2071).....1977..	867	4,498.4	38	49	66	79	95	94	(X)
	1972..	917	2,472.5	32	42	59	75	95	95	(X)
	1970..	(NA)	2,276.4	30	40	(NA)	(NA)	(NA)	(NA)	1
	1967..	1,091	1,870.2	25	35	52	69	97	94	(X)
	1966..	(NA)	1,681.5	24	34	(NA)	(NA)	(NA)	(NA)	3
	1963..	1,142	1,454.5	15	25	45	64	95	95	(X)
	1958..	1,301	1,170.1	18	27	44	62	96	96	(X)
	1954..	1,388	992.6	19	27	43	(NA)	95	96	(X)
	1947..	1,620	994.9	17	25	39	(NA)	97	97	(X)
	1935..	(NA)	(NA)	12	19	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.								
2066	Chocolate and cocoa products (1967 industry 2072)									
	1977	47	1,629.2	73	88	99	100	94	94	(X)
	1972	39	735.5	74	88	99	100	98	75	(X)
	1970	(NA)	601.5	79	90	(NA)	(NA)	(NA)	(NA)	1
	1967	27	520.5	77	89	99+	100	96	75	(X)
	1966	(NA)	471.0	78	90	(NA)	(NA)	(NA)	(NA)	2
	1963	24	479.1	75	87	99+	100	99	82	(X)
	1958	26	446.8	71	84	98	100	98	87	(X)
	1954	27	423.8	70	83	98	100	98	89	(X)
	1947	31	349.9	68	81	96	100	99	100	(X)
	1935	(NA)	(NA)	67	77	(NA)	100	(NA)	(NA)	(X)
2067	Chewing gum (1967 industry 2073)									
	1977	14	566.5	93	99	100	(X)	92	77	(X)
	1972	15	382.6	87	98	100	(X)	90	88	(X)
	1970	(NA)	407.7	85	97	(NA)	(NA)	(NA)	(NA)	1
	1967	19	303.7	86	96	100	(X)	86	95	(X)
	1966	(NA)	281.7	88	96	(NA)	(NA)	(NA)	(NA)	2
	1963	20	244.8	90	97	100	(X)	88	96	(X)
	1958	24	184.3	89	96	99+	100	91	96	(X)
	1954	27	158.1	86	94	99+	100	95	98	(X)
	1947	35	148.3	70	87	98	100	(D)	(D)	(X)
	1935	(NA)	(NA)	97	97	(NA)	(NA)	(NA)	(NA)	(X)
2074	Cottonseed oil mills (1967 industry 2091)									
	1977	62	859.2	45	62	85	99+	88	89	(X)
	1972	74	458.7	43	61	80	99	85	88	(X)
	1970	(NA)	375.8	39	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967	91	405.9	42	60	80	96	85	85	(X)
	1966	(NA)	560.8	38	56	(NA)	(NA)	(NA)	(NA)	5
	1963	115	555.2	41	56	72	91	89	91	(X)
	1958	125	383.4	42	54	71	91	92	92	(X)
	1954	145	546.4	47	57	72	(NA)	96	93	(X)
	1947	177	518.1	43	55	68	(NA)	90	99	(X)
	1935	(NA)	187.9	32	43	(NA)	(NA)	(NA)	(NA)	(X)
2075	Soybean oil mills (1967 industry 2092)									
	1977	65	7,580.0	54	73	94	99+	87	98	(X)
	1972	54	3,357.2	54	69	92	99+	85	96	(X)
	1970	(NA)	2,609.9	56	73	(NA)	(NA)	(NA)	(NA)	1
	1967	60	2,148.3	55	76	94	100	86	96	(X)
	1966	(NA)	2,009.8	57	78	(NA)	(NA)	(NA)	(NA)	2
	1963	68	1,473.4	50	70	88	99+	89	95	(X)
	1958	[18]66	999.2	40	63	86	99+	87	94	(X)
	1954	55	826.4	41	64	89	(NA)	88	96	(X)
	1947	105	585.7	44	63	81	(NA)	96	80	(X)
2076	Vegetable oil mills, n.e.c. (1967 industry 2093)									
	1977	37	360.8	54	80	98	100	86	58	(X)
	1972	28	261.0	70	89	99+	100	93	63	(X)
	1970	(NA)	237.5	60	84	(NA)	(NA)	(NA)	(NA)	1
	1967	34	236.7	56	78	99	100	80	74	(X)
	1966	(NA)	(265.7)	53	76	(NA)	(NA)	(NA)	(NA)	18
	1963	39	234.2	58	83	99	100	84	83	(X)
	[19]1958	38	216.1	66	93	(NA)	100	80	93	(X)
2077	Animal and marine fats and oils (1967 industry 2094)									
	1977	384	1,655.0	28	40	58	75	94	68	(X)
	1972	402	764.7	28	37	52	70	94	68	(X)
	1970	(NA)	790.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967	477	557.9	28	36	49	65	94	67	(X)
	1966	(NA)	(765.3)	25	32	(NA)	(NA)	(NA)	(NA)	12
	1963	516	474.0	23	31	43	61	94	66	(X)
	[20]1958	(NA)	362.4	20	30	(NA)	(NA)	(NA)	(NA)	(X)
2079	Shortening and cooking oils (1967 industry 2096)									
	1977	66	4,025.0	43	63	90	99+	89	77	(X)
	1972	64	2,068.1	44	70	93	99+	89	78	(X)
	1970	(NA)	1,887.5	46	72	(NA)	(NA)	(NA)	(NA)	1
	1967	63	1,725.6	43	67	93	99+	87	86	(X)
	1966	(NA)	1,687.4	47	73	(NA)	(NA)	(NA)	(NA)	2
	1963	65	1,324.3	42	64	92	99+	88	89	(X)
	[21]1958	62	1,152.6	44	69	(NA)	(NA)	93	90	(X)
2082	Malt beverages									
	1977	81	6,652.6	64	83	98	99+	100	100	(X)
	1972	108	4,054.4	52	70	91	99	100	100	(X)
	1970	(NA)	3,684.6	46	64	(NA)	(NA)	(NA)	(NA)	1
	1967	125	2,929.7	40	59	86	98	100	100	(X)
	1966	(NA)	2,699.9	39	56	(NA)	(NA)	(NA)	(NA)	2
	[22]1963	171	2,315.1	34	52	78	94	100	100	(X)
	1958	211	1,979.7	28	44	68	88	100	100	(X)
	1954	263	1,857.1	27	41	60	(NA)	100	100	(X)
	1947	404	1,316.0	21	30	44	(NA)	100	99	(X)
	1935	(NA)	(NA)	11	17	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.								
2083	Malt									
	1977	27	499.3	59	81	98	100	100	100	(X)
	1972	30	226.3	48	74	98	100	97	99	(X)
	1970	(NA)	202.8	(S)	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967	32	216.5	39	62	94	100-	97	100	(X)
	1966	(NA)	205.5	41	64	(NA)	(NA)	(NA)	(NA)	3
	1963	29	183.5	38	62	95	100	100	95	(X)
	1958	32	183.4	50	70	95	100	100	98	(X)
	1954	35	202.0	49	69	93	100	100	100	(X)
	1947	41	256.2	49	69	92	100	100	100	(X)
	1935	(NA)	(NA)	44	65	(NA)	(NA)	(NA)	(NA)	(X)
2084	Wines, brandy, and brandy spirits									
	1977	233	[9]1,362.5	49	62	84	94	98	97	(X)
	1972	183	[9]407.9	53	68	84	95	98	96	(X)
	1970	(NA)	[9]278.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967	175	[9]196.8	48	63	81	68	97	94	(X)
	1966	(NA)	[9]193.4	41	56	(NA)	(NA)	(NA)	(NA)	10
	1963	194	[9]137.3	44	62	76	90	98	99	(X)
	1958	216	[9]101.7	35	50	70	87	98	96	(X)
	1954	244	[9]96.7	38	54	71	(NA)	(NA)	(NA)	(X)
	[23]1947	379	[9]95.0	26	42	55	(NA)	(NA)	100	(X)
2085	Distilled liquor, except brandy									
	1977	64	[13]2,296.1	52	71	91	99+	98	98	(X)
	1972	76	[13]1,797.9	47	73	91	99	98	99	(X)
	1970	(NA)	[13]1,757.8	47	68	(NA)	(NA)	(NA)	(NA)	4
	1967	70	[13]1,364.2	54	71	88	99	98	98	(X)
	1966	(NA)	[13]1,331.6	55	72	(NA)	(NA)	(NA)	(NA)	5
	1963	70	[13]1,090.5	58	74	92	99	98	99	(X)
	1958	88	[13]830.2	60	77	94	99	98	100	(X)
	1954	98	[13]711.3	64	79	93	(NA)	99+	100	(X)
	1947	144	[13]870.2	75	86	95	(NA)	99	99	(X)
	1935	(NA)	(NA)	51	71	(NA)	(NA)	(NA)	(NA)	(X)
2086	Bottled and canned soft drinks									
	1977	1,758	10,007.2	15	22	36	50	98	97	(X)
	1972	2,273	5,453.8	14	21	32	44	98	97	(X)
	1970	(NA)	4,605.3	13	20	(NA)	(NA)	(NA)	(NA)	3
	1967	3,057	3,173.2	13	20	28	38	98	96	(X)
	1966	(NA)	2,734.9	14	20	(NA)	(NA)	(NA)	(NA)	2
	1963	3,569	2,210.9	12	17	24	34	98	95	(X)
	1958	3,989	1,434.9	11	15	22	28	98	98	(X)
	1954	4,334	1,113.1	10	14	21	(NA)	98	99	(X)
	1947	5,169	748.2	10	14	20	(NA)	99	99	(X)
	1935	(NA)	(NA)	8	13	(NA)	(NA)	(NA)	(NA)	(X)
2087	Flavoring extracts and sirups, n.e.c.									
	1977	319	2,511.3	64	71	78	88	92	86	(X)
	1972	350	1,472.0	66	74	82	89	87	86	(X)
	1970	(NA)	1,318.8	61	69	(NA)	(NA)	(NA)	(NA)	3
	1967	401	1,009.1	67	75	82	90	94	85	(X)
	1966	(NA)	974.4	63	71	(NA)	(NA)	(NA)	(NA)	3
	1963	492	729.7	62	70	78	86	90	78	(X)
	1958	498	494.9	55	67	78	87	90	83	(X)
	1954	530	446.1	53	63	75	(NA)	91	87	(X)
	1947	582	313.6	50	58	68	(NA)	93	89	(X)
	1935	(NA)	(NA)	47	54	(NA)	(NA)	(NA)	(NA)	(X)
2091	Canned and cured seafoods (1967 industry 2031)									
	1977	215	[13]1,440.6	52	65	79	91	81	96	(X)
	1972	258	[13]809.8	50	65	77	89	87	92	(X)
	1970	(NA)	[13]660.9	53	69	(NA)	(NA)	(NA)	(NA)	3
	1967	268	[13]523.1	44	59	73	85	92	95	(X)
	1966	(NA)	[13]548.1	42	56	(NA)	(NA)	(NA)	(NA)	4
	[17]1963	345	[13]452.5	38	51	56	80	92	95	(X)
2092	Fresh or frozen packaged fish (1967 industry 2036)									
	[24]1977	906	[13]2,664.9	14	23	42	59	97	97	(X)
	1972	470	[13]1,084.4	20	32	53	74	96	96	(X)
	1970	(NA)	[13]655.0	25	38	(NA)	(NA)	(NA)	(NA)	2
	1967	463	[13]557.4	26	38	56	72	97	94	(X)
	1966	(NA)	[13]492.7	33	48	(NA)	(NA)	(NA)	(NA)	6
	1963	528	[13]391.2	25	38	53	68	95	94	(X)
	1958	429	[13]282.7	18	30	47	68	93	96	(X)
	[25]1954	288	[13]164.6	24	37	56	(NA)	94	95	(X)
2095	Roasted coffee									
	1977	133	5,616.4	61	73	89	97	96	98	(X)
	1972	162	2,328.7	65	79	92	97	94	97	(X)
	1970	(NA)	2,405.5	58	74	(NA)	(NA)	(NA)	(NA)	1
	1967	206	2,092.2	53	71	87	96	91	99	(X)
	1966	(NA)	2,082.5	54	70	(NA)	(NA)	(NA)	(NA)	2
	1963	261	1,868.1	52	68	84	94	90	99	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years** – Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.								
2097	Manufactured ice....1977..	543	149.4	24	38	49	61	99	99	(X)
	1972..	610	116.4	32	44	53	63	100	99	(X)
	1970..	(NA)	115.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	6
	1967..	688	99.5	33	42	50	61	100	99	(X)
	1966..	(NA)	124.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1963..	862	122.6	32	39	48	59	99	100	(X)
	1958..	1,099	130.1	31	41	49	59	99	99	(X)
	1954..	1,430	143.3	26	32	41	(NA)	100	97	(X)
	1947..	2,206	273.4	22	30	40	(NA)	100	98	(X)
	1935..	(NA)	(NA)	20	28	(NA)	(NA)	(NA)	(NA)	(X)
2098	Macaroni and spaghetti....1977..	189	662.0	36	54	77	94	99	83	(X)
	1972..	179	348.3	38	53	76	93	99	91	(X)
	1970..	(NA)	315.7	(S)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1967..	190	266.0	31	48	73	93	97	98	(X)
	1966..	(NA)	237.7	31	46	(NA)	(NA)	(NA)	(NA)	4
	1963..	207	222.9	31	47	71	91	96	94	(X)
	1958..	205	167.5	25	41	64	87	97	98	(X)
	1954..	226	149.7	26	37	58	(NA)	98	95	(X)
	1947..	219	112.1	23	35	56	(NA)	98	99	(X)
	1935..	(NA)	(NA)	16	26	(NA)	(NA)	(NA)	(NA)	(X)
2099	Food preparations, n.e.c....1977..	1,872	6,531.0	28	36	51	64	89	83	(X)
	1972..	1,856	3,647.9	26	36	51	67	90	82	(X)
	1970..	(NA)	3,143.6	26	36	(NA)	(NA)	(NA)	(NA)	2
	1967..	1,824	2,413.3	24	35	51	66	90	82	(X)
	1966..	(NA)	2,206.0	26	37	(NA)	(NA)	(NA)	(NA)	7
	1963..	1,977	1,797.3	24	33	48	64	91	78	(X)
		MAJOR GROUP 21, TOBACCO MANUFACTURES								
2111	Cigarettes....1977..	8	[13]6,377.4	(D)	(D)	(X)	(X)	97	99	(X)
	1972..	7	[13]3,744.6	(D)	(D)	(X)	(X)	96	100	(X)
	1970..	(NA)	[13]3,503.4	84	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	8	[13]3,044.6	81	100	(X)	(X)	97	100	(X)
	1966..	(NA)	[13]2,860.3	81	100	(NA)	(NA)	(NA)	(NA)	2
	1963..	7	[13]2,655.3	80	100	(X)	(X)	97	100	(X)
	1958..	12	[13]2,159.1	79	99+	100	(X)	99	100	(X)
	1954..	12	[13]1,641.0	82	99+	100	(X)	99	100	(X)
	1947..	19	[13]1,131.9	90	99+	100	(X)	96	100	(X)
	1935..	(NA)	(NA)	89	99	(NA)	(NA)	(NA)	(NA)	(X)
2121	Cigars....1977..	94	[13]242.7	56	79	95	99	(D)	92	(X)
	1972..	113	[13]338.7	56	81	95	99	100	91	(X)
	1970..	(NA)	[13]375.3	61	83	(NA)	(NA)	(NA)	(NA)	1
	1967..	126	[13]363.7	59	83	96	99+	100	98	(X)
	1966..	(NA)	[13]378.8	58	82	(NA)	(NA)	(NA)	(NA)	6
	1963..	164	[13]358.5	59	81	92	99	100	100	(X)
	1958..	247	[13]351.6	54	75	86	96	100	100	(X)
	1954..	375	[13]339.5	44	64	80	(NA)	99	100	(X)
	1947..	765	[13]311.4	41	57	76	(NA)	99	100	(X)
	1935..	(NA)	(NA)	38	50	(NA)	(NA)	(NA)	(NA)	(X)
2131	Chewing and smoking tobacco....1977..	28	[13]354.3	81	95	99+	100	97	75	(X)
	1972..	28	[13]180.2	71	92	99+	100	96	64	(X)
	1970..	(NA)	[13]178.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	41	[13]122.2	51	81	98	100	96	58	(X)
	1966..	(NA)	[13]146.9	59	82	(NA)	(NA)	(NA)	(NA)	6
	1963..	45	[13]139.5	58	83	98	100	97	61	(X)
	1958..	52	[13]173.7	57	82	98	99+	98	88	(X)
	1954..	58	[13]161.7	58	82	99	(NA)	96	89	(X)
	1947..	65	[13]140.1	61	81	98	(NA)	98	86	(X)
	1935..	(NA)	(NA)	56	84	(NA)	(NA)	(NA)	(NA)	(X)
2141	Tobacco stemming and redrying....1977..	38	[13]2,076.2	67	85	98	100	(D)	94	(X)
	1972..	46	[13]1,656.8	67	87	98	100	100	97	(X)
	1970..	(NA)	[13]1,288.3	66	87	(NA)	(NA)	(NA)	(NA)	1
	1967..	54	[13]1,373.1	63	87	97	99+	100	99	(X)
	1966..	(NA)	[13]1,386.8	69	91	(NA)	(NA)	(NA)	(NA)	5
	1963..	59	[13]1,366.6	70	92	97	99+	100	100	(X)
	1958..	64	[13]1,037.0	73	90	96	99+	100	100	(X)
	1954..	72	[13]1,043.2	79	91	96	(NA)	100	99	(X)
	1947..	93	[13]957.8	88	95	97	(NA)	100	98	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS								
2211	Weaving mills, cotton.....1977..	211	4,431.2	39	58	79	95	84	66	(X)
	1972..	190	2,660.6	31	48	72	93	84	60	(X)
	1970..	(NA)	2,547.3	33	50	(NA)	(NA)	(NA)	(NA)	1
	1967..	218	3,327.7	30	48	68	88	87	79	(X)
	1966..	(NA)	3,561.9	30	48	(NA)	(NA)	(NA)	(NA)	2
	1963..	229	3,104.1	30	46	67	87	92	80	(X)
	1958..	321	2,719.4	25	40	59	79	94	82	(X)
	1954..	413	2,789.6	18	29	49	(NA)	94	84	(X)
	1947..	(26)	2,912.7	(26)	(26)	(26)	(26)	(26)	(26)	(X)
2221	Weaving mills, manmade fiber and silk.....1977..	267	6,325.9	42	58	76	90	86	74	(X)
	1972..	256	3,856.6	39	54	72	88	81	74	(X)
	1970..	(NA)	3,138.1	42	54	(NA)	(NA)	(NA)	(NA)	1
	1967..	272	2,289.6	46	54	68	86	85	74	(X)
	1966..	(NA)	2,240.9	40	50	(NA)	(NA)	(NA)	(NA)	2
	1963..	277	1,722.4	39	48	64	82	86	82	(X)
	1958..	328	1,230.7	34	44	62	78	85	88	(X)
	1954..	396	1,142.6	30	39	55	(NA)	87	90	(X)
	1947..	432	1,002.9	31	39	56	(NA)	85	(NA)	(X)
2231	Weaving and finishing mills, wool...1977..	153	583.3	31	47	74	95	83	80	(X)
	1972..	178	450.1	38	49	70	90	84	83	(X)
	1970..	(NA)	770.4	54	62	(NA)	(NA)	(NA)	(NA)	1
	1967..	262	1,090.0	55	62	76	88	82	96	(X)
	1966..	(NA)	1,166.8	56	62	(NA)	(NA)	(NA)	(NA)	3
	1963..	304	1,010.7	51	58	71	85	86	96	(X)
2241	Narrow fabric mills[27].....1977..	291	682.9	17	28	48	73	96	97	(X)
	1972..	324	566.2	20	31	49	71	93	97	(X)
	1970..	(NA)	513.7	27	37	(NA)	(NA)	(NA)	(NA)	3
	1967..	345	445.1	19	31	48	70	94	96	(X)
	1966..	(NA)	427.8	23	35	(NA)	(NA)	(NA)	(NA)	2
	1963..	350	349.1	20	30	47	68	91	97	(X)
	1958..	455	289.1	16	26	41	62	94	97	(X)
	1954..	489	250.2	13	21	37	(NA)	96	94	(X)
	1947..	445	215.2	17	25	41	(NA)	95	98	(X)
2251	Women's hosiery, except socks.....1977..	176	871.2	50	62	78	94	91	95	(X)
	1972..	256	984.7	35	49	69	87	94	97	(X)
	1970..	(NA)	1,352.6	38	52	(NA)	(NA)	(NA)	(NA)	1
	1967..	302	835.0	32	44	64	82	97	95	(X)
	1966..	(NA)	733.7	34	45	(NA)	(NA)	(NA)	(NA)	7
	1963..	363	606.6	34	47	64	79	96	94	(X)
2252	Hosiery, n.e.c.....1977..	382	921.3	20	30	46	66	96	96	(X)
	1972..	375	600.6	19	29	46	66	95	94	(X)
	1970..	(NA)	566.6	24	33	(NA)	(NA)	(NA)	(NA)	2
	1967..	423	550.1	25	32	46	65	90	95	(X)
	1966..	(NA)	576.4	22	28	(NA)	(NA)	(NA)	(NA)	6
	1963..	504	451.1	18	25	38	58	91	96	(X)
2253	Knit outerwear mills[28].....1977..	903	2,335.9	17	27	46	63	90	53	(X)
	1972..	882	1,703.8	16	26	44	59	92	63	(X)
	1970..	(NA)	1,237.0	14	21	(NA)	(NA)	(NA)	(NA)	2
	1967..	1,156	1,288.0	15	22	33	47	93	65	(X)
	1966..	(NA)	1,273.1	14	21	(NA)	(NA)	(NA)	(NA)	7
	1963..	1,175	1,045.5	11	16	27	43	93	68	(X)
	1958..	1,111	744.3	7	10	20	35	91	74	(X)
	1954..	1,081	544.1	6	10	20	(NA)	93	73	(X)
	1947..	1,196	330.5	8	13	24	(NA)	91	82	(X)
2254	Knit underwear mills[28].....1977..	80	648.9	42	59	85	99	80	86	(X)
	1972..	74	544.6	46	61	85	98	90	94	(X)
	1970..	(NA)	499.6	37	53	(NA)	(NA)	(NA)	(NA)	4
	1967..	99	445.3	36	54	77	95	85	35	(X)
	1966..	104	364.8	33	54	(NA)	(NA)	(NA)	(NA)	2
	1963..	104	364.8	33	52	73	93	89	38	(X)
	1958..	133	299.5	28	43	64	87	88	89	(X)
	1954..	140	256.3	26	40	64	(NA)	88	(NA)	(X)
	1947..	140	295.4	21	34	57	(NA)	87	70	(X)
2257	Circular knit fabric mills[29].....1977..	462	3,169.4	20	31	51	73	90	88	(X)
	1972..	629	2,808.8	23	31	49	69	93	91	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 22. TEXTILE MILL PRODUCTS--Con.								
2258	Warp knit fabric mills.....1977..	213	1,427.2	26	40	64	86	93	83	(X)
	1972..	174	987.7	27	46	72	91	90	95	(X)
	1967 industry 2256, Knit fabric mills (1972 industries 2257 and 2258)[28] [29].....1970..	(NA)	1,881.8	17	28	(NA)	(NA)	(NA)	(NA)	5
	1967..	489	1,362.2	15	24	42	65	97	92	(X)
	1966..	(NA)	1,143.6	16	25	(NA)	(NA)	(NA)	(NA)	4
	1963..	487	817.4	18	25	42	65	95	93	(X)
	1958..	336	486.1	18	30	51	72	94	90	(X)
	1954..	324	377.4	17	29	51	(NA)	94	91	(X)
	1947..	297	197.5	27	37	56	(NA)	93	88	(X)
2259	Knitting mills, n.e.c.[28].....1977..	191	95.7	30	42	59	80	97	81	(X)
	1972..	72	73.1	52	67	83	98	93	78	(X)
	1970..	(NA)	48.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	6
	1967..	61	38.8	54	71	89	99	96	19	(X)
	1966..	(NA)	(55.4)	32	(S)	(NA)	(NA)	(NA)	(NA)	22
	1963..	86	40.7	34	50	75	96	93	22	(X)
	[30]1958..	71	29.2	34	54	(NA)	(NA)	91	78	(X)
2261	Finishing plants, cotton.....1977..	194	759.5	29	47	75	93	83	39	(X)
	1972..	182	623.3	27	41	67	89	79	41	(X)
	1970..	(NA)	603.0	34	48	(NA)	(NA)	(NA)	(NA)	1
	1967..	202	893.9	42	59	64	87	75	58	(X)
	1966..	(NA)	853.9	44	60	(NA)	(NA)	(NA)	(NA)	4
	1963..	220	869.7	45	59	77	92	81	60	(X)
2262	Finishing plants, manmade fiber and silk.....1977..	248	2,404.3	60	70	80	91	80	57	(X)
	1972..	219	1,365.2	56	64	77	89	77	57	(X)
	1970..	(NA)	1,011.6	45	54	(NA)	(NA)	(NA)	(NA)	1
	1967..	212	550.2	37	49	63	81	90	45	(X)
	1966..	(NA)	550.3	42	54	(NA)	(NA)	(NA)	(NA)	3
	1963..	193	323.7	31	44	61	81	91	46	(X)
2269	Finishing plants, n.e.c.....1977..	176	830.6	30	43	66	86	95	43	(X)
	1972..	189	637.3	(S)	(S)	(S)	86	92	54	(X)
	1970..	(NA)	346.3	26	40	(NA)	(NA)	(NA)	(NA)	2
	1967..	187	290.9	29	44	64	86	84	52	(X)
	1966..	(NA)	273.0	32	48	(NA)	(NA)	(NA)	(NA)	3
	1963..	174	206.9	32	47	68	86	89	64	(X)
2271	Woven carpets and rugs.....1977..	71	[9]47.1	67	81	94	99+	(D)	81	(X)
	1972..	64	[9]93.2	78	91	98	99+	89	85	(X)
	1970..	(NA)	[9]102.1	80	90	(NA)	(NA)	(NA)	(NA)	1
	1967..	55	[9]104.7	76	93	99	99+	84	84	(X)
	1966..	(NA)	[9]115.7	75	88	(NA)	(NA)	(NA)	(NA)	6
	1963..	56	[9]120.0	67	88	98	99+	77	92	(X)
2272	Tufted carpets and rugs.....1977..	397	4,520.7	21	35	59	79	96	99	(X)
	1972..	333	2,775.2	20	33	56	78	97	98	(X)
	1970..	(NA)	1,898.3	25	40	(NA)	(NA)	(NA)	(NA)	2
	1967..	210	1,426.9	26	41	67	87	96	99	(X)
	1966..	(NA)	1,206.4	26	43	(NA)	(NA)	(NA)	(NA)	2
	1963..	167	801.8	25	41	65	87	96	96	(X)
2279	Carpets and rugs, n.e.c.....1977..	72	115.2	69	82	93	99	(D)	74	(X)
	1972..	79	157.9	78	88	94	99	62	71	(X)
	1970..	(NA)	200.6	76	88	(NA)	(NA)	(NA)	(NA)	3
	1967..	78	90.2	78	84	93	99	83	69	(X)
	1966..	(NA)	75.4	67	75	(NA)	(NA)	(NA)	(NA)	11
	1963..	103	29.6	32	49	76	95	89	46	(X)
2281	Yarn mills, except wool.....1977..	274	3,864.9	19	31	51	75	92	72	(X)
	1972..	263	2,248.3	21	31	50	74	92	86	(X)
	1970..	(NA)	1,644.9	24	33	(NA)	(NA)	(NA)	(NA)	2
	1967..	256	1,422.5	21	31	51	73	95	84	(X)
	1966..	(NA)	1,478.5	19	30	(NA)	(NA)	(NA)	(NA)	2
	1963..	234	1,067.0	17	27	46	68	96	83	(X)
2282	Throwing and winding mills (1972 industry 2282)[31].....1977..	170	1,510.1	44	54	71	89	92	55	(X)
	1972 industry 2282, Throwing and winding mills (1977 industry 2282)[31].....1972..	177	1,427.6	35	51	74	92	94	74	(X)
	1970..	(NA)	871.8	59	72	(NA)	(NA)	(NA)	(NA)	1
	1967..	159	568.0	50	62	79	93	97	91	(X)
	1966..	(NA)	438.4	51	65	(NA)	(NA)	(NA)	(NA)	3
	1963..	165	319.3	43	59	78	92	95	87	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.								
2283	Wool yarn mills.....1977..	71	194.9	51	66	87	99	90	71	(X)
	1972..	91	221.4	45	59	83	97	72	69	(X)
	1970..	(NA)	365.6	35	53	(NA)	(NA)	(NA)	(NA)	3
	1967..	127	361.5	26	42	68	91	79	80	(X)
	1966..	(NA)	407.3	29	45	(NA)	(NA)	(NA)	(NA)	3
	1963..	136	422.2	26	41	65	90	85	82	(X)
2284	Thread mills[27].....1977..	58	544.4	57	77	93	99+	96	91	(X)
	1972..	61	345.4	62	77	92	99+	92	90	(X)
	1970..	(NA)	300.7	64	83	(NA)	(NA)	(NA)	(NA)	2
	1967..	63	256.6	62	81	95	99+	90	90	(X)
	1966..	(NA)	264.3	62	80	(NA)	(NA)	(NA)	(NA)	3
	1963..	59	194.1	68	85	96	99+	93	90	(X)
	1958..	72	175.5	66	79	93	99+	90	91	(X)
	1954..	84	183.7	66	78	92	(NA)	88	94	(X)
	1947..	83	154.3	65	78	90	(NA)	85	(NA)	(X)
2291	Felt goods, except woven felts and hats.....1977..	37	197.7	58	81	98	100	82	82	(X)
	1972..	38	146.5	51	75	96	100	77	82	(X)
	1970..	(NA)	109.5	59	84	(NA)	(NA)	(NA)	(NA)	4
	1967..	33	133.6	61	80	98	100	76	72	(X)
	1966..	(NA)	144.9	59	80	(NA)	(NA)	(NA)	(NA)	4
	1963..	28	134.0	54	75	98	100	86	88	(X)
	1958..	[32]61	91.4	45	66	94	99+	89	86	(X)
	1954..	65	92.9	41	65	92	(NA)	90	92	(X)
	1947..	37	59.8	56	81	97	100	95	97	(X)
	1935..	(NA)	(NA)	61	81	(NA)	(NA)	(NA)	(NA)	(X)
2292	Lace goods.....1977..	68	45.9	51	68	87	99	98	98	(X)
	1972..	99	47.1	34	51	75	94	93	89	(X)
	1970..	(NA)	92.7	29	47	(NA)	(NA)	(NA)	(NA)	8
	1967..	134	65.7	31	52	74	92	99	94	(X)
	1966..	(NA)	(52.6)	36	62	(NA)	(NA)	(NA)	(NA)	16
	1963..	[33]145	53.0	27	47	71	89	98	91	(X)
	1958..	[32]204	61.9	21	36	63	82	98	95	(X)
	1954..	133	59.8	23	39	64	(NA)	99	94	(X)
	1947..	93	68.7	26	47	77	(NA)	94	97	(X)
	1935..	(NA)	(NA)	38	59	(NA)	(NA)	(NA)	(NA)	(X)
2293	Paddings and upholstery filling.....1977..	113	251.8	30	47	70	92	92	84	(X)
	1972..	119	134.6	28	40	62	87	86	73	(X)
	1970..	(NA)	173.9	35	51	(NA)	(NA)	(NA)	(NA)	1
	1967..	133	168.1	34	50	69	88	86	82	(X)
	1966..	(NA)	204.6	29	41	(NA)	(NA)	(NA)	(NA)	11
	1963..	[33]168	156.5	28	42	64	85	84	81	(X)
	1958..	177	132.2	25	38	60	81	92	88	(X)
	1954..	179	148.8	32	50	69	(NA)	91	90	(X)
	1947..	124	110.4	41	53	74	(NA)	96	92	(X)
2294	Processed textile waste.....1977..	95	178.4	43	60	82	96	98	95	(X)
	1972..	102	133.8	54	68	86	97	100	92	(X)
	1970..	(NA)	86.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1967..	132	91.5	36	50	70	89	96	92	(X)
	1966..	(NA)	118.7	41	49	(NA)	(NA)	(NA)	(NA)	6
	1963..	[33]137	87.5	38	52	69	87	95	86	(X)
	1958..	[32]181	80.8	21	34	56	79	96	93	(X)
	1954..	198	85.0	18	31	55	(NA)	96	93	(X)
	1947..	177	57.3	23	35	57	(NA)	94	91	(X)
2295	Coated fabrics, not rubberized.....1977..	175	1,059.0	39	56	74	89	87	89	(X)
	1972..	185	865.8	35	52	73	88	87	87	(X)
	1970..	(NA)	677.8	33	53	(NA)	(NA)	(NA)	(NA)	2
	1967..	157	616.2	31	48	70	88	87	89	(X)
	1966..	(NA)	595.2	32	49	(NA)	(NA)	(NA)	(NA)	7
	1963..	149	435.7	34	54	79	92	86	83	(X)
	1958..	122	249.8	42	57	76	95	82	80	(X)
	1954..	103	212.3	43	61	82	(NA)	86	82	(X)
	1947..	106	162.6	34	53	81	(NA)	84	82	(X)
2296	Tire cord and fabric.....1977..	8	1,013.2	80	100	(X)	(X)	90	99	(X)
	1972..	9	685.1	84	98	(D)	(X)	91	97	(X)
	1970..	(NA)	597.1	83	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	12	444.1	83	96	100	(X)	84	90	(X)
	1966..	(NA)	504.7	82	94	(NA)	(NA)	(NA)	(NA)	2
	1963..	12	375.7	79	96	100	(X)	87	91	(X)
2297	Nonwoven fabrics[34].....1977..	81	864.4	36	55	81	98	86	66	(X)
	1972..	68	397.4	43	62	84	99	84	61	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.									
2298	Cordage and twine.....1977..	151	332.2	34	50	73	91	90	95	(X)
	1972..	134	191.0	36	56	76	91	86	92	(X)
	1970..	(NA)	149.0	42	59	(NA)	(NA)	(NA)	(NA)	3
	1967..	147	188.8	34	52	77	94	86	88	(X)
	1966..	(NA)	164.7	38	54	(NA)	(NA)	(NA)	(NA)	5
	1963..	148	149.3	35	53	76	93	90	87	(X)
	1958..	128	135.3	38	56	77	93	92	93	(X)
	1954..	119	159.9	40	59	81	(NA)	90	89	(X)
	1947..	132	170.7	33	53	77	(NA)	87	87	(X)
	1935..	(NA)	(NA)	31	44	(NA)	(NA)	(NA)	(NA)	(X)
2299	Textile goods, n.e.c.[34].....1977..	432	231.1	21	35	48	65	96	68	(X)
	1972..	338	211.8	25	36	54	72	97	77	(X)
	MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS									
2311	Men's and boys' suits and coats[28]...1977..	619	2,767.5	21	32	48	67	93	92	(X)
	1972..	721	2,396.9	19	31	48	65	93	96	(X)
	1970..	(NA)	1,912.4	19	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	904	1,912.1	17	27	43	59	94	97	(X)
	1966..	(NA)	1,849.5	17	26	(NA)	(NA)	(NA)	(NA)	3
	1963..	1,031	1,526.0	14	23	38	56	93	97	(X)
	1958..	1,275	1,260.9	11	19	32	49	91	97	(X)
	1954..	1,255	1,140.7	11	18	31	(NA)	91	96	(X)
	1947..	1,761	1,412.8	9	15	26	(NA)	92	97	(X)
2321	Men's and boys' dress shirts and nightwear[28].....1977..	669	2,934.6	17	28	48	65	92	[35]92	(X)
	1972..	516	2,104.3	22	31	50	69	91	83	(X)
	1970..	(NA)	1,679.4	28	40	(NA)	(NA)	(NA)	(NA)	2
	1967..	570	1,448.2	23	33	50	67	90	82	(X)
	1966..	(NA)	1,348.1	25	36	(NA)	(NA)	(NA)	(NA)	3
	1963..	659	1,295.1	22	32	49	67	86	83	(X)
	1958..	737	942.1	16	26	41	59	90	82	(X)
	1954..	838	894.0	17	26	40	(NA)	91	85	(X)
	1947..	922	731.3	19	29	43	(NA)	94	87	(X)
2322	Men's and boys' underwear[28].....1977..	56	419.8	61	82	95	99+	87	[35]91	(X)
	1972..	67	239.3	49	71	91	99+	94	34	(X)
	1970..	(NA)	160.9	54	70	(NA)	(NA)	(NA)	(NA)	4
	1967..	71	180.2	43	60	87	99	94	37	(X)
	1966..	(NA)	181.6	42	57	(NA)	(NA)	(NA)	(NA)	8
	1963..	65	134.9	42	59	86	99	89	31	(X)
	1958..	79	100.2	30	46	79	88	86	30	(X)
	1954..	72	74.3	43	56	85	(NA)	88	28	(X)
	1947..	94	49.8	47	59	80	(NA)	95	21	(X)
2323	Men's and boys' neckwear[28].....1977..	199	223.8	27	39	58	84	100	97	(X)
	1972..	291	294.9	26	36	53	74	99	94	(X)
	1970..	(NA)	205.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1967..	296	144.7	23	32	48	70	98	96	(X)
	1966..	(NA)	(157.7)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	10
	1963..	341	121.3	19	28	43	65	98	98	(X)
	1958..	362	95.4	17	24	39	59	97	98	(X)
	1954..	403	100.0	16	24	41	(NA)	98	92	(X)
	1947..	408	113.7	20	29	46	(NA)	97	93	(X)
2327	Men's and boys' separate trousers[28].....1977..	404	1,718.0	25	40	59	77	84	88	(X)
	1972..	463	1,745.0	29	41	60	76	87	88	(X)
	1970..	(NA)	1,415.6	26	34	(NA)	(NA)	(NA)	(NA)	2
	1967..	579	1,132.4	20	30	46	64	89	82	(X)
	1966..	(NA)	1,041.6	20	29	(NA)	(NA)	(NA)	(NA)	4
	1963..	667	824.2	16	25	40	58	85	81	(X)
	1958..	720	442.1	9	17	30	50	89	71	(X)
	1954..	768	397.7	12	19	33	(NA)	89	75	(X)
	1947..	956	334.0	12	18	29	(NA)	86	70	(X)
2328	Men's and boys' work clothing.....1977..	347	3,641.9	49	60	73	86	89	94	(X)
	1972..	297	1,738.0	38	53	70	84	85	89	(X)
	1970..	(NA)	1,367.5	40	53	(NA)	(NA)	(NA)	(NA)	1
	1967..	277	1,155.0	32	45	64	81	84	90	(X)
	1966..	(NA)	1,051.7	28	42	(NA)	(NA)	(NA)	(NA)	3
	1963..	301	824.7	27	40	59	79	82	91	(X)
2329	Men's and boys' clothing, n.e.c.....1977..	553	1,065.1	12	22	38	59	83	[35]80	(X)
	1972..	481	783.2	20	27	41	63	90	61	(X)
	1970..	(NA)	649.1	18	25	(NA)	(NA)	(NA)	(NA)	5
	1967..	517	677.7	23	30	44	61	80	61	(X)
	1966..	(NA)	623.0	28	37	(NA)	(NA)	(NA)	(NA)	5
	1963..	529	397.6	13	19	32	51	85	50	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.								
2331	Women's and misses' blouses and waists[27] [28]									
	1977	1,292	2,333.6	12	18	30	47	85	75	(X)
	1972	890	1,254.9	18	26	38	55	83	74	(X)
	1970	(NA)	929.9	22	29	(NA)	(NA)	(NA)	(NA)	4
	1967	921	727.0	15	24	37	53	84	75	(X)
	1966	(NA)	797.1	19	25	(NA)	(NA)	(NA)	(NA)	6
	1963	1,130	610.2	11	15	27	44	88	74	(X)
	1958	1,222	414.6	10	14	24	39	89	78	(X)
	1954	1,233	375.3	11	16	25	(NA)	93	85	(X)
	1947	1,356	276.6	7	11	20	(NA)	93	88	(X)
2335	Women's and misses' dresses									
	1977	6,753	4,188.6	8	12	19	28	95	95	(X)
	1972	5,295	3,580.0	9	13	18	28	96	96	(X)
	1970	(NA)	3,365.6	10	13	(NA)	(NA)	(NA)	(NA)	4
	1967	5,008	3,086.3	7	9	14	23	97	95	(X)
	1966	(NA)	2,507.6	8	10	(NA)	(NA)	(NA)	(NA)	3
	1963	4,577	2,411.0	6	9	14	23	97	96	(X)
2337	Women's and misses' suits and coats[28]									
	1977	1,558	2,912.9	15	20	31	45	80	83	(X)
	1972	1,548	1,805.3	13	18	26	40	84	80	(X)
	1970	(NA)	1,605.1	10	14	(NA)	(NA)	(NA)	(NA)	4
	1967	2,058	1,776.4	12	15	22	34	86	90	(X)
	1966	(NA)	1,779.8	9	13	(NA)	(NA)	(NA)	(NA)	5
	1963	2,481	1,522.7	8	11	17	28	89	92	(X)
	1958	2,651	1,220.2	3	5	11	21	93	93	(X)
	1954	3,178	1,261.3	3	6	11	(NA)	94	93	(X)
	1947	(26)	1,092.8	(26)	(26)	(26)	(26)	(26)	(26)	(X)
2339	Women's and misses' outerwear, n.e.c									
	1977	1,625	3,285.1	14	20	33	50	80	[35]81	(X)
	1972	1,247	1,638.0	18	25	37	52	81	62	(X)
	1970	(NA)	1,256.6	22	31	(NA)	(NA)	(NA)	(NA)	6
	1967	1,048	944.3	16	21	33	50	77	59	(X)
	1966	(NA)	(960.0)	14	22	(NA)	(NA)	(NA)	(NA)	6
	1963	1,252	786.0	14	22	33	48	82	59	(X)
2341	Women's and children's underwear[28]									
	1977	548	1,780.8	22	29	43	64	95	87	(X)
	1972	609	1,331.9	15	23	41	63	94	88	(X)
	1970	(NA)	1,201.2	16	23	(NA)	(NA)	(NA)	(NA)	2
	1967	778	1,116.8	15	22	37	56	94	86	(X)
	1966	(NA)	1,042.2	15	22	(NA)	(NA)	(NA)	(NA)	5
	1963	978	976.1	11	17	31	50	94	[36]85	(X)
	1958	1,170	804.9	8	13	24	41	96	83	(X)
	1954	1,276	770.0	8	13	24	(NA)	95	98	(X)
	1947	1,467	575.8	6	11	19	(NA)	(NA)	(NA)	(X)
2342	Brassieres and allied garments[28]									
	1977	150	650.0	36	52	77	92	92	99	(X)
	1972	220	647.0	31	45	67	86	96	90	(X)
	1970	(NA)	645.7	30	44	(NA)	(NA)	(NA)	(NA)	2
	1967	254	663.3	30	43	62	81	95	97	(X)
	1966	(NA)	667.2	33	48	(NA)	(NA)	(NA)	(NA)	4
	1963	296	593.9	29	45	64	81	96	95	(X)
	1958	363	462.2	29	43	59	75	96	98	(X)
	1954	424	394.8	26	38	57	(NA)	96	(NA)	(X)
	1947	493	277.8	16	30	47	(NA)	(NA)	(NA)	(X)
2351	Millinery[28]									
	1977	151	75.1	19	28	48	79	99	(D)	(X)
	1972	215	58.1	17	26	44	68	99	96	(X)
	1970	(NA)	64.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	14
	1967	477	112.4	12	17	27	45	99	98	(X)
	1966	(NA)	(115.4)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	20
	1963	710	163.2	9	14	22	36	100	100	(X)
	1958	801	188.3	6	10	19	33	100	99	(X)
	1954	865	173.1	7	12	20	(NA)	99	98	(X)
	1947	927	177.7	7	10	18	(NA)	99	98	(X)
2352	Hats and caps, except millinery[28]									
	1977	230	284.8	27	43	63	83	96	94	(X)
	1972	253	171.0	26	39	57	77	96	99	(X)
	1970	(NA)	169.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1967	340	194.5	32	41	58	75	99	99	(X)
	1966	(NA)	(148.3)	36	47	(NA)	(NA)	(NA)	(NA)	6
	1963	413	171.1	31	40	52	69	98	98	(X)
	[37]1958	(NA)	163.7	28	36	(NA)	(NA)	98	98	(X)
2361	Children's dresses and blouses									
	1977	455	824.7	15	23	41	64	89	[35]87	(X)
	1972	439	655.2	17	26	42	63	89	86	(X)
	1970	(NA)	486.9	14	21	(NA)	(NA)	(NA)	(NA)	5
	1967	575	496.0	14	19	32	53	92	82	(X)
	1966	(NA)	492.7	14	21	(NA)	(NA)	(NA)	(NA)	5
	1963	627	433.3	12	20	34	54	91	32	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.								
2363	Children's coats and suits[28]									
	1977	108	173.8	32	47	72	92	87	78	(X)
	1972	155	188.5	18	31	55	83	91	85	(X)
	1970	(NA)	163.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	6
	1967	216	175.3	18	31	52	76	93	84	(X)
	1966	(NA)	185.4	15	(S)	(NA)	(NA)	(NA)	(NA)	9
	1963	269	162.9	14	24	43	67	92	86	(X)
	1958	361	163.7	11	19	35	58	93	83	(X)
	1954	400	172.1	14	22	35	(NA)	91	81	(X)
	1947	(26)	114.2	(26)	(26)	(26)	(26)	(26)	(26)	(X)
2369	Children's outerwear, n.e.c.									
	1977	307	718.8	24	36	57	76	84	3577	(X)
	1972	370	578.2	22	32	48	69	85	70	(X)
	1970	(NA)	476.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	456	456.2	20	30	45	64	80	68	(X)
	1966	(NA)	438.1	18	26	(NA)	(NA)	(NA)	(NA)	6
	1963	602	419.6	16	23	35	54	81	69	(X)
2371	Fur goods[28]									
	1977	620	383.4	11	19	31	51	100	99	(X)
	1972	797	220.0	7	12	23	39	99	99	(X)
	1970	(NA)	271.4	6	10	(NA)	(NA)	(NA)	(NA)	14
	1967	1,304	333.2	5	8	15	27	99	100	(X)
	1966	(NA)	365.1	4	7	(NA)	(NA)	(NA)	(NA)	11
	1963	1,591	334.4	5	8	15	26	99	100	(X)
	1958	1,651	275.3	5	8	14	25	99	100	(X)
	1954	1,972	227.5	4	6	11	(NA)	99	100	(X)
	1947	2,227	357.0	3	5	9	(NA)	100	100	(X)
	1935	(NA)	(NA)	2	4	(NA)	(NA)	(NA)	(NA)	(X)
2381	Fabric dress and work gloves[28]									
	1977	100	312.4	44	63	82	96	91	84	(X)
	1972	106	198.8	41	59	80	95	93	86	(X)
	1970	(NA)	185.4	35	53	(NA)	(NA)	(NA)	(NA)	3
	1967	140	176.6	33	49	72	92	91	87	(X)
	1966	(NA)	(205.9)	27	40	(NA)	(NA)	(NA)	(NA)	21
	1963	170	149.5	31	45	69	88	94	82	(X)
	[38]1958	189	112.1	30	46	(NA)	(NA)	94	84	(X)
2384	Robes and dressing gowns[28]									
	1977	137	288.3	25	44	69	90	89	93	(X)
	1972	172	202.8	24	39	59	83	93	97	(X)
	1970	(NA)	198.8	20	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	237	200.2	16	27	49	77	96	95	(X)
	1966	(NA)	(198.3)	20	(S)	(NA)	(NA)	(NA)	(NA)	16
	1963	268	173.5	17	28	48	75	96	94	(X)
	1958	278	132.5	14	23	43	68	93	96	(X)
	1954	322	108.0	15	25	45	(NA)	93	84	(X)
	1947	370	103.0	10	19	38	(NA)	89	82	(X)
2385	Waterproof outergarments[28]									
	1977	157	348.8	41	52	70	90	91	90	(X)
	1972	236	332.1	31	40	56	79	97	94	(X)
	1970	(NA)	345.0	30	40	(NA)	(NA)	(NA)	(NA)	4
	1967	299	371.9	24	34	51	73	95	93	(X)
	1966	(NA)	305.7	24	33	(NA)	(NA)	(NA)	(NA)	9
	1963	223	235.5	19	28	45	68	92	93	(X)
	1958	272	146.3	20	29	49	74	(NA)	90	(X)
	1954	291	119.7	20	30	50	(NA)	89	81	(X)
	1947	245	80.8	23	37	55	(NA)	85	73	(X)
2386	Leather and sheep lined clothing[28]									
	1977	236	214.1	16	28	50	78	97	91	(X)
	1972	185	172.1	19	32	57	82	94	87	(X)
	1970	(NA)	140.8	(S)	27	(NA)	(NA)	(NA)	(NA)	14
	1967	135	98.8	24	37	61	87	97	86	(X)
	1966	(NA)	(84.0)	24	(S)	(NA)	(NA)	(NA)	(NA)	15
	1963	114	56.4	28	43	66	92	97	83	(X)
	1958	154	64.3	18	30	52	81	94	91	(X)
	1954	153	56.4	18	31	53	(NA)	85	80	(X)
	1947	125	40.6	24	39	67	(NA)	79	80	(X)
2387	Apparel belts[28]									
	1977	281	286.9	21	32	51	71	88	96	(X)
	1972	292	257.5	21	32	51	72	94	97	(X)
	1970	(NA)	168.0	30	44	(NA)	(NA)	(NA)	(NA)	5
	1967	274	130.2	28	38	55	73	89	98	(X)
	1966	(NA)	121.4	28	38	(NA)	(NA)	(NA)	(NA)	7
	1963	388	108.6	23	30	43	62	91	94	(X)
	1958	458	93.8	21	27	36	54	92	95	(X)
	1954	501	106.3	19	25	36	(NA)	92	94	(X)
	1947	390	69.0	23	31	44	(NA)	90	95	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.								
2389	Apparel and accessories, n.e.c.	1977.. 304	199.0	31	45	62	78	90	95	(X)
		1972.. 238	116.8	24	37	57	77	97	84	(X)
		1970.. (NA)	139.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
		1967.. 243	119.5	18	30	52	76	96	85	(X)
		1966.. (NA)	116.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	10
		1963.. 265	98.2	19	31	50	74	93	82	(X)
2391	Curtains and draperies	1977.. 1,650	1,013.1	26	36	49	62	95	93	(X)
		1972.. 1,539	754.9	35	43	52	64	93	93	(X)
		1970.. (NA)	558.0	33	40	(NA)	(NA)	(NA)	(NA)	4
		1967.. 1,393	418.7	27	39	50	63	97	95	(X)
		1966.. (NA)	(416.2)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	17
		1963.. [39]1,092	313.0	21	33	45	60	95	95	(X)
		1958.. 757	206.5	26	34	45	61	(NA)	92	(X)
		1954.. 697	172.7	20	28	42	(NA)	94	89	(X)
		1947.. 379	109.6	18	29	49	(NA)	97	90	(X)
2392	Housefurnishings, n.e.c.	1977.. 980	2,294.0	22	33	48	66	89	61	(X)
		1972.. 1,059	1,526.9	22	30	43	60	86	58	(X)
		1970.. (NA)	1,272.1	21	27	(NA)	(NA)	(NA)	(NA)	5
		1967.. 1,189	962.8	21	28	41	56	88	52	(X)
		1966.. (NA)	903.8	20	(S)	(NA)	(NA)	(NA)	(NA)	5
		1963.. 1,205	716.7	18	24	35	50	88	50	(X)
		1958.. 1,181	591.5	18	25	39	52	89	60	(X)
		1954.. 1,203	503.2	21	29	42	(NA)	91	59	(X)
		1947.. 1,209	502.5	33	44	58	(NA)	93	87	(X)
2393	Textile bags	1977.. 211	321.8	27	39	57	83	82	84	(X)
		1972.. 188	255.1	27	42	61	84	93	90	(X)
		1970.. (NA)	231.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
		1967.. 177	291.1	31	50	72	89	94	89	(X)
		1966.. (NA)	205.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
		1963.. 175	200.4	38	51	68	87	88	85	(X)
		1958.. 217	186.3	40	51	66	85	86	87	(X)
		1954.. 235	221.0	45	56	70	(NA)	84	85	(X)
		1947.. 198	356.0	53	63	77	(NA)	93	98	(X)
2394	Canvas and related products	1977.. 987	486.8	17	26	40	56	93	92	(X)
		1972.. 845	276.4	23	29	40	55	95	88	(X)
		1970.. (NA)	242.4	19	(S)	(NA)	(NA)	(NA)	(NA)	6
		1967.. 846	273.6	20	30	43	62	94	95	(X)
		1966.. (NA)	225.3	19	(S)	(NA)	(NA)	(NA)	(NA)	8
		1963.. 869	166.4	18	25	37	54	92	91	(X)
		1958.. 846	119.0	14	22	34	49	90	90	(X)
		1954.. 1,100	129.6	14	19	31	(NA)	89	86	(X)
		1947.. 889	91.1	10	17	31	(NA)	91	93	(X)
2395	Pleating and stitching	1977.. 770	620.2	25	34	46	61	96	98	(X)
		1972.. 895	308.2	22	31	45	61	88	98	(X)
		1970.. (NA)	150.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
		1967.. 1,104	139.3	7	12	22	38	97	95	(X)
		1966.. (NA)	(123.0)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	17
		1963.. 1,315	150.2	9	13	20	32	97	98	(X)
2396	Automotive and apparel trimmings	1977.. 686	2,166.3	71	77	83	88	98	96	(X)
		1972.. 644	1,133.0	67	74	80	85	98	95	(X)
		1970.. (NA)	918.8	47	55	(NA)	(NA)	(NA)	(NA)	6
		1967.. 762	777.4	57	63	70	78	98	93	(X)
		1966.. (NA)	741.8	58	(S)	(NA)	(NA)	(NA)	(NA)	4
		1963.. 746	570.6	58	63	71	79	98	97	(X)
2397	Schiffli machine embroideries	1977.. 357	158.0	26	36	50	67	97	98	(X)
		1972.. 446	120.5	19	28	42	58	96	99	(X)
		1970.. (NA)	92.1	13	19	(NA)	(NA)	(NA)	(NA)	14
		1967.. 605	99.6	13	21	34	52	98	99	(X)
		1966.. (NA)	94.8	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
		1963.. 755	97.4	13	21	33	49	96	99	(X)
		1958.. 706	74.8	11	15	26	39	99	98	(X)
		1954.. 601	65.8	15	21	32	(NA)	98	99	(X)
		1947.. 542	55.5	17	23	36	(NA)	98	96	(X)
2399	Fabricated textile products, n.e.c.	1977.. 845	1,152.9	26	37	52	67	94	89	(X)
		1972.. 797	724.7	23	34	51	69	89	82	(X)
		1970.. (NA)	784.6	32	39	(NA)	(NA)	(NA)	(NA)	3
		1967.. 799	535.1	19	30	49	70	89	83	(X)
		1966.. (NA)	477.4	16	28	(NA)	(NA)	(NA)	(NA)	10
		1963.. 1,027	342.5	14	22	40	59	86	75	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS								
2411	Logging camps and logging contractors									
	1977	15,344	6,230.1	29	36	45	50	97	94	(X)
	1972	13,152	2,529.5	18	25	35	41	97	89	(X)
	1970	(NA)	1,838.8	19	27	(NA)	(NA)	(NA)	(NA)	4
	1967	16,265	1,476.3	14	22	30	35	91	99	(X)
	1966	(NA)	1,361.8	14	23	(NA)	(NA)	(NA)	(NA)	3
	1963	13,522	[40]1,154.7	11	19	25	31	99	90	(X)
	1958	12,730	833.8	13	19	25	32	93	92	(X)
	1954	12,789	733.4	8	13	20	(NA)	98	89	(X)
2421	Sawmills and planing mills, general									
	1977	6,966	10,866.7	17	23	36	49	92	93	(X)
	1972	7,664	6,420.8	18	23	33	45	91	94	(X)
	1970	(NA)	3,935.7	16	20	(NA)	(NA)	(NA)	(NA)	2
	1967	10,016	3,506.4	11	15	22	31	92	95	(X)
	1966	(NA)	3,390.8	11	15	(NA)	(NA)	(NA)	(NA)	4
	1963	11,931	3,156.3	11	14	20	29	89	95	(X)
2426	Hardwood dimension and flooring[41]									
	1977	845	850.0	16	22	33	51	91	92	(X)
	1972	882	579.0	12	17	28	44	91	88	(X)
2429	Special product sawmills, n.e.c.									
	1977	522	252.6	11	19	36	57	98	92	(X)
	1972	397	180.8	26	38	51	69	98	96	(X)
	1970	(NA)	118.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	18
	1967	454	117.9	21	30	43	63	98	95	(X)
	1966	(NA)	(109.7)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	14
	1963	476	96.0	17	25	41	62	98	[42]49	(X)
2431	Millwork[43]									
	1977	2,209	3,928.1	14	20	31	46	94	94	(X)
	1972	2,340	2,426.8	10	15	25	41	94	94	(X)
2434	Wood kitchen cabinets[44]									
	1977	2,541	1,590.8	14	21	33	44	96	96	(X)
	1972	1,769	897.2	12	19	32	48	95	95	(X)
2435	Hardwood veneer and plywood[45]									
	1977	274	1,250.4	27	40	60	78	91	93	(X)
	1972	326	911.8	34	43	61	77	91	92	(X)
2436	Softwood veneer and plywood[45]									
	1977	129	3,804.8	38	53	72	91	88	91	(X)
	1972	121	2,011.5	37	50	67	87	88	89	(X)
	1967 industry 2432, Veneer and plywood (1972 industries 2435 and 2436)[45]									
	1970	(NA)	1,871.8	30	44	(NA)	(NA)	(NA)	(NA)	1
	1967	516	1,687.2	26	37	50	65	90	90	(X)
	1966	(NA)	1,699.9	24	33	(NA)	(NA)	(NA)	(NA)	2
	1963	532	1,339.6	23	31	42	58	92	94	(X)
2439	Structural wood members, n.e.c.[46]									
	1977	620	807.7	16	21	31	48	94	93	(X)
	1972	642	456.0	14	19	31	48	95	90	(X)
2441	Nailed wood boxes and shook									
	1977	391	263.3	15	24	42	64	89	83	(X)
	1972	424	237.9	27	34	48	66	88	87	(X)
	1970	(NA)	222.8	26	(S)	(NA)	(NA)	(NA)	(NA)	6
	1967	567	273.8	24	30	42	60	88	87	(X)
	1966	(NA)	268.2	23	(S)	(NA)	(NA)	(NA)	(NA)	6
	1963	637	206.0	26	31	41	56	85	83	(X)
2448	Wood pallets and skids[47]									
	1977	1,267	698.0	6	10	18	29	90	91	(X)
	1972	444	295.4	7	11	20	37	91	89	(X)
2449	Wood containers, n.e.c.[48]									
	1977	238	255.8	25	38	64	87	93	97	(X)
	1972	236	240.2	22	35	60	86	94	98	(X)
	1967 industry 2442, Wirebound boxes and crates									
	1970	(NA)	134.0	34	49	(NA)	(NA)	(NA)	(NA)	3
	1967	118	144.9	33	49	76	97	89	92	(X)
	1966	(NA)	174.4	30	43	(NA)	(NA)	(NA)	(NA)	9
	1963	100	114.7	33	49	74	97	92	93	(X)
	1967 industry 2443, Veneer and plywood containers									
	1970	(NA)	24.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	81	32.0	44	57	80	97	81	89	(X)
	1966	(NA)	(24.3)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	29
	1963	84	27.9	39	50	73	95	90	79	(X)
	1958	94	27.8	27	43	67	95	93	88	(X)
	1954	126	30.5	30	46	66	(NA)	91	88	(X)
	1947	129	30.6	31	42	63	(NA)	91	88	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.								
	1967 industry 2445, Cooperage.....1970..	(NA)	66.2	47	80	(NA)	(NA)	(NA)	(NA)	4
	1967..	67	78.8	54	81	94	99	99	98	(X)
	1966..	(NA)	65.7	53	81	(NA)	(NA)	(NA)	(NA)	5
	1963..	71	52.9	47	71	91	99	97	99	(X)
	1958..	126	69.6	45	67	87	95	96	98	(X)
	1954..	104	60.4	47	66	86	(NA)	97	99	(X)
	1947..	127	106.4	51	64	(NA)	(NA)	96	97	(X)
	1935..	(NA)	(NA)	25	40	(NA)	(NA)	(NA)	(NA)	(X)
2451	Mobile homes[49].....1977..	308	3,199.3	24	37	58	77	99	99	(X)
	1972..	352	3,242.9	26	37	56	77	99	99	(X)
2452	Prefabricated wood buildings[50].....1977..	512	1,948.6	24	36	49	65	98	98	(X)
	1972..	263	1,046.1	33	40	53	71	97	96	(X)
2491	Wood preserving.....1977..	366	962.6	33	42	59	76	97	97	(X)
	1972..	309	475.8	36	45	61	80	99	96	(X)
	1970..	(NA)	398.5	34	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967..	278	344.2	35	44	63	84	98	98	(X)
	1966..	(NA)	326.0	37	47	(NA)	(NA)	(NA)	(NA)	7
	1963..	250	247.3	34	44	64	84	98	97	(X)
	1958..	211	198.3	32	43	65	87	98	96	(X)
	1954..	188	190.5	30	42	63	(NA)	97	99	(X)
	1947..	136	304.0	31	44	67	(NA)	(D)	(D)	(X)
	1935..	(NA)	(NA)	50	60	(NA)	(NA)	(NA)	(NA)	(X)
2492	Particleboard[51].....1977..	36	452.9	48	70	95	100	99	95	(X)
	1972..	39	295.4	48	69	92	100	92	94	(X)
2499	Wood products, n.e.c.[52].....1977..	2,909	2,557.6	18	24	36	50	94	93	(X)
	1972..	3,009	1,518.9	18	24	33	46	95	91	(X)
		MAJOR GROUP 25, FURNITURE AND FIXTURES								
2511	Wood household furniture[53].....1977..	2,795	4,148.8	14	23	39	56	94	96	(X)
	1972..	2,160	2,870.0	14	22	40	60	94	95	(X)
2512	Upholstered household furniture[54]...1977..	1,357	2,931.0	15	23	36	52	91	96	(X)
	1972..	1,201	2,104.7	14	23	36	51	92	95	(X)
	1970..	(NA)	1,675.3	13	20	(NA)	(NA)	(NA)	(NA)	5
	1967..	1,582	1,266.4	14	20	31	45	93	94	(X)
	1966..	(NA)	1,265.0	15	21	(NA)	(NA)	(NA)	(NA)	2
	1963..	1,729	983.2	13	18	28	41	92	92	(X)
2514	Metal household furniture.....1977..	405	1,307.1	13	22	39	67	89	91	(X)
	1972..	426	890.4	13	24	44	69	90	91	(X)
	1970..	(NA)	714.4	16	28	(NA)	(NA)	(NA)	(NA)	1
	1967..	464	605.3	14	24	40	63	90	90	(X)
	1966..	(NA)	595.3	13	23	(NA)	(NA)	(NA)	(NA)	3
	1963..	508	524.3	13	20	34	59	88	89	(X)
	1958..	614	489.7	14	22	38	58	88	88	(X)
	1954..	635	402.6	16	26	43	(NA)	87	83	(X)
	1947..	305	194.9	26	37	56	(NA)	83	73	(X)
2515	Mattresses and bedsprings.....1977..	832	1,398.5	21	31	43	58	95	86	(X)
	1972..	888	1,041.7	24	31	43	57	94	88	(X)
	1970..	(NA)	848.4	27	33	(NA)	(NA)	(NA)	(NA)	3
	1967..	939	745.1	26	34	44	58	91	91	(X)
	1966..	(NA)	735.6	27	33	(NA)	(NA)	(NA)	(NA)	3
	1963..	1,066	641.0	26	31	41	54	90	90	(X)
2517	Wood TV and radio cabinets[55].....1977..	91	304.8	45	75	88	98	92	90	(X)
	1972..	95	330.2	42	64	86	98	85	91	(X)
2519	Household furniture, n.e.c.....1977..	198	301.9	39	51	73	90	79	84	(X)
	1972..	157	172.6	19	34	64	87	84	73	(X)
	1970..	(NA)	54.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967..	75	55.3	36	53	82	98	83	56	(X)
	1966..	(NA)	(78.2)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
	1963..	72	28.9	34	50	78	98	84	51	(X)
	1958..	92	30.3	43	57	77	96	88	68	(X)
	1954..	69	15.6	50	65	85	(NA)	86	59	(X)
2521	Wood office furniture.....1977..	319	612.0	32	44	62	81	85	21	(X)
	1972..	232	249.7	25	38	60	80	90	84	(X)
	1970..	(NA)	198.5	34	52	(NA)	(NA)	(NA)	(NA)	5
	1967..	172	158.3	29	48	71	88	89	86	(X)
	1966..	(NA)	136.4	30	50	(NA)	(NA)	(NA)	(NA)	3
	1963..	131	101.5	29	47	74	92	90	87	(X)
	1958..	147	66.2	27	42	68	87	89	82	(X)
	1954..	111	52.7	25	41	69	(NA)	86	86	(X)
	1947..	114	47.5	21	34	65	(NA)	92	80	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 25, FURNITURE AND FIXTURES--Con.									
2522	Metal office furniture.....1977..	167	1,397.4	47	59	78	93	94	92	(X)
	1972..	166	861.5	42	54	76	93	90	89	(X)
	1970..	(NA)	677.7	41	55	(NA)	(NA)	(NA)	(NA)	1
	1967..	166	622.9	38	52	75	92	89	88	(X)
	1966..	(NA)	596.0	37	51	(NA)	(NA)	(NA)	(NA)	4
	1963..	153	390.0	33	50	75	93	87	89	(X)
	1958..	142	271.8	38	56	80	94	88	86	(X)
	1954..	122	202.9	46	63	83	(NA)	84	87	(X)
	1947..	100	125.7	50	66	87	(NA)	89	92	(X)
2531	Public building and related furniture.....1977..	401	787.4	23	32	50	71	88	87	(X)
	1972..	405	523.6	22	32	47	67	86	87	(X)
	1970..	(NA)	461.7	23	36	(NA)	(NA)	(NA)	(NA)	3
	1967..	428	421.2	23	36	54	72	84	86	(X)
	1966..	(NA)	343.5	24	37	(NA)	(NA)	(NA)	(NA)	9
	1963..	424	268.6	24	35	50	69	85	85	(X)
	1958..	383	204.6	27	37	53	71	88	80	(X)
	1954..	291	159.5	32	43	61	(NA)	83	86	(X)
2541	Wood partitions and fixtures.....1977..	1,572	1,105.8	6	11	20	34	92	88	(X)
	1972..	1,475	793.2	5	9	18	32	92	89	(X)
	1970..	(NA)	612.5	9	13	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,463	498.6	6	10	20	36	92	89	(X)
	1966..	(NA)	452.0	4	8	(NA)	(NA)	(NA)	(NA)	6
	1963..	1,588	389.6	4	8	15	27	94	89	(X)
2542	Metal partitions and fixtures.....1977..	508	1,303.0	16	24	41	62	89	91	(X)
	1972..	482	734.5	16	25	44	65	90	86	(X)
	1970..	(NA)	575.8	19	30	(NA)	(NA)	(NA)	(NA)	3
	1967..	491	512.0	24	33	51	70	90	83	(X)
	1966..	(NA)	520.1	22	33	(NA)	(NA)	(NA)	(NA)	14
	1963..	502	337.8	23	33	50	70	83	82	(X)
2591	Drapery hardware and blinds and shades.....1977..	435	675.1	46	65	81	89	95	96	(X)
	1972..	493	364.5	50	67	78	86	90	96	(X)
	1970..	(NA)	298.1	42	59	(NA)	(NA)	(NA)	(NA)	3
	1967..	581	246.8	41	57	74	83	89	94	(X)
	1966..	(NA)	229.0	41	57	(NA)	(NA)	(NA)	(NA)	8
	1963..	695	199.6	37	54	71	79	89	90	(X)
	1958..	826	166.6	32	45	(NA)	(NA)	(NA)	(NA)	(X)
2599	Furniture and fixtures, n.e.c.....1977..	528	705.2	19	27	40	59	87	82	(X)
	1972..	477	372.0	13	23	39	59	87	79	(X)
	1970..	(NA)	210.3	16	26	(NA)	(NA)	(NA)	(NA)	7
	1967..	317	179.0	18	28	43	65	87	75	(X)
	1966..	(NA)	152.5	18	28	(NA)	(NA)	(NA)	(NA)	13
	1963..	354	121.6	16	27	42	64	86	70	(X)
	MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS									
2611	Pulp mills[56 57].....1977..	26	2,091.1	48	76	99	100	86	72	(X)
	1972..	46	709.9	59	83	99	100	95	59	(X)
	1970..	(NA)	960.3	48	76	(NA)	(NA)	(NA)	(NA)	1
	1967..	45	730.5	45	70	97	100	88	71	(X)
	1966..	(NA)	725.5	48	75	(NA)	(NA)	(NA)	(NA)	2
	1963..	34	609.1	48	72	97	100	88	71	(X)
	1958..	49	452.0	46	68	94	100	98	73	(X)
2621	Paper mills, except building paper..1977..	171	12,613.3	23	42	70	92	92	92	(X)
	1972..	194	6,385.2	24	40	66	88	91	93	(X)
	1970..	(NA)	5,674.0	26	43	(NA)	(NA)	(NA)	(NA)	1
	1967..	203	4,844.0	26	43	65	86	92	93	(X)
	1966..	(NA)	4,804.8	24	40	(NA)	(NA)	(NA)	(NA)	2
	1963..	186	3,824.9	26	42	63	85	90	92	(X)
2631	Paperboard mills.....1977..	120	7,124.3	27	42	70	95	84	92	(X)
	1972..	135	4,153.5	29	44	69	93	83	94	(X)
	1970..	(NA)	3,388.6	28	44	(NA)	(NA)	(NA)	(NA)	1
	1967..	148	2,907.0	27	42	67	92	84	91	(X)
	1966..	(NA)	2,853.4	27	42	(NA)	(NA)	(NA)	(NA)	1
	1963..	146	2,315.2	27	43	67	90	85	90	(X)
2641	Paper coating and glazing.....1977..	454	3,392.0	30	45	64	82	80	87	(X)
	1972..	366	1,954.0	36	49	67	84	76	86	(X)
	1970..	(NA)	1,724.6	37	48	(NA)	(NA)	(NA)	(NA)	1
	1967..	334	1,566.5	38	49	68	85	79	87	(X)
	1966..	(NA)	1,383.5	28	39	(NA)	(NA)	(NA)	(NA)	2
	1963..	323	1,161.6	30	43	64	85	82	78	(X)

See footnotes at end of table.

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1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.								
2642	Envelopes....1977..	182	990.5	28	44	66	86	97	93	(X)
	1972..	178	620.8	31	45	65	84	96	95	(X)
	1970..	(NA)	572.9	31	44	(NA)	(NA)	(NA)	(NA)	4
	1967..	172	470.3	32	44	63	84	95	96	(X)
	1966..	(NA)	446.3	32	44	(NA)	(NA)	(NA)	(NA)	2
	1963..	180	363.3	32	42	59	82	94	96	(X)
	1958..	173	258.9	30	41	58	81	93	94	(X)
	1954..	170	195.3	27	37	54	(NA)	96	92	(X)
	1947..	142	128.3	30	40	58	(NA)	92	95	(X)
	1935..	(NA)	(NA)	33	42	(NA)	(NA)	(NA)	(NA)	(X)
2643	Bags, except textile bags....1977..	462	3,482.3	26	40	58	75	88	90	(X)
	1972..	466	1,885.7	25	41	61	78	88	88	(X)
	1970..	(NA)	1,702.7	25	40	(NA)	(NA)	(NA)	(NA)	3
	1967..	466	1,375.6	23	38	59	76	86	88	(X)
	1966..	(NA)	1,358.5	23	37	(NA)	(NA)	(NA)	(NA)	3
	1963..	495	1,061.7	22	36	58	76	86	88	(X)
2645	Die-cut paper and board....1977..	316	1,057.7	43	55	71	85	88	84	(X)
	1972..	310	676.3	43	54	69	86	89	89	(X)
	1970..	(NA)	597.0	37	45	(NA)	(NA)	(NA)	(NA)	2
	1967..	368	577.5	37	47	62	80	86	86	(X)
	1966..	(NA)	512.5	31	43	(NA)	(NA)	(NA)	(NA)	5
	1963..	370	378.3	36	47	62	79	88	82	(X)
2646	Pressed and molded pulp goods....1977..	25	240.3	87	94	99+	100	98	99	(X)
	1972..	32	162.8	75	89	99	100	98	97	(X)
	1970..	(NA)	160.1	73	90	(NA)	(NA)	(NA)	(NA)	3
	1967..	43	145.9	71	87	96	100	[58]95	[58]95	(X)
	1966..	(NA)	151.5	73	89	(NA)	(NA)	(NA)	(NA)	2
	1963..	43	110.1	72	88	96	100	99	96	(X)
	1958..	46	78.2	69	89	98	100	99	96	(X)
	1954..	26	42.3	72	94	99+	100	100	93	(X)
	1947..	19	16.2	86	97	100	(X)	95	86	(X)
2647	Sanitary paper products[8]....1977..	72	4,921.2	65	84	96	99+	93	99	(X)
	1972..	72	2,071.8	63	82	95	99+	95	97	(X)
	1970..	(NA)	1,659.1	63	81	(NA)	(NA)	(NA)	(NA)	1
	1967..	91	1,293.4	63	79	92	99	94	96	(X)
	1966..	(NA)	1,185.8	64	80	(NA)	(NA)	(NA)	(NA)	2
	1963..	97	983.0	62	76	90	99	93	97	(X)
2648	Stationery products[59]....1977..	219	651.7	38	50	69	88	86	80	(X)
	1972..	405	450.5	34	45	63	79	85	82	(X)
2649	Converted paper products, n.e.c.[60]....1977..	783	1,697.5	17	25	38	58	88	81	(X)
	1972..	287	630.6	22	32	52	72	83	74	(X)
2651	Folding paperboard boxes....1977..	452	2,579.0	22	35	56	74	87	91	(X)
	1972..	443	1,487.0	23	35	53	70	85	91	(X)
	1970..	(NA)	1,361.2	22	36	(NA)	(NA)	(NA)	(NA)	2
	1967..	476	1,216.2	22	36	54	70	84	90	(X)
	1966..	(NA)	1,289.5	22	35	(NA)	(NA)	(NA)	(NA)	2
	1963..	534	1,081.1	21	37	55	69	85	88	(X)
2652	Setup paperboard boxes....1977..	280	360.5	12	21	37	58	93	87	(X)
	1972..	366	321.3	11	17	31	52	94	86	(X)
	1970..	(NA)	324.6	12	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967..	418	282.4	12	19	32	50	92	87	(X)
	1966..	(NA)	256.6	12	20	(NA)	(NA)	(NA)	(NA)	12
	1963..	474	225.8	12	19	30	48	91	87	(X)
2653	Corrugated and solid fiber boxes....1977..	863	7,351.1	19	33	58	75	99	99	(X)
	1972..	709	4,308.8	18	32	58	76	98	99	(X)
	1970..	(NA)	3,508.3	19	33	(NA)	(NA)	(NA)	(NA)	2
	1967..	568	2,959.6	18	33	61	78	98	98	(X)
	1966..	(NA)	2,891.2	18	33	(NA)	(NA)	(NA)	(NA)	3
	1963..	534	2,166.1	20	36	63	79	97	96	(X)
2654	Sanitary food containers....1977..	122	2,048.4	48	68	87	96	87	86	(X)
	1972..	160	1,419.7	46	64	85	95	91	87	(X)
	1970..	(NA)	1,226.4	50	69	(NA)	(NA)	(NA)	(NA)	1
	1967..	144	1,093.9	49	68	88	96	92	86	(X)
	1966..	(NA)	964.1	53	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	98	905.9	52	74	91	98	92	92	(X)
2655	Fiber cans, drums, and similar products....1977..	166	1,011.1	54	73	85	94	93	89	(X)
	1972..	168	568.0	54	70	82	92	95	87	(X)
	1970..	(NA)	458.3	56	72	(NA)	(NA)	(NA)	(NA)	2
	1967..	165	385.2	51	68	83	93	96	85	(X)
	1966..	(NA)	353.0	54	72	(NA)	(NA)	(NA)	(NA)	6
	1963..	166	260.3	57	72	82	92	95	80	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.								
2661	Building paper and board mills.....1977..	19	473.7	51	(D)	100	(X)	93	83	(X)
	1972..	45	456.2	52	73	98	100	85	92	(X)
	1970..	(NA)	396.8	44	65	(NA)	(NA)	(NA)	(NA)	3
	1967..	43	341.1	46	69	97	100	92	96	(X)
	1966..	(NA)	351.2	45	68	(NA)	(NA)	(NA)	(NA)	2
	1963..	33	281.6	47	68	97	100	97	88	(X)
		MAJOR GROUP 27, PRINTING AND PUBLISHING								
2711	Newspapers.....1977..	7,821	13,055.9	19	31	45	62	96	100	(X)
	1972..	7,461	8,262.8	17	28	43	60	97	100	(X)
	1970..	(NA)	6,990.9	16	24	(NA)	(NA)	(NA)	(NA)	2
	1967..	7,589	5,757.1	16	25	40	56	97	100	(X)
	1966..	(NA)	5,520.2	14	22	(NA)	(NA)	(NA)	(NA)	2
	1963..	7,982	4,483.6	15	22	36	52	96	100	(X)
	1958..	7,947	3,615.6	17	24	35	51	96	100	(X)
	1954..	8,445	3,091.0	18	24	34	(NA)	95	100	(X)
	1947..	8,115	1,891.3	21	26	36	(NA)	94	100	(X)
2721	Periodicals.....1977..	2,860	6,056.5	22	35	52	67	90	96	(X)
	1972..	2,451	3,510.6	26	38	54	69	89	95	(X)
	1970..	(NA)	3,157.9	28	41	(NA)	(NA)	(NA)	(NA)	1
	1967..	2,430	3,095.9	24	37	56	72	89	97	(X)
	1966..	(NA)	2,717.9	28	41	(NA)	(NA)	(NA)	(NA)	3
	1963..	2,562	2,295.7	28	42	59	73	89	96	(X)
	1958..	2,245	1,650.6	31	41	55	69	93	97	(X)
	1954..	2,012	1,441.0	29	40	54	(NA)	95	97	(X)
	1947..	2,106	1,059.6	34	43	58	(NA)	94	98	(X)
2731	Book publishing.....1977..	1,650	4,793.9	17	30	57	74	74	88	(X)
	1972..	1,120	2,856.9	19	31	56	77	93	86	(X)
	1970..	(NA)	2,437.3	21	35	(NA)	(NA)	(NA)	(NA)	2
	1967..	963	2,060.2	20	32	57	77	94	85	(X)
	1966..	(NA)	1,996.3	20	33	(NA)	(NA)	(NA)	(NA)	3
	1963..	936	1,534.6	20	33	56	76	93	88	(X)
	1958..	883	1,000.9	16	29	48	69	92	90	(X)
	1954..	804	665.2	21	32	51	(NA)	91	90	(X)
	1947..	635	463.9	18	29	48	(NA)	92	93	(X)
2732	Book printing.....1977..	897	1,691.8	25	35	49	64	85	78	(X)
	1972..	674	937.7	24	36	53	68	83	73	(X)
	1970..	(NA)	939.3	22	33	(NA)	(NA)	(NA)	(NA)	3
	1967..	720	787.4	21	30	48	64	81	70	(X)
	1966..	(NA)	709.3	22	33	(NA)	(NA)	(NA)	(NA)	5
	1963..	662	546.6	19	30	48	66	78	69	(X)
	1958..	785	354.3	24	34	51	68	72	60	(X)
2741	Miscellaneous publishing.....1977..	2,266	1,850.9	24	34	50	63	95	89	(X)
	1972..	1,964	1,070.2	29	42	57	68	95	93	(X)
	1970..	(NA)	724.9	35	52	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,443	605.3	29	46	64	75	93	89	(X)
	1966..	(NA)	495.2	33	43	(NA)	(NA)	(NA)	(NA)	6
	1963..	1,308	389.6	32	44	59	71	92	84	(X)
	1958..	1,038	315.7	29	40	55	68	89	87	(X)
	1954..	900	231.2	31	45	58	(NA)	85	82	(X)
	1947..	569	103.3	22	33	52	(NA)	93	78	(X)
2751	Commercial printing, letterpress[61].....1977..	14,375	4,284.3	14	19	25	31	89	81	(X)
	1972..	13,043	3,305.8	14	19	26	35	87	82	(X)
	1970..	(NA)	3,726.8	15	21	(NA)	(NA)	(NA)	(NA)	2
	1967..	11,955	3,255.5	14	21	29	39	86	83	(X)
	1966..	(NA)	3,202.3	14	20	(NA)	(NA)	(NA)	(NA)	4
	1963..	11,979	2,645.1	13	19	28	38	86	79	(X)
2752	Commercial printing, lithographic[62].....1977..	10,964	9,359.7	6	10	17	26	87	88	(X)
	1972..	8,160	5,124.8	4	8	15	24	87	88	(X)
	1970..	(NA)	4,155.1	4	8	(NA)	(NA)	(NA)	(NA)	2
	1967..	6,718	3,139.4	5	8	15	25	82	80	(X)
	1966..	(NA)	2,791.4	5	9	(NA)	(NA)	(NA)	(NA)	3
	1963..	6,738	2,149.7	6	10	16	25	80	82	(X)
2753	Engraving and plate printing.....1977..	511	314.9	34	44	57	71	88	92	(X)
	1972..	542	201.6	28	33	43	57	92	87	(X)
	1970..	(NA)	164.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	11
	1967..	569	137.9	21	28	38	52	91	81	(X)
	1966..	(NA)	175.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
	1963..	574	111.1	26	34	47	60	89	79	(X)
	1958..	520	85.2	28	35	46	59	92	82	(X)
	1954..	565	60.1	24	30	41	(NA)	93	79	(X)
	1947..	412	45.3	38	44	55	(NA)	92	80	(X)
	1935..	(NA)	(NA)	33	40	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.								
2754	Commercial printing, gravure[63]....1977..	401	1,056.8	36	54	76	89	91	83	(X)
	1972..	120	697.6	35	55	81	96	87	79	(X)
2761	Manifold business forms.....1977..	601	2,893.8	38	48	64	77	93	95	(X)
	1972..	534	1,429.7	45	54	66	78	90	91	(X)
	1970..	(NA)	1,233.2	47	57	(NA)	(NA)	(NA)	(NA)	3
	1967..	454	932.3	47	57	69	81	91	90	(X)
	1966..	(NA)	823.9	47	57	(NA)	(NA)	(NA)	(NA)	3
	1963..	439	637.7	46	55	68	80	90	91	(X)
2771	Greeting card publishing.....1977..	155	1,072.1	77	85	93	98	78	95	(X)
	1972..	186	755.4	70	78	88	96	76	97	(X)
	1970..	(NA)	659.6	75	85	(NA)	(NA)	(NA)	(NA)	1
	1967..	203	517.9	67	79	88	95	87	93	(X)
	1966..	(NA)	460.1	64	76	(NA)	(NA)	(NA)	(NA)	5
	1963..	239	346.0	57	71	82	92	92	96	(X)
	1958..	265	276.0	45	62	75	89	94	93	(X)
	1954..	280	208.9	42	57	73	(NA)	93	89	(X)
	1947..	161	123.9	39	55	74	(NA)	92	87	(X)
2782	Blankbooks and looseleaf binders....1977..	371	1,122.6	43	56	70	83	86	91	(X)
	1972..	377	591.1	38	48	62	78	89	90	(X)
	1970..	(NA)	461.5	39	48	(NA)	(NA)	(NA)	(NA)	4
	1967..	402	381.3	35	45	59	77	86	88	(X)
	1966..	(NA)	344.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963..	380	268.2	33	44	57	76	88	88	(X)
2789	Bookbinding and related work.....1977..	974	533.6	10	17	30	46	96	94	(X)
	1972..	990	377.2	11	18	31	46	95	89	(X)
	1970..	(NA)	353.3	10	16	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,008	340.6	11	18	30	47	94	89	(X)
	1966..	(NA)	349.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1963..	1,038	228.5	12	17	28	44	95	83	(X)
	1958..	966	182.0	10	16	(NA)	(NA)	94	86	(X)
2791	Typesetting.....1977..	2,370	730.6	6	9	17	29	97	89	(X)
	1972..	1,860	482.8	5	8	16	29	97	91	(X)
	1970..	(NA)	462.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1967..	1,518	356.7	7	11	19	32	95	92	(X)
	1966..	(NA)	309.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1963..	1,271	241.0	6	10	18	30	95	90	(X)
	1958..	1,181	175.1	6	10	19	33	93	92	(X)
	1954..	1,078	121.4	5	9	18	(NA)	94	87	(X)
	1947..	793	75.7	8	13	24	(NA)	94	87	(X)
2793	Photoengraving.....1977..	440	218.0	28	38	55	71	83	79	(X)
	1972..	583	229.7	13	19	32	50	84	83	(X)
	1970..	(NA)	219.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1967..	732	234.3	10	16	27	44	94	91	(X)
	1966..	(NA)	225.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1963..	872	212.4	8	13	24	38	95	91	(X)
	1958..	897	206.0	8	13	24	37	95	93	(X)
	1954..	884	173.0	6	11	21	(NA)	95	93	(X)
	1947..	754	133.5	8	12	22	(NA)	96	95	(X)
2794	Electrotyping and stereotyping.....1977..	40	13.8	52	70	90	100	79	66	(X)
	1972..	72	36.8	43	57	79	98	81	77	(X)
	1970..	(NA)	54.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1967..	124	62.1	34	45	63	87	89	85	(X)
	1966..	(NA)	81.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	6
	1963..	170	76.1	31	39	57	80	87	86	(X)
	1958..	206	77.7	29	35	49	70	92	87	(X)
	1954..	219	85.9	23	34	51	(NA)	89	89	(X)
	1947..	205	59.0	24	34	49	(NA)	92	87	(X)
	1935..	(NA)	(NA)	36	46	(NA)	(NA)	(NA)	(NA)	(X)
2795	Lithographic platemaking services[64].....1977..	677	667.0	17	23	33	48	87	89	(X)
	1972..	330	257.0	21	29	41	60	87	83	(X)
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS								
2812	Alkalies and chlorine.....1977..	30	1,654.8	66	87	99+	100	63	58	(X)
	1972..	28	823.2	72	91	99+	100	65	65	(X)
	1970..	(NA)	660.3	71	93	(NA)	(NA)	(NA)	(NA)	1
	1967..	19	719.8	63	88	100	(X)	67	75	(X)
	1966..	(NA)	782.7	63	88	(NA)	(NA)	(NA)	(NA)	2
	1963..	19	652.1	62	88	100	(X)	66	79	(X)
	1958..	18	488.1	64	89	100	(X)	73	84	(X)
	1954..	17	399.9	69	90	100	(X)	76	84	(X)
	1947..	18	208.6	70	93	100	(X)	81	85	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.								
2813	Industrial gases.....1977..	109	1,234.6	65	84	93	98	97	93	(X)
	1972..	105	679.3	65	81	93	98	96	92	(X)
	1970..	(NA)	665.0	75	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	113	588.7	67	84	95	99	96	89	(X)
	1966..	(NA)	549.7	72	88	(NA)	(NA)	(NA)	(NA)	2
	1963..	104	425.4	72	86	95	99	98	87	(X)
	1958..	111	232.0	79	88	94	98	97	84	(X)
	1954..	101	167.7	84	88	93	(NA)	99	84	(X)
	1947..	69	93.5	83	88	94	(NA)	100	84	(X)
	1935..	(NA)	(NA)	79	87	(NA)	(NA)	(NA)	(NA)	(X)
2816	Inorganic pigments.....1977..	71	1,259.9	54	78	94	99+	88	84	(X)
	1972..	77	796.9	52	72	91	99	86	86	(X)
	1970..	(NA)	635.2	56	74	(NA)	(NA)	(NA)	(NA)	2
	1967..	65	549.3	59	78	95	99+	90	84	(X)
	1966..	(NA)	581.8	64	83	(NA)	(NA)	(NA)	(NA)	2
	1963..	69	484.8	68	84	96	99+	91	87	(X)
	1958..	67	402.6	69	83	96	99+	92	90	(X)
	1954..	73	371.4	67	83	96	(NA)	88	88	(X)
2819	Industrial inorganic chemicals, n.e.c.[65] [66].....1977..	345	8,695.7	33	49	74	90	87	77	(X)
	1972..	166	3,833.3	34	52	76	93	89	79	(X)
2821	Plastics materials and resins[67].....1977..	221	10,818.2	22	37	60	87	85	74	(X)
	1972..	193	4,478.2	26	41	65	90	81	79	(X)
2822	Synthetic rubber.....1977..	56	1,863.3	60	83	99	100	91	71	(X)
	1972..	50	1,089.4	62	81	98	100	81	79	(X)
	1970..	(NA)	992.1	64	85	(NA)	(NA)	(NA)	(NA)	1
	1967..	33	926.9	61	82	100	100	89	81	(X)
	1966..	(NA)	954.7	56	78	(NA)	(NA)	(NA)	(NA)	2
	1963..	16	763.9	57	80	100	(X)	92	80	(X)
	1958..	13	529.2	60	86	100	(X)	95	83	(X)
	1954..	13	361.1	53	81	100	(X)	98	90	(X)
	1947..	5	235.2	(D)	100	(X)	(X)	96	89	(X)
2823	Cellulosic manmade fibers.....1977..	5	1,002.8	(D)	100	(X)	(X)	(D)	(D)	(X)
	1972..	12	589.5	96	(D)	100	(X)	(D)	(D)	(X)
	1970..	(NA)	685.0	(D)	100	(NA)	(NA)	(NA)	(NA)	1
	1967..	13	902.8	86	99+	100	(X)	(NA)	(NA)	(X)
	1966..	(NA)	924.1	85	100	(NA)	(NA)	(NA)	(NA)	2
	1963..	8	731.8	82	100	(X)	(X)	(D)	(D)	(X)
2824	Organic fibers, noncellulosic[68].....1977..	37	6,379.7	78	90	99	100	84	97	(X)
	1972..	36	3,638.9	74	91	99+	100	80	97	(X)
	1970..	(NA)	2,822.3	73	89	(NA)	(NA)	(NA)	(NA)	1
	1967..	22	2,033.2	84	94	(D)	100	92	94	(X)
	1966..	(NA)	1,991.8	85	95	(NA)	(NA)	(NA)	(NA)	2
	1963..	14	1,403.2	94	99	100	(X)	95	97	(X)
2831	Biological products.....1977..	250	898.5	32	49	74	91	93	73	(X)
	1972..	158	360.0	37	53	82	95	87	60	(X)
	1970..	(NA)	236.7	37	59	(NA)	(NA)	(NA)	(NA)	1
	1967..	119	160.0	39	63	86	97	90	61	(X)
	1966..	(NA)	108.4	46	72	(NA)	(NA)	(NA)	(NA)	7
	1963..	102	95.7	36	57	86	98	88	45	(X)
	1958..	110	56.6	44	59	84	97	89	41	(X)
	1954..	86	61.0	46	51	81	(NA)	86	65	(X)
	1947..	79	40.0	38	51	76	(NA)	87	57	(X)
2833	Medicinals and botanicals.....1977..	153	1,889.9	65	78	89	96	82	68	(X)
	1972..	125	509.0	59	75	90	98	87	51	(X)
	1970..	(NA)	528.3	64	74	(NA)	(NA)	(NA)	(NA)	2
	1967..	112	445.2	74	81	91	98	71	56	(X)
	1966..	(NA)	285.1	70	81	(NA)	(NA)	(NA)	(NA)	3
	1963..	122	305.8	68	79	91	99	71	47	(X)
	1958..	114	299.3	64	77	89	98	72	55	(X)
	1954..	107	252.5	72	84	93	(NA)	69	59	(X)
2834	Pharmaceutical preparations.....1977..	655	11,459.4	24	43	73	91	86	97	(X)
	1972..	680	7,149.5	26	44	75	91	87	97	(X)
	1970..	(NA)	6,027.8	26	43	(NA)	(NA)	(NA)	(NA)	1
	1967..	791	4,696.4	24	40	73	90	87	97	(X)
	1966..	(NA)	4,432.4	24	41	(NA)	(NA)	(NA)	(NA)	2
	1963..	944	3,314.3	22	38	72	89	87	94	(X)
	1958..	1,064	2,533.4	27	45	73	87	88	94	(X)
	1954..	1,128	1,643.1	25	44	68	(NA)	91	94	(X)
	1947..	1,123	941.3	28	44	64	(NA)	91	98	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**–Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.								
2841	Soap and other detergents.....1977..	554	5,671.4	59	71	82	89	84	89	(X)
	1972..	577	3,394.4	62	74	85	92	83	90	(X)
	1970..	(NA)	2,988.7	70	79	(NA)	(NA)	(NA)	(NA)	1
	1967..	599	2,593.4	70	78	86	92	83	90	(X)
	1966..	(NA)	2,395.9	72	80	(NA)	(NA)	(NA)	(NA)	2
	1963..	641	2,127.8	72	80	88	93	82	92	(X)
2842	Polishes and sanitation goods[69].....1977..	946	3,157.3	41	56	67	78	76	79	(X)
	1972..	1,022	1,867.6	43	54	65	78	81	83	(X)
2843	Surface active agents.....1977..	148	944.8	32	46	69	90	81	55	(X)
	1972..	151	462.6	28	42	64	89	81	60	(X)
	1970..	(NA)	398.7	31	46	(NA)	(NA)	(NA)	(NA)	6
	1967..	154	294.2	34	47	65	85	79	54	(X)
	1966..	(NA)	252.1	38	50	(NA)	(NA)	(NA)	(NA)	3
	1963..	137	177.8	39	50	67	86	80	47	(X)
2844	Toilet preparations.....1977..	644	6,557.2	40	56	74	90	95	87	(X)
	1972..	593	4,053.0	38	53	74	91	94	86	(X)
	1970..	(NA)	3,461.1	39	52	(NA)	(NA)	(NA)	(NA)	2
	1967..	628	2,515.6	38	52	74	90	94	80	(X)
	1966..	(NA)	2,430.6	40	54	(NA)	(NA)	(NA)	(NA)	2
	1963..	673	1,792.7	38	52	75	90	91	84	(X)
	1958..	721	997.2	29	45	70	87	92	83	(X)
	1954..	693	628.5	25	40	64	(NA)	91	77	(X)
	1947..	692	381.4	24	38	59	(NA)	84	72	(X)
	1935..	(NA)	(NA)	25	40	(NA)	(NA)	(NA)	(NA)	(X)
2851	Paints and allied products[70].....1977..	1,288	6,629.7	24	36	52	67	96	97	(X)
	1972..	1,318	3,821.8	22	34	51	66	95	96	(X)
	1970..	(NA)	3,407.8	22	34	(NA)	(NA)	(NA)	(NA)	2
	1967..	1,459	2,911.4	22	35	48	61	95	96	(X)
	1966..	(NA)	2,970.4	23	36	(NA)	(NA)	(NA)	(NA)	2
	1963..	1,579	2,456.4	23	34	47	60	95	96	(X)
2861	Gum and wood chemicals.....1977..	100	391.3	59	80	92	98	76	67	(X)
	1972..	118	332.3	68	83	94	99	70	75	(X)
	1970..	(NA)	261.7	73	85	(NA)	(NA)	(NA)	(NA)	3
	1967..	172	215.9	70	79	88	97	73	76	(X)
	1966..	(NA)	209.5	72	84	(NA)	(NA)	(NA)	(NA)	4
	1963..	229	212.9	63	71	83	94	74	77	(X)
2865	Cyclic crudes and intermediates.....1977..	135	5,637.0	42	60	79	95	68	67	(X)
	1972..	124	2,049.6	34	52	77	96	76	65	(X)
	1970..	(NA)	1,792.2	36	56	(NA)	(NA)	(NA)	(NA)	1
	1967..	115	1,596.8	45	64	83	97	73	66	(X)
	1963..	120	1,212.8	53	71	88	99+	(NA)	(NA)	(X)
2869	Industrial organic chemicals, n.e.c.[8].....1977..	384	24,232.8	38	55	73	90	69	84	(X)
	1972..	351	9,223.5	43	57	74	92	71	85	(X)
	1970..	(NA)	7,373.8	44	58	(NA)	(NA)	(NA)	(NA)	1
	1967..	339	6,377.8	45	58	75	92	72	81	(X)
	1966..	(NA)	6,541.1	46	60	(NA)	(NA)	(NA)	(NA)	2
	1963..	343	4,840.2	51	63	79	93	72	81	(X)
	1958..	250	3,070.2	55	70	85	96	73	80	(X)
	1954..	202	2,198.7	59	73	87	(NA)	77	80	(X)
2873	Nitrogenous fertilizers[71].....1977..	110	2,603.4	34	54	82	99	84	72	(X)
	1972..	47	799.4	35	53	84	100	85	69	(X)
2874	Phosphatic fertilizers[72].....1977..	45	2,681.7	35	57	92	100	93	91	(X)
	1972..	66	1,178.9	29	47	83	99	89	92	(X)
2875	Fertilizers, mixing only.....1977..	457	1,866.6	21	37	56	71	95	98	(X)
	1972..	442	800.0	24	38	57	74	96	97	(X)
	1970..	(NA)	703.1	24	37	(NA)	(NA)	(NA)	(NA)	3
	1967..	496	731.1	23	36	54	72	96	97	(X)
	1966..	(NA)	734.9	21	36	(NA)	(NA)	(NA)	(NA)	2
	1963..	537	623.1	20	31	48	64	94	96	(X)
	1958..	514	355.1	18	28	47	64	(NA)	(NA)	(X)
	1954..	437	329.3	20	29	46	(NA)	95	44	(X)
	1947..	377	193.3	18	28	47	(NA)	49	47	(X)
2879	Agricultural chemicals, n.e.c.[73]....1977..	338	2,780.4	44	64	78	89	83	77	(X)
	1972..	297	1,150.8	39	57	76	89	87	72	(X)
2891	Adhesives and sealants[74].....1977..	405	1,813.1	24	35	54	74	89	81	(X)
	1972..	317	928.0	19	31	52	76	89	82	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.								
2892	Explosives[69] 1977	63	666.3	64	79	96	99+	86	95	(X)
	1972	55	402.7	67	86	98	99+	92	95	(X)
	1970	(NA)	501.3	72	95	(NA)	(NA)	(NA)	(NA)	1
	1967	37	647.0	67	91	99	100	93	93	(X)
	1966	(NA)	469.4	72	87	(NA)	(NA)	(NA)	(NA)	2
	1963	41	283.3	72	86	99	100	88	94	(X)
	1958	45	222.5	77	89	98	100	98	96	(X)
	1954	40	389.6	79	92	99	100	98	91	(X)
	1947	35	136.4	80	89	98	100	87	99	(X)
2893	Printing ink 1977	205	944.9	43	57	74	89	97	97	(X)
	1972	213	508.4	39	54	75	88	95	93	(X)
	1970	(NA)	397.4	49	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967	207	375.6	49	64	79	90	93	95	(X)
	1966	(NA)	377.0	48	58	(NA)	(NA)	(NA)	(NA)	6
	1963	216	268.0	48	63	77	90	93	92	(X)
	1958	193	223.6	53	65	78	91	91	97	(X)
	1954	188	180.6	54	65	79	(NA)	90	95	(X)
	1947	151	115.7	57	69	81	(NA)	92	78	(X)
	1935	(NA)	(NA)	49	60	(NA)	(NA)	(NA)	(NA)	(X)
2895	Carbon black 1977	8	468.4	70	100	(X)	(X)	[61]95	[61]95	(X)
	1972	11	227.0	74	99+	100	(X)	[61]95	[61]95	(X)
	1970	(NA)	169.7	(S)	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967	11	167.8	72	(D)	100	(X)	100	100	(X)
	1966	(NA)	187.8	70	100	(NA)	(NA)	(NA)	(NA)	2
	1963	8	149.1	72	100	(X)	(X)	(D)	(D)	(X)
2899	Chemical preparations, n.e.c.[75] 1977	1,479	3,950.6	15	25	40	56	87	77	(X)
	1972	1,485	2,202.3	16	26	41	58	84	75	(X)
	1970	(NA)	1,663.4	19	27	(NA)	(NA)	(NA)	(NA)	2
	1967	1,275	1,381.6	19	28	43	62	82	72	(X)
	1966	(NA)	1,322.5	20	31	(NA)	(NA)	(NA)	(NA)	2
	1963	1,312	964.6	20	30	46	64	82	71	(X)
		MAJOR GROUP 29, PETROLEUM AND COAL PRODUCTS								
2911	Petroleum refining 1977	192	91,688.8	30	53	81	94	99	97	(X)
	1972	152	25,921.1	31	56	84	95	99	97	(X)
	1970	(NA)	22,737.9	33	57	(NA)	(NA)	(NA)	(NA)	1
	1967	276	20,293.9	33	57	84	96	98	97	(X)
	1966	(NA)	18,758.7	32	57	(NA)	(NA)	(NA)	(NA)	2
	1963	266	16,496.9	34	56	82	95	98	[76]97	(X)
	1958	289	14,106.3	32	55	82	94	98	[76]98	(X)
	1954	253	11,757.2	33	56	84	(NA)	99	[76]98	(X)
	1947	277	6,623.7	37	59	83	(NA)	99	[76]97	(X)
	1935	(NA)	(NA)	38	58	(NA)	(NA)	(NA)	(NA)	(X)
2951	Paving mixtures and blocks 1977	590	1,578.3	17	23	35	51	95	93	(X)
	1972	585	922.5	15	23	34	51	93	90	(X)
	1970	(NA)	745.8	16	24	(NA)	(NA)	(NA)	(NA)	4
	1967	553	584.6	14	22	35	51	93	95	(X)
	1966	(NA)	479.2	15	23	(NA)	(NA)	(NA)	(NA)	4
	1963	528	427.5	15	21	35	51	92	89	(X)
	1958	415	255.3	11	17	31	51	93	89	(X)
	1954	252	126.6	15	24	42	(NA)	97	94	(X)
	1947	182	51.0	19	30	45	(NA)	99	88	(X)
	1935	(NA)	(NA)	48	63	(NA)	(NA)	(NA)	(NA)	(X)
2952	Asphalt felts and coatings 1977	146	2,077.6	45	72	87	97	91	97	(X)
	1972	116	1,010.3	48	74	88	97	93	96	(X)
	1970	(NA)	689.9	38	65	(NA)	(NA)	(NA)	(NA)	4
	1967	115	597.8	38	65	86	97	91	95	(X)
	1966	(NA)	589.4	38	65	(NA)	(NA)	(NA)	(NA)	2
	1963	126	527.6	37	66	85	97	90	92	(X)
	1958	120	420.7	37	64	86	97	90	92	(X)
	1954	108	400.8	39	67	89	(NA)	91	94	(X)
	1947	104	338.2	42	65	87	(NA)	95	95	(X)
	1935	(NA)	(NA)	42	68	(NA)	(NA)	(NA)	(NA)	(X)
2992	Lubricating oils and greases 1977	417	1,644.7	28	40	58	76	94	41	(X)
	1972	386	703.1	31	44	58	73	94	[77]40	(X)
	1970	(NA)	553.5	39	52	(NA)	(NA)	(NA)	(NA)	5
	1967	256	487.3	38	50	68	84	93	[77]32	(X)
	1966	(NA)	527.4	36	48	(NA)	(NA)	(NA)	(NA)	3
	1963	311	471.2	36	48	65	80	91	[77]33	(X)
	1958	284	260.2	29	44	63	80	83	[77]25	(X)
	1954	265	224.2	28	42	61	(NA)	87	18	(X)
	1947	205	169.3	36	48	66	(NA)	89	19	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 29, PETROLEUM AND COAL--Con.									
2999	Petroleum and coal products, n.e.c. 1977	60	463.3	67	84	94	99+	97	87	(X)
	1972	42	137.6	74	89	93	100	99	91	(X)
	1970	(NA)	119.0	82	91	(NA)	(NA)	(NA)	(NA)	2
	1967	38	79.8	82	92	99	100	99	92	(X)
	1966	(NA)	64.1	80	91	(NA)	(NA)	(NA)	(NA)	2
	1963	59	71.5	70	84	96	99+	96	91	(X)
	1958	74	67.8	63	72	89	99	95	96	(X)
	1954	39	58.5	58	72	95	100	94	89	(X)
	MAJOR GROUP 30, RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS, N.E.C.									
3011	Tires and inner tubes 1977	121	8,971.0	70	88	97	99+	96	99	(X)
	1972	136	5,747.1	73	90	98	99+	97	99	(X)
	1970	(NA)	4,587.2	72	89	(NA)	(NA)	(NA)	(NA)	1
	1967	119	3,733.9	70	88	97	100	95	99	(X)
	1966	(NA)	3,715.8	71	90	(NA)	(NA)	(NA)	(NA)	2
	1963	105	2,949.7	70	89	97	99+	(D)	99	(X)
3021	Rubber and plastics footwear[78] 1977	67	517.0	58	73	95	99+	93	99	(X)
	1972	82	600.0	59	70	89	99	94	99	(X)
	1970	(NA)	515.0	58	76	(NA)	(NA)	(NA)	(NA)	2
	1967	51	427.0	59	75	92	(D)	(NA)	(NA)	(X)
	1966	(NA)	410.1	63	80	(NA)	(NA)	(NA)	(NA)	2
	1963	44	354.2	62	77	94	100	93	90	(X)
	1958	22	219.0	65	82	(D)	100	88	90	(X)
	1954	19	166.4	72	87	100	(X)	84	85	(X)
	1947	20	198.7	81	93	100	(X)	80	99	(X)
	1935	(NA)	(NA)	81	100	(NA)	(NA)	(NA)	(NA)	(X)
3031	Reclaimed rubber 1977	21	41.6	74	(D)	(D)	100	100	62	(X)
	1972	19	29.7	78	95	100	(X)	96	55	(X)
	1970	(NA)	41.4	88	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967	19	43.8	87	96	100	(X)	83	75	(X)
	1966	(NA)	52.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	2
	1963	7	48.9	93	100	(X)	(X)	(D)	77	(X)
	1958	12	37.6	87	97	100	(X)	94	74	(X)
	1954	15	39.0	73	94	100	(X)	87	74	(X)
	1947	14	17.2	84	96	100	(X)	95	44	(X)
3041	Rubber and plastics hose and belting[79] 1977	101	1,765.7	55	71	87	97	88	92	(X)
	1972	66	1,020.1	52	72	91	99	85	89	(X)
3069	Fabricated rubber products, n.e.c.[80] 1977	1,127	4,565.0	16	24	38	55	88	90	(X)
	1972	967	2,830.9	16	24	40	59	84	89	(X)
3079	Miscellaneous plastics products[81] 1977	8,817	23,692.6	7	11	18	30	94	91	(X)
	1972	6,762	10,695.9	8	12	21	34	94	88	(X)
	1970	(NA)	6,992.8	8	13	(NA)	(NA)	(NA)	(NA)	2
	1967	4,495	5,414.5	8	13	21	33	93	84	(X)
	1966	(NA)	4,658.3	8	12	(NA)	(NA)	(NA)	(NA)	3
	1963	4,101	3,165.4	8	12	20	31	92	80	(X)
	MAJOR GROUP 31, LEATHER AND LEATHER PRODUCTS									
3111	Leather tanning and finishing 1977	428	1,456.1	17	28	51	76	99	99	(X)
	1972	468	1,059.5	17	28	48	71	99	99	(X)
	1970	(NA)	793.3	21	32	(NA)	(NA)	(NA)	(NA)	2
	1967	474	870.1	20	31	50	71	98	99	(X)
	1966	(NA)	940.5	19	30	(NA)	(NA)	(NA)	(NA)	3
	1963	482	758.4	18	30	47	70	99	100	(X)
	1958	520	732.4	18	30	47	68	100	100	(X)
	1954	525	706.2	18	28	45	(NA)	98	100	(X)
	1947	500	1,070.3	27	39	55	(NA)	100	100	(X)
	1935	(NA)	(NA)	22	34	(NA)	(NA)	(NA)	(NA)	(X)
3131	Boot and shoe cut stock and findings 1977	174	270.6	21	32	55	83	90	92	(X)
	1972	225	206.5	17	27	49	75	94	95	(X)
	1970	(NA)	247.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	348	262.8	19	28	44	64	94	93	(X)
	1966	(NA)	(282.8)	19	25	(NA)	(NA)	(NA)	(NA)	17
	1963	414	229.3	20	27	40	60	93	94	(X)
	1958	472	243.0	19	29	41	58	95	95	(X)
	1954	522	246.4	22	32	44	(NA)	97	96	(X)
	1947	544	294.3	30	41	55	(NA)	99	97	(X)
	1935	(NA)	(NA)	32	42	(NA)	(NA)	(NA)	(NA)	1

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 31, LEATHER AND LEATHER PRODUCTS--Con.									
3142	House slippers[82] 1977	65	201.2	44	64	87	99	94	96	(X)
	1972	83	151.4	39	58	80	97	95	87	(X)
	1970	(NA)	175.3	28	44	(NA)	(NA)	(NA)	(NA)	4
	1967	125	181.0	22	37	63	88	92	93	(X)
	1966	(NA)	162.0	18	31	(NA)	(NA)	(NA)	(NA)	8
	1963	149	123.6	20	34	58	84	90	85	(X)
	1958	159	111.0	18	30	56	83	90	85	(X)
	1954	170	90.5	19	31	54	(NA)	89	87	(X)
	1947	(83)	67.4	(83)	(83)	(83)	(83)	(83)	(83)	(X)
3143	Men's footwear, except athletic[84] 1977	115	1,734.5	31	46	73	95	92	96	(X)
	1972	118	1,288.9	34	51	74	95	93	97	(X)
3144	Women's footwear, except athletic[84] 1977	243	1,361.2	29	39	56	79	97	92	(X)
	1972	294	1,346.1	32	42	56	76	97	95	(X)
3149	Footwear, except rubber, n.e.c.[84] 1977	159	594.8	24	41	68	91	84	83	(X)
	1972	153	485.8	30	42	65	87	88	85	(X)
	1967 industry 3141, Shoes, except rubber (1972 industry 3149) 1970	(NA)	2,972.8	28	36	(NA)	(NA)	(NA)	(NA)	1
	1967	676	2,780.3	27	34	46	61	99	98	(X)
	1966	(NA)	2,650.1	26	34	(NA)	(NA)	(NA)	(NA)	2
	1963	784	2,249.2	25	32	43	57	99	99	(X)
	1958	871	2,026.2	27	34	43	55	99	99	(X)
	1954	970	1,790.7	30	36	45	(NA)	99	99	(X)
	1947	1,077	1,726.6	28	35	45	(NA)	99	100	(X)
3151	Leather gloves and mittens 1977	84	178.0	38	54	79	97	83	85	(X)
	1972	95	98.2	35	50	74	95	92	85	(X)
	1970	(NA)	96.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967	136	86.7	30	43	65	89	90	84	(X)
	1966	(NA)	89.6	25	36	(NA)	(NA)	(NA)	(NA)	10
	1963	160	80.6	22	34	57	84	81	89	(X)
3161	Luggage 1977	286	654.9	40	50	66	85	94	98	(X)
	1972	266	364.5	39	50	65	82	92	97	(X)
	1970	(NA)	312.4	38	51	(NA)	(NA)	(NA)	(NA)	5
	1967	328	334.2	34	45	59	77	96	94	(X)
	1966	(NA)	275.8	35	45	(NA)	(NA)	(NA)	(NA)	8
	1963	377	210.3	31	40	55	73	95	94	(X)
3171	Women's handbags and purses 1977	404	505.2	21	31	48	70	97	97	(X)
	1972	431	365.0	14	23	39	61	95	97	(X)
	1970	(NA)	280.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967	488	327.2	10	17	30	52	98	98	(X)
	1966	(NA)	291.9	11	19	(NA)	(NA)	(NA)	(NA)	11
	1963	539	280.3	11	18	31	51	98	98	(X)
	1958	613	227.4	10	15	27	48	96	98	(X)
	1954	710	188.8	8	14	26	(NA)	97	98	(X)
	1947	725	163.3	7	13	23	(NA)	99	97	(X)
3172	Personal leather goods 1977	253	366.8	38	49	67	86	96	91	(X)
	1972	238	242.2	37	47	66	84	94	91	(X)
	1970	(NA)	235.7	31	41	(NA)	(NA)	(NA)	(NA)	10
	1967	293	186.2	33	44	60	78	94	92	(X)
	1966	(NA)	195.8	32	45	(NA)	(NA)	(NA)	(NA)	6
	1963	325	159.0	31	45	60	78	96	92	(X)
3199	Leather goods, n.e.c.[85] 1977	512	284.2	13	24	44	65	94	95	(X)
	1972	433	161.3	17	26	43	63	92	90	(X)
	1970	(NA)	118.0	20	(S)	(NA)	(NA)	(NA)	(NA)	10
	1967	358	96.5	19	28	45	67	94	87	(X)
	1966	(NA)	(90.9)	19	(S)	(NA)	(NA)	(NA)	(NA)	14
	1963	365	67.1	17	26	44	66	94	82	(X)
	[87]1958	429	54.4	14	21	(NA)	(NA)	96	84	(X)
	MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS									
3211	Flat glass 1977	[86]43	1,576.6	90	99	99+	100	90	(D)	(X)
	1972	11	937.1	92	(D)	100	(X)	[58]85	(D)	(X)
	1970	(NA)	669.6	92	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967	[86]39	611.3	94	98	99	100	[58]85	(D)	(X)
	1966	(NA)	638.1	96	99+	(NA)	(NA)	(NA)	(NA)	2
	1963	11	549.4	94	99+	100	(X)	(D)	(D)	(X)
	1958	13	382.7	92	99	100	(X)	(D)	(D)	(X)
	1954	16	370.5	90	99	100	(X)	90	(D)	(X)
	1947	(83)	223.7	(83)	(83)	(83)	(83)	(83)	(83)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.									
3221	Glass containers....1977..	31	3,664.2	54	75	98	100	99	99	(X)
	1972..	27	2,126.5	55	76	98	100	99	99	(X)
	1970..	(NA)	1,863.9	57	78	(NA)	(NA)	(NA)	(NA)	1
	1967..	39	1,352.4	60	75	95	100	99	99	(X)
	1966..	(NA)	1,207.5	59	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	40	1,004.5	55	72	92	100	99	99	(X)
	1958..	42	855.8	58	75	93	100	99	99	(X)
	1954..	38	635.1	63	78	92	100	98	99	(X)
	1947..	41	422.6	63	79	93	100	(D)	(D)	(X)
3229	Pressed and blown glass, n.e.c.....1977..	325	2,120.1	61	78	92	97	97	96	(X)
	1972..	211	1,267.3	66	82	93	98	96	96	(X)
	1970..	(NA)	1,052.0	67	82	(NA)	(NA)	(NA)	(NA)	1
	1967..	139	886.2	71	83	93	99	97	98	(X)
	1966..	(NA)	926.6	72	85	(NA)	(NA)	(NA)	(NA)	2
	1963..	75	630.9	68	81	93	99	96	97	(X)
	1958..	111	441.0	64	79	90	96	98	98	(X)
	1954..	255	411.3	67	77	88	(NA)	98	96	(X)
	1947..	107	234.8	51	65	80	(NA)	96	91	(X)
3231	Products of purchased glass.....1977..	1,000	1,842.4	31	39	53	68	95	(D)	(X)
	1972..	842	1,330.1	43	53	65	77	[5][8]90	(D)	(X)
	1970..	(NA)	959.8	43	51	(NA)	(NA)	(NA)	(NA)	2
	1967..	845	794.7	42	50	61	74	[5][8]90	(D)	(X)
	1966..	(NA)	754.1	40	50	(NA)	(NA)	(NA)	(NA)	3
	1963..	1,016	627.3	43	49	59	70	(D)	(D)	(X)
3241	Cement, hydraulic.....1977..	87	3,042.3	24	41	74	99	99	99	(X)
	1972..	75	1,791.2	26	46	79	99+	99	99	(X)
	1970..	(NA)	1,376.3	27	48	(NA)	(NA)	(NA)	(NA)	1
	1967..	66	1,246.5	29	49	82	99+	99	99	(X)
	1966..	(NA)	1,253.4	30	51	(NA)	(NA)	(NA)	(NA)	2
	1963..	55	1,176.9	29	49	82	99+	99	100	(X)
	1958..	62	1,069.4	32	50	78	99	99	100	(X)
	1954..	67	811.1	31	48	73	(NA)	99	100	(X)
	1947..	73	408.9	30	45	70	(NA)	100	100	(X)
	1935..	(NA)	(NA)	29	44	(NA)	(NA)	(NA)	(NA)	(X)
3251	Brick and structural clay tile.....1977..	250	777.7	21	31	48	70	97	99	(X)
	1972..	314	513.0	17	26	42	64	98	99	(X)
	1970..	(NA)	401.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1967..	377	362.0	14	22	35	57	98	99	(X)
	1966..	(NA)	386.8	13	21	(NA)	(NA)	(NA)	(NA)	5
	1963..	401	325.1	12	19	33	54	98	98	(X)
	1958..	471	278.5	12	20	33	50	96	98	(X)
	1954..	510	250.4	13	20	34	(NA)	96	98	(X)
	1947..	574	144.5	10	17	30	(NA)	95	97	(X)
3253	Ceramic wall and floor tile.....1977..	62	252.5	60	79	96	100	99	95	(X)
	1972..	64	175.6	56	71	90	99+	98	96	(X)
	1970..	(NA)	154.1	56	78	(NA)	(NA)	(NA)	(NA)	1
	1967..	57	160.5	52	76	94	99+	93	99	(X)
	1966..	(NA)	162.1	51	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	71	164.7	49	69	88	99+	95	99	(X)
3255	Clay refractories.....1977..	98	607.2	47	67	86	98	89	95	(X)
	1972..	86	336.0	49	68	89	99	87	92	(X)
	1970..	(NA)	332.8	43	63	(NA)	(NA)	(NA)	(NA)	3
	1967..	83	246.1	44	64	86	99	92	92	(X)
	1966..	(NA)	267.1	41	62	(NA)	(NA)	(NA)	(NA)	4
	1963..	80	192.2	41	60	83	98	91	93	(X)
	1958..	104	157.5	43	61	81	95	93	95	(X)
	1954..	113	136.4	43	60	79	(NA)	92	95	1
	1947..	108	109.3	41	57	76	(NA)	93	94	(X)
3259	Structural clay products, n.e.c.....1977..	94	214.6	40	60	85	97	94	92	(X)
	1972..	88	180.7	39	66	88	99	95	96	(X)
	1970..	(NA)	161.6	36	58	(NA)	(NA)	(NA)	(NA)	4
	1967..	110	152.9	31	51	79	95	91	96	(X)
	1966..	(NA)	155.7	33	52	(NA)	(NA)	(NA)	(NA)	1
	1963..	126	159.7	36	55	79	94	89	95	(X)
3261	Vitreous plumbing fixtures.....1977..	54	411.4	62	82	98	100	92	95	(X)
	1972..	42	270.0	58	83	99	100	90	92	(X)
	1970..	(NA)	209.7	57	82	(NA)	(NA)	(NA)	(NA)	1
	1967..	34	170.0	62	84	99	100	95	96	(X)
	1966..	(NA)	180.7	56	77	(NA)	(NA)	(NA)	(NA)	6
	1963..	34	155.7	57	78	98	100	97	97	(X)
	1958..	35	130.8	54	75	96	100	97	97	(X)
	1954..	25	116.3	65	84	99	100	99	99	(X)
	1947..	26	68.1	58	82	99+	100	98	99	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.								
3262	Vitreous china food utensils.....1977..	26	170.7	71	94	99+	100	80	97	(X)
	1972..	32	81.9	75	90	99	100	[5][8]90	88	(X)
	1967..	35	67.2	70	88	98	100	[6]190	89	(X)
	1966..	(NA)	60.0	75	93	(NA)	(NA)	(NA)	(NA)	2
	1963..	26	51.0	69	88	99+	100	[5][8]90	91	(X)
	1958..	26	47.3	60	80	99	100	96	96	(X)
	1954..	32	44.5	55	73	97	110	95	96	(X)
	1947..	26	43.2	56	75	99	100	97	96	(X)
3263	Fine earthenware food utensils.....1977..	22	81.3	68	(D)	(D)	100	85	76	(X)
	1972..	17	74.3	65	90	100	(X)	[5][8]70	97	(X)
	1970..	(NA)	48.7	62	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	20	47.1	61	87	100	100	86	86	(X)
	1966..	(NA)	47.6	61	87	(NA)	(NA)	(NA)	(NA)	2
	1963..	20	59.0	57	83	100	(X)	92	91	(X)
	1958..	29	49.4	43	69	98	100	98	91	(X)
	1954..	46	66.4	37	57	88	100	98	92	(X)
	1947..	74	72.1	38	57	87	(NA)	92	97	(X)
3264	Porcelain electrical supplies.....1977..	77	367.5	48	64	84	98	86	82	(X)
	1972..	74	274.6	46	70	88	99	91	95	(X)
	1970..	(NA)	220.1	53	69	(NA)	(NA)	(NA)	(NA)	3
	1967..	65	225.0	47	70	90	99+	85	98	(X)
	1966..	(NA)	197.1	49	69	(NA)	(NA)	(NA)	(NA)	3
	1963..	74	131.8	46	67	88	99+	91	95	(X)
	1958..	57	92.6	46	68	89	99	92	93	(X)
	1954..	42	77.9	46	70	92	100	94	87	(X)
	1947..	47	71.5	44	64	90	100	89	93	(X)
3269	Pottery products, n.e.c.....1977..	713	230.0	19	31	48	68	95	85	(X)
	1972..	417	134.0	20	35	55	75	97	84	(X)
	1970..	(NA)	104.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1967..	424	96.1	28	37	55	75	97	87	(X)
	1963..	449	95.5	32	41	58	75	87	89	(X)
3271	Concrete block and brick.....1977..	1,162	1,143.8	4	6	12	23	93	85	(X)
	1972..	1,300	855.7	5	8	14	25	93	85	(X)
	1970..	(NA)	652.3	5	(S)	(NA)	(NA)	(NA)	(NA)	4
	1967..	1,534	550.1	4	7	13	23	92	86	(X)
	1966..	(NA)	585.9	4	7	(NA)	(NA)	(NA)	(NA)	5
	1963..	1,786	505.2	5	7	12	22	92	84	(X)
3272	Concrete products, n.e.c.....1977..	3,475	2,736.2	9	14	23	35	96	95	(X)
	1972..	3,198	1,961.4	10	15	24	37	96	95	(X)
	1970..	(NA)	1,495.7	11	17	(NA)	(NA)	(NA)	(NA)	3
	1967..	3,055	1,201.1	11	17	28	39	96	94	(X)
	1966..	(NA)	1,189.7	13	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963..	3,130	925.7	17	23	32	42	94	94	(X)
3273	Ready-mixed concrete.....1977..	4,317	6,440.6	5	8	14	23	93	98	(X)
	1972..	3,978	4,050.9	6	10	16	25	93	98	(X)
	1970..	(NA)	3,142.6	6	10	(NA)	(NA)	(NA)	(NA)	3
	1967..	4,032	2,684.2	6	9	16	24	93	98	(X)
	1966..	(NA)	2,527.8	5	8	(NA)	(NA)	(NA)	(NA)	5
	1963..	3,999	2,292.5	4	7	13	22	92	98	(X)
	1958..	3,104	1,559.3	4	7	13	21	94	97	(X)
3274	Lime.....1977..	64	484.2	35	50	79	99+	92	92	(X)
	1972..	68	238.1	37	53	79	99+	89	92	(X)
	1970..	(NA)	201.2	36	54	(NA)	(NA)	(NA)	(NA)	4
	1967..	78	176.5	35	54	79	99	87	93	(X)
	1966..	(NA)	197.9	31	47	(NA)	(NA)	(NA)	(NA)	11
	1963..	81	164.4	37	56	82	99	82	94	(X)
	1958..	94	129.7	38	57	80	98	84	95	(X)
	1954..	113	109.2	35	53	80	(NA)	84	97	(X)
	1947..	132	72.8	30	47	69	(NA)	93	97	(X)
3275	Gypsum products.....1977..	58	1,000.0	79	91	99	100	96	98	(X)
	1972..	44	640.3	80	93	99+	100	95	99	(X)
	1970..	(NA)	419.5	79	91	(NA)	(NA)	(NA)	(NA)	2
	1967..	55	387.7	80	93	99+	99+	96	98	(X)
	1966..	(NA)	394.4	80	95	(NA)	(NA)	(NA)	(NA)	2
	1963..	60	425.1	84	97	99+	99+	97	98	(X)
	1958..	72	350.6	88	96	98	99	97	98	(X)
	1954..	48	282.2	90	97	99	100	95	98	(X)
	1947..	33	127.5	85	94	99+	100	97	98	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.								
3281	Cut stone and stone products.....1977..	963	393.0	14	20	30	43	96	95	(X)
	1972..	874	304.5	18	24	35	48	96	98	(X)
	1970..	(NA)	248.3	20	28	(NA)	(NA)	(NA)	(NA)	4
	1967..	776	236.4	18	27	37	51	95	99	(X)
	1966..	(NA)	224.2	17	25	(NA)	(NA)	(NA)	(NA)	14
	1963..	857	217.2	20	28	38	51	94	99	(X)
	1958..	959	198.5	16	24	32	44	96	97	(X)
	1954..	961	181.8	12	21	30	(NA)	93	99	(X)
	1947..	629	67.3	8	13	21	(NA)	100	98	(X)
3291	Abrasive products.....1977..	353	1,955.8	58	65	77	87	90	97	(X)
	1972..	335	888.1	49	60	74	87	93	88	(X)
	1970..	(NA)	772.8	48	58	(NA)	(NA)	(NA)	(NA)	1
	1967..	320	725.3	48	57	71	85	91	85	(X)
	1966..	(NA)	1,015.6	56	63	(NA)	(NA)	(NA)	(NA)	4
	1963..	340	704.2	58	67	77	88	(D)	95	(X)
	1958..	318	466.6	58	68	77	88	83	96	(X)
	1954..	290	332.5	50	58	71	(NA)	94	87	(X)
	1947..	236	225.4	49	56	72	(NA)	94	86	(X)
	1935..	(NA)	(NA)	67	74	(NA)	(NA)	(NA)	(NA)	(X)
3292	Asbestos products[88].....1977..	86	882.1	42	64	90	98	92	81	(X)
	1972..	88	763.4	50	71	91	99	91	88	(X)
	1970..	(NA)	587.0	54	75	(NA)	(NA)	(NA)	(NA)	1
	1967..	81	575.0	55	75	94	99+	93	90	(X)
	1966..	(NA)	591.1	56	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	73	509.2	56	76	95	99+	95	91	(X)
	1958..	69	433.3	59	76	95	99	89	92	(X)
	1954..	74	346.2	60	77	([89])	([89])	87	93	(X)
	1947..	85	206.2	([89])	([89])	([89])	([89])	87	90	(X)
3293	Gaskets, packing and sealing devices[90].....1977..	384	1,267.1	25	39	58	77	93	89	(X)
	1972..	346	665.4	27	43	60	77	89	81	(X)
3295	Minerals, ground or treated.....1977..	318	957.3	27	42	65	82	96	90	(X)
	1972..	345	412.0	25	36	54	75	95	89	(X)
	1970..	(NA)	384.8	25	36	(NA)	(NA)	(NA)	(NA)	3
	1967..	382	280.9	26	36	56	76	96	89	(X)
	1966..	(NA)	292.1	24	39	(NA)	(NA)	(NA)	(NA)	6
	1963..	313	204.4	24	38	59	79	94	86	(X)
3296	Mineral wool.....1977..	95	1,790.5	72	85	95	99+	93	96	(X)
	1972..	66	755.4	75	89	97	99+	93	93	(X)
	1970..	(NA)	524.9	73	85	(NA)	(NA)	(NA)	(NA)	1
	1967..	77	454.4	71	84	95	99	92	95	(X)
	1966..	(NA)	461.0	71	83	(NA)	(NA)	(NA)	(NA)	1
	1963..	89	391.9	67	83	95	99	90	96	(X)
3297	Nonclay refractories.....1977..	74	680.2	46	67	89	99	92	83	(X)
	1972..	61	343.6	42	65	90	99+	94	84	(X)
	1970..	(NA)	353.8	38	60	(NA)	(NA)	(NA)	(NA)	2
	1967..	59	307.1	38	58	89	99+	90	88	(X)
	1966..	(NA)	333.1	42	61	(NA)	(NA)	(NA)	(NA)	2
	1963..	51	250.2	49	66	91	(D)	94	88	(X)
3299	Nonmetallic mineral products, n.e.c.....1977..	681	387.3	37	48	65	78	93	89	(X)
	1972..	480	166.5	28	36	53	70	94	90	(X)
	1970..	(NA)	97.2	41	53	(NA)	(NA)	(NA)	(NA)	10
	1967..	325	99.9	37	49	66	82	82	89	(X)
	1966..	(NA)	115.9	35	(S)	(NA)	(NA)	(NA)	(NA)	11
	1963..	313	96.2	37	48	66	82	86	96	(X)
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES								
3312	Blast furnaces and steel mills.....1977..	395	[9]15,331.9	45	65	84	95	(NA)	(NA)	(X)
	1972..	241	[9]10,304.7	45	65	84	96	(NA)	(NA)	(X)
	1970..	(NA)	[9]9,328.3	47	65	(NA)	(NA)	(NA)	(NA)	1
	1967..	200	[9]8,910.1	48	66	83	96	(NA)	(NA)	(X)
	1966..	(NA)	[9]9,643.6	49	66	(NA)	(NA)	(NA)	(NA)	2
	1963..	161	[9]7,699.5	48	67	85	95	(NA)	(NA)	(X)
	1958..	148	[9]5,980.0	53	70	84	96	(NA)	(NA)	(X)
	[91]1954..	(NA)	[9]5,014.4	55	71	86	(NA)	(NA)	(NA)	(X)
	[91]1947..	(NA)	[9]2,844.6	50	66	81	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

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1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.								
3313	Electrometallurgical products.....1977..	28	930.6	69	84	99+	100	(D)	90	(X)
	1972..	27	550.1	74	90	99+	100	85-90	[9]2 87	(X)
	1970..	(NA)	515.7	77	93	(NA)	(NA)	(NA)	(NA)	1
	1967..	21	467.9	74	90	(D)	100	85-90	[9]2 82	(X)
	1966..	(NA)	509.3	74	91	(NA)	(NA)	(NA)	(NA)	2
	1963..	20	382.1	79	95	100	(X)	85-90	[9]2 77	(X)
	1958..	19	397.3	73	91	100	(X)	96	[9]2 76	(X)
	1954..	17	271.8	77	93	100	(X)	92	[9]2 68	(X)
	1947..	10	150.9	88	(D)	100	(X)	88	(NA)	(X)
3315	Steel wire and related products.....1977..	262	2,258.6	21	32	52	76	95	47	(X)
	1972..	234	1,227.7	18	30	52	77	94	42	(X)
	1970..	(NA)	965.3	26	38	(NA)	(NA)	(NA)	(NA)	2
	1967..	200	845.2	24	34	53	78	90	37	(X)
	1966..	(NA)	799.6	26	38	(NA)	(NA)	(NA)	(NA)	2
	1963..	171	592.3	28	39	59	85	89	30	(X)
3316	Cold finishing of steel shapes.....1977..	118	2,713.2	37	54	80	97	95	25	(X)
	1972..	85	1,635.7	40	56	82	99	91	29	(X)
	1970..	(NA)	1,122.1	35	52	(NA)	(NA)	(NA)	(NA)	3
	1967..	77	1,038.7	34	51	77	98	87	24	(X)
	1966..	(NA)	975.7	34	51	(NA)	(NA)	(NA)	(NA)	2
	1963..	59	751.6	36	55	82	99+	94	20	(X)
3317	Steel pipe and tubes.....1977..	130	2,681.4	24	39	68	91	95	44	(X)
	1972..	115	1,292.1	23	40	70	92	93	42	(X)
	1970..	(NA)	1,026.9	25	40	(NA)	(NA)	(NA)	(NA)	2
	1967..	123	1,148.6	26	41	72	92	89	38	(X)
	1966..	(NA)	1,072.3	26	43	(NA)	(NA)	(NA)	(NA)	2
	1963..	114	809.0	27	42	71	93	91	37	(X)
3321	Gray iron foundries[93].....1977..	865	7,388.7	34	44	60	73	96	88	(X)
	1972..	893	3,876.5	34	45	59	71	94	87	(X)
	1970..	(NA)	3,034.9	30	40	(NA)	(NA)	(NA)	(NA)	1
	1967..	969	2,637.8	27	36	50	64	93	86	(X)
	1966..	(NA)	2,728.2	27	37	(NA)	(NA)	(NA)	(NA)	2
	1963..	1,062	1,984.9	28	37	51	65	93	88	(X)
	1958..	1,199	1,406.4	24	33	47	61	95	87	(X)
	1954..	1,321	1,418.9	26	34	46	(NA)	94	87	(X)
	1947..	1,554	1,173.0	16	24	35	(NA)	92	87	(X)
3322	Malleable iron foundries.....1977..	58	721.9	54	72	88	99+	86	93	(X)
	1972..	64	507.9	52	66	83	99	87	91	(X)
	1970..	(NA)	403.0	42	56	(NA)	(NA)	(NA)	(NA)	1
	1967..	72	438.3	47	59	77	97	85	89	(X)
	1966..	(NA)	449.4	48	60	(NA)	(NA)	(NA)	(NA)	2
	1963..	76	317.5	46	58	76	96	87	87	(X)
	1958..	73	210.8	42	56	73	96	87	90	(X)
	1954..	71	212.4	50	59	76	(NA)	86	89	(X)
	1947..	68	184.4	35	48	69	(NA)	88	91	(X)
3324	Steel investment foundries.....1977..	80	407.5	56	66	81	97	93	86	(X)
	1972..	67	262.2	56	67	87	98	86	94	(X)
3325	Steel foundries, n.e.c.....1977..	287	2,312.1	26	38	56	77	81	91	(X)
	1972..	225	1,067.4	24	37	58	79	89	88	(X)
	1967 industry 3323, Steel foundries (1972 industries 3324 and 3325).....1970..	(NA)	1,256.5	23	35	(NA)	(NA)	(NA)	(NA)	1
	1967..	256	1,213.2	20	33	52	75	90	89	(X)
	1966..	(NA)	1,279.0	22	35	(NA)	(NA)	(NA)	(NA)	2
	1963..	222	871.0	23	36	56	79	85	89	(X)
	1958..	209	590.7	25	37	56	77	86	86	(X)
	1954..	207	534.7	21	34	53	(NA)	88	87	(X)
	1947..	177	403.2	23	36	57	(NA)	89	83	(X)
3331	Primary copper.....1977..	8	[9]904.3	87	100	(X)	(X)	(NA)	(NA)	(X)
	1972..	11	[9]487.8	72	(D)	100	(X)	(NA)	(NA)	(X)
	1970..	(NA)	[9]673.0	75	98	(NA)	(NA)	(NA)	(NA)	1
	1967..	15	[9]262.6	77	98	100	(X)	(NA)	(NA)	(X)
	1966..	(NA)	[9]362.5	71	97	(NA)	(NA)	(NA)	(NA)	2
	1963..	13	[9]285.5	78	98	100	(X)	(NA)	(NA)	(X)
	1958..	11	[9]161.7	87	99	100	(X)	(NA)	(NA)	(X)
	1954..	(94)	[9]163.7	(94)	(94)	(94)	(94)	(NA)	(NA)	(X)
	1947..	(83)	[9]93.2	(83)	(83)	(83)	(83)	(83)	(83)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.								
3332	Primary lead									
	1977	4	$189.5	100	(X)	(X)	(X)	(NA)	(NA)	(X)
	1972	12	$128.7	93	99+	100	(X)	(NA)	(NA)	(X)
	1970	(NA)	$80.6	(D)	(D)	(NA)	(NA)	(NA)	(NA)	1
	1967	14	$48.3	(D)	(D)	100	(X)	(NA)	(NA)	(X)
	1966	(NA)	$65.0	(D)	100	(X)	(X)	(NA)	(NA)	2
	1963	6	$24.9	(D)	100	(X)	(X)	(NA)	(NA)	(X)
	1958	5	$24.4	(D)	100	(X)	(X)	(NA)	(NA)	(X)
	1954	5	$30.8	(D)	100	(X)	(X)	(NA)	(NA)	(X)
	1947	6	$35.9	(D)	100	(X)	(X)	(NA)	(NA)	(X)
3333	Primary zinc									
	1977	8	430.7	81	100	(X)	(X)	83	67	(X)
	1972	11	376.4	66	(D)	100	(X)	87	92 70	(X)
	1970	(NA)	372.5	57	90	(NA)	(NA)	(NA)	(NA)	1
	1967	11	332.8	59	90	100	(X)	88	92 80	(X)
	1966	(NA)	379.9	60	91	(NA)	(NA)	(NA)	(NA)	2
	1963	11	281.5	57	90	100	(X)	92	92 81	(X)
	1958	11	203.4	62	93	100	(X)	90	92 76	(X)
	1954	13	230.5	56	87	100	(X)	87	(NA)	(X)
	1947	14	191.0	53	82	100	(X)	(NA)	(NA)	(X)
3334	Primary aluminum									
	1977	12	4,647.8	76	93	100	(X)	95	70	(X)
	1972	12	1,959.8	79	92	100	(X)	94	92 76	(X)
	1970	(NA)	1,757.9	(D)	(D)	(NA)	(NA)	(NA)	(NA)	1
	1967	10	1,608.7	(D)	(D)	100	(X)	97	92 75	(X)
	1966	(NA)	1,496.2	(D)	100	(X)	(X)	(NA)	(NA)	2
	1963	7	1,090.0	(D)	100	(X)	(X)	100	92 75	(X)
	1958	6	801.7	(D)	100	(X)	(X)	100	92 76	(X)
	1954	3	604.1	100	(X)	(X)	(X)	100	92 78	(X)
	1947	3	161.0	100	(X)	(X)	(X)	(NA)	(NA)	(X)
3339	Primary nonferrous metals, n.e.c.									
	1977	81	963.9	56	76	96	99+	90	44	(X)
	1972	72	395.9	49	70	92	99+	84	92 27	(X)
	1970	(NA)	492.3	61	78	(NA)	(NA)	(NA)	(NA)	1
	1967	41	284.4	60	80	98	100	87	92 40	(X)
	1966	(NA)	309.2	53	71	(NA)	(NA)	(NA)	(NA)	4
	1963	32	212.2	61	78	96	100	83	92 39	(X)
	1958	24	96.5	62	86	99	100	92	92 24	(X)
	1954	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(X)
	1947	(83)	24.3	(83)	(83)	(83)	(83)	(83)	(83)	(X)
3341	Secondary nonferrous metals									
	1977	393	3,558.0	22	36	55	74	97	26	(X)
	1972	324	2,097.2	24	40	62	81	98	92 28	(X)
	1970	(NA)	1,802.6	26	41	(NA)	(NA)	(NA)	(NA)	2
	1967	351	1,586.0	26	42	62	79	89	92 26	(X)
	1966	(NA)	1,709.2	29	44	(NA)	(NA)	(NA)	(NA)	5
	1963	406	1,045.5	29	42	58	75	94	92 26	(X)
	1958	349	648.2	26	41	59	76	93	92 30	(X)
	1954	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(X)
	1947	(83)	(83)	(83)	(83)	(83)	(83)	(83)	(83)	(X)
3351	Copper rolling and drawing									
	1977	102	4,013.8	40	63	85	98	85	92	(X)
	1972	103	3,098.8	39	61	83	97	89	93	(X)
	1970	(NA)	2,920.9	44	65	(NA)	(NA)	(NA)	(NA)	1
	1967	86	2,391.1	41	65	85	98	90	93	(X)
	1966	(NA)	2,846.3	43	67	(NA)	(NA)	(NA)	(NA)	2
	1963	81	1,657.5	45	67	87	99	90	91	(X)
3353	Aluminum sheet, plate, and foil									
	1977	31	5,970.7	72	88	99+	100	92	99	(X)
	1972	24	2,685.2	69	84	99+	100	85	99	(X)
3354	Aluminum extruded products									
	1977	133	2,050.0	38	54	78	93	88	92	(X)
	1972	133	1,078.3	42	56	76	93	85	88	(X)
3355	Aluminum rolling and drawing, n.e.c.									
	1977	18	1,001.0	81	95	100	(X)	91	65	(X)
	1972	14	343.4	73	96	100	(X)	86	92 42	(X)
	1967 industry 3352, Aluminum rolling and drawing (1972 industries 3353, 3354, and 3355)									
	1970	(NA)	3,454.3	57	73	(NA)	(NA)	(NA)	(NA)	1
	1967	155	2,958.9	65	79	89	96	89	92 89	(X)
	1966	(NA)	3,099.8	65	78	(NA)	(NA)	(NA)	(NA)	3
	1963	166	2,196.4	68	79	87	95	85	92 93	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.								
3356	Nonferrous rolling and drawing, n.e.c. 1977	153	2,596.5	42	56	79	95	94	93	(X)
	1972	136	1,244.6	43	59	82	95	84	87	(X)
	1970	(NA)	1,047.8	47	66	(NA)	(NA)	(NA)	(NA)	1
	1967	115	984.0	49	67	85	98	89	[9]84	(X)
	1966	(NA)	1,051.1	46	68	(NA)	(NA)	(NA)	(NA)	3
	1963	108	641.0	46	66	86	97	84	[9]81	(X)
	1958	120	467.6	43	64	84	97	77	[9]82	(X)
	1954	[94]	[94]	[94]	[94]	[94]	[94]	[94]	[94]	(X)
	1947	[83]	[83]	[83]	[83]	[83]	[83]	[83]	[83]	(X)
3357	Nonferrous wiredrawing and insulating 1977	245	6,595.4	40	54	74	90	94	93	(X)
	1972	202	4,412.3	41	58	80	92	94	[9]89	(X)
	1970	(NA)	4,143.8	45	62	(NA)	(NA)	(NA)	(NA)	1
	1967	206	3,591.4	39	55	76	92	93	[9]89	(X)
	1966	(NA)	3,711.1	39	56	(NA)	(NA)	(NA)	(NA)	2
	1963	210	2,117.9	44	62	79	92	91	[9]86	(X)
3361	Aluminum foundries 1977	994	2,459.1	23	29	42	58	87	92	(X)
	1972	973	1,269.9	23	30	42	58	84	89	(X)
	1970	(NA)	1,036.2	23	30	(NA)	(NA)	(NA)	(NA)	3
	1967	970	920.5	24	31	42	55	83	85	(X)
	1966	(NA)	916.8	25	32	(NA)	(NA)	(NA)	(NA)	8
	1963	926	640.2	33	40	50	64	81	83	(X)
3362	Brass, bronze, and copper foundries 1977	476	553.3	16	23	37	57	85	74	(X)
	1972	490	465.3	20	28	42	60	84	81	(X)
	1970	(NA)	474.3	21	29	(NA)	(NA)	(NA)	(NA)	5
	1967	516	445.2	18	28	45	63	83	82	(X)
	1966	(NA)	451.7	20	28	(NA)	(NA)	(NA)	(NA)	6
	1963	535	287.5	18	27	44	61	84	78	(X)
3369	Nonferrous foundries, n.e.c. 1977	359	813.7	20	29	47	68	85	77	(X)
	1972	324	588.6	25	35	52	71	83	79	(X)
	1970	(NA)	487.6	25	37	(NA)	(NA)	(NA)	(NA)	3
	1967	352	556.3	29	39	54	73	83	82	(X)
	1966	(NA)	498.3	25	34	(NA)	(NA)	(NA)	(NA)	6
	1963	386	302.7	18	26	44	66	78	75	(X)
3398	Metal heat treating 1977	682	744.9	24	32	41	54	(NA)	(NA)	(X)
	1972	885	467.4	16	24	35	48	[95]	[95]	(X)
3399	Primary metal products, n.e.c. 1977	406	750.6	24	36	56	77	94	70	(X)
	1972	129	348.3	26	40	62	85	92	74	(X)
	1967 industry 3399, Primary metal products, n.e.c. (1972 industries 3398 and 3399) 1970	(NA)	582.4	13	20	(NA)	(NA)	(NA)	(NA)	3
	1967	868	578.5	14	23	36	51	97	85	(X)
	1966	(NA)	398.8	16	27	(NA)	(NA)	(NA)	(NA)	6
	1963	695	284.7	17	28	41	55	93	87	(X)
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS								
3411	Metal cans 1977	153	8,242.8	59	74	90	98	96	98	(X)
	1972	134	4,510.8	66	79	92	99	96	99	(X)
	1970	(NA)	3,912.7	72	83	(NA)	(NA)	(NA)	(NA)	1
	1967	96	2,890.6	73	84	94	99	90	98	(X)
	1966	(NA)	2,631.3	71	83	(NA)	(NA)	(NA)	(NA)	2
	1963	99	2,075.0	74	85	95	99	97	98	(X)
	1958	84	1,803.7	80	89	97	99	95	96	(X)
	1954	[96]109	1,366.8	80	88	96	(NA)	98	99	(X)
	1947	102	678.9	78	86	94	(NA)	97	99	(X)
	1935	(NA)	(NA)	80	85	(NA)	(NA)	(NA)	(NA)	(X)
3412	Metal barrels, drums, and pails 1967 industry 3491) 1977	120	937.1	34	47	71	94	94	90	(X)
	1972	99	461.3	38	52	75	97	97	86	(X)
	1970	(NA)	400.9	39	54	(NA)	(NA)	(NA)	(NA)	2
	1967	91	370.7	36	54	77	97	92	88	(X)
	1966	(NA)	361.7	39	55	(NA)	(NA)	(NA)	(NA)	5
	1963	95	303.4	40	56	77	97	92	86	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.								
3421	Cutlery									
	1977	119	711.4	53	65	83	97	92	94	(X)
	1972	123	427.5	55	67	83	97	91	94	(X)
	1970	(NA)	354.7	61	71	(NA)	(NA)	(NA)	(NA)	3
	1967	138	378.5	69	77	87	97	79	95	(X)
	1966	(NA)	373.6	66	76	(NA)	(NA)	(NA)	(NA)	4
	1963	156	283.4	66	76	87	96	89	97	(X)
	1958	181	176.8	53	65	78	92	91	96	(X)
	1954	179	169.8	49	61	77	(NA)	88	96	(X)
	1947	192	142.6	41	54	73	(NA)	93	94	(X)
3423	Hand and edge tools, n.e.c.									
	1977	662	2,279.2	25	38	56	76	91	90	(X)
	1972	582	1,233.1	23	39	58	77	89	88	(X)
	1970	(NA)	970.6	25	37	(NA)	(NA)	(NA)	(NA)	2
	1967	630	813.5	22	34	53	73	93	85	(X)
	1966	(NA)	808.1	22	35	(NA)	(NA)	(NA)	(NA)	6
	1963	681	565.6	21	34	52	72	87	84	(X)
	[9 7]1958	(NA)	402.4	19	30	(NA)	(NA)	(NA)	(NA)	(X)
3425	Handsaws and saw blades									
	1977	105	363.3	53	69	86	97	86	77	(X)
	1972	81	194.4	51	74	88	98	85	77	(X)
	1970	(NA)	177.8	47	(S)	(NA)	(NA)	(NA)	(NA)	14
	1967	74	154.3	51	71	89	99	80	82	(X)
	1966	(NA)	149.9	55	76	(NA)	(NA)	(NA)	(NA)	5
	1963	70	102.8	48	66	90	99	78	85	(X)
	1958	82	84.8	49	66	89	98	82	90	(X)
	1954	95	83.7	56	70	89	(NA)	71	90	(X)
	1947	81	70.4	66	75	90	(NA)	78	87	(X)
	1935	(NA)	(NA)	63	76	(NA)	(NA)	(NA)	(NA)	(X)
3429	Hardware, n.e.c.									
	1977	1,063	5,202.6	39	45	57	72	94	94	(X)
	1972	963	3,239.4	35	43	57	71	94	94	(X)
	1970	(NA)	2,485.8	30	38	(NA)	(NA)	(NA)	(NA)	2
	1967	979	2,368.3	38	45	58	70	91	95	(X)
	1966	(NA)	2,343.8	38	45	(NA)	(NA)	(NA)	(NA)	2
	1963	1,025	1,785.1	39	45	57	70	91	93	(X)
3431	Metal sanitary ware									
	1977	96	477.6	54	68	88	99	82	92	(X)
	1972	86	370.2	49	67	87	99	84	91	(X)
	1970	(NA)	369.2	46	65	(NA)	(NA)	(NA)	(NA)	1
	1967	83	251.2	51	69	90	99	83	89	(X)
	1966	(NA)	262.3	47	67	(NA)	(NA)	(NA)	(NA)	2
	1963	75	234.9	49	68	91	99	84	91	(X)
3432	Plumbing fittings and brass goods									
	1977	191	1,166.4	33	49	69	90	96	92	(X)
	1972	211	708.2	26	42	66	88	90	90	(X)
	1970	(NA)	465.4	30	46	(NA)	(NA)	(NA)	(NA)	5
	1967	210	404.7	28	43	64	88	93	86	(X)
	1966	(NA)	396.3	32	43	(NA)	(NA)	(NA)	(NA)	6
	1963	247	333.8	30	41	60	83	90	83	(X)
3433	Heating equipment, except electric[9 8]									
	1977	678	1,443.6	14	26	44	69	87	84	(X)
	1972	409	1,058.4	22	31	48	70	82	88	(X)
	1970	(NA)	1,256.7	19	30	(NA)	(NA)	(NA)	(NA)	2
	1967	496	1,069.0	22	33	50	71	77	80	(X)
	1966	(NA)	1,167.3	16	26	(NA)	(NA)	(NA)	(NA)	4
	1963	611	1,019.8	16	27	45	66	76	81	(X)
3441	Fabricated structural metal									
	1977	2,319	5,505.2	10	15	23	35	92	92	(X)
	1972	2,010	3,920.1	10	14	23	36	89	93	(X)
	1970	(NA)	3,139.0	13	18	(NA)	(NA)	(NA)	(NA)	2
	1967	1,865	2,967.8	13	18	26	38	89	91	(X)
	1966	(NA)	2,601.7	14	20	(NA)	(NA)	(NA)	(NA)	3
	1963	1,636	1,916.0	15	20	28	41	86	89	(X)
3442	Metal doors, sash, and trim									
	1977	1,498	3,135.6	8	15	30	48	93	91	(X)
	1972	1,391	2,077.6	12	19	33	50	90	91	(X)
	1970	(NA)	1,588.7	11	17	(NA)	(NA)	(NA)	(NA)	5
	1967	1,540	1,413.6	10	16	26	42	91	94	(X)
	1966	(NA)	1,397.2	10	16	(NA)	(NA)	(NA)	(NA)	3
	1963	1,712	1,253.8	8	13	23	38	88	94	(X)
3443	Fabricated platework (boiler shops)									
	1977	1,683	7,432.4	26	32	43	57	89	92	(X)
	1972	1,349	3,339.0	29	35	46	58	92	87	(X)
	1970	(NA)	2,980.2	30	37	(NA)	(NA)	(NA)	(NA)	1
	1967	1,346	2,688.5	30	36	48	59	91	85	(X)
	1966	(NA)	2,323.3	28	35	(NA)	(NA)	(NA)	(NA)	2
	1963	1,301	1,623.0	25	34	48	59	89	93	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.								
3444	Sheet metalwork									
	1977	3,222	4,863.5	10	17	28	40	92	90	(X)
	1972	2,959	2,680.0	9	15	24	36	90	84	(X)
	1970	(NA)	2,035.8	9	14	(NA)	(NA)	(NA)	(NA)	4
	1967	2,942	1,812.4	10	16	26	39	88	83	(X)
	1966	(NA)	1,834.8	11	17	(NA)	(NA)	(NA)	(NA)	3
	1963	3,139	1,303.7	11	16	24	35	88	78	(X)
	1958	3,066	973.8	15	20	27	39	88	83	(X)
	1954	2,363	738.5	19	28	36	(NA)	81	80	(X)
	1947	1,665	420.5	21	29	38	(NA)	83	82	(X)
	1935	(NA)	(NA)	17	26	(NA)	(NA)	(NA)	(NA)	(X)
3446	Architectural metalwork									
	1977	1,477	947.1	17	26	41	57	90	86	(X)
	1972	1,431	573.7	14	21	33	48	88	81	(X)
	1970	(NA)	489.0	16	25	(NA)	(NA)	(NA)	(NA)	5
	1967	1,360	484.9	28	36	48	62	83	77	(X)
	1966	(NA)	342.0	15	21	(NA)	(NA)	(NA)	(NA)	5
	1963	1,326	269.3	13	19	32	50	86	71	(X)
3448	Prefabricated metal buildings									
	1977	414	1,779.2	22	34	58	79	94	95	(X)
	1972	145	608.9	35	52	76	93	89	90	(X)
3449	Miscellaneous metalwork									
	1977	308	1,330.8	28	45	63	82	91	78	(X)
	1972	332	980.4	27	41	60	79	91	76	(X)
	1967 industry 3449, Miscellaneous metalwork (1972 industries 3448 and 3449)									
	1970	(NA)	1,451.6	18	30	(NA)	(NA)	(NA)	(NA)	3
	1967	594	1,082.0	21	31	47	69	89	77	(X)
	1966	(NA)	1,014.5	24	36	(NA)	(NA)	(NA)	(NA)	3
	1963	649	704.2	25	35	53	71	89	68	(X)
3451	Screw machine products									
	1977	1,727	1,771.7	7	11	18	30	96	92	(X)
	1972	1,780	1,063.8	6	9	16	26	96	90	(X)
	1970	(NA)	1,048.4	(S)	(S)	(NA)	(NA)	(NA)	(NA)	7
	1967	1,847	1,021.5	6	9	17	28	96	90	(X)
	1966	(NA)	949.0	4	7	(NA)	(NA)	(NA)	(NA)	3
	1963	1,861	589.0	5	8	15	26	97	90	(X)
	1958	1,784	415.3	9	12	19	30	95	86	(X)
	1954	1,791	401.5	11	15	23	(NA)	93	82	(X)
	1947	1,205	222.0	17	20	29	(NA)	94	86	(X)
3452	Bolts, nuts, rivets, and washers									
	1977	723	3,319.5	13	23	40	62	94	94	(X)
	1972	581	2,027.6	16	25	42	66	93	91	(X)
	1970	(NA)	1,646.0	17	27	(NA)	(NA)	(NA)	(NA)	2
	1967	577	1,643.9	18	27	47	68	94	90	(X)
	1966	(NA)	1,661.8	18	28	(NA)	(NA)	(NA)	(NA)	4
	1963	504	1,218.2	18	27	47	68	92	90	(X)
	1958	470	844.5	17	27	45	67	88	89	(X)
	1954	421	699.5	15	25	45	(NA)	91	89	(X)
	1947	339	463.8	20	31	52	(NA)	92	86	(X)
3462	Iron and steel forgings									
	1977	312	2,795.7	25	34	51	74	92	84	(X)
	1972	252	1,416.1	29	40	57	79	92	92 68	(X)
	1970	(NA)	1,184.5	31	40	(NA)	(NA)	(NA)	(NA)	1
	1967	248	1,261.6	30	40	57	77	90	92 72	(X)
	1966	(NA)	1,273.1	31	42	(NA)	(NA)	(NA)	(NA)	2
	1963	248	868.9	30	39	56	77	89	92 69	(X)
	1958	287	675.4	31	39	56	77	86	92 72	(X)
	1954	247	595.4	27	38	59	(NA)	88	73	(X)
	1947	240	370.1	24	35	54	(NA)	95	77	(X)
	1935	(NA)	(NA)	21	32	(NA)	(NA)	(NA)	(NA)	(X)
3463	Nonferrous forgings									
	1977	43	456.7	77	85	97	100	87	67	(X)
	1972	40	222.5	71	81	96	100	84	63	(X)
	1970	(NA)	326.4	67	80	(NA)	(NA)	(NA)	(NA)	2
	1967	37	333.1	77	85	97	100	67	54	(X)
	1966	(NA)	311.4	78	85	(NA)	(NA)	(NA)	(NA)	5
	1963	32	165.1	84	91	99	100	69	55	(X)
3465	Automotive stampings									
	1977	495	9,739.2	65	70	77	84	92	91	(X)
	1972	388	5,286.0	69	72	79	87	92	92	(X)
3466	Crowns and closures									
	1977	42	536.9	53	73	95	100	95	86	(X)
	1972	42	343.5	49	72	92	100	88	83	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.								
3469	Metal stampings, n.e.c.....1977..	2,544	4,735.7	9	16	26	38	88	88	(X)
	1972..	2,283	2,688.8	9	14	23	36	86	85	(X)
	1967 industry 3461, Metal stampings (1972 industries 3456, 3466, and 3469)[99].....1970..	(NA)	6,453.5	40	46	(NA)	(NA)	(NA)	(NA)	1
	1967..	2,564	5,893.7	39	44	51	60	89	91	(X)
3471	Plating and polishing.....1977..	3,344	1,848.5	8	12	18	27	(100)	(100)	(X)
	1972..	3,179	1,034.5	5	8	15	24	(100)	(100)	(X)
	1970..	(NA)	966.6	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1967..	3,170	791.1	5	9	15	24	(100)	(100)	(X)
	1966..	(NA)	719.8	5	8	(NA)	(NA)	(NA)	(NA)	2
	1963..	2,968	517.6	5	8	14	22	(100)	(100)	(X)
	1958..	2,588	353.5	5	7	12	21	(100)	(100)	(X)
	1954..	2,423	304.4	10	13	20	(NA)	(100)	(100)	(X)
	1947..	1,789	180.7	15	20	28	(NA)	(100)	(100)	(X)
	1935..	(NA)	(NA)	12	17	(NA)	(NA)	(NA)	(NA)	(X)
3479	Metal coating and allied services.....1977..	1,556	1,607.7	22	32	46	59	(100)	(100)	(X)
	1972..	1,427	701.8	15	23	36	49	(100)	(100)	(X)
	1970..	(NA)	532.3	17	(S)	(NA)	(NA)	(NA)	(NA)	6
	1967..	1,393	471.3	18	26	37	50	(100)	(100)	(X)
	1966..	(NA)	469.1	15	24	(NA)	(NA)	(NA)	(NA)	7
	1963..	1,227	322.1	17	26	39	54	(100)	(100)	(X)
	1958..	986	194.4	21	28	(NA)	(NA)	(100)	(100)	(X)
3482	Small arms ammunition[101].....1977..	59	436.2	86	97	99	99+	95	90	(X)
	1972..	57	366.7	89	95	99	99+	97	97	(X)
3483	Ammunition, except for small arms, n.e.c.[101].....1977..	68	716.5	52	71	93	99	81	83	(X)
	1972..	78	1,173.4	44	62	85	99	83	84	(X)
3484	Small arms[101].....1977..	105	754.9	58	78	95	99	94	99	(X)
	1972..	75	393.5	53	74	96	99+	91	98	(X)
3489	Ordnance and accessories, n.e.c.[101].....1977..	89	733.8	48	72	91	99+	81	68	(X)
	1972..	75	469.5	54	76	93	99+	76	67	(X)
3493	Steel springs, except wire.....1977..	116	500.5	44	59	84	97	84	72	(X)
	1972..	99	331.4	45	62	86	98	81	73	(X)
	1970..	(NA)	265.5	43	62	(NA)	(NA)	(NA)	(NA)	2
	1967..	105	192.4	36	53	82	97	88	63	(X)
	1966..	(NA)	162.2	41	62	(NA)	(NA)	(NA)	(NA)	5
	1963..	91	157.7	44	63	85	98	91	67	(X)
3494	Valves and pipe fittings.....1977..	741	5,662.3	13	21	37	59	89	88	(X)
	1972..	643	2,956.9	11	21	41	63	89	86	(X)
	1970..	(NA)	2,678.7	14	23	(NA)	(NA)	(NA)	(NA)	2
	1967..	575	2,274.5	14	23	42	65	87	88	(X)
	1966..	(NA)	2,209.0	13	23	(NA)	(NA)	(NA)	(NA)	2
	1963..	580	1,588.5	13	23	41	62	86	85	(X)
	1958..	535	1,196.5	17	27	46	66	87	88	(X)
	1954..	523	959.0	17	27	47	(NA)	75	86	(X)
	1947..	436	633.8	24	32	50	(NA)	82	90	(X)
3495	Wire springs.....1977..	254	957.7	29	41	58	78	92	92	(X)
	1972..	206	611.9	26	38	60	80	88	93	(X)
3496	Miscellaneous fabricated wire products.....1977..	1,048	1,435.0	10	16	31	48	91	37	(X)
	1972..	1,157	959.7	11	17	29	47	93	[92]45	(X)
	1967 industry 3481, Miscellaneous fabricated wire products (1972 industries 3495 and 3496).....1970..	(NA)	1,253.7	11	17	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,430	1,220.4	11	17	28	44	93	[92]59	(X)
	1966..	(NA)	1,299.9	13	19	(NA)	(NA)	(NA)	(NA)	4
	1963..	1,464	1,030.9	13	19	31	46	93	[92]65	(X)
	1958..	1,373	836.9	13	22	33	48	93	[92]62	(X)
	1954..	1,205	744.8	18	26	40	(NA)	89	63	(X)
	1947..	853	466.0	20	31	48	(NA)	91	60	(X)
	1935..	(NA)	(NA)	23	35	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.								
3497	Metal foil and leaf									
	1977	63	895.1	49	66	87	99	80	63	(X)
	1972	54	282.0	45	61	86	99+	79	42	(X)
	1970	(NA)	283.7	45	65	(NA)	(NA)	(NA)	(NA)	2
	1967	59	265.5	43	65	87	99+	85	56	(X)
	1966	(NA)	165.9	43	66	(NA)	(NA)	(NA)	(NA)	3
	1963	56	151.6	54	73	90	99+	86	41	(X)
3498	Fabricated pipe and fittings									
	1977	513	1,872.7	18	29	49	70	94	93	(X)
	1972	374	704.4	21	32	54	73	94	90	(X)
	1970	(NA)	547.2	17	28	(NA)	(NA)	(NA)	(NA)	5
	1967	356	508.1	17	27	48	68	95	90	(X)
	1966	(NA)	463.0	13	22	(NA)	(NA)	(NA)	(NA)	3
	1963	328	305.6	17	28	48	71	92	91	(X)
	1958	269	296.6	24	39	55	75	90	92	(X)
	1954	237	225.9	27	42	62	(NA)	92	88	(X)
	1947	206	116.0	22	36	59	(NA)	82	83	(X)
3499	Fabricated metal products, n.e.c. (1967 industries 3492, 3496, and 3499)									
	1977	3,142	3,429.2	13	18	29	42	89	83	(X)
	1972	2,255	1,938.6	16	22	33	47	89	74	(X)
	1967 industry 3492, Safes and vaults									
	1970	(NA)	191.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967	28	98.7	(D)	96	99+	100	87	85-90	(X)
	1966	(NA)	91.8	(D)	(D)	(NA)	(NA)	(NA)	(NA)	6
	1963	28	78.0	(D)	(D)	99+	100	81	90-95	(X)
	1958	31	57.3	91	95	99+	100	78	97	(X)
	1954	25	40.0	90	96	99+	100	87	97	(X)
	1947	26	29.2	85	94	99+	100	98	98	(X)
	1935	(NA)	(NA)	84	97	(NA)	(NA)	(NA)	(NA)	(X)
	1967 industry 3496, Collapsible tubes									
	1970	(NA)	84.5	67	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967	15	65.0	61	92	100	(X)	80	100	(X)
	1966	(NA)	65.0	54	86	(NA)	(NA)	(NA)	(NA)	6
	1963	18	51.0	58	92	100	(X)	88	100	(X)
	1958	18	41.4	54	86	100	(X)	91	100	(X)
	1954	19	36.9	52	82	100	(X)	93	100	(X)
	1947	19	27.0	53	81	100	(X)	91	100	(X)
	1935	(NA)	(NA)	52	79	(NA)	(NA)	(NA)	(NA)	(X)
	1967 industry 3499, Fabricated metal products, n.e.c.									
	1970	(NA)	1,189.9	15	22	(NA)	(NA)	(NA)	(NA)	4
	1967	1,233	981.7	14	21	34	50	90	71	(X)
	1966	(NA)	850.3	16	23	(NA)	(NA)	(NA)	(NA)	5
	1963	1,254	573.2	16	22	34	49	89	62	(X)
	1958	962	316.1	19	29	42	59	88	62	(X)
	1954	1,017	237.8	18	29	43	(NA)	85	53	(X)
	1947	430	73.2	31	43	58	(NA)	90	60	(X)
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL								
3511	Turbines and turbine generator sets									
	1977	68	2,729.7	86	97	99	100	92	82	(X)
	1972	59	2,189.0	90	96	99	100	92	90	(X)
	1970	(NA)	1,791.0	77	88	(NA)	(NA)	(NA)	(NA)	1
	1967	20	1,043.2	76	82	100	(X)	83	78	(X)
	1966	(NA)	867.2	87	98	(NA)	(NA)	(NA)	(NA)	2
	1963	17	616.4	93	98	100	(X)	85	82	(X)
3519	Internal combustion engines, n.e.c.									
	1977	187	7,696.5	49	70	88	98	91	88	(X)
	1972	145	3,326.1	50	70	92	99	91	86	(X)
	1970	(NA)	2,673.7	51	74	(NA)	(NA)	(NA)	(NA)	1
	1967	129	2,093.2	47	64	89	99	89	83	(X)
	1966	(NA)	2,052.5	52	69	(NA)	(NA)	(NA)	(NA)	2
	1963	120	1,473.6	49	65	89	99	86	86	(X)
3523	Farm machinery and equipment (1967 industry 3522, part)									
	1977	1,868	10,281.7	46	61	70	78	92	95	(X)
	[10][2]1972	1,465	4,529.7	47	61	69	78	90	94	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.								
3524	Lawn and garden equipment (1967 industry 3522, part)....1977..	137	1,575.3	30	51	82	96	92	82	(X)
	1972..	100	1,059.1	34	53	78	95	90	82	(X)
	1967 industry 3522, Farm machinery (1972 SIC industries 3523 and 3524....1970..	(NA)	4,367.3	40	51	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,526	4,299.9	44	56	68	77	92	94	(X)
	1966..	(NA)	4,332.0	45	59	(NA)	(NA)	(NA)	(NA)	2
	1963..	1,481	2,842.2	43	55	67	77	89	95	(X)
3531	Construction machinery[8] [103].....1977..	807	12,628.7	47	59	75	86	91	95	(X)
	1972..	644	6,091.0	43	54	72	86	90	93	(X)
	1970..	(NA)	4,888.1	42	53	(NA)	(NA)	(NA)	(NA)	1
	1967..	578	4,138.0	41	53	72	85	88	92	(X)
	1966..	(NA)	3,767.8	45	57	(NA)	(NA)	(NA)	(NA)	3
	1963..	561	2,696.0	42	53	70	84	91	89	(X)
3532	Mining machinery.....1977..	293	1,996.7	37	50	70	88	88	86	(X)
	1972..	220	771.4	41	55	72	89	87	81	(X)
	1970..	(NA)	688.8	36	50	(NA)	(NA)	(NA)	(NA)	2
	1967..	197	622.2	37	52	73	89	78	82	(X)
	1966..	(NA)	630.4	34	52	(NA)	(NA)	(NA)	(NA)	4
	1963..	198	417.6	35	53	74	91	75	82	(X)
3533	Oil field machinery[8] [103].....1977..	386	3,912.4	30	45	66	87	88	95	(X)
	1972..	257	1,207.1	28	42	64	90	82	92	(X)
	1970..	(NA)	1,063.7	23	37	(NA)	(NA)	(NA)	(NA)	3
	1967..	309	799.8	21	36	60	82	85	92	(X)
	1966..	(NA)	846.0	24	39	(NA)	(NA)	(NA)	(NA)	2
	1963..	373	666.5	25	37	57	80	90	91	(X)
3534	Elevators and moving stairways.....1977..	134	489.7	52	68	82	94	96	93	(X)
	1972..	135	483.6	55	68	82	94	97	96	(X)
	1970..	(NA)	467.8	61	(S)	(NA)	(NA)	(NA)	(NA)	3
	[104]1967..	130	319.7	55	67	81	94	94	95	(X)
	1966..	(NA)	352.6	63	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	126	318.6	62	73	85	95	97	95	(X)
	1958..	135	189.4	62	71	82	93	97	80	(X)
	1954..	127	161.0	66	74	83	(NA)	87	89	(X)
	1947..	108	101.8	63	73	84	(NA)	92	91	(X)
3535	Conveyors and conveying equipment.....1977..	572	1,897.9	19	30	46	64	90	87	(X)
	1972..	457	969.8	22	32	50	69	90	88	(X)
	1970..	(NA)	878.2	24	34	(NA)	(NA)	(NA)	(NA)	2
	1967..	416	736.0	29	39	56	74	85	83	(X)
	1966..	(NA)	725.4	29	39	(NA)	(NA)	(NA)	(NA)	6
	1963..	428	494.6	28	39	60	78	82	83	(X)
3536	Hoists, cranes, and monorails[105]....1977..	231	836.0	16	30	57	80	87	76	(X)
	1972..	176	527.3	30	46	71	89	78	84	(X)
	1970..	(NA)	477.2	39	55	(NA)	(NA)	(NA)	(NA)	1
	1967..	139	444.4	44	61	80	93	78	83	(X)
	1966..	(NA)	437.3	44	62	(NA)	(NA)	(NA)	(NA)	3
	1963..	120	220.0	36	53	79	95	80	70	(X)
3537	Industrial trucks and tractors.....1977..	450	1,920.1	45	61	75	86	94	95	(X)
	1972..	363	1,035.4	50	66	77	88	96	91	(X)
	1970..	(NA)	905.8	52	67	(NA)	(NA)	(NA)	(NA)	3
	1967..	337	778.0	48	62	76	81	93	86	(X)
	1966..	(NA)	792.1	49	63	(NA)	(NA)	(NA)	(NA)	3
	1963..	304	447.0	54	64	77	88	90	81	(X)
	1958..	251	255.0	52	64	77	88	92	84	(X)
	1954..	234	245.1	50	62	77	(NA)	88	83	(X)
	1947..	191	162.2	57	69	81	(NA)	84	84	(X)
3541	Machine tools, metal cutting types.....1977..	874	2,819.1	22	35	56	77	87	92	(X)
	1972..	857	1,418.1	22	33	55	75	86	90	(X)
	1970..	(NA)	1,829.2	24	37	(NA)	(NA)	(NA)	(NA)	1
	1967..	865	2,127.2	21	33	54	77	86	90	(X)
	1966..	(NA)	1,826.1	22	34	(NA)	(NA)	(NA)	(NA)	2
	1963..	784	1,060.8	20	32	52	74	81	88	(X)
	1958..	608	684.8	21	32	52	74	82	90	(X)
	1954..	627	1,146.9	19	29	52	(NA)	84	93	(X)
	1947..	312	493.9	20	30	50	(NA)	77	86	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.								
3542	Machine tools, metal forming types									
	1977	411	1,130.6	18	32	55	77	90	87	(X)
	1972	375	693.6	18	33	54	75	89	87	(X)
	1970	(NA)	760.2	23	39	(NA)	(NA)	(NA)	(NA)	2
	1967	344	714.0	23	38	63	82	85	84	(X)
	1966	(NA)	727.7	24	38	(NA)	(NA)	(NA)	(NA)	4
	1963	362	441.4	22	39	61	80	86	79	(X)
3544	Special dies, tools, jigs, and fixtures									
	1977	7,033	3,901.3	8	10	14	21	94	79	(X)
	1972	6,513	2,426.7	7	10	14	21	94	78	(X)
	1970	(NA)	2,478.9	7	9	(NA)	(NA)	(NA)	(NA)	3
	1967	6,532	2,202.3	4	7	12	19	94	74	(X)
	1966	(NA)	2,217.9	5	8	(NA)	(NA)	(NA)	(NA)	3
	1963	5,850	1,388.8	6	9	14	21	93	72	(X)
3545	Machine tool accessories									
	1977	1,271	2,384.5	20	31	45	61	89	88	(X)
	1972	1,113	1,249.0	19	30	47	63	86	88	(X)
	1970	(NA)	1,206.3	21	32	(NA)	(NA)	(NA)	(NA)	2
	1967	1,073	1,309.9	20	32	47	64	85	85	(X)
	1966	(NA)	1,230.3	20	32	(NA)	(NA)	(NA)	(NA)	4
	1963	983	787.3	17	29	46	63	83	84	(X)
3546	Power driven handtools (1967 industry 3548, part)[106]									
	1977	[106]99	[106]1,623.2	[106]50	[106]70	[106]95	[106]99	[106]91	[106]90	(X)
	1972	71	730.5	48	70	93	99	82	92	(X)
3547	Rolling mill machinery (1967 industry 3548, part)									
	1977	58	507.4	62	77	93	99+	78	86	(X)
	1972	40	327.8	69	88	96	100	74	86	(X)
3549	Metalworking machinery, n.e.c. (1967 industry 3548, part)									
	1977	522	916.8	15	24	43	66	88	82	(X)
	1972	384	427.8	15	27	50	72	86	88	(X)
	1967 industry 3548, Metalworking machinery, n.e.c. (1972 SIC industries 3546, 3547, and 3549)									
	1970	(NA)	1,230.9	25	37	(NA)	(NA)	(NA)	(NA)	3
	1967	409	1,158.1	26	41	66	84	86	88	(X)
	1966	(NA)	1,148.0	25	40	(NA)	(NA)	(NA)	(NA)	3
	1963	420	796.3	25	40	64	85	85	88	(X)
3551	Food products machinery									
	1977	685	1,786.8	14	24	40	60	90	92	(X)
	1972	636	1,000.1	18	27	42	62	90	89	(X)
	1970	(NA)	916.2	21	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967	611	830.2	22	34	49	66	88	86	(X)
	1966	(NA)	827.3	21	32	(NA)	(NA)	(NA)	(NA)	3
	1963	649	640.5	22	33	47	65	86	87	(X)
	1958	657	429.5	16	27	43	61	86	84	(X)
	1954	650	404.3	16	29	46	(NA)	84	86	(X)
	1947	605	327.7	18	27	43	(NA)	89	82	(X)
3552	Textile machinery									
	1977	600	951.0	22	35	51	69	93	94	(X)
	1972	535	822.8	31	46	61	75	94	96	(X)
	1970	(NA)	793.0	33	49	(NA)	(NA)	(NA)	(NA)	2
	1967	524	711.7	31	48	65	78	94	95	(X)
	1966	(NA)	820.3	33	51	(NA)	(NA)	(NA)	(NA)	4
	1963	529	542.7	35	52	67	80	93	94	(X)
	1958	507	363.2	34	49	64	79	87	94	(X)
	1954	517	536.8	32	46	63	(NA)	89	93	(X)
	1947	470	403.4	30	44	59	(NA)	95	93	(X)
	1935	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(X)
3553	Woodworking machinery[106]									
	1977	[106]291	[106]585.6	[106]35	[106]46	[106]62	[106]80	[106]94	[106]95	(X)
	1972	229	488.0	40	53	70	87	90	91	(X)
	1970	(NA)	385.6	36	51	(NA)	(NA)	(NA)	(NA)	4
	1967	232	314.4	37	51	70	88	83	87	(X)
	1966	(NA)	382.5	32	45	(NA)	(NA)	(NA)	(NA)	3
	1963	245	252.8	35	48	65	83	80	83	(X)
	1958	251	204.7	39	52	69	85	79	86	(X)
	1954	247	167.2	37	52	72	(NA)	84	81	(X)
	1947	([83])	153.4	([83])	([83])	([83])	([83])	([83])	([83])	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.								
3554	Paper industries machinery.....1977..	193	826.9	40	52	69	88	84	90	(X)
	1972..	203	447.8	32	46	65	85	85	86	(X)
	1970..	(NA)	535.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967..	206	551.4	43	54	72	90	92	86	(X)
	1966..	(NA)	502.8	37	51	(NA)	(NA)	(NA)	(NA)	2
	1963..	204	403.9	41	53	74	92	88	90	(X)
	1958..	192	292.4	47	58	78	92	93	90	(X)
	1954..	163	196.6	34	46	69	(NA)	85	86	(X)
	1947..	144	151.1	28	42	66	(NA)	85	89	(X)
3555	Printing trades machinery.....1977..	520	1,350.9	40	50	65	79	97	92	(X)
	1972..	523	823.5	42	51	66	82	97	91	(X)
	1970..	(NA)	750.6	48	58	(NA)	(NA)	(NA)	(NA)	1
	1967..	485	752.3	48	57	72	86	98	94	(X)
	1966..	(NA)	649.1	46	58	(NA)	(NA)	(NA)	(NA)	2
	1963..	463	448.4	44	53	68	83	95	93	(X)
	1958..	421	279.1	42	53	68	82	97	92	(X)
	1954..	342	248.7	38	57	73	(NA)	95	90	(X)
	1947..	300	199.4	31	48	70	(NA)	95	94	(X)
	1935..	(NA)	(NA)	32	47	(NA)	(NA)	(NA)	(NA)	(X)
3559	Special industry machinery, n.e.c.[112].....1977..	1,548	3,627.0	13	20	34	52	88	85	(X)
	1972..	1,310	2,603.9	20	27	42	59	81	81	(X)
	1970..	(NA)	1,990.5	11	17	(NA)	(NA)	(NA)	(NA)	1
	1967..	1,085	1,833.0	13	21	35	54	82	81	(X)
3561	Pumps and pumping equipment (1967 industry 3561, part).....1977..	515	3,773.7	17	29	52	78	88	88	(X)
	1972..	492	1,917.3	17	27	49	75	83	86	(X)
3563	Air and gas compressors (1967 industry 3561, part).....1977..	148	2,075.6	45	64	86	96	88	89	(X)
	1972..	66	858.1	47	72	94	99	83	90	(X)
	1967 industry 3561, Pumps and compressors (1972 industries 3561 and 3563).....1970..	(NA)	2,520.3	23	35	(NA)	(NA)	(NA)	(NA)	1
	1967..	480	2,207.5	26	37	56	75	87	88	(X)
	1966..	(NA)	2,151.1	27	38	(NA)	(NA)	(NA)	(NA)	2
	1963..	589	1,419.1	26	36	55	75	85	86	(X)
3562	Ball and roller bearings.....1977..	102	2,567.3	56	71	88	99	96	98	(X)
	1972..	99	1,530.5	53	73	89	99	94	99	(X)
	1970..	(NA)	1,314.6	54	74	(NA)	(NA)	(NA)	(NA)	1
	1967..	85	1,328.5	54	73	90	99	97	97	(X)
	1966..	(NA)	1,398.9	56	74	(NA)	(NA)	(NA)	(NA)	2
	1963..	93	998.8	57	76	91	99	97	98	(X)
	1958..	85	638.9	57	77	92	99	97	98	(X)
	1954..	83	537.2	60	79	92	(NA)	98	98	(X)
	1947..	78	365.6	62	79	93	(NA)	94	96	(X)
3564	Blowers and fans.....1977..	432	1,430.8	17	28	49	75	89	87	(X)
	1972..	360	805.2	26	37	59	80	79	84	(X)
	1970..	(NA)	670.6	24	37	(NA)	(NA)	(NA)	(NA)	3
	1967..	271	525.2	23	37	62	84	85	82	(X)
	1966..	(NA)	444.3	25	39	(NA)	(NA)	(NA)	(NA)	7
	1963..	225	315.3	27	43	67	88	83	79	(X)
	1958..	197	250.5	28	43	66	86	83	79	(X)
	1954..	208	261.8	31	49	68	(NA)	83	76	(X)
	1947..	187	140.7	39	54	72	(NA)	75	78	(X)
3565	Industrial patterns.....1977..	1,001	320.6	9	14	23	36	97	75	(X)
	1972..	1,017	198.0	7	13	23	36	95	78	(X)
	1970..	(NA)	210.5	(S)	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967..	1,156	201.8	9	14	24	39	96	80	(X)
	1966..	(NA)	233.0	(S)	(S)	(NA)	(NA)	(NA)	(NA)	9
	1963..	1,206	140.7	9	14	24	37	96	80	(X)
3566	Speed changers, drives, and gears (1967 industry 3566, part)...1977..	307	1,222.3	29	42	64	81	87	84	(X)
	1972..	330	632.7	27	41	62	80	88	89	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.								
3568	Power transmission equipment, n.e.c. (1967 industry 3566, part)	1977	184	1,626.0	26	44	69	89	82	74	(X)
		1972	125	876.4	36	58	75	92	87	74	(X)
	1967 industry 3566, Power transmission equipment (1972 industries 3566 and 3568)	1970	(NA)	1,386.8	25	41	(NA)	(NA)	(NA)	(NA)	1
		1967	476	1,263.4	25	39	57	73	90	83	(X)
		1966	(NA)	1,314.1	25	39	(NA)	(NA)	(NA)	(NA)	2
		1963	498	888.6	24	36	57	75	84	79	(X)
3567	Industrial furnaces and ovens	1977	311	746.3	26	39	58	76	91	90	(X)
		1972	253	443.2	30	43	66	83	78	91	(X)
		1970	(NA)	454.9	34	48	(NA)	(NA)	(NA)	(NA)	4
		1967	246	495.7	36	50	68	85	87	88	(X)
		1966	(NA)	401.0	35	48	(NA)	(NA)	(NA)	(NA)	4
		1963	229	279.1	28	42	62	84	84	79	(X)
3569	General industrial machinery, n.e.c.[107]	1977	1,586	2,779.5	10	16	27	44	88	86	(X)
		1972	864	1,171.9	10	17	31	51	85	81	(X)
		1970	(NA)	1,032.6	13	23	(NA)	(NA)	(NA)	(NA)	4
		1967	725	901.2	10	19	36	56	85	79	(X)
3572	Typewriters	1977	(108)	(108)	(108)	(108)	(108)	(108)	(108)	(108)	(X)
		1972	(108)	(108)	(108)	(108)	(108)	(108)	(108)	(108)	(X)
		1970	(NA)	635.1	(S)	(S)	(NA)	(NA)	(NA)	(NA)	1
		1967	20	595.5	81	99	100	(X)	86	99	(X)
		1966	(NA)	533.9	79	99	(NA)	(NA)	(NA)	(NA)	2
		1963	17	315.4	76	99	100	(X)	85	99	(X)
		1958	15	230.1	79	99	100	(X)	82	99-100	(X)
		1954	15	173.4	83	99	100	(X)	80	97	(X)
		1947	23	153.9	79	96	100	(X)	90-100	97-100	(X)
		1935	(NA)	(NA)	(NA)	99	(NA)	(NA)	(NA)	(NA)	(X)
3573	Electronic computing equipment[109]	1977	808	[9]7,623.5	44	55	71	85	94	91	(X)
		1972	518	[9]3,418.9	51	63	78	90	92	91	(X)
		1970	(NA)	[9]2,816.9	57	78	(NA)	(NA)	(NA)	(NA)	1
		1967	134	[9]1,926.4	66	83	92	98	(110)	(110)	(X)
3574	Calculating and accounting machines[109]	1977	58	850.0	59	83	98	100	84	77	(X)
		1972	74	637.2	73	89	98	100	97	86	(X)
		1970	(NA)	887.9	83	91	(NA)	(NA)	(NA)	(NA)	1
		1967	132	707.8	83	90	95	99	85	84	(X)
3576	Scales and balances, except laboratory	1977	92	348.1	50	66	85	98	96	99	(X)
		1972	86	200.4	50	68	88	99	92	95	(X)
		1970	(NA)	157.3	62	76	(NA)	(NA)	(NA)	(NA)	3
		1967	69	140.2	53	72	92	99	93	96	(X)
		1966	(NA)	130.7	50	69	(NA)	(NA)	(NA)	(NA)	8
		1963	81	98.5	50	69	88	99	92	97	(X)
3579	Office machines, n.e.c.	1977	[108]191	[108]2,719.7	[108]60	[108]76	[108]88	[108]98	[108]76	[108]91	(X)
		1972	[108]206	[108]1,296.1	[108]60	[108]75	[108]88	[108]96	[108]79	[108]87	(X)
		1970	(NA)	605.3	67	78	(NA)	(NA)	(NA)	(NA)	2
		1967	170	516.6	63	74	87	96	89	77	(X)
		1966	(NA)	466.4	57	69	(NA)	(NA)	(NA)	(NA)	6
		1963	158	349.2	59	71	85	96	81	79	(X)
3581	Automatic merchandising machines	1977	108	410.1	46	67	93	99	94	93	(X)
		1972	116	324.4	51	68	89	97	94	92	(X)
		1970	(NA)	247.3	57	73	(NA)	(NA)	(NA)	(NA)	3
		1967	143	248.0	60	74	87	96	97	88	(X)
		1966	(NA)	279.5	61	77	(NA)	(NA)	(NA)	(NA)	2
		1963	148	238.0	55	72	84	95	81	90	(X)
3582	Commercial laundry equipment[111]	1977	90	220.3	46	63	84	98	90	81	(X)
		1972	100	157.0	53	65	82	97	91	70	(X)
		1970	(NA)	165.3	57	(S)	(NA)	(NA)	(NA)	(NA)	5
		1967	109	183.1	51	63	83	97	92	79	(X)
		1966	(NA)	190.5	51	(S)	(NA)	(NA)	(NA)	(NA)	5
		1963	107	136.8	47	57	77	96	91	89	(X)
		1958	113	111.7	51	66	83	96	94	95	(X)
		1954	101	88.1	51	67	81	(NA)	83	93	(X)
		1947	119	4.4	59	69	81	(NA)	94	94	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.								
3585	Refrigeration and heating equipment[9 8]	1977..	731	[9]4,469.2	41	51	67	82	89	95	(X)
		1972..	655	[9]3,517.4	40	53	70	85	([3])	([3])	(X)
	1967 industry 3585, Refrigeration machinery[9 8]	1970..	(NA)	[9]1,990.2	31	48	(NA)	(NA)	(NA)	(NA)	1
		1967..	624	[9]1,479.8	31	45	62	78	([110])	([110])	(X)
		1966..	(NA)	[9]1,235.7	34	49	(NA)	(NA)	(NA)	(NA)	2
		1963..	655	[9]892.7	25	39	58	77	([110])	([110])	(X)
3586	Measuring and dispensing pumps	1977..	57	375.7	50	73	96	99+	61	82	(X)
		1972..	54	232.3	51	75	94	100	71	83	(X)
		1970..	(NA)	201.8	58	83	(NA)	(NA)	(NA)	(NA)	1
		1967..	46	174.7	56	83	97	100	71	80	(X)
		1966..	(NA)	206.9	48	77	(NA)	(NA)	(NA)	(NA)	2
		1963..	42	159.5	46	80	97	100	73	85	(X)
		1958..	32	110.5	52	85	99	100	66	90	(X)
		1954..	([94])	104.4	([94])	([94])	([94])	([94])	([94])	([94])	(X)
		1947..	51	125.1	49	76	97	(D)	76	98	(X)
3589	Service industry machines, n.e.c.	1977..	959	1,771.8	11	21	39	59	91	90	(X)
		1972..	669	913.8	12	22	39	62	90	87	(X)
		1970..	(NA)	708.7	14	26	(NA)	(NA)	(NA)	(NA)	2
		1967..	554	598.1	14	24	44	66	89	88	(X)
		1966..	(NA)	570.8	15	26	(NA)	(NA)	(NA)	(NA)	4
		1963..	496	378.3	14	26	46	67	86	84	(X)
3592	Carburetors, pistons, rings, valves (1967 industry 3599, part)	1977..	131	1,400.6	52	71	92	98	82	87	(X)
		1972..	98	744.3	53	71	92	98	81	74	(X)
3599	Machinery, except electrical, n.e.c. (1967 industry 3599, part)	1977..	19,137	6,611.2	2	3	5	10	96	94	(X)
		1972..	16,220	3,665.2	4	5	8	13	93	94	(X)
	1967 industry 3599, Miscellaneous machinery, except electrical (1972 industries 3592 and 3599)	1970..	(NA)	3,957.4	7	12	(NA)	(NA)	(NA)	(NA)	3
		1967..	15,055	3,712.0	7	11	17	24	93	94	(X)
		1966..	(NA)	2,864.8	6	11	(NA)	(NA)	(NA)	(NA)	3
		1963..	12,032	2,036.3	8	12	20	27	90	90	(X)
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT									
3612	Transformers	1977..	229	2,209.1	56	70	85	95	95	97	(X)
		1972..	168	1,461.9	59	75	90	97	96	97	(X)
		1970..	(NA)	1,392.5	59	76	(NA)	(NA)	(NA)	(NA)	1
		1967..	150	1,188.4	65	78	92	97	95	98	(X)
		1966..	(NA)	1,053.0	66	80	(NA)	(NA)	(NA)	(NA)	2
		1963..	144	722.9	68	79	93	98	92	94	(X)
		1958..	153	639.1	71	84	94	98	94	93	(X)
		1954..	152	686.1	78	89	95	(NA)	87	94	(X)
		1947..	134	357.0	73	84	93	(NA)	85	91	(X)
3613	Switchgear and switchboard apparatus	1977..	542	3,562.6	51	65	78	88	91	91	(X)
		1972..	462	2,123.5	51	65	79	89	91	89	(X)
		1970..	(NA)	1,890.3	52	66	(NA)	(NA)	(NA)	(NA)	2
		1967..	398	1,690.0	51	65	78	88	89	90	(X)
		1966..	(NA)	1,549.0	52	67	(NA)	(NA)	(NA)	(NA)	2
		1963..	338	1,093.7	51	65	79	89	87	89	(X)
3621	Motors and generators	1977..	343	4,462.7	42	55	72	86	92	80	(X)
		1972..	325	2,516.0	47	59	78	90	91	81	(X)
		1970..	(NA)	2,475.2	50	62	(NA)	(NA)	(NA)	(NA)	1
		1967..	320	2,402.3	48	60	74	87	83	83	(X)
		1966..	(NA)	2,288.8	48	57	(NA)	(NA)	(NA)	(NA)	2
		1963..	316	1,709.8	50	59	73	88	81	84	(X)
		1958..	317	1,359.7	47	56	72	88	83	88	(X)
		1954..	266	1,389.1	50	59	75	(NA)	82	84	(X)
		1947..	224	995.6	59	66	80	(NA)	81	92	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years** – Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.									
3622	Industrial controls....1977..	676	2,511.4	42	54	68	79	87	86	(X)
	1972..	544	1,400.0	44	59	74	85	79	84	(X)
	1970..	(NA)	1,170.8	47	62	(NA)	(NA)	(NA)	(NA)	3
	1967..	456	1,102.8	49	63	77	88	83	81	(X)
	1966..	(NA)	1,049.0	50	65	(NA)	(NA)	(NA)	(NA)	2
	1963..	421	648.7	56	69	91	90	79	79	(X)
3623	Welding apparatus electric....1977..	160	1,189.6	47	65	80	94	86	94	(X)
	1972..	154	659.6	41	60	77	94	84	92	(X)
	1970..	(NA)	505.9	45	64	(NA)	(NA)	(NA)	(NA)	2
	1967..	133	493.3	38	53	78	93	91	94	(X)
	1966..	(NA)	533.8	38	53	(NA)	(NA)	(NA)	(NA)	4
	1963..	133	330.2	41	54	79	94	93	89	(X)
	1958..	123	234.7	39	52	78	95	93	92	(X)
	1954..	111	168.8	39	52	76	(NA)	90	92	(X)
	1947..	103	103.7	46	58	79	(NA)	93	89	(X)
3624	Carbon and graphite products....1977..	58	735.2	80	88	97	99+	94	93	(X)
	1972..	58	397.4	80	91	98	99+	95	98	(X)
	1970..	(NA)	369.6	87	94	(NA)	(NA)	(NA)	(NA)	1
	1967..	49	296.4	86	93	98	100	96	96	(X)
	1966..	(NA)	283.2	88	93	(NA)	(NA)	(NA)	(NA)	3
	1963..	40	226.9	83	92	98	100	93	96	(X)
	1958..	34	154.5	87	92	99	100	97	95	(X)
	1954..	43	111.0	86	93	98	100	98	94	(X)
	1947..	36	68.7	87	93	99	100	95	95	(X)
3629	Electrical industrial apparatus, n.e.c....1977..	213	692.4	28	43	66	87	87	81	(X)
	1972..	245	449.4	31	47	65	83	85	80	(X)
	1970..	(NA)	409.9	35	49	(NA)	(NA)	(NA)	(NA)	4
	1967..	212	328.8	33	45	61	83	84	67	(X)
	1966..	(NA)	369.4	33	45	(NA)	(NA)	(NA)	(NA)	6
	1963..	226	238.3	38	51	67	84	80	72	(X)
3631	Household cooking equipment....1977..	84	1,707.2	51	71	90	99+	92	80	(X)
	1972..	74	939.8	60	73	90	99+	91	74	(X)
	1970..	(NA)	656.5	61	76	(NA)	(NA)	(NA)	(NA)	1
	1967..	66	551.9	56	72	90	99+	92	77	(X)
	1966..	(NA)	548.5	54	71	(NA)	(NA)	(NA)	(NA)	2
	1963..	77	473.5	51	68	88	99+	87	72	(X)
3632	Household refrigerators and freezers....1977..	33	2,576.6	82	98	99+	100	77	98	(X)
	1972..	30	1,719.7	85	98	99+	100	75-80	80-85	(X)
	1970..	(NA)	2,022.1	82	99	(NA)	(NA)	(NA)	(NA)	1
	1967..	31	1,785.4	73	93	99+	100	59	99	(X)
	1966..	(NA)	1,674.9	72	93	(NA)	(NA)	(NA)	(NA)	2
	1963..	31	1,306.5	74	91	99+	100	66	99	(X)
3633	Household laundry equipment....1977..	21	1,792.8	89	(D)	(D)	100	87	90	(X)
	1972..	20	1,356.5	83	98	100	(X)	88	91	(X)
	1970..	(NA)	1,081.0	83	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	25	982.5	78	95	99+	100	87	90	(X)
	1966..	(NA)	946.9	79	95	(NA)	(NA)	(NA)	(NA)	2
	1963..	31	760.2	78	95	99+	100	89	87	(X)
	1958..	34	722.2	71	90	99	100	91	91	(X)
	1954..	48	527.5	68	85	99	100	93	81	(X)
	1947..	59	442.3	40	65	91	(NA)	90	91	(X)
	1935..	(NA)	(NA)	56	79	(NA)	(NA)	(NA)	(NA)	(X)
3634	Electric housewares and fans....1977..	239	2,531.2	46	59	78	94	87	90	(X)
	1972..	247	1,615.0	43	60	76	91	88	91	(X)
	1970..	(NA)	1,275.5	45	59	(NA)	(NA)	(NA)	(NA)	1
	1967..	248	1,112.0	52	63	80	94	90	86	(X)
	1966..	(NA)	1,127.8	50	61	(NA)	(NA)	(NA)	(NA)	2
	1963..	286	850.3	41	59	78	92	87	81	(X)
3635	Household vacuum cleaners....1977..	32	639.9	83	95	99+	100	(D)	81	(X)
	1972..	34	467.7	75	91	99	100	80	85	(X)
	1970..	(NA)	346.1	79	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	34	293.2	76	94	99	100	75	84	(X)
	1966..	(NA)	252.6	78	98	(NA)	(NA)	(NA)	(NA)	2
	1963..	34	175.4	81	96	99	100	87	80	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.								
3636	Sewing machines....1977..	86	304.9	83	91	96	99+	(D)	(D)	(X)
	1972..	72	159.6	84	92	97	99+	95-100	93	(X)
	1970..	(NA)	135.9	80	(S)	(NA)	(NA)	(NA)	(NA)	2
	1967..	83	123.6	81	92	97	99+	95-99	96	(X)
	1966..	(NA)	120.8	(D)	(S)	(NA)	(NA)	(NA)	(NA)	4
	1963..	83	117.2	(D)	93	97	99+	95-99	96	(X)
	1958..	80	95.4	(D)	93	97	99	97	94	(X)
	1954..	78	112.0	81	91	96	(NA)	91	94	(X)
	1947..	69	97.0	77	87	97	(NA)	95	94	(X)
	1935..	(NA)	(NA)	78	90	(NA)	(NA)	(NA)	(NA)	(X)
3639	Household appliances, n.e.c....1977..	65	1,184.0	52	83	98	99+	93	79	(X)
	1972..	70	681.9	57	76	94	99+	93	96	(X)
	1970..	(NA)	535.8	46	67	(NA)	(NA)	(NA)	(NA)	1
	1967..	71	479.9	44	65	92	99+	87	79	(X)
	1966..	(NA)	448.9	45	67	(NA)	(NA)	(NA)	(NA)	2
	1963..	102	435.5	41	61	86	98	79	79	(X)
3641	Electric lamps....1977..	128	1,651.4	90	95	98	99	97	98	(X)
	1972..	103	1,095.7	90	94	98	99+	95	96	(X)
	1970..	(NA)	891.5	92	97	(NA)	(NA)	(NA)	(NA)	1
	1967..	72	781.8	91	95	99	99+	94	95	(X)
	1966..	(NA)	742.0	93	97	(NA)	(NA)	(NA)	(NA)	2
	1963..	54	574.5	92	96	99	(D)	95	96	(X)
	1958..	35	409.5	92	97	99+	100	94	98	(X)
	1954..	35	326.3	93	97	99+	100	94	99	(X)
	1947..	35	203.2	92	96	99+	100	94	100	(X)
3643	Current-carrying wiring devices....1977..	361	1,795.2	26	38	59	82	84	79	(X)
	1972..	366	1,216.6	30	46	65	83	83	81	(X)
	1970..	(NA)	1,008.9	32	47	(NA)	(NA)	(NA)	(NA)	3
	1967..	351	837.0	32	48	67	83	78	78	(X)
	1966..	(NA)	811.3	32	48	(NA)	(NA)	(NA)	(NA)	3
	1963..	431	616.0	28	44	64	82	80	83	(X)
3644	Noncurrent-carrying wiring devices....1977..	174	1,421.8	25	39	65	89	82	83	(X)
	1972..	149	886.4	24	41	67	91	81	78	(X)
	1970..	(NA)	789.4	24	40	(NA)	(NA)	(NA)	(NA)	1
	1967..	158	637.9	26	42	68	93	74	82	(X)
	1966..	(NA)	673.9	22	36	(NA)	(NA)	(NA)	(NA)	3
	1963..	168	479.0	22	39	66	91	77	80	(X)
3645	Residential lighting fixtures (1967 industry 3642, Lighting fixtures, part)....1977..	675	986.6	25	33	45	61	95	92	(X)
	1972..	665	767.2	28	35	46	59	97	93	(X)
3646	Commercial lighting fixtures (1967 industry 3642, Lighting fixtures, part)....1977..	192	922.7	30	46	68	86	90	86	(X)
	1972..	206	718.7	25	40	64	85	90	91	(X)
3647	Vehicular lighting fixtures (1967 industry 3642, Lighting fixtures, part)....1977..	70	908.5	(D)	86	95	99+	68	94	(X)
	1972..	46	499.8	78	89	97	100	68	94	(X)
3648	Lighting equipment, n.e.c. (1967 industry 3642, Lighting fixtures, part)....1977..	211	671.0	25	39	60	82	85	81	(X)
	1972..	172	466.5	29	46	73	90	86	79	(X)
	1967 industry 3642, Lighting fixtures (1972 industries 3645, 3646, 3647, and 3648)....1970..	(NA)	1,976.0	20	30	(NA)	(NA)	(NA)	(NA)	2
	1967..	1,148	1,593.6	19	29	41	56	93	94	(X)
	1966..	(NA)	1,544.1	18	28	(NA)	(NA)	(NA)	(NA)	3
	1963..	1,203	1,159.5	17	26	38	54	93	93	(X)
	1958..	1,180	798.5	16	23	33	49	89	92	(X)
	1954..	1,211	641.6	20	28	39	(NA)	90	90	(X)
	1947..	1,198	465.4	18	26	39	(NA)	90	89	(X)
3651	Radio and TV receiving sets....1977..	546	5,731.6	51	65	81	92	94	98	(X)
	1972..	343	4,440.1	49	71	86	96	95	99	(X)
	1970..	(NA)	3,594.8	48	67	(NA)	(NA)	(NA)	(NA)	1
	1967..	303	3,846.3	49	69	85	95	94	99	(X)
	1966..	(NA)	4,117.4	48	68	(NA)	(NA)	(NA)	(NA)	2
	1963..	322	2,254.9	41	62	82	94	91	96	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.								
3652	Phonograph records and prerecorded tape									
	1977	679	1,181.7	48	62	75	85	99	99	(X)
	1972	537	567.7	48	61	76	85	98	99	(X)
	1970	(NA)	437.5	62	73	(NA)	(NA)	(NA)	(NA)	6
	1967	306	276.4	58	67	81	92	99	96	(X)
	1966	(NA)	218.4	71	79	(NA)	(NA)	(NA)	(NA)	3
	1963	128	180.2	69	75	85	94	99	97	(X)
	1958	85	138.6	76	83	90	98	97	98	(X)
	1954	135	84.7	70	80	88	(NA)	94	97	(X)
	1947	96	110.2	79	87	94	(NA)	96	99	(X)
3661	Telephone and telegraph apparatus									
	1977	208	[9]4,192.0	(D)	89	94	98	94	97	(X)
	1972	157	[9]2,650.1	(D)	(D)	98	99+	91	99	(X)
	1970	(NA)	[9]2,246.6	94	99	(NA)	(NA)	(NA)	(NA)	1
	1967	82	[9]1,536.7	92	96	99	99+	88	96	(X)
	1966	(NA)	[9]1,431.8	94	97	(NA)	(NA)	(NA)	(NA)	2
	1963	65	[9]1,013.8	92	96	99	99+	(NA)	(NA)	(X)
	1958	44	[9]749.4	92	97	99+	100	(NA)	(NA)	(X)
	1954	56	[9]497.8	90	95	(NA)	(NA)	(NA)	(NA)	(X)
	1947	50	[9]384.4	([11]2)	([11]2)	([11]2)	([11]2)	(NA)	(NA)	(X)
3662	Radio and TV communication equipment									
	1977	1,873	14,886.0	20	33	57	73	92	92	(X)
	1972	1,524	9,140.2	19	33	58	77	91	91	(X)
	1970	(NA)	9,330.8	19	33	(NA)	(NA)	(NA)	(NA)	1
	1967	1,111	8,555.8	22	37	61	81	89	92	(X)
	1966	(NA)	7,562.6	24	39	(NA)	(NA)	(NA)	(NA)	2
	1963	1,001	7,145.6	29	45	69	84	88	91	(X)
3671	Electron tubes, all types (1972 industries 3671, 3672, and 3673)									
	1977	125	1,581.7	58	78	95	99	78	93	(X)
	1972 industry 3671, Electron tubes, receiving type									
	1972	21	230.4	95	99+	(D)	100	83	94	(X)
	1970	(NA)	252.8	95	99	(NA)	(NA)	(NA)	(NA)	1
	1967	28	300.6	94	99	99+	100	85	94	(X)
	1966	(NA)	336.1	95	99+	(NA)	(NA)	(NA)	(NA)	1
	1963	30	321.1	85	99	99+	100	89	95	(X)
	1972 industry 3672, Cathode ray television picture tube (1977 industry 3671, part)									
	1972	69	696.5	83	97	99+	99+	91	98	(X)
	1970	(NA)	519.1	88	97	(NA)	(NA)	(NA)	(NA)	1
	1967	95	832.3	84	98	99+	99+	92	98	(X)
	1966	(NA)	812.4	89	(D)	(NA)	(NA)	(NA)	(NA)	2
	1963	148	269.1	91	95	97	99	85-90	90	(X)
	1972 industry 3673 Electron tubes, transmitting (1977 industry 3671, part)									
	1972	43	479.3	55	80	98	100	68	84	(X)
	1970	(NA)	392.4	65	86	(NA)	(NA)	(NA)	(NA)	3
	1967	43	369.4	70	87	98	100	79	72	(X)
	1966	(NA)	369.9	57	77	(NA)	(NA)	(NA)	(NA)	3
	1963	45	299.5	52	77	96	100	80	75	(X)
3674	Semiconductors and related devices									
	1977	499	5,327.1	42	62	79	90	93	94	(X)
	1972	289	2,704.8	57	70	82	94	89	92	(X)
	1970	(NA)	1,473.2	49	65	(NA)	(NA)	(NA)	(NA)	1
	1967	141	1,141.0	47	65	85	98	92	87	(X)
	1966	(NA)	1,123.7	51	70	(NA)	(NA)	(NA)	(NA)	2
	1963	86	687.8	46	65	90	99	88	92	(X)
3675	Electronic capacitors (1967 industry 3679, part)									
	1977	86	742.3	47	62	86	98	92	91	(X)
	1972	79	445.8	42	61	85	97	90	87	(X)
3676	Electronic resistors (1967 industry 3679, part)									
	1977	77	578.3	38	63	86	98	87	81	(X)
	1972	67	372.2	43	65	86	99+	90	74	(X)
3677	Electronic coils and transformers (1967 industry 3679, part)									
	1977	276	506.4	20	30	46	67	91	75	(X)
	1972	215	354.1	14	24	45	71	87	79	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.								
3678	Electronic connectors (1967 industry 3679, part) 1977	106	1,104.6	45	65	82	96	78	86	(X)
	1972	75	483.3	55	71	87	98	87	81	(X)
3679	Electronic components, n.e.c. (1967 industry 3679, part) 1977	3,005	5,549.2	29	36	45	56	79	74	(X)
	1972	1,745	3,059.9	36	41	51	63	80	72	(X)
	1967 industry 3679, Electronic components, n.e.c., (1972 industries 3675, 3676, 3677, 3678, and 3679) 1970	(NA)	4,586.7	31	38	(NA)	(NA)	(NA)	(NA)	2
	1967	1,775	4,809.5	32	38	51	65	83	85	(X)
	1966	(NA)	4,001.8	22	29	(NA)	(NA)	(NA)	(NA)	2
	1963	1,743	2,332.2	13	21	35	54	89	78	(X)
3691	Storage batteries 1977	134	1,982.5	57	84	93	98	97	99	(X)
	1972	138	968.6	57	85	93	98	98	99	(X)
	1970	(NA)	783.0	56	83	(NA)	(NA)	(NA)	(NA)	1
	1967	154	577.5	61	83	93	98	98	97	(X)
	1966	(NA)	615.7	60	80	(NA)	(NA)	(NA)	(NA)	3
	1963	169	516.5	59	78	92	97	98	99	(X)
	1958	206	366.6	64	81	91	96	99	100	(X)
	1954	244	341.4	64	80	90	(NA)	100	100	(X)
	1947	205	297.7	62	78	87	(NA)	90	99	(X)
3692	Primary batteries, dry and wet 1977	41	666.1	87	94	99	100	96	97	(X)
	1972	30	348.1	92	97	99+	100	95	98	(X)
	1970	(NA)	329.5	85	96	(NA)	(NA)	(NA)	(NA)	1
	1967	32	307.6	85	95	99+	100	97	86	(X)
	1966	(NA)	277.0	88	97	(NA)	(NA)	(NA)	(NA)	2
	1963	26	195.3	89	98	99+	100	96	91	(X)
	1958	24	134.9	84	95	99+	100	99	98	(X)
	1954	20	121.8	78	93	100	(X)	98	98	(X)
	1947	23	85.0	76	95	99+	100	90-100	98-100	(X)
3693	X-ray apparatus and tubes 1977	212	1,884.7	32	51	73	90	98	92	(X)
	1972	95	443.7	54	75	90	99	95	92	(X)
	1970	(NA)	256.3	59	(S)	(NA)	(NA)	(NA)	(NA)	3
	1967	78	233.2	62	77	92	99+	93	86	(X)
	1966	(NA)	240.4	67	85	(NA)	(NA)	(NA)	(NA)	5
	1963	56	143.7	67	79	93	99+	83	80	(X)
	1958	126	77.2	63	74	87	96	85	82	(X)
	1954	129	79.9	51	69	87	(NA)	81	91	(X)
	1947	114	59.5	58	75	90	(NA)	94	93	(X)
3694	Engine electrical equipment 1977	372	3,647.2	62	75	87	94	81	89	(X)
	1972	266	2,035.0	65	78	89	96	79	87	(X)
	1970	(NA)	1,569.9	66	75	(NA)	(NA)	(NA)	(NA)	2
	1967	239	1,364.7	68	77	89	96	81	85	(X)
	1966	(NA)	1,342.5	72	81	(NA)	(NA)	(NA)	(NA)	(X)
	1963	163	900.7	69	79	88	97	93	81	(X)
	1958	147	565.7	66	78	91	95	81	85	(X)
	1954	154	587.1	62	83	90	(NA)	85	87	(X)
	1947	100	357.8	67	81	93	(NA)	89	91	(X)
3699	Electrical equipment and supplies, n.e.c. 1977	612	749.0	27	33	48	65	94	77	(X)
	1972	968	501.8	21	30	45	62	91	52	(X)
	1970	(NA)	416.3	26	37	(NA)	(NA)	(NA)	(NA)	9
	1967	528	290.8	23	34	52	73	93	[9]250	(X)
	1966	(NA)	319.3	30	40	(NA)	(NA)	(NA)	(NA)	4
	1963	245	190.0	38	48	64	81	90	[9]249	(X)
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT								
3711	Motor vehicles and car bodies 1977	254	76,517.8	93	99	99+	99+	95	99	(X)
	1972	165	42,905.6	93	99	99+	99+	96	100	(X)
	1970	(NA)	27,750.7	91	97	(NA)	(NA)	(NA)	(NA)	1
	1967	107	27,296.0	92	98	99+	99+	96	99	(X)
3713	Truck and bus bodies (1972 industry 3713, Truck and bus bodies)[113] 1977	770	2,003.3	33	40	52	66	94	93	(X)
	1972	729	1,564.4	26	34	48	64	90	91	(X)
	1970	(NA)	935.5	22	31	(NA)	(NA)	(NA)	(NA)	2
	1967	620	706.1	21	30	47	65	85	92	(X)
	1966	(NA)	718.6	27	26	(NA)	(NA)	(NA)	(NA)	5
	1963	594	476.7	22	32	50	66	88	86	(X)
	1958	548	292.4	21	31	49	68	87	87	(X)
	1954	555	256.9	[9]4	[9]4	[9]4	[9]4	86	87	(X)
	1947	599	242.3	22	31	48	(NA)	79	90	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.								
3714	Motor vehicle parts and accessories									
	1977	2,194	35,750.8	62	70	79	86	94	87	(X)
	1972	1,748	18,333.5	61	69	78	86	94	86	(X)
	1970	(NA)	13,073.2	58	66	(NA)	(NA)	(NA)	(NA)	1
	1967	1,424	11,623.8	60	68	78	87	96	99	(X)
3715	Truck trailers									
	1977	316	1,910.1	43	56	71	86	94	96	(X)
	1972	215	1,117.9	45	60	77	91	96	94	(X)
	1970	(NA)	777.5	49	63	(NA)	(NA)	(NA)	(NA)	2
	1967	147	713.9	48	64	82	95	94	91	(X)
	1966	(NA)	795.6	53	66	(NA)	(NA)	(NA)	(NA)	2
	1963	175	515.7	59	69	81	93	92	93	(X)
	1958	155	324.6	52	63	77	93	84	83	(X)
	1954	115	305.5	57	68	84	(NA)	82	93	(X)
	1947	107	155.7	56	67	83	(NA)	81	87	(X)
3716	Motor homes produced on purchased chassis (1972 industry 3713, part)[113]									
	1977	80	1,564.5	43	58	75	94	92	94	(X)
3721	Aircraft									
	1977	151	[115]14,834.2	59	81	99	99+	83	98	(X)
	1972	141	[115]8,779.3	66	86	99	99+	86	96	(X)
	1970	(NA)	[116]10,996.2	65	87	(NA)	(NA)	(NA)	(NA)	1
	1967	91	[116]5,447.6	69	89	99	99+	83	97	(X)
	1966	(NA)	[116]4,674.6	67	88	(NA)	(NA)	(NA)	(NA)	2
	1963	82	[116]3,542.7	59	83	99	99+	69	96	(X)
	1958	[96]113	[116]3,375.9	59	83	99	99+	81	99	(X)
	1954	([114])	[116]3,348.9	([114])	([114])	([114])	([114])	([114])	([114])	(X)
	1947	([114])	[116]606.0	([114])	([114])	([114])	([114])	([114])	([114])	(X)
3724	Aircraft engines and engine parts (1967 industry 3722, part)									
	1977	226	6,272.3	74	86	93	97	81	95	(X)
	1972	189	3,640.2	77	87	94	97	87	94	(X)
	1967 industry 3722, Aircraft engines and engine parts (1972 industries 3724 and 3764)									
	1970	(NA)	5,150.2	68	81	(NA)	(NA)	(NA)	(NA)	1
	1967	205	5,289.7	64	81	93	97	88	92	(X)
	1966	(NA)	4,424.6	60	79	(NA)	(NA)	(NA)	(NA)	2
	1963	194	4,024.9	57	79	94	99+	87	93	(X)
	1958	186	3,359.3	56	77	92	97	94	93	(X)
	1954	202	3,189.0	62	81	93	(NA)	93	91	(X)
	1947	54	464.6	72	88	98	(NA)	90	95	(X)
3728	Aircraft equipment, n.e.c. (1967 industry 3729, Aircraft equipment, n.e.c., part)									
	1977	681	4,760.6	45	56	73	85	72	57	(X)
	1972	649	3,031.9	33	51	69	84	77	66	(X)
	1967 industry 3729, Aircraft equipment, n.e.c., part (1972 industries 3728 and 3729)[117]									
	1970	(NA)	3,846.4	27	44	(NA)	(NA)	(NA)	(NA)	1
	1967	825	4,694.4	25	41	60	76	78	64	(X)
	1966	(NA)	3,992.3	24	39	(NA)	(NA)	(NA)	(NA)	2
	1963	(NA)	3,359.4	38	52	65	79	(NA)	(NA)	(X)
3731	Shipbuilding and repairing									
	1977	542	[116]6,495.1	43	58	76	88	97	99	(X)
	1972	415	[116]3,281.0	47	63	81	91	98	98	(X)
	1970	(NA)	[116]2,534.1	46	65	(NA)	(NA)	(NA)	(NA)	1
	1967	389	[116]2,518.2	42	59	77	90	95	98	(X)
	1966	(NA)	[116]2,338.9	42	61	(NA)	(NA)	(NA)	(NA)	2
	1963	305	[116]1,679.8	48	63	81	92	92	99	(X)
	1958	293	[116]1,626.3	48	66	80	91	93	99	(X)
	1954	328	[116]1,077.9	43	58	74	(NA)	92	99	(X)
	1947	272	[116] 802.6	43	55	73	(NA)	94	98	(X)
3732	Boatbuilding and repairing									
	1977	2,148	1,822.6	11	19	32	49	98	96	(X)
	1972	1,725	1,048.2	14	23	38	54	97	96	(X)
	1970	(NA)	673.5	15	24	(NA)	(NA)	(NA)	(NA)	4
	1967	1,565	571.4	19	27	41	57	96	91	(X)
	1966	(NA)	485.1	20	29	(NA)	(NA)	(NA)	(NA)	4
	1963	1,596	360.2	21	29	42	56	97	95	(X)
	1958	1,622	310.2	18	25	37	52	94	95	(X)
	1954	1,146	154.4	21	28	39	(NA)	93	85	(X)
	1947	798	114.4	31	41	53	(NA)	83	88	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.									
3742	Railroad equipment (1967 industry 3741, Locomotives and parts and industry 3742, Railroad and street cars)....1977..	145	4,278.3	51	65	86	97	91	94	(X)
	1972..	128	2,446.2	56	70	90	98	92	95	(X)
	1967 industry 3741, Locomotive and parts (1972 industry 3743, part)....1970..	(NA)	([118])	([118])	([118])	(NA)	(NA)	(NA)	(NA)	1
	1967..	26	689.6	97	99	99+	100	80	92	(X)
	1966..	(NA)	700.7	98	99	(NA)	(NA)	(NA)	(NA)	2
	1963..	23	437.9	97	99	99+	100	83	90	(X)
	1958..	25	387.4	95	99	99+	100	85	90	(X)
	1954..	25	428.3	91	98	99+	100	82	95	(X)
	1947..	33	355.2	91	95	99	100	95	83	(X)
	1967 industry 3742, Railroad and street cars (1972 industry 3743, part)....1970..	(NA)	[118]2,159.6	[118]52	[118]68	(NA)	(NA)	(NA)	(NA)	1
	1967..	79	1,420.9	53	69	90	99+	95	95	(X)
	1966..	(NA)	1,695.7	50	69	(NA)	(NA)	(NA)	(NA)	2
	1963..	68	927.2	53	73	93	99+	91	93	(X)
	1958..	55	554.4	58	81	97	99+	88	91	(X)
	1954..	47	495.8	64	81	98	100	83	86	(X)
	1947..	68	726.2	56	72	92	(NA)	91	91	(X)
3751	Motorcycles, bicycles, and parts (1967 industry 3751, part)[8].....1977..	343	1,007.6	66	81	89	94	84	97	(X)
	1972..	219	659.5	65	78	92	97	81	95	(X)
	1970..	(NA)	404.8	57	72	(NA)	(NA)	(NA)	(NA)	7
	1967..	87	299.6	57	76	95	99+	89	96	(X)
	1966..	(NA)	261.1	57	78	(NA)	(NA)	(NA)	(NA)	4
	1963..	85	192.9	56	77	94	99+	83	93	(X)
	1958..	49	118.3	58	81	97	99+	84	93	(X)
	1954..	44	95.6	50	77	97	100	86	92	(X)
	1947..	75	163.7	42	68	92	(NA)	87	89	(X)
	1935..	(NA)	(NA)	60	90	(NA)	(NA)	(NA)	(NA)	(X)
3761	Guided missiles and space vehicles (1967 industry 1925).....1977..	20	5,314.4	64	94	100	(X)	87	91	(X)
	1972..	23	4,123.7	62	88	(D)	100	81	95	(X)
3764	Space propulsion units and parts (1967 industry 3722, part).....1977..	18	945.5	69	93	100	(X)	92	88	(X)
	1972..	22	716.3	59	92	(D)	100	91	87	(X)
3769	Space vehicle equipment, n.e.c. (1967 industry 3729, part).....1977..	41	339.4	76	86	97	100	85	(D)	(X)
	1972..	45	788.2	70	85	97	100	79	68	(X)
3792	Travel trailers and campers (1967 industry 3791, part).....1977..	775	1,582.4	31	44	58	72	88	90	(X)
	1972..	943	1,342.4	21	29	43	59	92	94	(X)
	1967 industry 3791, Trailer coaches (1972 industries 3792 and 2451).....1970..	(NA)	2,652.5	22	33	(NA)	(NA)	(NA)	(NA)	5
	1967..	708	1,324.5	19	31	48	67	99	99	(X)
	1966..	(NA)	1,089.3	21	33	(NA)	(NA)	(NA)	(NA)	6
	1963..	348	713.1	22	37	53	71	98	99	(X)
3795	Tanks and tank components (1967 industry 1931).....1977..	20	934.2	87	97	100	(X)	92	82	(X)
	1972..	18	272.2	95	99	100	(X)	95	77	(X)
3799	Transportation equipment, n.e.c.[119].....1977..	408	620.9	35	46	63	79	94	79	(X)
	1972..	444	654.6	28	38	53	73	93	74	(X)
	MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS									
3811	Engineering and scientific instruments.....1977..	740	1,926.7	25	37	56	72	85	79	(X)
	1972..	703	1,042.0	22	33	50	68	86	72	(X)
	1970..	(NA)	1,150.9	26	38	(NA)	(NA)	(NA)	(NA)	4
	1967..	642	1,000.8	28	38	56	71	88	73	(X)
	1966..	(NA)	748.7	29	41	(NA)	(NA)	(NA)	(NA)	3
	1963..	571	553.9	29	40	58	75	84	56	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.								
3822	Environmental controls	1977	182	1,358.7	59	81	92	97	80	92	(X)
		1972	117	728.1	57	76	93	99	86	90	(X)
		1970	(NA)	642.2	56	81	(NA)	(NA)	(NA)	(NA)	1
		1967	88	618.0	56	75	96	99+	81	81	(X)
		1966	(NA)	628.5	59	77	(NA)	(NA)	(NA)	(NA)	2
		1963	89	527.4	55	75	96	99+	82	95	(X)
3823	Process control instruments (1967 industry 3821, part)[120]	1977	383	2,022.0	32	46	64	81	90	80	(X)
		1972	175	906.9	35	53	75	89	83	83	(X)
3824	Fluid meters and counting devices (1967 industry 3821, part)[120]	1977	100	650.4	43	67	87	98	80	80	(X)
		1972	51	296.2	57	77	95	(D)	90	79	(X)
	1967 industry 3821, Mechanical measuring devices (1972 industries 3823, 3824, and 3829)[120]	1970	(NA)	1,607.4	21	36	(NA)	(NA)	(NA)	(NA)	2
		1967	605	1,455.1	20	34	58	79	86	82	(X)
		1966	(NA)	1,428.5	21	33	(NA)	(NA)	(NA)	(NA)	2
		1963	510	1,143.5	22	36	61	81	90	23	(X)
3825	Instruments to measure electricity (1967 industry 3611)[8]	1977	622	2,761.0	33	43	61	78	90	89	(X)
		1972	606	1,493.5	38	49	64	79	82	88	(X)
		1970	(NA)	1,309.9	38	48	(NA)	(NA)	(NA)	(NA)	3
		1967	502	1,184.0	35	45	61	77	84	79	(X)
		1966	(NA)	1,020.5	36	48	(NA)	(NA)	(NA)	(NA)	3
		1963	536	749.2	34	47	65	81	84	78	(X)
3829	Measuring and controlling devices, n.e.c. (1967 industry 3821, part)[120]	1977	649	1,118.1	25	35	52	69	89	83	(X)
		1972	579	577.7	23	37	56	77	85	77	(X)
3832	Optical instruments and lenses (1967 industry 3831 and 1941)[121]	1977	510	1,330.4	30	43	63	81	84	82	(X)
		1972	467	531.5	42	53	66	79	92	79	(X)
		1970	(NA)	431.5	54	64	(NA)	(NA)	(NA)	(NA)	2
		1967	287	406.9	49	59	74	88	87	74	(X)
		1966	(NA)	332.4	56	66	(NA)	(NA)	(NA)	(NA)	7
		1963	272	196.0	41	53	73	87	90	61	(X)
		1958	222	89.0	46	60	74	88	90	66	(X)
		1954	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(X)
		1947	(83)	45.3	(83)	(83)	(83)	(83)	(83)	(83)	(X)
3841	Surgical and medical instruments	1977	575	1,833.1	32	48	67	82	88	80	(X)
		1972	448	961.8	32	45	64	81	90	82	(X)
		1970	(NA)	630.2	43	55	(NA)	(NA)	(NA)	(NA)	2
		1967	298	475.4	38	54	72	88	91	63	(X)
		1966	(NA)	360.1	40	51	(NA)	(NA)	(NA)	(NA)	6
		1963	256	284.0	47	58	72	86	88	74	(X)
3842	Surgical appliances and supplies	1977	1,017	2,597.3	38	49	62	77	87	85	(X)
		1972	780	1,453.5	41	54	67	81	79	90	(X)
		1970	(NA)	1,209.6	43	56	(NA)	(NA)	(NA)	(NA)	2
		1967	755	837.9	44	53	66	80	80	86	(X)
		1966	(NA)	768.9	45	55	(NA)	(NA)	(NA)	(NA)	6
		1963	525	594.8	49	58	71	84	80	90	(X)
3843	Dental equipment and supplies	1977	507	786.7	33	46	69	86	92	98	(X)
		1972	385	409.2	35	49	71	87	93	94	(X)
		1970	(NA)	274.2	38	54	(NA)	(NA)	(NA)	(NA)	3
		1967	314	220.5	41	53	73	89	94	94	(X)
		1966	(NA)	205.6	37	50	(NA)	(NA)	(NA)	(NA)	7
		1963	267	147.8	37	50	70	88	94	92	(X)
		1958	240	108.7	45	57	73	89	95	92	(X)
		1954	193	79.2	40	53	73	(NA)	95	94	(X)
		1947	209	71.1	40	52	72	(NA)	97	94	(X)
		1935	(NA)	(NA)	51	67	(NA)	(NA)	(NA)	(NA)	(X)
3851	Ophthalmic goods	1977	593	971.8	45	56	70	84	92	98	(X)
		1972	447	568.3	56	66	77	89	88	97	(X)
		1970	(NA)	516.0	54	63	(NA)	(NA)	(NA)	(NA)	4
		1967	432	426.0	51	58	71	84	88	95	(X)
		1966	(NA)	346.8	60	70	(NA)	(NA)	(NA)	(NA)	3
		1963	211	272.7	53	62	77	90	86	82	(X)
		1958	226	191.5	52	62	74	86	87	98	(X)
		1954	223	157.9	54	63	75	(NA)	83	94	(X)
		1947	175	121.2	58	69	80	(NA)	86	97	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years** – Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.									
3861	Photographic equipment and supplies....1977..	702	9,946.9	72	86	90	94	95	95	(X)
	1972..	555	5,623.9	74	85	92	95	95	96	(X)
	1970..	(NA)	4,372.5	75	86	(NA)	(NA)	(NA)	(NA)	1
	1967..	505	3,664.5	69	81	89	95	95	97	(X)
	1966..	(NA)	3,285.7	67	79	(NA)	(NA)	(NA)	(NA)	2
	1963..	499	1,851.2	63	76	86	93	95	97	(X)
	1958..	450	1,133.6	65	74	85	93	94	94	(X)
	1954..	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(94)	(X)
	1947..	346	457.5	61	70	81	(NA)	93	97	(X)
	1935..	(NA)	(NA)	77	84	(NA)	(NA)	(NA)	(NA)	(X)
3873	Watches, clocks, and watchcases (1967 industry 3871 and 3872).....1977..	283	1,594.7	58	66	82	94	91	95	(X)
	1972..	183	937.2	55	67	84	96	87	95	(X)
	1967 industry 3871, Watches and clocks (1972 industry 3873, part).....1970..	(NA)	834.7	56	70	(NA)	(NA)	(NA)	(NA)	1
	1967..	153	746.5	47	63	87	98	85	90	(X)
	1966..	(NA)	669.4	45	63	(NA)	(NA)	(NA)	(NA)	2
	1963..	150	511.2	46	65	90	98	82	85	(X)
	1958..	153	322.1	48	70	89	97	88	95	(X)
	1954..	141	330.0	44	68	80	(NA)	82	90	(X)
	1947..	183	341.2	41	59	82	(NA)	97	98	(X)
	1935..	(NA)	(NA)	37	59	(NA)	(NA)	(NA)	(NA)	(X)
	1967 industry 3872, Watchcases (1972 industry 3873, part).....1970..	(NA)	54.0	70	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967..	45	55.6	68	81	97	100	78	96	(X)
	1966..	(NA)	58.1	55	(S)	(NA)	(NA)	(NA)	(NA)	8
	1963..	51	33.6	57	72	93	(D)	86	97	(X)
	1958..	58	34.6	57	71	89	99+	80	98	(X)
	1954..	63	35.0	40	58	85	(NA)	86	85	(X)
	1947..	81	44.5	40	60	84	(NA)	87	94	(X)
	1935..	(NA)	(NA)	58	80	(NA)	(NA)	(NA)	(NA)	(X)
	MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES									
3911	Jewelry, precious metal.....1977..	2,165	2,107.0	18	24	35	48	92	97	(X)
	1972..	1,497	1,124.6	21	26	35	49	92	96	(X)
	1970..	(NA)	904.3	21	(S)	(NA)	(NA)	(NA)	(NA)	4
	1967..	1,477	741.8	23	28	38	49	91	96	(X)
	1966..	(NA)	693.8	25	32	(NA)	(NA)	(NA)	(NA)	10
	1963..	1,428	481.9	26	33	42	53	92	97	(X)
	1958..	1,300	303.3	18	25	36	48	95	98	(X)
	1954..	1,323	258.1	15	23	36	(NA)	93	96	(X)
	1947..	1,342	248.2	13	20	32	(NA)	92	95	(X)
3914	Silverware and plated ware.....1977..	247	457.0	51	67	83	92	93	98	(X)
	1972..	188	364.7	52	68	85	94	94	97	(X)
	1970..	(NA)	316.1	56	68	(NA)	(NA)	(NA)	(NA)	4
	1967..	186	339.1	56	67	82	93	95	99	(X)
	1966..	(NA)	325.1	55	66	(NA)	(NA)	(NA)	(NA)	2
	1963..	201	238.0	55	66	81	91	95	98	(X)
	1958..	198	192.2	54	67	79	91	95	98	(X)
	1954..	190	211.1	61	72	83	(NA)	91	97	(X)
	1947..	221	221.6	61	72	82	(NA)	98	97	(X)
	1935..	(NA)	(NA)	56	68	(NA)	(NA)	(NA)	(NA)	(X)
3915	Jewelers' materials and lapidary work (1967 industries 3912 and 3913).....1977..	650	685.2	17	27	48	70	96	89	(X)
	1972..	566	323.3	18	29	51	71	95	86	(X)
	1967 industry 3912, Jewelers' findings and materials.....1970..	(NA)	115.6	31	(S)	(NA)	(NA)	(NA)	(NA)	9
	1967..	232	128.6	31	44	63	83	90	94	(X)
	1966..	(NA)	(108.2)	24	35	(NA)	(NA)	(NA)	(NA)	13
	1963..	228	72.8	33	45	65	83	92	89	(X)
	1958..	248	56.5	27	41	58	80	90	97	(X)
	1954..	234	69.3	43	53	66	(NA)	92	91	(X)
	1947..	180	73.5	39	52	75	(NA)	92	93	(X)
	1967 industry 3913, Lapidary work.....1970..	(NA)	113.3	(S)	(S)	(NA)	(NA)	(NA)	(NA)	15
	1967..	296	89.5	30	47	70	89	95	78	(X)
	1966..	(NA)	(74.6)	40	51	(NA)	(NA)	(NA)	(NA)	16
	1963..	318	65.1	38	53	72	88	93	81	(X)
	1958..	326	38.5	16	28	53	79	99	87	(X)
	1954..	332	33.6	21	31	51	(NA)	97	91	(X)
	1947..	270	30.3	26	38	58	(NA)	98	98	(X)
	1935..	(NA)	(NA)	37	54	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**–Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.								
3931	Musical instruments.....1977..	400	924.9	31	53	78	91	98	99	(X)
	1972..	310	617.5	38	60	82	94	97	99	(X)
	1970..	(NA)	478.9	40	58	(NA)	(NA)	(NA)	(NA)	3
	1967..	304	434.3	34	57	79	91	97	98	(X)
	1966..	(NA)	437.3	36	57	(NA)	(NA)	(NA)	(NA)	3
	1963..	288	314.4	38	54	73	88	97	92	(X)
3942	Dolls.....1977..	223	340.2	37	46	66	87	94	59	(X)
	1972..	237	199.1	22	34	55	79	99	68	(X)
	1970..	(NA)	169.9	21	35	(NA)	(NA)	(NA)	(NA)	6
	1967..	331	162.8	19	31	51	72	99+	70	(X)
	1966..	(NA)	150.2	(S)	(S)	(NA)	(NA)	(NA)	(NA)	5
	1963..	404	247.9	(D)	50	62	75	80-85	87	(X)
	1958..	482	160.3	12	20	37	59	98	94	(X)
	1954..	484	142.7	19	29	43	(NA)	92	97	(X)
	1947..	374	69.8	39	48	62	(NA)	89	98	(X)
3944	Games, toys, and children's vehicles (1967 industries 3941 and 3943).....1977..	754	2,719.7	34	47	66	82	86	93	(X)
	1972..	618	1,734.3	35	49	65	80	86	92	(X)
	1967 industry 3941, Games and toys.....1970..	(NA)	1,483.4	35	47	(NA)	(NA)	(NA)	(NA)	2
	1967..	653	1,113.5	25	36	56	73	88	96	(X)
	1966..	(NA)	1,157.2	22	32	(NA)	(NA)	(NA)	(NA)	3
	1963..	767	796.6	15	25	43	63	92	91	(X)
	1958..	845	532.1	13	22	35	53	95	93	(X)
	1954..	872	382.7	18	25	40	(NA)	95	89	(X)
	1947..	830	181.9	20	29	44	(NA)	92	90	(X)
	1967 industry 3943, Children's vehicles, except bicycles.....1970..	(NA)	122.1	52	79	(NA)	(NA)	(NA)	(NA)	7
	1967..	41	78.7	57	78	99	100	81	61	(X)
	1966..	(NA)	95.8	45	69	(NA)	(NA)	(NA)	(NA)	10
	1963..	60	77.5	43	67	94	99+	71	65	(X)
	1958..	57	71.6	37	62	91	99+	84	81	(X)
	1954..	58	76.6	46	66	90	(NA)	76	90	(X)
	1947..	119	85.8	30	52	79	(NA)	81	79	(X)
	1935..	(NA)	(NA)	47	64	(NA)	(NA)	(NA)	(NA)	(X)
3949	Sporting and athletic goods, n.e.c.....1977..	1,757	2,425.1	21	28	41	59	95	94	(X)
	1972..	1,441	1,729.2	28	37	50	66	89	94	(X)
	1970..	(NA)	949.5	24	33	(NA)	(NA)	(NA)	(NA)	3
	1967..	1,304	853.3	27	33	47	62	95	91	(X)
	1966..	(NA)	805.1	27	34	(NA)	(NA)	(NA)	(NA)	4
	1963..	1,361	704.7	37	44	52	64	93	91	(X)
	1958..	1,167	542.5	41	49	58	69	88	91	(X)
	1954..	1,007	293.7	21	31	47	(NA)	90	86	(X)
	1947..	843	202.3	24	37	53	(NA)	94	90	(X)
3951	Pens and mechanical pencils[122].....1977..	133	669.8	50	64	80	94	85	94	(X)
	1972..	112	310.5	47	63	82	96	92	91	(X)
	1970..	(NA)	243.5	45	64	(NA)	(NA)	(NA)	(NA)	3
	1967..	113	211.8	46	60	80	96	93	92	(X)
	1966..	(NA)	216.4	46	60	(NA)	(NA)	(NA)	(NA)	4
	1963..	122	185.5	48	60	79	94	90	93	(X)
3952	Lead pencils and art goods.....1977..	127	275.9	49	68	84	97	85	79	(X)
	1972..	136	198.8	41	64	82	95	83	88	(X)
	1970..	(NA)	172.8	41	65	(NA)	(NA)	(NA)	(NA)	2
	1967..	123	158.9	42	61	79	95	85	93	(X)
	1966..	(NA)	159.6	39	57	(NA)	(NA)	(NA)	(NA)	5
	1963..	140	121.6	37	55	75	94	87	90	(X)
	1958..	138	93.4	44	60	(NA)	(NA)	88	92	(X)
3953	Marking devices[122].....1977..	583	248.7	29	38	51	66	85	88	(X)
	1972..	584	180.0	31	38	49	63	90	91	(X)
	1970..	(NA)	185.9	28	39	(NA)	(NA)	(NA)	(NA)	6
	1967..	561	146.3	30	43	54	67	90	91	(X)
	1966..	(NA)	162.2	26	40	(NA)	(NA)	(NA)	(NA)	11
	1963..	581	126.8	40	49	59	70	84	90	(X)
	1958..	495	53.6	23	29	41	57	96	86	(X)
	1954..	444	47.6	20	28	42	(NA)	90	89	(X)
	1947..	415	27.5	16	25	40	(NA)	89	89	(X)
	1935..	(NA)	(NA)	18	28	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3] Total (million dollars)	Percent accounted for by[4]-- 4 largest companies	8 largest companies	20 largest companies	50 largest companies	Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
	MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.									
3955	Carbon paper and inked ribbons.....1977..	78	344.0	47	63	85	99	96	64	(X)
	1972..	72	237.5	37	58	83	99	90	61	(X)
	1970..	(NA)	228.1	30	45	(NA)	(NA)	(NA)	(NA)	6
	1967..	87	206.8	37	54	78	98	94	79	(X)
	1966..	(NA)	196.5	38	56	(NA)	(NA)	(NA)	(NA)	5
	1963..	91	155.5	38	55	78	97	95	83	(X)
	1958..	97	116.4	29	47	75	94	91	89	(X)
	1954..	80	81.2	31	48	78	(NA)	93	83	(X)
	1947..	63	48.6	32	53	83	(NA)	90-100	90-100	(X)
	1935..	(NA)	(NA)	35	56	(NA)	(NA)	(NA)	(NA)	(X)
3961	Costume jewelry.....1977..	837	816.6	23	33	47	63	92	89	(X)
	1972..	764	471.6	17	27	41	59	93	90	(X)
	1970..	(NA)	447.2	26	36	(NA)	(NA)	(NA)	(NA)	5
	1967..	763	376.5	22	31	43	60	95	92	(X)
	1966..	(NA)	335.0	25	33	(NA)	(NA)	(NA)	(NA)	6
	1963..	910	280.5	17	25	39	55	95	95	(X)
	1958..	1,049	245.3	12	18	32	48	95	96	(X)
	1954..	1,123	239.4	14	21	32	(NA)	95	95	(X)
	1947..	855	170.3	24	33	48	(NA)	90	91	(X)
3962	Artificial flowers.....1977..	222	180.2	38	49	67	84	98	91	(X)
	1972..	260	108.7	33	44	61	79	93	92	(X)
	1970..	(NA)	82.9	23	(S)	(NA)	(NA)	(NA)	(NA)	8
	1967..	319	84.7	19	28	47	70	97	85	(X)
	1966..	(NA)	(73.5)	(S)	(S)	(NA)	(NA)	(NA)	(NA)	18
	1963..	367	60.4	17	26	42	62	97	87	(X)
	1958..	428	60.4	12	19	35	56	98	98	(X)
	1954..	466	50.0	9	16	32	(NA)	97	98	(X)
	1947..	443	39.5	10	17	33	(NA)	97	99	(X)
3963	Buttons.....1977..	150	95.2	35	50	71	91	98	82	(X)
	1972..	179	93.7	31	47	70	87	94	81	(X)
	1970..	(NA)	95.1	29	45	(NA)	(NA)	(NA)	(NA)	5
	1967..	227	80.8	26	39	59	80	97	90	(X)
	1966..	(NA)	72.9	(S)	(S)	(NA)	(NA)	(NA)	(NA)	13
	1963..	282	81.8	27	39	59	78	96	87	(X)
	1958..	348	65.7	20	32	52	73	98	88	(X)
	1954..	395	64.8	20	29	47	(NA)	92	89	(X)
	1947..	412	59.5	20	32	52	(NA)	93	94	(X)
	1935..	(NA)	(NA)	15	27	(NA)	(NA)	(NA)	(NA)	(X)
3964	Needles, pins, and fasteners.....1977..	249	674.2	50	61	73	87	92	95	(X)
	1972..	244	574.7	48	59	73	88	94	92	(X)
	1970..	(NA)	531.4	51	62	(NA)	(NA)	(NA)	(NA)	3
	1967..	262	385.3	47	58	71	86	93	89	(X)
	1966..	(NA)	409.3	43	55	(NA)	(NA)	(NA)	(NA)	5
	1963..	314	337.3	34	47	64	81	91	92	(X)
	1958..	359	214.8	35	47	64	80	93	89	(X)
	1954..	349	203.1	44	56	68	(NA)	82	91	(X)
	1947..	273	147.2	39	52	69	(NA)	91	89	(X)
	1935..	(NA)	(NA)	63	76	(NA)	(NA)	(NA)	(NA)	(X)
3991	Brooms and brushes.....1977..	391	673.1	20	33	53	74	91	89	(X)
	1972..	430	438.3	24	36	53	72	92	94	(X)
	1970..	(NA)	408.6	31	42	(NA)	(NA)	(NA)	(NA)	2
	1967..	516	371.8	33	44	58	75	90	92	(X)
	1966..	(NA)	374.4	32	42	(NA)	(NA)	(NA)	(NA)	6
	1963..	628	321.1	31	41	57	73	89	(NA)	(X)
	1958..	713	252.2	23	33	49	65	87	96	(X)
	1954..	688	185.4	21	32	47	(NA)	91	92	(X)
	1947..	698	179.8	22	36	54	(NA)	94	97	(X)
3993	Signs and advertising displays.....1977..	3,373	1,738.7	6	11	19	30	98	97	(X)
	1972..	3,221	1,198.1	6	10	18	29	98	97	(X)
	1970..	(NA)	982.7	7	11	(NA)	(NA)	(NA)	(NA)	4
	1967..	3,159	875.1	6	10	17	28	97	95	(X)
	1966..	(NA)	818.6	6	10	(NA)	(NA)	(NA)	(NA)	8
	1963..	3,165	646.8	5	8	15	26	96	95	(X)
	1958..	2,689	446.9	5	8	14	26	86	87	(X)
	1954..	2,600	353.3	8	11	18	(NA)	93	92	(X)
	1947..	1,933	204.7	5	9	18	(NA)	95	88	(X)
	1935..	(NA)	(NA)	9	14	(NA)	(NA)	(NA)	(NA)	(X)

See footnotes at end of table.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

1977 code	Industry and year[1]	Companies[2] (number)	Value of industry shipments[3]					Primary product specialization ratio[5] (percent)	Coverage ratio[6] (percent)	Standard error of estimate[7] (percent)
			Total (million dollars)	Percent accounted for by[4]--						
				4 largest companies	8 largest companies	20 largest companies	50 largest companies			
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.								
3995	Burial caskets (1967 industry 3994)[12,13]									
	1977	376	505.9	36	48	62	75	99	98	(X)
	1972	474	391.9	25	34	47	63	99	99	(X)
	1970	(NA)	355.2	24	31	(NA)	(NA)	(NA)	(NA)	4
	1967	527	306.1	22	28	42	58	95	98	(X)
	1966	(NA)	319.1	22	28	(NA)	(NA)	(NA)	(NA)	(X)
	1963	581	290.0	20	27	41	57	95	98	(X)
	1958	562	226.6	21	28	42	56	95	99	(X)
	1954	541	166.1	20	26	38	(NA)	97	97	(X)
	1947	525	188.8	26	34	45	(NA)	90	97	(X)
	1935	(NA)	(NA)	17	23	(NA)	(NA)	(NA)	(NA)	(X)
3996	Hard surface floor coverings									
	1977	20	607.2	90	97	100	(X)	92	98	(X)
	1972	18	342.3	91	98	100	(X)	88	99	(X)
	1970	(NA)	232.6	92	(S)	(NA)	(NA)	(NA)	(NA)	1
	1967	18	221.7	89	99	100	(X)	86	97	(X)
	1966	(NA)	230.3	89	98	(NA)	(NA)	(NA)	(NA)	8
	1963	15	204.1	87	98	100	(X)	82	98	(X)
	1958	11	178.8	83	(D)	100	(X)	(NA)	(NA)	(X)
	1954	10	181.6	87	(D)	100	(X)	85	97	(X)
	1947	14	173.3	80	95	100	(X)	91	100	(X)
3999	Manufactures, n.e.c.[12,14]									
	1977	3,921	2,662.0	18	25	35	47	91	90	(X)
	1972	3,313	1,534.7	12	19	30	43	91	92	(X)
	1970	(NA)	1,148.0	9	15	(NA)	(NA)	(NA)	(NA)	4
	1967	2,165	943.3	10	17	28	42	94	90	(X)

Note: The figures shown in parentheses either have associated standard errors exceeding 15 percent or are not consistent with other Census series and related data. Thus, these estimates may be of limited reliability.

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. (S) Data suppressed because some of the largest companies were approximately the same size as others not included in the sample, and, therefore, a reliable numerator could not be computed. (X) Not applicable.

[1]Industry codes and descriptions are based on the 1972 Standard Industrial Classification Manual (SIC). This classification system represents a substantial revision from the previous 1957 edition as modified through 1967 and was put into effect with the final reports in the 1972 census. The concentration ratios in 1958 were tabulated on the 1945 edition to preserve comparability to prior years. Also, in 1958, establishments in Alaska and Hawaii were not included as part of U.S. industry totals since these States did not attain Statehood until 1959. Data and ratios for 1958 and prior years are shown in this report only if the industry definitions are so closely comparable that the concentration ratios could not be affected by the shifting of plants due to industry classification changes or by the change in treatment of Alaska and Hawaii. (See "Concentration Ratios in Manufacturing Industry: 1958," Part I, table 7, for comparability of old/new industry definitions.)

[2]The determination of company affiliation of establishments is based on census reports and publicly available records. Value of shipment totals or establishments have been summarized into company totals in each manufacturing industry. "Largest" companies are determined by each company's value of shipments in the specified industry.

[3]Value of shipments figures are not completely comparable between the years 1963-72 and prior years. They include for all establishments classified in the industry (a) value of products primary to the industry, (b) value of all secondary products which are primary to other industries, (c) value of miscellaneous receipts such as receipts for contract and commission work on materials owned by others, scrap, salable refuse, repairs, etc., and (d) value of resales--i.e., products resold in same condition as bought. In 1958 and prior years value of resales was excluded from value of shipments.

[4]The percentages consist of the sum of the value of shipments of the largest 4 companies (or 8, 20, or 50 companies), divided by the total value of shipments of the industry.

[5]The "primary product specialization ratio" measures the extent to which plants classified in the industry specialize in making products regarded as primary to the industry; that is, value of shipments of primary products of plants in the industry is expressed as a ratio of the total shipments of all products made by these establishments (excluding miscellaneous receipts, such as receipts for contract and commission work on materials owned by others, scrap and salable refuse, repair, etc.).

[6]The "coverage ratio" measures the extent to which all shipments of primary products of an industry are made by plants classified in the industry, as distinguished from secondary producers elsewhere; that is, value of shipments of the primary products made by plants classified in the industry is expressed as a ratio of the total shipments of primary products made by all producers, both in and out of the specified industry.

[7]A description of the standard error of estimate is given in Appendix B under "Qualifications of the Data". The percentage standard errors shown are approximate relative standard errors of level for the 1970 and 1966 Annual Survey of Manufactures data.

[8]Although the 1972 definition of this industry is the same as that used in the 1967 SIC system, the content of the industry has changed slightly. The net result of these changes accounts for less than 3 percent of the industry aggregate and the 1972 data are considered to be directly comparable to prior years data.

[9]Value added by manufacture is shown for this industry rather than value of shipments because the latter contains a substantial and unmeasurable amount of duplication. The calculations for the 4, 8, 20, and 50 largest companies also are based on value added. The value added figure for 1963 and later years is adjusted value added; for 1958 and prior years, it is unadjusted value added. Adjusted value added is calculated by subtracting the cost of materials including cost of resales from the value of shipments including resales and adjusting for the change in finished products and work-in-process inventories during the year. Unadjusted value added excludes value added by resales and any inventory change. The standard error shown for this industry is for value added by manufacturing.

[10]For 1977, a small number of establishments conducting slaughtering activities were reclassified to industry 2016 from industry 2017 in accordance with industry definitions. As a result, the calculation of specialization and coverage ratios is not comparable with that for 1972. For 1972, industry 2015 was split to form industries 2016 and 2017.

[11]Not completely comparable to 1954 and later years because of a change in industry classification. For discussion of 1947 to 1954 comparability, see 1954 Census of Manufactures, Volume II, Industry Statistics, Dairy Products.

[12]In 1954, Industry 2027, Fluid Milk, was composed of two industries, 2026, Fluid Milk (only), and 2027, Fluid Milk and Other Products. In 1954, figures on value of shipments and share of value of shipments accounted for by the 4 and 8 largest companies have been recalculated on a basis comparable to 1958. In 1947 and earlier years, establishments primarily distributing fluid milk were classified as nonmanufacturing.

[13]Value of production shown for this industry rather than value of shipments. For 1963 and subsequent years, the figure includes value of primary and secondary products made, miscellaneous receipts such as receipts for contract and commission work on materials owned by others, scrap and other salable refuse, and the value of products bought and resold in the same condition; for 1958 and prior years, resales are excluded.

[14]For 1977, the industry classification of several establishments changed to industry 2035 because of a change in the products they produced. As a result, 1977 data are not completely comparable with data for prior years.

Footnotes are continued on next page.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

[15]For 1972, this industry was split to form a new industry 2038; in 1970 and prior years, the statistics for industry 2038 were included in Industry 2037, Frozen Fruits and Vegetables.

[16]For 1972, old industry 2042 was split to form new industries 2047 and 2048.

[17]Establishments in Alaska and Hawaii are important producers in this industry. Recomputed figures cannot be shown for the 4, 8, 20, and 50 largest companies prior to 1963 without disclosing the operation of individual companies in Alaska and Hawaii.

[18]The discrepancy between these figures and those appearing in table 1 of the 1958 Census of Manufactures, Volume II, Chapter 20H, Fats and Oils (82 companies and $994,865,000 value of shipments) is due to a misclassification of 16 small companies into industry 2075. These companies should have been classified into Industry 2079, Shortening and Cooking Oils.

[19]The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2882, Linseed Oil Mills, and Industry 2884, Vegetable Oil Mills, N.E.C. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[20]The 1963 SIC combined two industries which were separate in the 1945 SIC: Industry 2886, Grease and Tallow, and Industry 2889, Animal Oils, N.E.C. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[21]The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2092, Shortening and Cooking Oils, and Industry 2093, Margarine. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[22]Includes data for 21 wholesale distributors of malt liquors. Each had less than 10 employees and had no significant effect on any of the statistics for the industry except the establishment and company counts.

[23]Bonded store rooms which were engaged in blending wines were excluded in 1947.

[24]The 1977 data are not directly comparable to prior years data. A total of 388 establishments were added to this industry accounting for $505 million in value of production. In prior years, the additional establishments were erroneously listed in the administrative record file as non-manufacturing locations.

[25]The 1954 data for industry 2036 are not completely comparable to 1958 and subsequent years; 1947 data are not available. In 1947, Industry 2036, Packaged Seafood, was, in part (frozen packaged seafood), included in Industry 2037, Frozen Fruits, Vegetables, and Fish, and, in part (fresh packaged seafood), included in nonmanufacturing industries (principally Industry 5046, Fish and Seafoods). A significant but undetermined number of establishments classified in industry 2036 in 1958 and 1963 were probably classified in industry 5046 in 1954.

[26]Comparable data are not available because of significant changes in the 1947 classification of plants or products in this industry.

[27]Jobbers were included in 1947 but excluded in 1954 and later years.

[28]Value of production shown for this industry in 1958 and prior years; whereas, value of shipments is shown for 1963 and later years. This change does not affect the comparability significantly. For industries 2253, 2254, 2256 and 2259, the method of computing coverage and specialization ratios was changed in 1967, causing a significant decrease in some ratios.

[29]For 1972, industry 2256 was split to form new industries 2257 and 2258.

[30]The SIC codes combined in this industry are the two industries which were separate in the 1957 SIC: Industry 2255, Knit Glove Mills, and Industry 2259, Knitting Mills, N.E.C. The 1958 value of production figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[31]For 1977, industry 2282 was redefined to exclude those establishments which produce filament yarn and texture it in the same plant. These establishments are now included in industries 2823 and 2824. New industry 2282 includes only those plants which purchase filament yarn for texturing.

[32]This industry included a large number of very small establishments in 1958, and there is a possibility that some were misclassified as to industry. Industry misclassification of these small establishments does not affect significantly any statistics other than the number of establishments and companies.

[33]This industry included a large number of very small establishments in 1963 and some of these small establishments may have been misclassified as to industry. Industry misclassification of these small establishments does not affect significantly any statistics other than the number of establishments and companies.

[34]The 1972 definition of this industry has been revised from that used in the 1967 SIC manual. In 1967, industry 2297 was titled Scouring and Combing Mill Products. This is now product class 22993 in Industry 2299, Textile Goods, N.E.C. In 1967, Nonwoven Textiles was product class 22991 in industry 2299.

[35]The 1977 data are not comparable to 1972 data. The 1977 figure covers only products made in cut-and-sew shops; 1972 and prior years figures also include products made in knitting mills.

[36]Includes the shipments of women's and children's knit underwear and nightwear made in knitting mills (primary products of industry 2254) as well as the shipments of these products cut and sewed from purchased knit cloth.

[37]The 1957 SIC combined into this industry four industries which were separate in the 1945 SIC: Industry 2281, Fur-Felt Hats and Hat Bodies; Industry 2282, Wool-Felt Hats and Hat Bodies; Industry 2283, Straw Hats; and Industry 2325, Men's and Boys' Cloth Hats. The 1958 value of production figures for these four industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[38]The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 2381, Fabric Dress Gloves, and Industry 2382, Fabric Work Gloves. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[39]A review of the reports for 1963 indicated that there were approximately 300 very small companies included in this industry which described their activities as custom drapery producers, interior decorators workrooms, etc. Approximately half of these companies were classified as non-manufacturing in the 1958 census.

[40]For 1963 and subsequent years, the value of shipments total includes shipments of logs for establishments that own and maintain timberlands but contract the cutting of logs to others. The establishments that actually performed the logging on a contract basis also reported their receipts for contract logging under the heading, "total value of shipments." Thus, an undetermined amount of duplication exists in the shipments total. The figures previously reported for 1958 and prior years do not include shipments for timberland owners that do not perform their own logging.

[41]Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. This industry, as now constituted, includes wood frames for household furniture which were previously classified in industry 2512 under 1967 product class 25126.

[42]The low coverage ratio for 1963 was due to the large amount of wood chips manufactured by establishments classified in industry 2421. In 1967, wood chips were reclassified from industry 2429 to industry 2421.

[43]Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. Custom cabinetwork, to be built in (1967 product class 24317) was reclassified to industry 2434.

[44]Comparable data are not available for prior years due to a major revision in the 1972 SIC system. Industry 2434 was formed by combining the manufacture of custom cabinetwork, to be built in (1967 product class 24317) with wood kitchen cabinets (1967 product class 25114).

[45]For 1972, industry 2432 was split to form new industries 2435 and 2436.

[46]This industry was revised for 1972. Historical data are not available. All products now classified in industry 2439 were formerly part of old Industry 2433, Prefabricated Wood Structures. The balance of old industry 2433 is now classified as industry 2452.

[47]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. This industry was previously indentified under product class 24992 as a part of industry 2499.

[48]For 1972, industry codes 2442, 2443, and 2445 were combined to form industry 2449.

[49]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. All products now classified in this industry were formerly part of industry 3791.

[50]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. All products now classified in industry 2452 were formerly part of old industry 2433. The balance of old industry 2433 is now classified as 2439.

Footnotes are continued on next page.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

[51]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. This industry was previously indentified as product class 24993 under industry 2499.

[52]This industry was revised for 1972. Historical data are not available. This industry as now constituted excludes pallets and skids (1967 product class code 24992) and particleboard (1967 product class code 24993) which were reclassified to product classes 24480 and 24920, respectively.

[53]Comparable data for prior years are not available due to a significant revision in the 1972 SIC system. Radio, phonograph, stereo wood cabinets, and sewing machine cabinets were reclassified to new SIC industry 2517, and wood kitchen cabinets were reclassified to new SIC industry 2434.

[54]Data for 1972 are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. The industry as now constituted excludes wood frames for household furniture (1967 product class 25126) which was reclassified to industry 2426.

[55]Comparable data for previous years are not available due to a significant revision in the 1972 SIC system. This industry was previously classified under industry 2511 as product class 25111 and part of product class 25112.

[56]For 1977, data may not be strictly comparable to prior years because of change in industry classification of a number of establishments between industry 2611, industry 2621, and industry 2631. These establishments are integrated operations (pulp mills and primary paper and board mills at same physical location) at which shipments of pulp are significant. Accordingly, any comparison of historical statistics should consider all three of these industries: 2611, 2621, and 2631.

[57]Beginning with 1958, integrated pulp and paper companies were given the option of reporting their pulp and paper (or board) operations on a combined basis when both were conducted at a single physical location. Most integrated companies excercise this option and file a single report covering their pulp, paper (or board) making operations at a single physical location, but a few with departmental accounting choose to report separately for the pulp mill and paper (or board) mill. The other pulp mills separately reported are: (1) those exclusively selling their pulp on the market (i.e., not associated or affiliated with a paper and board mill), and (2) those pulp mills affiliated or associated with paper or board mills but operated at a different physical location from the paper or board mill(s).

[58]This is a minimum ratio (the exact ratio is withheld to avoid disclosing figures for individual companies).

[59]This industry was revised for 1972; historical data are not available. The stationary products which now constitute industry 2648 were classified in the 1967 SIC system in industry 2649 under product class 26491.

[60]Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. The industry as now constituted includes wallpaper (1967 SIC industry 2644) and excludes stationery products (1967 product class 26491).

[61]Data for 1972 are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Industry 2751 was split into two separate industries: This industry and commercial printing, gravure (industry 2754, 1967 product classes 27517 and 27518).

[62]Data for 1972 are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Industry 2752 was split into two separate industries: This industry and lighographic platemaking and related services (industry 2795, 1967 product class 27527).

[63]Comparable data for prior years are not available due to a major revision in the 1972 SIC system; this industry was previously identified as product classes 27517 and 27512 under industry 2751.

[64]Comparable data for prior years are not available due to a major revision in the 1972 SIC system; this industry was previously identified as product class 27527 under industry 2752.

[65]Comparable data for prior years are not available due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of household bleaches to industry 2842; the manufacture of synthetic ammonia, nitric acid, and ammonium compounds to industry 2873; and the manufacture of phosphoric acid to industry 2874.

[66]Government-owned establishments that are privately operated are included in this industry but did not enter into the calculation of the specialization and coverage ratios as all dollar receipts for these establishments were included in "miscellaneous receipts."

[67]Comparable data are not available for 1970 and earlier years due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of unsupported plastics film, sheets, rods, and tubes; regenerated cellulosic products, except rayon; and custom compounded purchased resins to industry 3079. In addition, the production of synthetic resin adhesives from resins manufactured in the same establishment, was transferred to industry 2981.

[68]Industry definition was revised for 1977 to include manmade fiber producers primarily engaged in the manufacture of textured fibers. These establishments were included in industry 2822 for 1972. Change represents approximately six percent of value of shipments for industry 2824.

[69]This industry was revised for 1972; historical data are not available. The 1972 revisions transferred the manufacture of household insecticides and repellants to industry 2879. In addition, the production of household liquid and dry bleaches was transferred from industry 2819 to this industry.

[70]Data for 1972 are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Caulking and sealant compounds, formerly classified in product class 28518, were reclassified into industry 2891. The degree of change based on total employment is estimated to be 4 percent.

[71]Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. This industry was formed by combining synthetic ammonia, nitric acid, and ammonium compounds (1967 product class 28191); urea (part of 1967 product class 28182); and fertilizer materials of organic origin (part of 1967 product class 28712).

[72]Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. Industry 2874 was formed by combining most of the products of old industry 2871, which includes superphosphate, other phosphatic fertilizer materials, and mixed fertilizers produced from one or more materials made in the same plant, with phosphoric acid, which was previously classified in 1967 product class 28194 as part of industry 2819.

[73]Comparable data for 1970 and earlier years are not available due to a major revision in the 1972 SIC system. The industry as now constituted includes the manufacture of household insecticides and repellants which were previously classified as product class 28421 in industry 2842.

[74]Comparable data are not available for 1970 and earlier years due to a significant revision in the 1972 SIC system. This industry as now constituted includes synthetic resin adhesives from resins manufactured in the same establishment (formerly in industry 2821); caulking compounds and sealants (formerly in industry 2851); rubber cement (formerly in industry 3069); and sealants, n.e.c. (formerly in industry 2899); and excludes gelatin and sizes (now in industry 2899).

[75]Data for 1972 are not completely comparable to earlier data due to a slight revision in the 1972 SIC system. The industry as now constituted includes gelatin, except ready-to-eat desserts (formerly classified in industry 2891); sizes (formerly in industry 2891); and embalming chemicals (formerly in industry 3994); and excludes sealants, n.e.c. (now classified in industry 2991). The degree of change, based on total employment, is estimated to be 5 percent.

[76]Includes lubricating oils and greases which are also primary to Industry 2992, Lubricating Oils and Greases.

[77]Includes lubricating oils and greases which are also primary to Industry 2911, Petroleum Refining.

[78]Data for 1972 are not directly comparable to earlier data due to a significant revision in the 1972 SIC system. Plastics footwear, which was classified in industry 3079 in 1967, is now included in industry 3021. However, the degree of change based on total employment is estimated to be 11 percent.

[79]The rubber and plastics hose and belting industry is included for the first time in the census of manufactures for 1972. The industry includes all of 1967 Product Class 30691, Rubber and Plastics Belts and Belting; and Product Class 30692, Rubber Hose and Tubing, except 30692 81, Tubing, Except Medical and Surgical and Reinforced; part of 1967 Product Class 30795, Industrial Plastics Products; and Product Class 30798, Consumer and Commercial Plastics Products, N.E.C.

[80]This industry was significantly revised for 1972. The statistics for this industry, as classified under the 1972 edition of the SIC manual, were unchanged as to code number from the previous classification, but were significantly changed in comparison with data classified by the previous system. All of 1967 Product Class 30691, Rubber and Plastics Belts and Belting and all of 1967 Product Class 30692, Rubber Hose and Tubing, except Product Code 30692 81 Tubing, Except Medical and Surgical and Reinforced, are now classified in Industry 3041, Rubber and Plastics Hose and Belting. Tubing, except medical and surgical and reinforced, is now included in product class 30695. In addition, seals and packing (formerly product codes 30695 26, 27, and 28) are now included in industry 3293; and latex and solvent-type cement (formerly product codes 30698 64 and 65) are now classified in industry 3291.

Footnotes are continued on next page.

[81]Data for 1972 are not directly comparable to earlier data due to a significant revision in the 1972 SIC system. The degree of change, based on total employment, is estimated to be 9 percent.

[82]Value of production shown for this industry in 1958 and prior years; whereas, value of shipments is shown for 1963 and later years. This change does not affect the comparability significantly.

[83]Comparable data are not available because of significant changes in the 1947 classification of plants or products in this industry.

[84]For 1972, industry 3141 was split to form new industries: 3143, 3144, and 3149.

[85]Data for 1972 are not completely comparable to earlier data due to a significant revision in the 1972 SIC system. Industrial leather belting was reclassified to Industry 3199, Leather Goods, N.E.C.

[86]Company count includes a small number of administrative records which have no apparent effect on total value of shipments or percent of value of shipments accounted for by the largest companies.

[87]The 1957 SIC combined two industries which were separate in the 1945 SIC: Industry 3192, Saddlery, Harness, and Whips, and this industry. The 1958 value of shipments figures for these two industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and 1966.

[88]Data for 1972 are not directly comparable to earlier data due to a significant revision in the 1972 SIC system. Insulation materials containing asbestos, which were previously classified in industry 3293, are now included in this industry. However, the degree of change, based on total employment, is estimated to be 4 percent.

[89]Revised percentages not available.

[90]Although the SIC number and title of industry 3293 are unchanged, the 1972 definition of this industry has been revised from that used in the 1967 SIC manual. Molded packings and seals, except plastics (formerly classified in industry 3069), axial mechanical face seals (formerly in industry 3599), plastics packing and seals (formerly in industry 3079), and leather packings, oil and grease retainers, including seals (formerly in industry 3121), are now included in this industry. Also, insulation materials containing asbestos, which were previously classified in this industry, are included in industry 3292 for 1972.

[91]Industry 3312, Blast Furnaces and Steel Mills, has been redefined since 1954 to include Industry 3311, Blast Furnaces; Industry 3312, Steelworks and Rolling Mills; Industry 2931, Beehive Coke Ovens; and Industry 2932, Byproduct Coke Ovens. For 1954 and 1947, value added by manufacture and shares accounted for by the largest 4, 8, and 20 companies have been recomputed on a basis comparable to later years.

[92]This ratio is based on shipments of primary products only by this industry. However, some of these products are also primary to one or more other industries.

[93]This industry includes, in addition to commercial (jobbing) foundries, "captive" foundries at separate locations producing gray iron castings for other plants of the same company. Accordingly, the ratios for this industry do not reflect the market shares in the commercial foundry industry as such.

[94]Comparable data are not available due to significant revisions in the 1954 classification of plants or products in this industry.

[95]Indexes not meaningful because of large miscellaneous receipts, particularly receipts for contract and commission work on materials owned by others. Such receipts are treated as primary products for this industry.

[96]A number of small establishments was misclassified into this industry. This affects the figure for the number of companies but has no appreciable effect on the total value of shipments or the percentage of value of shipments accounted for by the largest companies.

[97]The 1957 SIC combined three industries which were separate in the 1945 SIC: Industry 3422, Edge Tools; Industry 3423, Hand Tools, N.E.C.; and Industry 3424, Files. The 1958 value of shipments figures for these three industries have been combined and the ratios for the 4 and 8 largest companies have been recomputed on a basis comparable to 1963 and later years.

[98]This industry was revised for 1972; historical data are tabulated under the old definition and are not directly comparable. Warm air furnaces (old product class 34332) and parts and attachments for warm air furnaces (old product code 34336 73) are classified in Industry 3585, Refrigeration and Heating Equipment.

[99]Revisions were made to this industry for prior years to include automobile stampings plants operated by automobile producing companies. Concentration ratios cannot be published for prior years on a revised basis without approximating the operations of individual companies.

[100]Indexes not meaningful because of large miscellaneous receipts, particularly receipts for contract and commission work on materials owned by others.

[101]Comparable data are not available for 1970 and earlier years.

[102]Farm wagons, trucks, and other farm transportation equipment previously classified in Industry 3799, Transportation Equipment, N.E.C., are now included in this industry for 1972. The effect of the change on this industry is approximately 5 percent of the total value of shipments for 1972.

[103]For 1976 and prior years, data for plants primarily engaged in the manufacture of water well and blast hole drilling rigs were contained in either industry 3531 or 3533. For 1977, data for plants primarily engaged in the manufacture of these rigs were contained in industry 3533 only.

[104]Not completely comparable to 1966 and earlier years, some companies included construction receipts with value of shipments for those years. Such receipts are exluded in 1967.

[105]For 1972, the content of this industry has been slightly changed by the inclusion of automatic stacking machines and parts and attachments. The effect of this change on the industry is approximately 5 percent. These products were formerly classified in industry 3537.

[106]Data for 1977 for Industries 3546, Power Driven Handtools, and 3553, Woodworking Machinery, are not comparable to prior years. Plants primarily engaged in manufacturing chain saws were tabulated in industry 3546 in 1977; in industry 3553 in 1972. These plants had industry shipments totaling $430.8 million in 1977.

[107]Comparable data are not available for 1966 and earlier years because of significant changes in the 1967 SIC system of plants or products of this industry.

[108]Separate data cannot be published for this industry, typewriters, without revealing the operations of individual companies. Accordingly, this industry has been combined with Industry 3579, Office Machines, N.E.C., for 1972.

[109]Comparable data are not available for prior years as this industry was not separately identified prior to 1967.

[110]Ratios not meaningful because total value of primary products shipped include a significant amount of duplication.

[111]For 1972, data for coin-operated washers and dryers under 10-lb. load, and parts and attachments for these products have been moved to Industry 3633, Household Laundry Equipment. Products shifting out of this industry represent approximately 15 percent of the total shipments value at the United States level.

[112]Comparable figures not available. Ratios were calculated originally on value of shipments in 1954 and 1947. 1954 ratios for the largest 4 and 8 companies have been recalculated based on value added; 1947 ratios based on value added are not available.

[113]Industry 3716, Motor Homes Produced on Purchased Chassis, was created as a separate industry in 1977 from Industry 3713, Trucks and Bus Bodies. Data for 1977 for industry 3713 are not comparable to prior years.

[114]Not completely comparable to 1958 and later years because of a change in the SIC system. In 1958 and later years, an establishment manufacturing complete aircraft was classified in Industry 3721, Aircraft, if its value of work done on aircraft exceeded its value of shipments of any other single industry's products. In 1954 and earlier years, any establishment manufacturing at least one complete aircraft was classified in industry 3721.

[115]Value of shipments, rather than value of work done, has been used in this industry since 1970.

[116]Value of work done rather than value of shipments.

[117]Data include aircraft propellers and parts classified in industry 3723 prior to 1967.

[118]Industry 3741 is combined with industry 3742 to avoid disclosing operations of individual companies.

[119]This industry was revised for 1972; historical data are tabulated under the old definition and are not comparable. Farm wagons and other farm transportation equipment (1967 product class 37992, part) were reclassified to industry 3523. Other automobile trailers (1967 product class 37991, part) were reclassified to industry 3792; self-propelled golf carts, classified in this industry prior to 1972, were reclassified into product class 37997.

Footnotes are continued on next page.

Table 7. **Share of Value of Shipments Accounted for by the 4, 8, 20, and 50 Largest Companies in Each Manufacturing Industry: 1977 and Earlier Years**—Con.

[120] In 1967, industry 3821, Mechanical Measuring Devices, was split into three industries: 3823, Process Control Instruments; 3824, Fluid Meters and Counting Devices; and 3829, Measuring and Controlling Devices, N.E.C.

[121] This industry and 1967 Industry 3831, Optical Instruments and Lenses are not directly comparable; also, this industry is a combination of two 1967 industries: 1941, Sighting and Fire Control Equipment, and 3831, Optical Instruments and Lenses. No 1967 concentration data were published for industry 1941. However, from the final industry bulletin MC-72(2)-38A, table 1C, it can be seen that 4 percent of the total value of shipments for this industry in 1972 came from 1967 industry 1941.

[122] Data for 1972 are not directly comparable to earlier years data due to a significant revision in the industry's SIC system. Broad-tipped markers, formerly in industry 3953 (product code 39530 43), are now included in industry 3951 (product code 39510 43). However, the degree of change (based on total employment) for industry 3951 and industry 3953 are 6 percent and 8 percent, respectively.

[123] Data for 1972 are not directly comparable to earlier years data due to a minor revision in the industry SIC system. Data for embalming chemicals are now included in Industry 2899, Chemical Preparations, N.E.C.; burial garments in Industry 2389, Apparel and Accessories, N.E.C.; and innerliners, sold as such, in Industry 2399, Fabricated Textile Products, N.E.C. However, the degree of change (based on total employment) is less than 1 percent.

[124] The 1967 SIC combined into this industry six industries which were separate in the 1957 SIC: Industry 3983, Matches; 3984, Candles; 3987, Lamp Shades; 3992, Furs, Dressed and Dyed; 3995, Umbrellas, Parasols and Canes; and 3999, Miscellaneous Products, N.E.C. Concentration ratio data are not available for 1966 or prior years.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2011, MEATPACKING PLANTS[1]													
TOTAL	2 404	2 590	[2]31 208.2	146.2	2 110.6	116.5	237.2	1 625.9	4 010.1	236.7	63.6	173.1	27 239.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.6	17.0	18.5	21.8	18.3	16.8	22.2	20.6	13.8	10.0	15.2	16.5
NEXT 4 LARGEST COMPANIES	.2	1.6	19.3	14.7	15.9	14.5	15.1	16.3	16.1	16.1	11.6	17.7	19.7
NEXT 12 LARGEST COMPANIES	.4	1.7	14.7	13.5	14.2	14.2	14.9	15.1	13.7	14.1	11.3	15.2	14.9
NEXT 30 LARGEST COMPANIES	1.3	2.2	13.0	13.9	13.0	13.6	13.6	12.8	14.2	13.5	12.2	13.8	12.8
REMAINDER COMPANIES	97.9	92.9	36.0	39.4	35.1	39.4	39.6	33.6	35.4	42.6	54.9	58.1	36.1
INDUSTRY 2013, SAUSAGES AND OTHER PREPARED MEATS[1]													
TOTAL	1 213	1 345	[2]8 465.4	65.0	891.9	50.1	100.4	626.6	2 039.0	151.6	40.4	111.2	6 445.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	2.2	20.1	14.6	17.9	14.4	14.5	19.1	23.1	20.0	(D)	18.4	19.0
NEXT 4 LARGEST COMPANIES	.3	1.1	7.1	4.8	5.8	5.1	5.3	6.1	6.8	5.6	(D)	6.0	7.3
NEXT 12 LARGEST COMPANIES	1.0	2.4	13.1	12.0	12.1	12.4	12.9	12.9	11.4	15.4	15.3	15.4	13.3
NEXT 30 LARGEST COMPANIES	2.5	4.3	17.0	14.7	15.5	15.2	15.8	16.0	16.2	14.5	13.8	14.8	17.4
REMAINDER COMPANIES	95.9	90.0	42.7	46.1	48.7	52.9	51.5	45.9	42.5	44.5	42.1	45.4	43.0
INDUSTRY 2016, POULTRY DRESSING PLANTS													
TOTAL	313	446	5 746.1	86.8	612.3	77.7	143.6	496.3	1 236.9	126.1	36.6	89.5	4 520.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	7.8	16.4	15.2	15.1	15.6	15.3	16.2	16.8	12.1	(D)	14.0	16.2
NEXT 4 LARGEST COMPANIES	1.3	5.6	10.8	11.7	11.2	11.9	12.0	11.5	8.2	10.9	(D)	12.5	11.5
NEXT 12 LARGEST COMPANIES	3.8	12.6	20.9	17.9	18.7	17.9	18.3	18.5	21.4	20.0	21.2	19.5	20.9
NEXT 30 LARGEST COMPANIES	9.6	12.3	23.7	25.0	24.9	24.9	25.4	24.0	24.2	21.3	14.5	24.0	23.7
REMAINDER COMPANIES	84.0	61.7	28.1	30.2	30.1	29.7	28.9	29.7	29.5	35.7	49.6	30.0	27.8
INDUSTRY 2017, POULTRY AND EGG PROCESSING													
TOTAL	124	153	856.6	11.1	86.8	9.8	18.6	68.1	192.0	18.3	4.2	14.1	669.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.2	5.2	21.2	22.8	26.3	23.2	23.2	27.3	21.1	19.7	(D)	15.1	20.9
NEXT 4 LARGEST COMPANIES	3.2	12.4	14.1	9.0	9.9	9.1	9.6	9.0	10.6	14.2	(D)	13.1	15.2
NEXT 12 LARGEST COMPANIES	9.7	12.4	22.9	20.4	20.7	20.4	20.8	20.5	23.4	25.6	21.9	26.7	22.6
NEXT 30 LARGEST COMPANIES	24.2	19.6	29.7	32.3	30.1	31.8	31.5	29.6	31.4	28.3	14.5	32.4	29.4
REMAINDER COMPANIES	59.7	50.3	12.2	15.5	13.0	15.5	14.9	13.5	13.5	12.2	10.9	12.6	11.9
INDUSTRY 2021, CREAMERY BUTTER													
TOTAL	123	138	900.5	2.3	26.3	1.7	3.6	18.1	74.6	8.3	1.9	6.4	822.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.3	12.3	49.2	40.9	35.9	42.8	43.8	42.6	44.9	39.9	21.2	45.4	49.7
NEXT 4 LARGEST COMPANIES	3.3	3.6	16.7	12.2	20.5	11.1	11.9	16.7	24.9	14.6	30.5	10.0	16.0
NEXT 12 LARGEST COMPANIES	9.8	9.4	18.9	18.6	19.1	16.5	17.2	15.6	16.1	34.9	36.3	34.5	19.0
NEXT 30 LARGEST COMPANIES	24.4	21.7	10.2	14.3	12.6	14.5	14.3	13.1	9.5	7.6	9.0	7.1	10.3
REMAINDER COMPANIES	59.3	52.9	5.0	14.0	12.0	15.1	12.8	12.0	4.5	3.0	3.0	2.9	5.1
INDUSTRY 2022, CHEESE, NATURAL AND PROCESSED													
TOTAL	660	791	6 126.0	26.7	287.0	22.2	44.0	223.4	948.8	57.2	12.9	44.3	5 200.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	5.8	35.0	26.3	29.2	27.4	27.7	31.7	43.6	19.8	10.7	22.4	33.4
NEXT 4 LARGEST COMPANIES	.6	3.8	13.2	12.2	12.6	11.4	11.5	12.1	6.7	7.3	4.4	8.2	14.2
NEXT 12 LARGEST COMPANIES	1.8	3.8	13.4	12.4	13.6	12.6	13.4	14.2	12.7	14.5	11.7	15.4	13.6
NEXT 30 LARGEST COMPANIES	4.5	6.4	14.4	16.6	16.2	16.6	16.4	15.5	17.2	19.1	19.9	18.8	14.1
REMAINDER COMPANIES	92.4	80.2	23.9	32.5	28.4	32.0	31.0	26.5	19.8	39.3	53.3	35.2	24.6
INDUSTRY 2023, CONDENSED AND EVAPORATED MILK													
TOTAL	167	266	3 188.5	12.3	163.2	9.0	18.9	110.7	805.2	56.2	12.1	44.2	2 382.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.4	17.7	29.9	25.1	27.3	28.4	29.4	32.8	47.0	13.2	15.2	12.7	24.2
NEXT 4 LARGEST COMPANIES	2.4	9.0	16.2	21.4	20.4	17.6	17.7	16.3	19.7	(D)	(D)	(D)	15.1
NEXT 12 LARGEST COMPANIES	7.2	8.6	24.7	16.7	17.5	18.4	19.1	19.7	12.4	(D)	(D)	(D)	28.8
NEXT 30 LARGEST COMPANIES	18.0	18.4	20.7	21.5	21.3	20.3	19.3	18.4	12.1	29.0	15.8	32.6	23.6
REMAINDER COMPANIES	70.1	46.2	8.4	15.3	13.5	15.4	14.4	12.8	8.8	10.0	14.7	8.7	8.3
INDUSTRY 2024, ICE CREAM AND FROZEN DESSERTS													
TOTAL	507	612	2 008.6	19.1	247.0	11.4	22.7	130.1	643.7	56.8	20.3	36.4	1 368.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	8.7	28.1	24.1	27.2	21.9	22.6	27.4	26.9	17.0	6.6	22.9	28.6
NEXT 4 LARGEST COMPANIES	.8	1.8	11.6	8.3	10.5	9.0	8.3	10.5	8.1	(D)	65.3	9.9	13.3
NEXT 12 LARGEST COMPANIES	2.4	7.8	20.4	16.6	15.8	18.4	19.2	16.5	24.1	(D)	7.0	18.0	18.6
NEXT 30 LARGEST COMPANIES	5.9	6.2	18.8	18.8	19.8	19.4	20.8	20.4	20.3	22.8	12.3	28.6	18.1
REMAINDER COMPANIES	90.1	75.5	21.1	32.1	26.7	31.4	29.1	25.3	20.5	16.3	8.8	20.5	21.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2026, FLUID MILK													
TOTAL	1 516	1 924	13 786.2	93.5	1 215.4	40.8	86.3	505.4	3 175.9	210.5	42.0	168.5	10 631.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	6.4	17.9	17.0	17.8	15.9	16.5	16.4	18.9	13.1	(D)	13.9	17.7
NEXT 4 LARGEST COMPANIES	.3	3.1	10.3	7.5	9.2	8.5	8.0	10.9	11.1	10.1	(D)	8.4	10.1
NEXT 12 LARGEST COMPANIES	.8	5.9	15.1	12.0	11.6	13.3	13.5	13.4	11.4	11.4	9.0	12.0	16.1
NEXT 30 LARGEST COMPANIES	2.0	4.6	16.7	12.8	12.7	13.3	13.5	14.2	16.7	19.5	14.7	20.7	16.7
REMAINDER COMPANIES	96.7	79.9	40.0	50.7	48.6	49.1	48.5	45.1	41.9	45.9	49.4	45.0	39.5
INDUSTRY 2032, CANNED SPECIALTIES													
TOTAL	172	203	[3]2 829.2	26.4	296.5	21.5	42.4	224.3	[3]1 142.6	46.7	11.2	35.5	1 687.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	9.9	63.0	55.5	59.2	55.5	56.2	60.3	64.4	52.5	(D)	53.1	62.1
NEXT 4 LARGEST COMPANIES	2.3	4.9	14.4	15.7	16.2	15.7	15.4	16.2	15.6	14.0	(D)	15.0	13.5
NEXT 12 LARGEST COMPANIES	7.0	8.9	14.7	16.9	14.7	16.9	17.6	14.4	12.5	19.0	14.3	20.5	16.2
NEXT 30 LARGEST COMPANIES	17.4	15.8	6.1	7.8	7.1	8.0	7.3	6.6	5.8	10.0	20.6	6.6	6.4
REMAINDER COMPANIES	70.9	60.6	1.8	4.2	2.8	3.9	3.5	2.5	1.7	4.5	4.0	4.6	1.8
INDUSTRY 2033, CANNED FRUITS AND VEGETABLES													
TOTAL	648	900	[3]6 662.8	82.6	789.8	72.6	135.0	636.6	[3]2 542.4	147.1	33.3	113.8	4 135.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	6.1	21.7	19.9	20.2	21.1	20.4	21.6	24.5	18.5	14.1	19.8	20.2
NEXT 4 LARGEST COMPANIES	.6	3.1	12.9	11.9	14.6	12.4	12.5	15.7	13.8	10.9	8.1	11.8	12.4
NEXT 12 LARGEST COMPANIES	1.9	6.8	20.8	16.4	17.7	15.6	15.7	17.9	23.0	21.8	26.1	20.5	19.2
NEXT 30 LARGEST COMPANIES	4.6	10.7	19.7	20.0	20.1	19.9	21.2	19.8	17.3	15.6	12.3	16.6	21.1
REMAINDER COMPANIES	92.3	73.3	25.0	31.7	27.5	31.1	30.2	25.0	21.3	33.1	39.3	31.3	27.2
INDUSTRY 2034, DEHYD. FRUITS, VEGETABLES, SOUPS													
TOTAL	143	184	1 142.4	14.4	153.9	11.7	22.1	111.5	472.6	52.5	15.6	36.9	685.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.8	8.2	36.8	31.9	34.3	32.3	32.2	34.9	36.6	28.8	25.1	30.3	37.4
NEXT 4 LARGEST COMPANIES	2.8	3.8	16.3	19.7	20.4	18.2	20.1	20.4	18.8	40.8	(D)	42.4	14.1
NEXT 12 LARGEST COMPANIES	8.4	9.8	23.7	21.8	20.8	22.0	21.5	20.5	24.0	11.8	(D)	11.2	23.8
NEXT 30 LARGEST COMPANIES	21.0	27.7	17.2	19.6	18.1	20.3	19.4	17.9	14.6	13.6	21.1	10.5	18.6
REMAINDER COMPANIES	65.0	50.5	6.0	6.9	6.4	7.2	6.8	6.2	5.9	5.0	3.9	5.5	6.1
INDUSTRY 2035, PICKLES, SAUCES, SALAD DRESSINGS													
TOTAL	380	438	[3]2 996.5	23.5	250.2	18.9	35.7	184.9	[3]986.5	52.3	11.7	40.6	2 003.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	3.9	55.4	31.7	36.7	33.6	33.8	42.2	46.7	43.2	(D)	42.7	59.9
NEXT 4 LARGEST COMPANIES	1.1	3.0	7.0	7.6	8.1	7.9	7.3	9.0	9.1	3.9	(D)	4.8	5.9
NEXT 12 LARGEST COMPANIES	3.2	5.5	10.6	17.0	14.2	17.7	17.8	14.5	11.3	14.9	(D)	13.9	10.2
NEXT 30 LARGEST COMPANIES	7.9	9.8	13.2	18.0	18.3	16.7	17.6	14.7	17.1	20.1	15.2	21.6	11.2
REMAINDER COMPANIES	86.8	77.9	13.8	25.7	22.7	24.1	23.5	19.5	15.9	17.8	20.6	17.0	12.8
INDUSTRY 2037, FROZEN FRUITS AND VEGETABLES													
TOTAL	187	260	[3]3 297.5	46.8	425.9	41.5	78.5	344.7	[3]1 322.5	87.7	14.1	73.6	1 972.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	5.8	22.3	18.0	19.0	17.6	18.9	18.5	21.6	29.5	28.6	29.6	22.7
NEXT 4 LARGEST COMPANIES	2.1	5.8	17.8	17.3	18.1	17.6	17.5	18.5	23.6	16.1	(D)	16.0	13.9
NEXT 12 LARGEST COMPANIES	6.4	15.4	24.7	26.5	26.5	26.7	26.1	27.1	23.2	16.6	(D)	18.1	25.9
NEXT 30 LARGEST COMPANIES	16.0	16.2	21.6	23.5	22.5	23.8	23.3	23.0	18.7	26.1	30.4	25.2	23.4
REMAINDER COMPANIES	73.3	56.9	13.6	14.7	14.0	14.4	14.2	13.0	12.9	11.7	14.8	11.1	14.1
INDUSTRY 2038, FROZEN SPECIALTIES													
TOTAL	330	394	[3]3 404.4	41.0	419.8	32.5	63.4	290.9	[3]1 217.7	84.1	18.9	65.2	2 187.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	5.6	40.0	32.8	32.6	34.8	35.2	36.6	33.0	33.1	(D)	34.2	43.9
NEXT 4 LARGEST COMPANIES	1.2	4.1	15.2	11.8	13.8	9.4	10.0	10.3	19.6	9.1	(D)	10.2	12.7
NEXT 12 LARGEST COMPANIES	3.6	5.8	17.4	18.6	18.5	19.4	19.1	20.3	17.1	27.2	31.7	26.0	17.6
NEXT 30 LARGEST COMPANIES	9.1	11.4	15.5	16.7	17.6	16.1	15.6	15.8	17.5	15.8	18.7	14.9	14.4
REMAINDER COMPANIES	84.8	73.1	11.9	20.1	17.5	20.3	20.2	17.0	12.8	14.8	14.7	14.8	11.4
INDUSTRY 2041, FLOUR, OTHER GRAIN MILL PRODUCTS													
TOTAL	301	407	3 683.3	15.6	222.3	11.3	24.6	153.4	824.5	52.4	15.2	37.2	2 854.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	11.3	33.2	25.3	26.2	27.4	25.3	28.5	29.7	25.6	16.3	29.4	34.3
NEXT 4 LARGEST COMPANIES	1.3	8.4	20.9	18.6	20.7	18.6	20.0	21.1	23.5	20.4	21.1	20.2	20.1
NEXT 12 LARGEST COMPANIES	4.0	7.6	21.6	20.2	20.2	19.8	20.6	21.0	21.6	15.4	13.8	16.0	21.6
NEXT 30 LARGEST COMPANIES	10.0	9.6	15.5	19.7	19.3	18.8	19.4	17.8	17.2	30.0	36.4	27.4	15.1
REMAINDER COMPANIES	83.4	63.1	8.7	16.2	13.5	15.4	14.8	11.6	8.0	8.6	12.4	7.0	9.0

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2043, CEREAL BREAKFAST FOODS													
TOTAL	32	48	2 497.5	16.4	287.4	13.8	28.8	230.0	1 447.0	79.8	10.8	69.0	1 061.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	12.5	31.2	88.6	85.4	87.6	85.5	85.4	87.6	87.5	91.3	85.2	92.2	90.1
NEXT 4 LARGEST COMPANIES	12.5	18.7	9.6	11.1	10.0	11.3	11.5	10.4	11.0	6.7	11.4	6.0	7.6
NEXT 12 LARGEST COMPANIES	37.5	25.0	1.7	3.3	2.3	3.0	2.9	1.9	1.3	1.9	3.2	1.7	2.2
NEXT 30 LARGEST COMPANIES	37.5	25.0	.1	.1	.1	.2	.1	.1	.1	.1	.2	.1	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2044, RICE MILLING													
TOTAL	47	59	1 263.4	4.8	61.4	4.0	8.4	40.7	341.0	40.0	11.5	28.5	948.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	8.5	11.9	50.8	42.7	49.6	42.9	44.7	45.8	60.4	76.0	74.4	76.7	46.7
NEXT 4 LARGEST COMPANIES	8.5	20.3	25.4	25.6	24.1	25.5	23.1	27.7	18.5	10.7	1.8	14.3	27.6
NEXT 12 LARGEST COMPANIES	25.5	22.0	18.9	23.1	19.5	23.2	25.0	20.3	17.1	10.1	(D)	6.8	20.6
NEXT 30 LARGEST COMPANIES	57.4	45.8	4.9	8.7	6.8	8.4	7.2	6.1	4.0	3.1	(D)	2.2	5.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2045, BLENDED AND PREPARED FLOUR													
TOTAL	111	137	1 011.7	8.4	104.5	5.8	12.1	68.0	408.7	17.6	5.8	11.8	606.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.6	11.7	51.1	47.5	51.3	56.0	56.7	58.4	55.8	66.3	72.0	63.5	48.0
NEXT 4 LARGEST COMPANIES	3.6	6.6	17.4	15.8	11.1	9.2	9.2	9.6	14.3	3.3	1.3	4.2	19.7
NEXT 12 LARGEST COMPANIES	10.8	11.7	18.9	17.0	19.6	15.2	15.8	16.0	18.0	19.8	16.9	21.2	19.3
NEXT 30 LARGEST COMPANIES	27.0	25.5	10.3	15.3	14.5	14.8	14.5	12.5	9.7	8.7	8.4	8.9	10.7
REMAINDER COMPANIES	55.0	44.5	2.3	4.3	3.6	4.8	3.8	3.5	2.2	2.0	1.5	2.2	2.3
INDUSTRY 2046, WET CORN MILLING													
TOTAL	24	39	2 014.8	10.9	191.1	7.8	15.7	132.2	666.7	232.2	34.2	198.0	1 338.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	16.7	38.5	62.6	53.3	53.2	57.4	56.9	57.6	65.9	(D)	(D)	(D)	60.6
NEXT 4 LARGEST COMPANIES	16.7	15.4	26.2	33.0	32.7	30.3	30.7	29.9	24.2	(D)	(D)	(D)	27.2
NEXT 12 LARGEST COMPANIES	50.0	35.9	11.2	13.5	14.0	12.2	12.2	12.4	9.9	(D)	27.8	(D)	12.1
NEXT 30 LARGEST COMPANIES	16.7	10.3	.1	.1	.1	.2	.2	.1	.1	(D)	.1	(Z)	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2047, DOG, CAT, AND OTHER PET FOOD													
TOTAL	218	290	3 086.7	17.7	245.5	13.4	27.7	170.3	1 392.9	67.2	13.4	53.7	1 697.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	7.9	58.4	38.9	44.7	39.9	40.3	47.3	65.4	54.2	36.9	58.5	52.7
NEXT 4 LARGEST COMPANIES	1.8	5.5	15.4	19.7	22.2	19.6	19.7	21.9	15.8	14.5	12.8	14.9	15.0
NEXT 12 LARGEST COMPANIES	5.5	11.7	11.8	14.8	13.2	14.2	14.4	12.9	7.8	10.8	16.3	9.4	15.1
NEXT 30 LARGEST COMPANIES	13.8	13.1	7.8	13.4	9.9	13.1	13.1	8.6	5.8	11.8	18.2	10.2	9.6
REMAINDER COMPANIES	77.1	61.7	6.6	13.2	10.0	13.1	12.6	9.3	5.2	8.7	15.8	6.9	7.7
INDUSTRY 2048, PREPARED FEEDS, NEC													
TOTAL	1 435	2 063	8 786.8	39.1	463.4	23.2	48.2	239.6	1 544.7	130.9	35.3	95.6	7 242.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	7.2	22.2	16.3	18.0	14.8	15.8	18.0	27.2	15.7	12.0	17.1	21.1
NEXT 4 LARGEST COMPANIES	.3	3.3	8.0	5.4	5.9	6.1	5.9	6.8	5.9	4.4	3.7	4.6	8.5
NEXT 12 LARGEST COMPANIES	.8	5.6	14.4	10.2	11.2	9.9	9.9	11.2	12.3	15.3	17.0	14.7	14.8
NEXT 30 LARGEST COMPANIES	2.1	7.0	15.3	13.7	14.2	13.6	14.0	14.5	14.6	14.6	14.3	14.7	15.5
REMAINDER COMPANIES	96.5	76.9	40.2	54.4	50.7	55.6	54.5	49.4	40.0	50.0	53.0	49.0	40.2
INDUSTRY 2051, BREAD, CAKE, AND RELATED PRODUCTS													
TOTAL	2 549	3 062	9 274.9	178.0	2 335.8	97.4	191.7	1 152.8	5 377.2	279.9	52.2	227.6	3 902.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	6.3	33.0	28.9	32.7	25.6	25.8	30.2	34.0	30.2	24.5	31.5	31.5
NEXT 4 LARGEST COMPANIES	.2	2.7	7.4	8.0	7.9	6.8	7.2	6.5	7.9	4.7	3.8	4.9	6.8
NEXT 12 LARGEST COMPANIES	.5	2.7	13.6	11.6	12.0	12.3	12.2	13.4	13.6	8.0	3.9	9.0	13.7
NEXT 30 LARGEST COMPANIES	1.2	3.6	13.7	12.2	12.1	11.9	12.2	11.7	13.1	15.8	21.5	14.5	14.5
REMAINDER COMPANIES	98.0	84.7	32.3	39.3	35.3	43.4	42.6	38.2	31.4	41.3	46.3	40.1	33.5
INDUSTRY 2052, COOKIES AND CRACKERS													
TOTAL	263	324	2 960.5	43.8	530.2	34.0	67.0	372.2	1 695.9	85.6	26.1	59.4	1 265.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.5	8.0	58.7	48.9	53.3	49.8	51.6	58.9	63.6	59.1	(D)	55.3	52.1
NEXT 4 LARGEST COMPANIES	1.5	2.2	9.3	11.4	10.8	11.0	10.4	9.6	7.7	10.5	(D)	11.7	11.4
NEXT 12 LARGEST COMPANIES	4.6	10.8	14.5	15.4	15.7	15.1	15.0	13.8	13.6	7.8	(D)	9.8	15.7
NEXT 30 LARGEST COMPANIES	11.4	10.5	10.1	12.8	10.9	12.6	12.5	9.3	8.4	11.1	11.0	11.2	12.5
REMAINDER COMPANIES	81.0	68.5	7.3	11.5	9.3	11.6	10.5	8.4	6.6	11.5	10.4	12.0	8.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2061, RAW CANE SUGAR													
TOTAL	49	65	704.0	8.0	95.8	6.3	13.6	70.8	275.7	43.4	4.0	39.3	440.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	8.2	15.4	42.2	33.1	35.2	31.0	32.8	35.1	40.7	22.5	46.6	20.0	41.5
NEXT 4 LARGEST COMPANIES	8.2	10.8	19.3	20.1	23.5	20.2	18.8	24.1	27.9	49.2	(D)	51.2	12.7
NEXT 12 LARGEST COMPANIES	24.5	27.7	24.9	29.6	27.5	30.3	27.7	26.2	19.1	19.9	(D)	20.8	28.4
NEXT 30 LARGEST COMPANIES	59.2	46.2	13.6	17.2	13.8	18.5	20.7	14.6	12.3	8.5	14.0	7.9	17.5
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2062, CANE SUGAR REFINING													
TOTAL	27	40	2 260.0	10.2	168.9	7.2	15.4	116.4	526.2	53.4	10.8	42.7	1 755.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	14.8	37.5	63.1	62.5	63.4	61.5	58.5	60.9	72.5	74.2	57.1	78.5	59.9
NEXT 4 LARGEST COMPANIES	14.8	15.0	26.6	24.3	26.1	26.4	29.2	28.6	20.3	17.5	23.7	16.0	28.9
NEXT 12 LARGEST COMPANIES	44.4	30.0	10.2	12.9	10.3	11.6	11.9	10.4	7.2	8.1	19.1	5.3	11.1
NEXT 30 LARGEST COMPANIES	25.9	17.5	.1	.3	.1	.5	.3	.1	(Z)	.2	.2	.2	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2063, BEET SUGAR													
TOTAL	14	57	1 181.7	11.4	143.3	9.9	21.3	119.0	344.9	43.5	4.6	38.9	836.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	28.6	64.9	67.0	63.8	65.6	64.0	66.8	65.7	52.9	66.5	17.9	72.2	67.3
NEXT 4 LARGEST COMPANIES	28.6	24.6	27.6	31.3	29.1	31.3	28.1	29.3	41.7	(D)	(D)	(D)	27.6
NEXT 12 LARGEST COMPANIES	42.8	10.6	5.4	4.9	5.3	4.8	5.1	5.0	5.4	(D)	(D)	(D)	5.1
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2065, CONFECTIONERY PRODUCTS													
TOTAL	867	962	4 498.4	58.0	584.2	47.0	89.1	415.5	2 028.0	115.5	25.9	89.5	2 478.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.8	38.3	23.2	29.0	23.8	23.4	31.5	36.8	26.1	18.6	28.3	39.4
NEXT 4 LARGEST COMPANIES	.5	1.0	11.1	6.3	6.6	6.6	6.4	7.3	11.6	19.6	17.7	20.2	11.1
NEXT 12 LARGEST COMPANIES	1.4	3.7	17.0	22.4	20.2	22.5	23.7	20.8	18.8	15.2	10.0	16.7	15.5
NEXT 30 LARGEST COMPANIES	3.5	5.1	13.0	16.8	16.3	16.1	15.9	14.3	12.7	18.9	25.3	17.1	13.2
REMAINDER COMPANIES	94.2	87.3	20.5	31.4	27.9	31.0	30.5	26.1	20.2	20.2	28.4	17.8	20.8
INDUSTRY 2066, CHOCOLATE AND COCOA PRODUCTS													
TOTAL	47	56	1 629.2	10.0	130.2	7.2	13.9	84.0	640.6	35.0	11.2	23.8	996.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	8.5	16.1	72.8	71.4	74.4	69.5	69.1	72.2	84.1	70.3	49.4	80.2	65.2
NEXT 4 LARGEST COMPANIES	8.5	14.3	15.4	17.9	15.3	19.1	19.2	17.8	10.3	22.9	49.2	10.5	19.0
NEXT 12 LARGEST COMPANIES	25.5	21.4	10.7	9.3	9.1	9.8	10.1	8.6	4.6	6.1	.9	8.6	14.6
NEXT 30 LARGEST COMPANIES	57.4	48.2	1.1	1.5	1.3	1.7	1.6	1.4	1.0	.7	.5	.8	1.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2067, CHEWING GUM													
TOTAL	14	18	566.5	7.7	83.9	6.0	11.6	62.7	335.5	22.1	3.7	18.4	233.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	28.6	44.4	93.0	82.2	85.2	82.1	82.3	87.2	93.4	97.1	98.2	96.9	92.5
NEXT 4 LARGEST COMPANIES	28.6	22.2	5.9	16.1	13.0	16.5	16.4	11.3	5.6	2.6	1.4	2.9	6.2
NEXT 12 LARGEST COMPANIES	42.9	33.3	1.1	1.7	1.8	1.4	1.3	1.5	1.0	.3	.4	.3	1.3
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2074, COTTONSEED OIL MILLS													
TOTAL	62	97	859.2	5.2	51.5	4.1	9.3	35.9	197.4	13.0	2.9	10.0	670.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.5	17.5	44.5	33.4	36.5	32.9	32.9	37.0	45.6	33.9	27.2	35.8	44.4
NEXT 4 LARGEST COMPANIES	6.5	18.6	17.0	19.0	19.0	17.8	17.9	17.7	9.1	14.2	18.3	13.1	18.2
NEXT 12 LARGEST COMPANIES	19.4	19.6	23.6	24.5	24.2	24.7	24.0	24.0	28.8	27.2	37.6	24.2	23.0
NEXT 30 LARGEST COMPANIES	48.4	32.0	14.6	22.8	19.9	24.2	24.8	21.0	16.2	24.3	16.5	26.5	14.1
REMAINDER COMPANIES	19.4	12.4	.3	.3	.4	.4	.4	.4	.3	.4	.4	.4	.3
INDUSTRY 2075, SOYBEAN OIL MILLS													
TOTAL	65	121	7 580.0	9.4	130.7	6.6	14.7	87.8	373.8	72.3	14.1	58.2	7 012.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.2	32.2	54.4	48.6	49.5	48.7	46.2	51.1	49.0	53.7	28.5	59.8	54.4
NEXT 4 LARGEST COMPANIES	6.2	12.4	18.3	16.0	16.3	16.5	17.5	17.1	8.8	13.2	9.7	(D)	18.7
NEXT 12 LARGEST COMPANIES	18.5	16.5	21.6	22.4	22.9	21.1	21.5	21.0	34.5	21.9	49.4	(D)	21.1
NEXT 30 LARGEST COMPANIES	46.2	26.4	5.6	12.5	11.0	12.9	14.0	10.3	7.5	10.8	12.0	10.5	5.7
REMAINDER COMPANIES	23.1	12.4	.1	.5	.4	.7	.8	.5	.2	.5	.4	.5	.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2076, VEGETABLE OIL MILLS, NEC													
TOTAL	37	42	360.8	1.5	17.6	1.1	2.5	12.2	58.4	7.4	2.1	5.3	304.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	10.8	11.9	54.4	24.9	31.7	26.5	26.1	33.8	43.2	48.7	37.9	(D)	55.8
NEXT 4 LARGEST COMPANIES	10.8	16.7	25.5	46.0	43.3	44.2	46.1	42.8	27.4	32.9	(D)	(D)	24.3
NEXT 12 LARGEST COMPANIES	32.4	31.0	17.7	24.6	21.4	24.6	23.9	19.9	28.5	17.1	(D)	19.6	17.4
NEXT 30 LARGEST COMPANIES	45.9	40.5	2.4	4.5	3.6	4.7	3.9	3.5	1.0	1.3	1.1	1.4	2.5
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2077, ANIMAL AND MARINE FATS AND OILS													
TOTAL	384	500	1 655.0	12.4	171.2	8.7	19.2	103.8	583.8	53.3	8.9	44.3	1 086.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	10.8	27.8	19.5	21.8	19.5	20.2	23.6	25.2	18.8	3.3	21.9	28.9
NEXT 4 LARGEST COMPANIES	1.0	4.4	12.5	12.9	11.5	11.3	11.1	10.8	11.4	10.1	10.1	10.1	13.2
NEXT 12 LARGEST COMPANIES	3.1	7.6	18.1	16.2	17.7	18.0	18.1	17.7	21.0	23.1	15.8	24.6	16.8
NEXT 30 LARGEST COMPANIES	7.8	6.6	16.4	14.1	15.7	11.7	12.3	12.7	17.2	17.1	22.6	16.0	16.0
REMAINDER COMPANIES	87.0	70.6	25.2	37.3	33.3	39.5	38.3	35.2	25.2	30.9	48.2	27.4	25.1
INDUSTRY 2079, SHORTENING AND COOKING OILS													
TOTAL	66	109	4 025.0	12.7	190.5	9.0	18.7	125.8	691.8	62.1	9.2	53.0	3 293.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.1	18.3	42.5	34.1	37.5	34.4	35.2	38.8	42.6	48.3	29.3	51.6	41.4
NEXT 4 LARGEST COMPANIES	6.1	8.3	20.5	16.3	15.1	16.6	16.7	14.9	15.8	11.8	17.2	10.8	21.9
NEXT 12 LARGEST COMPANIES	18.2	27.5	26.7	34.7	33.4	34.5	33.8	33.7	29.4	31.3	34.2	30.8	26.7
NEXT 30 LARGEST COMPANIES	45.5	29.4	10.0	14.5	13.5	14.1	13.7	12.2	11.9	8.5	19.0	6.7	9.7
REMAINDER COMPANIES	24.2	16.5	.3	.4	.4	.5	.6	.4	.3	.2	.3	.2	.2
INDUSTRY 2082, MALT BEVERAGES													
TOTAL	81	131	6 652.6	44.0	857.5	31.1	61.1	589.1	2 602.3	410.3	74.8	335.5	4 045.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.9	24.4	64.4	56.1	62.0	58.9	58.5	66.3	62.3	76.8	70.0	78.3	65.9
NEXT 4 LARGEST COMPANIES	4.9	9.2	18.5	19.7	18.9	16.3	16.8	14.6	17.8	14.8	18.9	13.9	19.0
NEXT 12 LARGEST COMPANIES	14.8	19.1	14.7	18.7	15.3	19.4	19.4	15.6	16.8	7.3	9.8	6.7	13.2
NEXT 30 LARGEST COMPANIES	37.0	23.7	2.2	5.2	3.6	5.2	5.1	3.3	2.9	.9	1.1	.9	1.8
REMAINDER COMPANIES	38.3	23.7	.2	.3	.2	.3	.3	.2	.2	.2	.2	.2	.2
INDUSTRY 2083, MALT													
TOTAL	27	40	499.3	1.6	27.4	1.2	2.5	20.0	101.4	39.6	19.5	20.1	377.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	14.8	22.5	59.3	43.9	44.7	41.4	41.1	43.6	57.4	51.8	43.4	60.1	58.4
NEXT 4 LARGEST COMPANIES	14.8	30.0	22.0	30.7	30.4	32.5	32.6	32.4	25.5	4.4	1.4	7.3	21.6
NEXT 12 LARGEST COMPANIES	44.4	30.0	16.7	21.8	21.7	22.2	22.4	20.6	15.0	(D)	(D)	6.4	17.8
NEXT 30 LARGEST COMPANIES	25.9	17.5	2.1	3.6	3.2	3.9	3.9	3.5	2.0	(D)	(D)	1.0	2.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2084, WINES, BRANDY, AND BRANDY SPIRITS[1]													
TOTAL	233	269	[2]1 362.5	9.2	134.1	5.4	10.5	69.6	510.4	51.1	13.6	37.6	893.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	6.3	51.4	39.5	43.1	37.0	39.4	42.4	49.2	53.3	36.1	59.5	53.8
NEXT 4 LARGEST COMPANIES	1.7	6.3	16.5	16.5	17.8	17.3	17.8	18.8	17.3	7.9	6.2	8.5	16.3
NEXT 12 LARGEST COMPANIES	5.2	6.0	13.2	16.8	15.7	16.6	17.0	15.6	18.0	6.5	10.2	5.2	12.0
NEXT 30 LARGEST COMPANIES	12.9	12.6	10.0	13.9	11.9	14.2	12.7	10.5	10.4	18.2	37.2	11.3	9.3
REMAINDER COMPANIES	78.5	68.8	8.9	13.3	11.5	14.9	13.1	12.7	5.1	14.1	10.3	15.5	8.6
INDUSTRY 2085, DISTILLED LIQUOR, EXCEPT BRANDY													
TOTAL	64	104	[3]2 296.1	15.7	232.1	12.0	23.8	168.1	[3]1 149.7	36.3	9.8	26.5	1 163.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.2	19.2	52.2	40.7	43.8	42.8	45.5	46.6	61.7	55.0	62.0	52.5	42.2
NEXT 4 LARGEST COMPANIES	6.2	13.5	19.1	23.2	24.3	23.2	21.6	24.8	15.0	10.6	7.8	11.7	22.7
NEXT 12 LARGEST COMPANIES	18.7	21.2	19.4	22.4	20.5	20.8	20.1	18.4	16.6	13.0	5.5	15.8	23.5
NEXT 30 LARGEST COMPANIES	46.9	32.7	9.0	13.3	10.9	12.7	12.4	9.8	6.6	10.1	10.8	9.9	11.4
REMAINDER COMPANIES	21.9	13.5	.2	.5	.4	.5	.4	.4	.2	11.2	14.0	10.2	.2
INDUSTRY 2086, BOTTLED AND CANNED SOFT DRINKS													
TOTAL	1 758	2 192	10 007.2	114.1	1 448.8	43.4	89.3	444.8	4 084.5	423.6	72.5	351.0	5 958.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	3.2	14.8	11.6	13.4	11.6	11.6	13.9	15.1	16.7	15.4	17.0	14.7
NEXT 4 LARGEST COMPANIES	.2	2.5	7.4	4.3	5.4	4.2	4.1	5.3	7.2	3.4	2.0	3.7	7.6
NEXT 12 LARGEST COMPANIES	.7	4.4	13.6	13.3	14.1	12.1	12.1	13.1	16.0	11.4	9.2	11.8	12.1
NEXT 30 LARGEST COMPANIES	1.7	5.2	14.2	14.2	13.3	14.0	14.3	13.7	12.4	19.2	19.0	19.3	15.4
REMAINDER COMPANIES	97.2	84.8	49.9	56.7	53.8	58.1	57.9	54.0	49.3	49.3	54.5	48.2	50.2

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2087, FLAVORING EXTRACTS, SIRUPS, NEC													
TOTAL	319	368	2 511.3	10.5	149.1	6.3	12.9	77.1	1 452.6	33.1	6.9	26.2	1 069.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	6.8	64.4	29.9	32.5	35.5	36.6	44.4	70.4	45.3	16.7	52.8	56.3
NEXT 4 LARGEST COMPANIES	1.3	2.4	6.5	6.8	7.1	5.5	5.0	4.9	6.4	4.2	6.4	3.7	6.8
NEXT 12 LARGEST COMPANIES	3.8	5.2	7.4	11.6	12.3	10.6	10.6	11.0	5.6	19.2	31.2	16.1	9.7
NEXT 30 LARGEST COMPANIES	9.4	10.9	9.8	19.0	18.8	17.2	17.0	15.8	7.7	10.2	16.0	8.7	12.8
REMAINDER COMPANIES	84.3	74.7	11.8	32.8	29.4	31.2	30.7	24.0	9.9	21.0	29.6	18.8	14.4
INDUSTRY 2091, CANNED AND CURED SEAFOODS													
TOTAL	215	255	[3]1 440.6	16.0	147.0	13.8	25.0	113.4	[3]441.0	28.1	8.9	19.2	1 000.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	2.4	51.9	41.0	45.4	40.0	43.7	45.5	46.1	41.2	(D)	36.8	54.5
NEXT 4 LARGEST COMPANIES	1.9	9.0	12.6	14.9	14.6	16.5	16.1	16.6	14.8	12.2	(D)	10.1	11.6
NEXT 12 LARGEST COMPANIES	5.6	8.2	14.8	17.1	14.7	17.1	16.0	14.2	17.9	20.6	9.6	25.7	13.5
NEXT 30 LARGEST COMPANIES	14.0	14.5	11.4	12.5	13.1	12.1	11.6	11.6	10.8	18.2	18.1	18.2	11.7
REMAINDER COMPANIES	76.7	65.9	9.3	14.5	12.3	14.3	12.7	12.0	10.4	7.9	4.9	9.2	8.8
INDUSTRY 2092, FRESH OR FROZEN PACKAGED FISH													
TOTAL	906	990	[3]2 664.9	34.3	260.8	29.6	49.7	188.9	[3]705.5	56.8	19.0	37.8	1 958.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.7	13.8	7.0	9.6	7.2	8.4	10.9	17.7	13.1	11.5	14.0	12.3
NEXT 4 LARGEST COMPANIES	.4	1.2	9.5	6.1	6.1	6.3	6.3	6.7	7.3	5.6	2.0	7.3	10.4
NEXT 12 LARGEST COMPANIES	1.3	2.5	19.0	16.2	18.4	16.0	16.8	16.5	18.5	16.6	18.3	15.8	19.1
NEXT 30 LARGEST COMPANIES	3.3	5.4	16.4	16.6	16.7	16.0	15.9	16.8	13.5	21.0	27.7	17.6	17.4
REMAINDER COMPANIES	94.5	89.2	41.3	54.1	49.2	54.5	52.4	49.1	43.0	43.7	40.5	45.2	40.8
INDUSTRY 2095, ROASTED COFFEE													
TOTAL	133	167	5 616.4	10.9	164.8	7.2	15.0	103.2	988.0	41.9	1.4	40.4	4 643.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	10.2	61.2	44.4	49.8	53.6	54.1	60.0	59.4	(D)	(D)	(D)	61.8
NEXT 4 LARGEST COMPANIES	3.0	6.0	11.5	6.8	7.4	7.5	7.4	8.2	10.1	(D)	(D)	(D)	11.6
NEXT 12 LARGEST COMPANIES	9.0	15.6	16.2	23.9	21.3	20.2	19.8	18.2	17.9	(D)	25.0	(D)	15.9
NEXT 30 LARGEST COMPANIES	22.6	18.0	7.7	16.1	14.4	11.8	11.8	8.8	8.1	17.4	9.6	17.7	7.6
REMAINDER COMPANIES	62.4	50.3	3.3	8.7	7.0	6.9	6.9	4.8	4.4	4.2	21.1	3.6	3.0
INDUSTRY 2097, MANUFACTURED ICE													
TOTAL	543	678	149.4	5.3	47.8	3.5	6.7	25.5	106.1	16.9	5.2	11.6	43.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	9.6	24.0	17.8	22.0	16.5	17.2	17.0	23.9	19.0	17.6	19.7	24.2
NEXT 4 LARGEST COMPANIES	.7	5.6	14.0	14.4	13.9	16.7	15.2	18.1	15.2	(D)	(D)	10.9	11.2
NEXT 12 LARGEST COMPANIES	2.2	3.8	10.5	11.0	10.1	10.3	10.5	10.4	11.2	(D)	(D)	11.4	8.8
NEXT 30 LARGEST COMPANIES	5.5	6.2	12.2	14.0	13.9	13.4	14.2	13.8	11.9	12.1	8.0	14.0	13.0
REMAINDER COMPANIES	90.8	74.8	39.2	42.8	40.1	43.0	42.8	40.7	37.8	42.4	38.7	44.1	42.8
INDUSTRY 2098, MACARONI AND SPAGHETTI													
TOTAL	189	205	662.0	8.2	96.0	5.7	12.3	56.5	327.0	12.6	3.3	9.2	337.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	5.4	36.1	28.6	33.7	27.7	28.5	33.5	37.8	47.0	76.3	36.4	34.3
NEXT 4 LARGEST COMPANIES	2.1	2.9	17.8	14.8	15.1	14.2	13.8	13.5	18.2	10.7	(D)	11.8	17.7
NEXT 12 LARGEST COMPANIES	6.3	7.3	23.2	25.6	22.9	25.5	24.4	24.2	23.3	18.2	(D)	22.6	22.9
NEXT 30 LARGEST COMPANIES	15.9	16.6	16.9	20.9	20.4	21.8	21.8	20.6	15.6	16.5	3.8	21.0	18.2
REMAINDER COMPANIES	73.5	67.8	6.0	10.1	7.8	10.7	11.4	8.2	5.2	7.6	5.9	8.2	6.9
INDUSTRY 2099, FOOD PREPARATIONS, NEC													
TOTAL	1 872	2 117	6 531.0	71.5	792.6	50.9	97.7	484.1	3 028.1	166.2	32.6	133.6	3 499.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	2.3	27.5	15.9	16.9	19.0	19.2	23.5	33.2	11.4	5.4	12.9	22.6
NEXT 4 LARGEST COMPANIES	.2	1.1	8.7	6.3	7.5	6.6	7.2	8.2	7.3	17.2	20.5	16.4	9.8
NEXT 12 LARGEST COMPANIES	.6	2.0	14.3	11.7	13.1	11.4	11.7	13.6	12.9	13.7	8.0	15.1	15.7
NEXT 30 LARGEST COMPANIES	1.6	4.8	13.9	16.1	16.7	13.6	14.1	13.9	14.6	14.3	11.9	14.9	13.4
REMAINDER COMPANIES	97.3	89.8	35.5	50.1	45.9	49.3	47.8	40.7	32.0	43.4	54.1	40.8	38.6
INDUSTRY 2111, CIGARETTES													
TOTAL	8	14	[3]6 377.4	39.0	567.7	32.5	58.9	442.0	[3]3 803.1	118.0	41.2	76.8	2 573.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	50.0	64.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 4 LARGEST COMPANIES	50.0	35.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2121, CIGARS													
TOTAL	94	101	[3]242.7	7.7	54.9	7.0	12.7	44.0	[3]125.6	3.3	.3	3.0	117.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.3	8.9	56.3	52.0	57.1	51.7	52.1	58.3	60.0	37.6	(D)	36.5	51.4
NEXT 4 LARGEST COMPANIES	4.3	5.0	22.5	19.3	15.7	20.3	19.9	16.6	18.8	45.6	(D)	(D)	26.2
NEXT 12 LARGEST COMPANIES	12.8	11.9	16.4	22.2	21.3	21.5	21.3	19.6	16.9	9.0	(D)	(D)	17.6
NEXT 30 LARGEST COMPANIES	31.9	29.7	4.2	5.6	4.9	5.8	6.0	4.9	4.2	4.7	12.7	3.7	4.2
REMAINDER COMPANIES	46.8	44.6	.6	1.0	1.0	.8	.7	.6	.0	3.1	9.8	2.4	.6
INDUSTRY 2131, CHEWING AND SMOKING TOBACCO													
TOTAL	28	35	[3]354.3	3.2	32.1	2.5	4.4	22.0	[3]188.9	7.3	1.9	5.4	166.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	14.3	31.4	80.8	70.1	72.0	69.4	71.3	72.1	81.3	36.0	(D)	45.1	80.0
NEXT 4 LARGEST COMPANIES	14.3	11.4	14.0	16.8	19.0	16.3	16.2	18.2	13.4	(D)	(D)	(D)	14.9
NEXT 12 LARGEST COMPANIES	42.9	34.3	5.0	12.7	8.6	13.9	11.9	9.3	5.1	(D)	(D)	(D)	4.9
NEXT 30 LARGEST COMPANIES	28.6	22.9	.2	.4	.4	.5	.5	.4	.2	(D)	(D)	(D)	.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2141, TOBACCO STEMMING AND REDRYING													
TOTAL	38	78	[3]2 076.2	10.7	96.1	8.4	16.6	62.6	[3]216.5	52.8	13.3	39.6	1 872.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	10.5	21.8	66.9	35.9	38.0	35.7	32.4	39.6	37.5	21.1	20.4	21.3	70.5
NEXT 4 LARGEST COMPANIES	10.5	21.8	18.3	32.4	31.6	32.3	35.2	31.2	33.5	24.1	42.1	18.0	16.5
NEXT 12 LARGEST COMPANIES	31.6	24.4	13.2	23.0	23.2	22.2	23.2	20.8	22.6	52.2	37.0	57.3	12.0
NEXT 30 LARGEST COMPANIES	47.4	32.0	1.6	8.7	7.2	9.8	9.3	8.5	6.4	2.7	.5	3.4	1.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2211, WEAVING MILLS, COTTON													
TOTAL	211	314	4 431.2	117.2	1 046.8	107.2	214.3	902.0	1 944.5	187.2	32.8	154.4	2 579.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	12.7	38.6	36.8	37.0	37.1	36.4	37.5	39.0	38.1	51.2	35.3	39.9
NEXT 4 LARGEST COMPANIES	1.9	8.0	19.5	16.6	17.2	16.7	17.2	17.7	18.7	15.1	10.0	16.1	19.7
NEXT 12 LARGEST COMPANIES	5.7	11.1	20.9	21.6	22.3	21.3	21.7	21.8	21.5	15.4	9.9	16.6	19.7
NEXT 30 LARGEST COMPANIES	14.2	14.0	15.9	18.9	17.8	18.9	18.6	17.5	15.7	23.2	14.2	25.1	15.8
REMAINDER COMPANIES	76.3	54.1	5.0	6.1	5.7	6.0	6.1	5.4	5.1	8.2	14.7	6.8	4.9
INDUSTRY 2221, WEAV'G MILLS, MANMADE FIBER, SILK													
TOTAL	267	449	6 325.9	151.0	1 428.7	134.6	275.4	1 168.7	2 790.9	260.2	23.3	236.9	3 574.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.5	18.0	41.7	37.9	39.0	37.8	37.8	39.2	37.5	46.3	40.3	46.8	45.2
NEXT 4 LARGEST COMPANIES	1.5	8.2	15.9	17.5	17.0	18.0	18.0	17.6	17.9	12.0	8.1	12.4	14.3
NEXT 12 LARGEST COMPANIES	4.5	10.5	18.0	17.8	17.6	17.8	17.6	17.5	18.8	21.1	16.9	21.5	17.4
NEXT 30 LARGEST COMPANIES	11.2	11.4	14.6	16.3	15.6	16.0	16.2	15.4	15.5	13.0	19.7	12.3	13.8
REMAINDER COMPANIES	81.3	51.9	9.8	10.5	10.7	10.3	10.3	10.4	10.3	7.7	15.0	7.0	9.3
INDUSTRY 2231, WEAVING AND FINISHING MILLS, WOOL													
TOTAL	153	165	583.3	14.6	136.6	12.6	25.9	105.8	312.9	14.9	4.0	11.0	283.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	3.6	30.7	20.9	20.4	21.5	22.6	21.8	24.3	16.5	13.4	17.6	39.6
NEXT 4 LARGEST COMPANIES	2.6	5.5	16.0	15.8	18.0	15.2	15.9	17.0	18.1	15.0	4.2	19.0	13.0
NEXT 12 LARGEST COMPANIES	7.8	9.7	27.4	26.9	26.5	27.4	27.8	28.4	26.9	21.6	31.2	18.1	27.8
NEXT 30 LARGEST COMPANIES	19.6	18.2	21.0	27.7	27.7	27.2	25.8	25.2	25.4	42.6	47.2	40.9	15.7
REMAINDER COMPANIES	67.3	63.0	4.9	8.7	7.5	8.7	7.8	7.5	5.4	4.3	4.1	4.4	4.0
INDUSTRY 2241, NARROW FABRIC MILLS													
TOTAL	291	335	682.9	20.8	171.6	18.1	35.7	130.9	350.8	16.2	4.0	12.1	333.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	2.4	16.7	13.3	14.2	12.3	12.5	14.0	16.7	10.9	3.3	13.4	16.8
NEXT 4 LARGEST COMPANIES	1.4	2.4	11.1	11.0	10.1	10.5	10.8	9.0	12.4	3.3	(D)	3.8	9.8
NEXT 12 LARGEST COMPANIES	4.1	6.9	20.4	19.2	20.5	19.4	19.8	20.5	19.4	14.4	(D)	17.1	21.5
NEXT 30 LARGEST COMPANIES	10.3	13.4	24.5	25.8	25.7	26.4	26.5	27.1	24.2	35.8	35.9	35.8	25.0
REMAINDER COMPANIES	82.8	74.9	27.3	30.7	29.4	31.4	30.4	29.4	27.4	35.7	53.2	29.8	26.9
INDUSTRY 2251, WOMEN'S HOSIERY, EXCEPT SOCKS[4]													
TOTAL	176	200	871.2	26.6	191.3	23.8	44.1	156.6	457.0	16.6	3.9	12.6	415.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	6.0	49.7	30.1	34.7	29.9	31.5	34.9	54.0	(D)	(D)	(D)	44.9
NEXT 4 LARGEST COMPANIES	2.3	3.0	11.9	16.6	16.0	16.6	16.9	16.1	12.7	(D)	(D)	(D)	11.4
NEXT 12 LARGEST COMPANIES	6.8	9.5	16.6	20.4	20.3	20.3	20.2	19.7	13.9	16.7	(D)	19.6	19.3
NEXT 30 LARGEST COMPANIES	17.0	18.0	15.6	22.9	20.2	23.1	22.3	20.5	14.0	21.5	26.6	19.9	17.4
REMAINDER COMPANIES	71.6	63.5	6.3	10.0	8.8	10.1	9.0	8.7	5.4	6.4	4.4	7.0	7.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2252, HOSIERY, NEC[4]													
TOTAL	382	415	921.3	32.2	218.7	29.0	52.6	179.4	401.5	14.8	3.6	11.3	525.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	3.4	19.7	12.6	14.2	12.7	14.3	15.2	16.0	10.0	5.1	11.6	22.2
NEXT 4 LARGEST COMPANIES	1.0	2.2	10.1	9.0	9.8	9.3	9.4	9.9	12.4	20.1	37.3	14.6	9.0
NEXT 12 LARGEST COMPANIES	3.1	4.8	16.6	17.3	18.5	17.7	17.8	19.1	17.9	11.0	10.1	11.3	15.5
NEXT 30 LARGEST COMPANIES	7.9	8.7	20.0	21.7	21.3	21.7	22.1	20.9	21.4	24.7	21.1	25.9	19.0
REMAINDER COMPANIES	86.9	81.0	33.5	39.3	36.2	38.6	36.4	34.9	32.3	34.2	26.4	36.6	34.3
INDUSTRY 2253, KNIT OUTERWEAR MILLS[4]													
TOTAL	903	953	2 335.9	73.0	582.0	62.7	114.0	422.0	1 159.5	49.9	5.3	44.6	1 207.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.9	17.0	10.7	10.7	10.6	10.5	10.6	14.7	18.5	15.8	18.9	19.2
NEXT 4 LARGEST COMPANIES	.4	.7	10.0	5.9	6.6	5.3	5.3	5.5	9.0	2.9	(D)	3.1	11.4
NEXT 12 LARGEST COMPANIES	1.3	2.2	18.6	19.1	20.2	18.0	18.6	17.4	21.6	13.7	(D)	13.4	15.8
NEXT 30 LARGEST COMPANIES	3.3	5.0	17.0	14.7	14.3	14.5	14.1	14.3	14.7	12.5	17.3	11.9	19.5
REMAINDER COMPANIES	94.5	91.1	37.3	49.6	48.2	51.6	51.6	52.2	39.9	52.4	49.7	52.7	34.2
INDUSTRY 2254, KNIT UNDERWEAR MILLS[4]													
TOTAL	80	92	648.9	25.2	175.2	23.4	42.7	151.8	305.7	14.5	4.2	10.2	353.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.0	6.5	42.1	38.7	43.2	39.5	40.4	44.6	37.0	53.8	52.9	54.2	46.2
NEXT 4 LARGEST COMPANIES	5.0	6.5	16.4	13.4	13.2	13.3	13.0	13.5	16.6	(D)	(D)	(D)	15.8
NEXT 12 LARGEST COMPANIES	15.0	19.6	26.0	29.0	25.4	28.5	28.2	24.5	29.4	(D)	(D)	(D)	24.2
NEXT 30 LARGEST COMPANIES	37.5	34.8	14.1	16.1	15.6	16.1	15.9	15.0	15.3	10.0	11.7	9.3	12.7
REMAINDER COMPANIES	37.5	32.6	1.4	2.7	2.6	2.7	2.5	2.4	1.8	.8	.5	.9	1.1
INDUSTRY 2257, CIRCULAR KNIT FABRIC MILLS[4]													
TOTAL	462	530	3 169.4	51.8	493.0	44.0	88.2	371.2	1 033.5	91.6	11.5	80.0	2 141.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	4.2	19.6	14.5	15.7	14.3	14.6	15.9	16.3	19.4	18.9	19.5	21.1
NEXT 4 LARGEST COMPANIES	.9	2.3	11.7	6.6	6.7	6.2	6.5	5.9	11.8	2.5	2.5	2.5	11.6
NEXT 12 LARGEST COMPANIES	2.6	5.5	19.7	16.6	17.4	17.2	17.3	18.3	19.1	17.8	18.9	17.6	20.2
NEXT 30 LARGEST COMPANIES	6.5	7.2	22.1	22.4	22.3	22.4	22.3	22.1	19.6	19.0	23.6	18.3	23.4
REMAINDER COMPANIES	89.2	80.9	26.9	39.9	37.9	39.9	39.2	37.7	33.2	41.3	36.2	42.0	23.8
INDUSTRY 2258, WARP KNIT FABRIC MILLS[4]													
TOTAL	213	235	1 427.6	23.7	226.7	20.0	41.9	169.8	464.8	56.3	20.1	36.2	963.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	4.3	25.6	20.5	21.3	20.1	21.2	21.8	25.8	48.2	(D)	35.8	25.7
NEXT 4 LARGEST COMPANIES	1.9	3.0	14.0	9.6	9.9	9.7	9.7	10.2	14.3	(D)	(D)	14.0	13.9
NEXT 12 LARGEST COMPANIES	5.6	8.5	24.3	24.1	22.9	24.1	23.9	22.8	23.4	(D)	4.0	19.1	24.6
NEXT 30 LARGEST COMPANIES	14.1	14.0	21.8	23.1	23.5	22.6	22.9	22.1	17.6	8.6	3.3	11.6	23.6
REMAINDER COMPANIES	76.5	70.2	14.3	22.8	22.4	23.5	22.3	23.2	18.9	17.0	12.6	19.5	12.2
INDUSTRY 2259, KNITTING MILLS, NEC[4]													
TOTAL	191	192	95.7	3.4	24.1	3.1	6.0	19.0	40.9	1.5	.2	1.4	54.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	2.6	29.5	18.4	23.5	16.8	16.6	22.9	25.1	(D)	3.8	(D)	32.5
NEXT 4 LARGEST COMPANIES	2.1	2.1	12.1	12.6	12.3	12.9	12.6	13.0	12.7	(D)	(D)	(D)	11.6
NEXT 12 LARGEST COMPANIES	6.3	6.2	17.1	15.2	15.4	15.3	14.9	14.3	20.1	(D)	(D)	(D)	15.0
NEXT 30 LARGEST COMPANIES	15.7	15.6	21.1	25.4	23.9	25.4	26.2	24.2	22.2	26.6	61.1	21.9	20.7
REMAINDER COMPANIES	73.8	73.4	20.2	28.4	24.9	29.5	29.6	25.6	19.9	9.4	16.8	8.4	20.3
INDUSTRY 2261, FINISHING PLANTS, COTTON													
TOTAL	194	210	759.5	20.8	211.4	17.3	35.7	162.2	350.7	24.8	3.1	21.6	415.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	2.4	28.7	25.8	24.4	26.5	25.2	25.6	27.1	15.9	27.6	14.2	30.0
NEXT 4 LARGEST COMPANIES	2.1	3.3	18.6	16.1	15.9	15.9	15.4	15.1	16.0	19.0	22.0	18.6	22.4
NEXT 12 LARGEST COMPANIES	6.2	7.1	28.0	32.0	33.6	30.6	32.4	33.1	30.3	41.0	24.9	43.3	25.5
NEXT 30 LARGEST COMPANIES	15.5	17.6	17.9	17.0	17.7	17.6	17.9	17.6	19.4	16.1	11.5	16.8	16.5
REMAINDER COMPANIES	74.2	69.5	6.7	9.2	8.5	9.4	9.2	8.7	7.2	8.0	13.9	7.1	5.6
INDUSTRY 2262, FINISH. PLTS, MANMADE FIBER, SILK													
TOTAL	248	285	2 404.3	37.2	396.2	30.4	63.7	293.4	792.0	75.9	12.2	63.6	1 619.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	7.4	60.4	35.6	34.0	35.6	34.6	33.6	34.6	61.2	50.1	63.4	73.3
NEXT 4 LARGEST COMPANIES	1.6	3.2	9.6	9.7	10.4	9.4	9.8	10.3	17.5	(D)	(D)	(D)	5.7
NEXT 12 LARGEST COMPANIES	4.8	7.4	9.8	15.5	15.2	15.3	15.9	15.4	13.1	(D)	(D)	(D)	8.1
NEXT 30 LARGEST COMPANIES	12.1	11.6	10.8	18.2	19.1	18.3	18.1	18.9	17.5	10.5	16.9	9.3	7.4
REMAINDER COMPANIES	79.8	70.5	9.4	21.1	21.3	21.5	21.6	21.8	17.3	16.6	16.5	16.6	5.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--			All employees		Production workers				New capital expenditures			
	Companies	Establishments	Value of shipments (million dollars)	Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)	Value added by manufacture (million dollars)	Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	Cost of materials (million dollars)
INDUSTRY 2269, FINISHING PLANTS, NEC													
TOTAL	176	183	830.6	14.1	132.3	12.1	24.1	98.4	274.0	24.6	5.3	19.4	560.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	4.9	29.7	20.0	20.6	20.6	20.1	21.6	26.1	31.0	(D)	30.8	31.4
NEXT 4 LARGEST COMPANIES	2.3	2.7	13.4	11.1	11.4	10.8	11.6	11.3	13.0	7.9	(D)	7.9	13.8
NEXT 12 LARGEST COMPANIES	6.8	7.1	23.1	23.6	23.4	23.5	23.6	22.9	18.8	11.8	8.2	12.8	25.2
NEXT 30 LARGEST COMPANIES	17.0	16.4	20.0	20.6	20.0	20.0	19.7	19.0	21.0	19.4	18.6	19.6	19.4
REMAINDER COMPANIES	71.6	68.9	13.8	24.7	24.5	25.1	25.0	25.2	21.1	29.8	33.5	28.8	10.1
INDUSTRY 2271, WOVEN CARPETS AND RUGS[1]													
TOTAL	71	71	138.7	2.8	24.8	2.5	4.7	20.0	47.1	1.1	.4	.8	93.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.6	5.6	67.9	56.1	62.6	57.5	59.9	65.0	67.8	37.8	(D)	52.2	67.6
NEXT 4 LARGEST COMPANIES	5.6	5.6	12.8	23.7	19.1	22.2	20.1	17.7	15.7	(D)	(D)	(D)	11.9
NEXT 12 LARGEST COMPANIES	16.9	16.9	14.0	12.9	11.7	12.9	12.8	11.5	10.9	(D)	(D)	(D)	15.4
NEXT 30 LARGEST COMPANIES	42.3	42.3	4.8	6.8	6.1	6.8	6.7	5.3	5.1	13.3	8.9	15.4	3.6
REMAINDER COMPANIES	29.6	29.6	.5	.5	.5	.6	.5	.5	.5	.9	-	1.3	.5
INDUSTRY 2272, TUFTED CARPETS AND RUGS													
TOTAL	397	449	4 520.7	50.2	506.5	39.4	82.2	341.1	1 438.2	78.7	11.1	67.6	3 113.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	2.9	20.9	17.9	18.9	17.4	17.6	18.7	19.5	16.9	14.1	17.4	21.5
NEXT 4 LARGEST COMPANIES	1.0	2.2	14.3	11.6	13.3	11.6	12.7	13.5	15.5	20.7	15.8	21.4	13.3
NEXT 12 LARGEST COMPANIES	3.0	6.5	23.7	23.4	23.1	23.9	23.9	24.9	23.5	22.2	13.7	23.6	24.3
NEXT 30 LARGEST COMPANIES	7.6	8.7	20.0	19.7	19.4	19.4	19.0	18.9	19.4	13.6	19.2	12.7	20.4
REMAINDER COMPANIES	87.4	79.7	21.1	27.5	25.4	27.6	26.7	24.0	22.1	26.6	37.3	24.8	20.5
INDUSTRY 2279, CARPETS AND RUGS, NEC													
TOTAL	72	72	115.2	2.8	25.3	2.4	4.5	18.6	44.8	2.6	.6	2.0	73.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.6	5.6	69.3	65.0	68.9	65.8	68.1	71.9	64.7	45.2	-	58.0	72.5
NEXT 4 LARGEST COMPANIES	5.6	5.6	12.6	16.0	13.3	16.4	15.0	12.4	12.7	21.4	32.2	18.3	12.3
NEXT 12 LARGEST COMPANIES	16.7	16.7	11.3	11.2	11.3	10.4	9.8	9.6	13.8	29.2	63.1	19.6	9.8
NEXT 30 LARGEST COMPANIES	41.7	41.7	6.2	7.2	6.1	6.8	6.4	5.6	8.1	4.0	4.7	3.8	4.8
REMAINDER COMPANIES	30.6	30.6	.6	.6	.5	.7	.6	.5	.7	.3	-	.4	.5
INDUSTRY 2281, YARN MILLS, EXCEPT WOOL													
TOTAL	274	456	3 864.9	93.0	782.7	85.6	175.2	675.5	1 480.3	114.4	13.5	101.0	2 382.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.5	9.6	19.3	17.1	17.8	17.0	17.1	18.1	18.8	13.8	33.3	11.2	19.7
NEXT 4 LARGEST COMPANIES	1.5	6.4	12.1	9.3	9.7	9.3	9.5	9.7	11.7	22.0	(D)	24.1	12.4
NEXT 12 LARGEST COMPANIES	4.4	8.6	19.8	18.6	19.3	18.6	18.6	18.8	19.5	18.9	(D)	17.8	19.8
NEXT 30 LARGEST COMPANIES	10.9	20.0	23.5	24.2	24.2	24.1	24.5	24.5	23.1	19.1	11.5	20.1	23.5
REMAINDER COMPANIES	81.8	55.5	25.4	30.8	29.0	31.0	30.4	29.0	27.0	26.2	21.9	26.8	24.6
INDUSTRY 2282, THROWING AND WINDING MILLS													
TOTAL	170	196	1 510.1	30.5	262.3	27.1	54.5	210.4	490.4	51.1	8.3	42.9	1 030.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.4	8.2	43.7	29.1	33.0	28.8	30.3	32.6	38.0	30.1	30.9	29.9	46.6
NEXT 4 LARGEST COMPANIES	2.4	4.6	9.8	8.6	8.4	8.8	9.3	8.7	9.1	6.4	2.5	7.2	10.0
NEXT 12 LARGEST COMPANIES	7.1	8.2	17.0	19.7	18.1	19.8	19.1	18.8	17.0	26.9	15.2	29.2	16.6
NEXT 30 LARGEST COMPANIES	17.6	17.9	18.4	22.3	22.6	22.4	22.1	22.2	22.2	13.2	15.3	12.8	17.2
REMAINDER COMPANIES	70.6	61.2	11.1	20.3	18.0	20.2	19.3	17.7	13.7	23.3	36.1	20.9	9.6
INDUSTRY 2283, WOOL YARN MILLS													
TOTAL	71	76	194.9	4.1	33.1	3.7	7.3	27.3	81.8	2.7	.2	2.5	112.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.6	11.8	51.2	31.5	32.2	31.3	31.8	33.9	49.7	25.5	(D)	27.2	51.3
NEXT 4 LARGEST COMPANIES	5.6	5.3	15.1	21.2	20.5	21.1	22.0	20.4	13.6	5.5	(D)	4.8	16.3
NEXT 12 LARGEST COMPANIES	16.9	15.8	20.8	24.7	24.1	24.8	24.1	23.3	20.6	44.1	11.6	46.8	21.4
NEXT 30 LARGEST COMPANIES	42.3	39.5	12.3	21.5	22.0	21.6	21.0	21.3	15.5	24.2	68.3	20.7	10.4
REMAINDER COMPANIES	29.6	27.6	.6	1.2	1.2	1.2	1.2	1.1	.6	.6	1.5	.6	.6
INDUSTRY 2284, THREAD MILLS													
TOTAL	58	70	544.4	12.8	106.3	10.9	21.1	81.1	201.9	11.8	2.0	9.8	351.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	18.6	57.3	54.2	55.3	54.6	54.2	57.9	45.4	41.5	10.4	47.8	64.2
NEXT 4 LARGEST COMPANIES	6.9	10.0	20.0	17.9	16.9	17.9	17.4	16.2	26.6	26.4	16.9	28.3	16.6
NEXT 12 LARGEST COMPANIES	20.7	17.1	15.7	19.4	20.4	19.1	20.1	19.3	19.7	24.1	69.5	15.0	13.1
NEXT 30 LARGEST COMPANIES	51.7	42.9	6.9	8.3	7.1	8.2	8.1	6.4	8.0	7.8	3.1	8.8	6.0
REMAINDER COMPANIES	13.8	11.4	.1	.3	.3	.3	.2	.2	.2	.1	.1	.2	.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2291, FELT GOODS, EXC. WOVEN FELT, HATS													
TOTAL	37	46	197.7	4.3	50.7	3.3	6.7	33.1	103.0	5.7	1.5	4.3	96.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	10.8	21.7	58.3	51.3	54.2	48.4	48.0	52.8	61.7	68.9	80.8	64.8	54.3
NEXT 4 LARGEST COMPANIES	10.8	10.9	23.0	24.6	24.5	26.2	25.6	25.4	23.6	6.8	11.8	5.1	23.2
NEXT 12 LARGEST COMPANIES	32.4	30.4	16.9	21.7	19.0	23.0	24.0	19.7	13.9	20.2	6.1	25.1	19.8
NEXT 30 LARGEST COMPANIES	45.9	36.0	1.8	2.4	2.2	2.5	2.4	2.2	.8	4.1	1.3	5.0	2.7
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2292, LACE GOODS													
TOTAL	68	71	45.9	2.2	17.9	1.9	3.6	14.0	27.7	1.0	.2	.8	18.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.9	8.5	50.7	48.5	50.9	49.0	49.5	51.7	52.6	30.0	11.6	35.4	49.1
NEXT 4 LARGEST COMPANIES	5.9	5.6	17.6	16.8	16.5	15.3	14.8	14.1	14.6	10.2	7.9	10.9	21.0
NEXT 12 LARGEST COMPANIES	17.6	18.3	18.3	19.1	18.1	19.5	20.2	18.6	19.0	42.6	67.6	35.1	17.3
NEXT 30 LARGEST COMPANIES	44.1	42.3	12.4	14.3	13.4	14.7	14.3	14.4	12.9	(D)	(D)	14.1	11.6
REMAINDER COMPANIES	26.5	25.4	1.0	1.3	1.1	1.5	1.2	1.2	.9	(D)	(D)	4.5	1.1
INDUSTRY 2293, PADDINGS AND UPHOLSTERY FILLING													
TOTAL	113	120	251.8	5.2	52.9	4.1	8.4	36.4	124.5	5.8	1.9	4.0	128.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.5	5.0	30.2	28.6	27.4	28.1	26.4	28.1	32.3	32.8	56.7	21.6	28.6
NEXT 4 LARGEST COMPANIES	3.5	4.2	16.8	16.9	18.7	17.0	18.1	19.6	17.1	17.1	7.1	21.8	16.2
NEXT 12 LARGEST COMPANIES	10.6	12.5	23.3	23.1	22.8	22.9	24.5	22.4	20.4	13.5	7.2	16.4	25.9
NEXT 30 LARGEST COMPANIES	26.5	25.8	21.2	21.2	21.4	21.8	21.2	20.8	21.7	27.1	25.2	28.0	20.7
REMAINDER COMPANIES	55.8	52.5	8.5	10.1	9.6	10.2	9.8	9.1	8.5	9.5	3.8	12.1	8.6
INDUSTRY 2294, PROCESSED TEXTILE WASTE													
TOTAL	95	99	178.4	3.7	31.2	3.1	6.3	23.1	61.7	5.8	1.9	3.9	117.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.2	6.1	42.5	38.0	37.8	41.7	43.1	43.7	39.1	(D)	(D)	(D)	44.3
NEXT 4 LARGEST COMPANIES	4.2	6.1	17.1	11.3	12.7	8.4	8.3	8.9	13.1	(D)	(D)	(D)	19.2
NEXT 12 LARGEST COMPANIES	12.6	12.1	22.5	17.9	20.1	17.0	17.6	18.2	22.1	16.9	10.0	20.3	22.5
NEXT 30 LARGEST COMPANIES	31.6	30.3	13.6	25.2	23.4	25.0	24.6	23.0	21.3	13.5	8.6	15.9	9.8
REMAINDER COMPANIES	47.4	45.5	4.4	7.7	6.1	7.9	6.4	6.1	4.5	3.8	1.7	4.8	4.3
INDUSTRY 2295, COATED FABRICS, NOT RUBBERIZED													
TOTAL	175	191	1 059.0	13.6	182.3	9.9	20.9	117.1	413.1	26.0	7.8	18.2	650.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	4.7	39.3	33.0	38.5	32.5	34.0	40.0	43.6	50.5	71.9	41.4	36.3
NEXT 4 LARGEST COMPANIES	2.3	3.7	17.1	14.5	15.2	15.3	15.9	17.0	13.1	(D)	(D)	(D)	19.9
NEXT 12 LARGEST COMPANIES	6.9	8.9	17.6	17.3	16.7	15.7	15.7	14.3	17.5	(D)	(D)	(D)	17.7
NEXT 30 LARGEST COMPANIES	17.1	16.2	15.4	18.5	16.4	19.0	18.0	15.3	15.0	12.2	2.2	16.4	15.7
REMAINDER COMPANIES	71.4	66.5	10.6	16.6	13.2	17.6	16.4	13.3	10.8	15.8	15.8	15.8	10.4
INDUSTRY 2296, TIRE CORD AND FABRIC													
TOTAL	8	20	1 013.2	9.6	94.7	8.5	16.2	78.1	242.1	7.0	.5	6.6	779.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	50.0	65.0	79.9	85.3	84.6	85.7	84.4	85.6	85.0	75.8	(D)	74.9	77.7
NEXT 4 LARGEST COMPANIES	50.0	35.0	20.1	14.7	15.4	14.3	15.6	14.4	15.0	24.2	(D)	25.1	22.3
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2297, NONWOVEN FABRICS													
TOTAL	81	100	864.4	13.0	139.8	10.4	21.1	100.2	386.0	41.1	10.5	30.5	489.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.9	10.0	35.9	27.2	28.6	27.1	26.8	29.1	41.5	34.3	(D)	26.2	31.3
NEXT 4 LARGEST COMPANIES	4.9	10.0	18.6	21.6	23.7	21.5	22.4	23.7	18.3	15.0	(D)	19.3	19.6
NEXT 12 LARGEST COMPANIES	14.8	17.0	26.0	24.9	24.8	25.7	27.2	26.1	22.1	39.4	(D)	42.0	29.0
NEXT 30 LARGEST COMPANIES	37.0	31.0	17.0	21.1	19.5	21.7	19.7	18.3	16.0	9.0	6.8	9.8	17.4
REMAINDER COMPANIES	38.3	32.0	2.5	5.2	3.4	4.0	3.8	2.8	2.2	2.3	1.1	2.7	2.6
INDUSTRY 2298, CORDAGE AND TWINE													
TOTAL	151	171	332.2	9.5	79.5	7.9	14.2	53.7	173.8	6.5	1.7	4.9	162.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	6.4	33.5	32.5	31.2	32.5	30.0	28.9	38.7	21.1	15.0	23.2	29.5
NEXT 4 LARGEST COMPANIES	2.6	4.1	16.3	13.8	16.3	12.9	14.1	16.8	14.4	15.6	(D)	15.8	18.5
NEXT 12 LARGEST COMPANIES	7.9	9.4	23.4	23.1	22.3	23.9	23.8	24.5	21.6	28.4	(D)	25.5	24.0
NEXT 30 LARGEST COMPANIES	19.9	20.5	18.1	20.6	20.7	20.4	21.6	20.3	18.0	22.7	22.6	22.7	18.1
REMAINDER COMPANIES	66.9	59.6	8.6	9.9	9.3	10.2	10.5	9.5	7.2	12.2	10.6	12.7	9.9

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2299, TEXTILE GOODS, NEC													
TOTAL	432	436	231.1	6.7	56.6	5.7	11.8	41.8	109.2	13.0	3.5	9.4	124.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	1.1	21.3	16.2	17.9	16.9	16.5	19.2	21.0	15.0	4.1	19.1	21.5
NEXT 4 LARGEST COMPANIES	.9	.9	13.3	7.4	7.2	6.5	6.7	7.1	8.9	28.9	39.6	24.9	17.8
NEXT 12 LARGEST COMPANIES	2.8	3.0	13.4	15.1	15.8	15.0	15.4	16.0	14.0	19.5	22.5	18.4	13.1
NEXT 30 LARGEST COMPANIES	6.9	6.9	17.1	19.4	19.3	19.6	19.7	19.2	17.5	9.6	6.6	10.8	16.6
REMAINDER COMPANIES	88.4	88.1	34.8	42.0	39.7	42.1	41.6	38.5	38.5	27.0	27.2	26.9	31.1
INDUSTRY 2311, MEN'S AND BOYS' SUITS AND COATS													
TOTAL	619	737	2 767.5	98.7	822.2	86.2	152.9	645.5	1 574.4	25.8	5.8	20.0	1 232.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	3.4	21.0	15.9	18.3	15.2	15.4	18.0	20.8	15.4	16.9	15.0	22.3
NEXT 4 LARGEST COMPANIES	.6	3.4	11.3	11.5	10.7	12.0	11.1	11.6	12.3	11.9	13.8	11.4	10.3
NEXT 12 LARGEST COMPANIES	1.9	6.1	15.2	11.5	12.1	11.3	11.9	11.9	14.1	11.9	10.4	12.3	15.8
NEXT 30 LARGEST COMPANIES	4.8	5.8	19.1	17.2	17.0	15.9	16.1	16.8	19.3	26.4	26.1	26.5	19.7
REMAINDER COMPANIES	91.9	81.3	33.3	44.8	41.9	45.6	45.3	41.7	33.5	34.3	32.9	34.7	31.9
INDUSTRY 2321, MEN'S, BOYS' SHIRTS, NIGHTWEAR													
TOTAL	669	928	2 934.6	114.7	711.3	103.0	184.1	569.9	1 445.7	25.9	6.2	19.7	1 539.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	5.5	17.3	13.3	13.7	13.3	12.9	13.8	15.8	11.3	(D)	12.9	19.1
NEXT 4 LARGEST COMPANIES	.6	3.4	10.2	8.2	8.4	8.5	9.3	8.9	9.4	9.9	(D)	12.0	11.1
NEXT 12 LARGEST COMPANIES	1.8	6.9	20.2	14.7	15.7	14.0	14.1	15.0	22.2	22.8	24.1	22.4	19.5
NEXT 30 LARGEST COMPANIES	4.5	9.4	17.1	16.7	16.6	16.5	16.2	16.4	15.0	12.5	11.6	12.8	17.9
REMAINDER COMPANIES	92.5	74.8	35.3	47.2	45.5	47.8	47.5	45.8	37.6	43.5	54.9	39.9	32.4
INDUSTRY 2322, MEN'S AND BOYS' UNDERWEAR													
TOTAL	56	76	419.8	15.1	92.2	13.7	23.8	79.0	218.2	2.6	.5	2.0	205.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	7.1	18.4	61.4	46.7	45.9	44.8	43.6	45.1	59.3	51.9	26.6	58.3	64.3
NEXT 4 LARGEST COMPANIES	7.1	15.8	20.4	26.6	28.2	28.6	30.3	31.4	23.4	28.9	(D)	21.5	16.6
NEXT 12 LARGEST COMPANIES	21.4	15.8	13.2	18.4	17.7	18.5	18.3	16.2	12.6	5.4	(D)	5.6	14.3
NEXT 30 LARGEST COMPANIES	53.6	42.1	5.0	8.3	8.2	8.1	7.7	7.3	5.0	13.8	10.9	14.5	4.8
REMAINDER COMPANIES	10.7	7.9	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
INDUSTRY 2323, MEN'S AND BOYS' NECKWEAR													
TOTAL	199	207	223.8	6.3	57.5	5.1	8.7	33.4	117.5	2.6	.8	1.8	108.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.0	2.4	27.2	27.8	28.4	26.9	27.1	25.9	29.3	40.2	34.2	42.8	25.4
NEXT 4 LARGEST COMPANIES	2.0	1.9	12.1	5.2	8.7	5.0	5.5	6.6	11.3	16.4	7.4	20.4	13.2
NEXT 12 LARGEST COMPANIES	6.0	6.3	19.1	17.1	16.5	16.8	16.8	16.2	17.7	29.6	50.8	20.3	20.7
NEXT 30 LARGEST COMPANIES	15.1	16.4	25.6	27.2	27.3	27.7	28.7	29.1	25.3	7.4	5.9	8.0	25.7
REMAINDER COMPANIES	74.9	72.9	15.9	22.7	19.1	23.7	22.0	22.2	16.3	6.5	1.8	8.5	15.2
INDUSTRY 2327, MEN'S AND BOYS' SEPARATE TROUSERS													
TOTAL	404	514	1 718.0	70.9	474.0	61.9	107.6	372.0	845.6	22.8	5.0	17.9	878.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	5.8	26.4	19.6	20.2	18.5	19.8	20.5	24.2	10.3	10.9	10.2	30.3
NEXT 4 LARGEST COMPANIES	1.0	3.8	15.6	15.0	15.6	14.7	13.6	14.7	12.6	(D)	(D)	(D)	16.6
NEXT 12 LARGEST COMPANIES	3.0	8.2	19.0	15.2	16.1	15.5	16.2	16.6	18.4	(D)	(D)	(D)	19.5
NEXT 30 LARGEST COMPANIES	7.4	11.0	17.0	17.8	18.0	17.9	18.4	17.8	17.5	22.8	32.0	20.3	16.8
REMAINDER COMPANIES	87.6	71.3	22.0	32.4	30.1	33.4	32.0	30.4	27.3	28.2	29.8	27.7	16.8
INDUSTRY 2328, MEN'S AND BOYS' WORK CLOTHING													
TOTAL	347	656	3 641.9	113.7	719.4	101.6	183.7	589.9	1 765.4	44.1	13.8	30.3	1 913.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	16.0	48.9	29.4	31.0	29.4	29.9	31.8	49.6	57.9	64.6	54.8	47.9
NEXT 4 LARGEST COMPANIES	1.2	7.8	10.6	11.8	11.9	11.7	11.2	11.9	9.0	8.0	5.9	8.9	12.6
NEXT 12 LARGEST COMPANIES	3.5	10.1	13.8	15.3	15.3	14.9	14.8	13.8	12.5	10.9	11.2	10.8	15.1
NEXT 30 LARGEST COMPANIES	8.6	13.9	12.6	17.2	16.3	17.5	17.4	16.8	12.8	6.6	4.3	7.6	12.4
REMAINDER COMPANIES	85.6	52.3	14.1	26.3	25.5	26.6	26.6	25.6	16.2	16.6	14.0	17.9	12.1
INDUSTRY 2329, MEN'S AND BOYS' CLOTHING, NEC													
TOTAL	553	632	1 065.1	43.8	285.8	38.1	67.4	219.3	542.8	20.2	5.9	14.3	530.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	2.4	12.2	6.1	6.4	5.1	4.8	4.8	9.0	13.4	(D)	9.4	14.4
NEXT 4 LARGEST COMPANIES	.7	1.1	9.3	5.4	5.9	5.2	5.6	5.7	7.2	2.5	(D)	3.5	12.5
NEXT 12 LARGEST COMPANIES	2.2	5.9	16.9	12.1	12.6	12.0	12.4	12.5	14.5	17.8	(D)	8.3	19.4
NEXT 30 LARGEST COMPANIES	5.4	7.1	20.9	17.8	18.9	17.1	17.3	17.8	19.4	12.9	7.1	15.3	22.6
REMAINDER COMPANIES	91.0	83.5	40.7	58.5	56.1	60.7	59.9	59.2	50.0	53.4	29.0	63.5	31.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2331, WOMEN'S, MISSES' BLOUSES, WAISTS													
TOTAL	1 292	1 415	2 333.6	83.3	569.0	73.8	125.0	424.3	1 192.5	24.0	4.9	19.2	1 164.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.9	11.7	3.7	5.0	3.1	3.2	4.0	10.2	5.9	(D)	6.7	14.2
NEXT 4 LARGEST COMPANIES	.3	.7	6.4	2.6	3.7	2.3	2.4	2.9	5.0	3.6	(D)	4.1	7.9
NEXT 12 LARGEST COMPANIES	.9	2.6	11.9	6.8	7.5	6.6	7.2	7.2	8.7	15.2	21.5	13.6	15.3
NEXT 30 LARGEST COMPANIES	2.3	4.0	16.8	7.6	9.1	6.8	6.9	6.6	15.3	15.3	12.7	15.9	18.0
REMAINDER COMPANIES	96.1	91.7	53.2	79.2	74.6	81.3	80.3	79.2	60.8	60.0	61.4	59.7	44.5
INDUSTRY 2335, WOMEN'S AND MISSES' DRESSES													
TOTAL	6 753	6 953	4 188.6	175.3	1 197.1	153.0	261.0	882.5	2 233.7	45.2	10.8	34.5	1 972.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.6	7.5	2.9	4.0	2.4	2.6	2.6	5.2	5.8	(D)	5.8	10.4
NEXT 4 LARGEST COMPANIES	.1	.4	4.2	2.4	2.9	2.2	2.4	2.4	3.3	1.2	(D)	1.5	5.1
NEXT 12 LARGEST COMPANIES	.2	.6	7.5	3.9	4.5	3.4	3.3	3.9	5.5	2.0	(D)	1.9	9.8
NEXT 30 LARGEST COMPANIES	.4	.8	8.9	5.7	6.2	5.5	6.0	5.9	7.4	9.2	7.7	9.7	10.5
REMAINDER COMPANIES	99.3	97.6	71.8	85.2	82.4	86.4	85.6	85.2	78.6	81.8	83.9	81.2	64.2
INDUSTRY 2337, WOMEN'S, MISSES' SUITS AND COATS													
TOTAL	1 558	1 672	2 912.9	84.7	654.0	72.7	123.3	468.5	1 429.6	22.0	7.5	14.5	1 481.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	1.9	15.2	8.1	9.0	6.9	6.7	7.0	12.4	9.3	6.4	10.9	18.3
NEXT 4 LARGEST COMPANIES	.3	.8	5.1	2.9	3.0	2.7	2.7	2.8	4.7	10.7	16.9	7.4	5.3
NEXT 12 LARGEST COMPANIES	.8	1.6	10.4	3.8	4.7	3.6	3.7	4.5	10.4	15.0	32.7	5.7	10.4
NEXT 30 LARGEST COMPANIES	1.9	3.1	14.3	9.7	10.4	8.9	9.1	9.0	12.3	15.4	6.6	20.0	16.3
REMAINDER COMPANIES	96.8	92.7	55.0	75.6	72.9	77.9	77.8	76.7	60.1	49.6	37.4	55.9	49.7
INDUSTRY 2339, WOMEN'S, MISSES' OUTERWEAR, NEC													
TOTAL	1 625	1 794	3 285.1	104.1	732.7	87.9	151.5	528.9	1 574.0	42.4	13.8	28.5	1 728.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	2.2	13.6	10.3	10.1	10.1	10.1	9.9	11.7	8.0	(D)	9.7	14.8
NEXT 4 LARGEST COMPANIES	.2	1.3	6.7	4.6	5.1	4.4	4.4	5.0	6.1	(D)	(D)	4.6	7.2
NEXT 12 LARGEST COMPANIES	.7	1.3	12.9	5.8	6.8	4.7	5.0	5.3	10.4	(D)	3.7	13.2	15.7
NEXT 30 LARGEST COMPANIES	1.8	3.3	16.9	10.0	11.3	9.4	10.0	10.1	14.9	9.2	3.6	11.9	18.7
REMAINDER COMPANIES	96.9	91.8	49.9	69.3	66.6	71.4	70.5	69.6	56.9	59.3	56.6	60.6	43.6
INDUSTRY 2341, WOMEN'S AND CHILDREN'S UNDERWEAR													
TOTAL	548	698	1 780.8	72.9	472.1	63.4	112.6	359.8	915.3	18.7	5.5	13.2	878.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	4.2	21.5	16.9	17.6	17.2	17.6	18.6	19.9	26.6	(D)	22.6	23.1
NEXT 4 LARGEST COMPANIES	.7	2.6	7.7	6.6	7.0	6.5	7.0	6.7	7.6	3.6	(D)	4.9	8.0
NEXT 12 LARGEST COMPANIES	2.2	4.9	13.5	14.6	14.7	14.5	14.9	14.8	14.2	15.4	(D)	12.2	12.8
NEXT 30 LARGEST COMPANIES	5.5	11.0	21.5	19.4	19.5	18.7	18.9	18.3	20.4	17.5	13.8	19.0	22.7
REMAINDER COMPANIES	90.9	77.4	35.8	42.4	41.2	43.1	41.6	41.7	37.9	37.0	26.5	41.3	33.3
INDUSTRY 2342, BRASSIERES AND ALLIED GARMENTS													
TOTAL	150	180	650.0	18.9	141.1	15.2	27.0	89.1	334.4	4.2	.8	3.5	318.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.7	7.8	36.4	27.4	32.1	26.7	27.3	31.3	38.4	46.3	48.3	45.8	34.5
NEXT 4 LARGEST COMPANIES	2.7	5.6	15.8	15.8	14.6	15.8	15.4	13.8	17.0	14.9	30.9	11.3	15.1
NEXT 12 LARGEST COMPANIES	8.0	11.7	25.0	24.4	23.2	23.3	22.6	21.9	21.6	16.7	2.9	19.7	28.4
NEXT 30 LARGEST COMPANIES	20.0	18.3	15.1	18.0	17.6	18.9	19.1	19.0	15.1	13.7	9.8	14.6	15.2
REMAINDER COMPANIES	66.7	56.7	7.7	14.5	12.6	15.4	15.6	13.9	7.9	8.5	8.2	8.6	6.7
INDUSTRY 2351, MILLINERY													
TOTAL	151	151	75.1	2.7	20.2	2.2	3.7	13.7	32.8	.2	(Z)	.2	42.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	2.6	18.7	16.4	15.4	15.8	14.3	15.1	11.9	8.2	-	8.3	23.8
NEXT 4 LARGEST COMPANIES	2.6	2.6	9.1	9.6	9.3	10.8	12.4	10.6	12.5	11.8	-	11.8	6.3
NEXT 12 LARGEST COMPANIES	7.9	7.9	20.4	16.4	18.3	15.8	15.3	15.5	21.5	26.5	-	26.6	19.8
NEXT 30 LARGEST COMPANIES	19.9	19.9	30.6	30.1	31.5	30.6	32.1	32.7	32.3	31.2	100.0	30.8	29.4
REMAINDER COMPANIES	66.9	66.9	21.2	27.5	25.4	26.9	25.9	26.1	21.7	22.4	-	22.5	20.7
INDUSTRY 2352, HATS AND CAPS, EXCEPT MILLINERY													
TOTAL	230	258	284.8	12.4	85.1	11.1	20.1	65.3	152.7	3.9	1.2	2.7	136.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	5.0	27.1	24.1	24.8	24.3	26.5	25.2	29.0	40.9	71.6	26.9	27.0
NEXT 4 LARGEST COMPANIES	1.7	5.8	15.8	13.5	13.8	14.0	13.1	15.0	16.5	10.3	(D)	13.2	14.7
NEXT 12 LARGEST COMPANIES	5.2	6.6	19.7	23.3	21.2	23.0	22.6	21.5	17.0	15.5	(D)	18.8	22.0
NEXT 30 LARGEST COMPANIES	13.0	12.4	20.3	18.7	20.1	18.1	18.1	18.5	19.8	21.4	10.1	26.6	20.8
REMAINDER COMPANIES	78.3	70.2	17.1	20.5	20.1	20.7	19.8	19.8	17.8	11.8	5.7	14.6	15.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2361, CHILDREN'S DRESSES AND BLOUSES													
TOTAL	455	519	824.7	35.2	228.4	30.4	52.5	169.7	444.6	6.4	1.2	5.2	388.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	3.1	15.4	11.9	11.8	12.2	12.0	12.1	15.4	9.4	(D)	8.8	14.9
NEXT 4 LARGEST COMPANIES	.9	2.1	7.9	7.4	7.6	7.3	7.6	7.7	8.3	7.3	(D)	6.5	7.6
NEXT 12 LARGEST COMPANIES	2.6	3.9	17.3	8.5	9.2	8.1	7.7	7.6	12.6	16.3	5.8	18.8	23.3
NEXT 30 LARGEST COMPANIES	6.6	10.0	23.4	19.0	20.7	17.8	19.7	18.7	22.7	16.3	20.1	15.4	24.4
REMAINDER COMPANIES	89.0	80.9	36.0	53.2	50.7	54.6	53.0	53.8	41.0	50.7	51.3	50.6	29.8
INDUSTRY 2363, CHILDREN'S COATS AND SUITS													
TOTAL	108	120	173.8	6.7	45.8	5.7	9.7	35.1	90.2	1.3	.2	1.1	86.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.7	5.8	31.5	26.9	27.2	26.3	28.0	26.6	31.3	13.6	2.7	15.4	32.0
NEXT 4 LARGEST COMPANIES	3.7	3.3	15.9	8.5	11.2	8.6	8.8	9.5	14.3	13.5	(D)	14.7	18.0
NEXT 12 LARGEST COMPANIES	11.1	16.7	24.9	23.6	23.2	22.3	21.8	22.5	23.9	23.2	(D)	21.7	25.7
NEXT 30 LARGEST COMPANIES	27.8	25.8	20.0	24.0	24.0	25.4	24.1	25.7	20.5	34.2	38.4	33.5	19.4
REMAINDER COMPANIES	53.7	48.3	7.7	17.0	14.4	17.4	17.3	15.8	10.0	15.5	20.0	14.8	5.0
INDUSTRY 2369, CHILDREN'S OUTERWEAR, NEC													
TOTAL	307	363	718.8	29.3	184.9	25.1	45.4	144.1	344.4	6.7	1.1	5.6	364.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	5.2	23.7	20.6	20.4	21.6	21.6	22.0	22.7	16.3	9.5	17.7	25.0
NEXT 4 LARGEST COMPANIES	1.3	3.6	11.9	9.6	9.9	9.2	8.8	10.2	10.8	16.3	(D)	18.7	12.9
NEXT 12 LARGEST COMPANIES	3.9	6.6	21.0	14.0	14.4	13.5	14.0	13.0	18.1	25.4	(D)	22.4	24.0
NEXT 30 LARGEST COMPANIES	9.8	9.9	19.5	19.1	20.4	18.5	19.6	19.2	19.3	15.7	22.7	14.3	19.6
REMAINDER COMPANIES	83.7	74.7	23.9	36.7	35.0	37.2	36.0	35.5	29.2	26.4	23.4	26.9	18.5
INDUSTRY 2371, FUR GOODS													
TOTAL	620	620	383.4	4.0	51.5	3.2	5.1	36.2	112.8	.5	.2	.3	273.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	.6	10.9	6.7	7.8	6.1	6.9	7.2	8.1	7.4	6.6	7.9	12.2
NEXT 4 LARGEST COMPANIES	.6	.6	7.7	5.2	4.8	5.4	4.1	4.9	5.2	3.2	2.4	3.6	8.6
NEXT 12 LARGEST COMPANIES	1.9	1.9	12.6	9.5	10.8	7.6	8.0	9.4	15.0	3.8	2.4	4.6	11.8
NEXT 30 LARGEST COMPANIES	4.8	4.8	19.7	14.3	15.9	13.4	15.5	15.4	20.3	17.4	18.7	16.7	19.3
REMAINDER COMPANIES	91.9	91.9	49.1	64.2	60.8	67.4	65.5	63.1	51.4	68.2	69.9	67.2	48.2
INDUSTRY 2381, FABRIC DRESS AND WORK GLOVES													
TOTAL	100	132	312.4	10.9	69.0	9.9	18.0	56.3	160.9	3.5	.4	3.1	153.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.0	11.4	44.5	35.1	41.4	34.7	36.8	39.4	46.7	(D)	(D)	(D)	42.3
NEXT 4 LARGEST COMPANIES	4.0	12.1	18.6	17.6	14.8	17.7	16.3	16.0	18.4	(D)	(D)	(D)	18.7
NEXT 12 LARGEST COMPANIES	12.0	15.2	19.3	20.7	20.4	20.9	20.1	20.7	18.4	(D)	3.8	(D)	20.7
NEXT 30 LARGEST COMPANIES	30.0	23.5	13.4	19.4	17.2	19.5	20.1	17.5	12.6	14.2	28.8	12.3	14.0
REMAINDER COMPANIES	50.0	37.9	4.1	7.2	6.2	7.2	6.7	6.4	3.9	2.8	4.0	2.6	4.3
INDUSTRY 2384, ROBES AND DRESSING GOWNS													
TOTAL	137	151	288.3	9.5	64.3	8.2	14.7	47.8	139.5	3.3	.9	2.5	152.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.9	5.3	25.3	17.0	19.0	17.7	18.8	20.7	21.8	29.1	64.3	16.8	29.4
NEXT 4 LARGEST COMPANIES	2.9	5.3	18.3	13.1	12.8	12.4	12.2	12.8	12.3	7.7	(D)	6.4	22.7
NEXT 12 LARGEST COMPANIES	8.8	10.6	25.5	24.0	24.5	23.7	23.5	22.6	28.5	20.1	(D)	26.1	22.8
NEXT 30 LARGEST COMPANIES	21.9	20.5	21.1	23.2	23.6	22.5	22.6	21.8	22.3	22.6	4.8	28.8	20.3
REMAINDER COMPANIES	63.5	58.3	9.8	22.7	20.2	23.7	22.9	22.1	15.1	20.5	16.7	21.9	4.8
INDUSTRY 2385, WATERPROOF OUTERGARMENTS													
TOTAL	157	167	348.8	12.0	89.4	10.1	17.9	61.6	194.4	5.6	2.1	3.5	157.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.5	7.2	41.0	31.8	36.2	30.2	31.6	34.7	42.7	(D)	3.5	(D)	39.4
NEXT 4 LARGEST COMPANIES	2.5	3.0	10.7	10.1	10.0	9.3	10.0	9.5	9.8	(D)	(D)	(D)	11.2
NEXT 12 LARGEST COMPANIES	7.6	7.2	18.5	13.1	14.1	12.8	12.6	13.1	16.6	26.8	(D)	31.2	21.3
NEXT 30 LARGEST COMPANIES	19.1	18.6	19.7	22.5	20.5	22.9	22.4	19.9	18.4	34.4	19.0	43.5	20.9
REMAINDER COMPANIES	68.2	64.1	10.1	22.6	19.2	24.8	23.4	22.8	12.5	3.9	1.4	5.3	7.2
INDUSTRY 2386, LEATHER AND SHEEP LINED CLOTHING													
TOTAL	236	239	214.1	6.7	54.7	5.9	10.4	41.1	94.8	1.6	.6	.9	122.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	2.5	16.4	11.8	11.9	11.3	10.9	10.6	14.3	35.2	66.9	14.3	17.7
NEXT 4 LARGEST COMPANIES	1.7	1.7	11.4	11.6	11.3	11.7	11.4	11.0	11.2	12.5	-	20.8	11.4
NEXT 12 LARGEST COMPANIES	5.1	5.0	22.4	18.4	20.0	18.2	19.5	19.4	21.2	10.0	3.7	14.2	24.0
NEXT 30 LARGEST COMPANIES	12.7	13.0	27.5	29.1	28.6	29.0	29.4	28.8	28.7	22.9	15.2	27.9	26.6
REMAINDER COMPANIES	78.8	77.8	22.4	29.1	28.2	29.8	28.8	30.2	24.5	19.4	14.2	22.8	20.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2387, APPAREL BELTS													
TOTAL	281	284	286.9	9.4	76.1	7.3	12.6	44.6	150.3	2.5	.3	2.2	141.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	2.1	20.8	16.7	16.9	14.6	17.1	15.5	22.8	14.7	3.2	16.0	18.9
NEXT 4 LARGEST COMPANIES	1.4	1.4	11.5	9.4	11.7	8.6	8.5	8.0	10.5	9.4	11.5	9.2	12.6
NEXT 12 LARGEST COMPANIES	4.3	4.2	18.7	15.5	15.7	14.8	16.2	14.3	16.1	21.9	29.0	21.1	21.1
NEXT 30 LARGEST COMPANIES	10.7	10.9	20.0	22.3	21.6	23.1	22.0	23.5	20.3	23.5	17.1	24.2	19.6
REMAINDER COMPANIES	82.2	81.3	29.0	36.0	34.2	38.8	36.3	38.7	30.3	30.5	39.3	29.5	27.8
INDUSTRY 2389, APPAREL AND ACCESSORIES, NEC													
TOTAL	304	311	199.0	7.8	54.0	6.5	11.2	36.9	105.4	4.2	1.0	3.2	96.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	1.6	31.4	18.1	19.8	19.5	21.3	20.0	28.3	26.3	1.1	33.7	34.7
NEXT 4 LARGEST COMPANIES	1.3	1.9	13.3	14.2	14.2	12.6	13.6	13.0	13.3	16.2	11.6	17.6	13.4
NEXT 12 LARGEST COMPANIES	3.9	4.8	17.1	14.8	16.5	14.5	15.5	15.9	19.2	19.0	16.0	19.9	15.3
NEXT 30 LARGEST COMPANIES	9.9	10.0	16.1	19.6	20.1	20.0	20.5	21.9	17.1	4.9	4.4	5.1	15.0
REMAINDER COMPANIES	83.6	81.7	22.0	33.3	29.4	33.3	29.1	29.2	22.1	33.5	67.0	23.7	21.5
INDUSTRY 2391, CURTAINS AND DRAPERIES													
TOTAL	1 650	1 712	1 013.1	31.7	224.7	27.2	47.9	163.6	407.3	7.2	1.6	5.6	605.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.5	25.7	15.6	15.5	15.5	15.7	17.2	17.5	14.8	36.1	8.6	31.4
NEXT 4 LARGEST COMPANIES	.2	.8	10.0	7.4	7.5	7.4	7.9	7.8	8.3	10.7	(D)	12.5	11.1
NEXT 12 LARGEST COMPANIES	.7	1.8	13.2	14.2	13.6	14.4	14.9	14.5	14.5	16.7	(D)	17.9	12.3
NEXT 30 LARGEST COMPANIES	1.8	2.0	12.7	13.5	13.7	13.3	13.4	13.3	14.2	16.4	8.4	18.8	11.6
REMAINDER COMPANIES	97.0	93.9	38.4	49.4	49.6	49.4	48.1	47.3	45.6	41.5	39.1	42.2	33.6
INDUSTRY 2392, HOUSEFURNISHINGS, NEC													
TOTAL	980	1 051	2 294.0	47.5	366.4	39.8	75.4	260.0	782.9	26.9	6.3	20.6	1 541.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.9	22.0	13.6	15.2	13.9	14.9	17.3	12.8	18.0	12.3	19.7	27.2
NEXT 4 LARGEST COMPANIES	.4	.9	11.4	6.7	6.8	6.3	6.2	6.6	8.7	7.6	10.4	6.8	12.4
NEXT 12 LARGEST COMPANIES	1.2	3.0	14.5	14.3	14.1	15.1	15.7	14.6	16.2	18.1	19.3	17.8	13.9
NEXT 30 LARGEST COMPANIES	3.1	4.3	17.6	16.4	17.2	15.4	15.6	15.4	18.7	18.5	26.0	16.2	17.0
REMAINDER COMPANIES	94.9	91.0	34.5	49.0	46.7	49.3	47.5	46.1	43.6	37.8	31.9	39.6	29.5
INDUSTRY 2393, TEXTILE BAGS													
TOTAL	211	228	321.8	8.2	66.7	6.8	12.9	46.8	122.2	5.8	1.4	4.4	200.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	4.8	27.0	22.6	23.6	23.5	24.7	24.7	24.5	(D)	(D)	(D)	28.5
NEXT 4 LARGEST COMPANIES	1.9	3.1	11.6	8.7	9.5	9.0	9.3	10.1	11.6	(D)	(D)	(D)	11.6
NEXT 12 LARGEST COMPANIES	5.7	7.0	18.7	21.5	20.1	19.6	20.5	20.8	20.5	16.6	23.1	14.6	17.5
NEXT 30 LARGEST COMPANIES	14.2	14.0	25.5	26.4	26.7	26.3	25.3	25.0	26.1	39.2	50.9	35.6	25.3
REMAINDER COMPANIES	76.3	71.1	17.3	20.8	20.1	21.7	20.2	19.5	17.3	15.1	21.7	13.0	17.1
INDUSTRY 2394, CANVAS AND RELATED PRODUCTS													
TOTAL	987	1 003	486.8	13.9	121.6	11.0	19.3	75.1	237.4	8.4	2.2	6.2	254.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.6	16.9	11.0	11.6	9.2	9.3	9.9	17.9	18.6	14.4	20.1	16.7
NEXT 4 LARGEST COMPANIES	.4	.6	8.7	5.6	6.6	5.3	5.6	6.4	5.6	(D)	(D)	(D)	11.2
NEXT 12 LARGEST COMPANIES	1.2	1.5	14.8	13.0	13.4	13.5	13.8	14.0	14.8	(D)	(D)	(D)	15.1
NEXT 30 LARGEST COMPANIES	3.0	3.3	15.1	16.4	15.9	16.9	17.6	16.4	14.4	13.7	14.9	13.3	15.6
REMAINDER COMPANIES	94.9	94.0	44.6	54.0	52.6	55.1	53.7	53.2	47.3	49.4	53.9	47.9	41.3
INDUSTRY 2395, PLEATING AND STITCHING													
TOTAL	770	778	620.2	16.1	130.9	13.2	22.9	89.0	281.8	9.3	1.8	7.5	341.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	.8	24.6	10.4	12.9	9.9	10.8	11.6	17.1	9.2	(D)	11.0	30.1
NEXT 4 LARGEST COMPANIES	.5	.8	9.3	4.5	5.1	3.8	4.3	4.5	6.4	28.3	(D)	28.6	11.9
NEXT 12 LARGEST COMPANIES	1.6	1.8	12.4	11.5	12.1	11.3	11.1	11.9	14.1	14.9	6.1	17.0	11.5
NEXT 30 LARGEST COMPANIES	3.9	4.0	15.1	14.5	14.7	14.7	15.2	15.2	15.3	17.3	37.3	12.5	15.1
REMAINDER COMPANIES	93.5	92.7	38.6	59.1	55.2	60.3	58.6	56.8	47.2	30.3	27.9	30.8	31.4
INDUSTRY 2396, AUTOMOTIVE AND APPAREL TRIMMINGS													
TOTAL	686	715	2 166.3	30.9	476.4	26.3	51.7	374.0	1 000.2	36.1	6.4	29.6	1 163.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.5	71.3	58.1	71.2	58.9	61.1	74.2	72.7	(D)	(D)	(D)	70.1
NEXT 4 LARGEST COMPANIES	.6	.8	5.7	5.2	4.0	4.3	4.3	2.9	4.7	(D)	(D)	(D)	6.5
NEXT 12 LARGEST COMPANIES	1.7	3.4	5.6	5.9	4.1	5.6	5.9	3.9	4.9	4.7	2.4	5.2	6.3
NEXT 30 LARGEST COMPANIES	4.4	5.0	5.5	7.5	5.2	7.6	7.0	4.8	5.1	3.5	3.9	3.5	5.8
REMAINDER COMPANIES	92.7	89.2	11.9	23.2	15.5	23.6	21.7	14.3	12.6	8.4	7.7	8.6	11.3

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	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2397, SCHIFFLI MACHINE EMBROIDERIES													
TOTAL	357	363	158.0	6.0	56.3	5.3	10.4	42.5	96.7	3.3	.4	2.9	62.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	1.9	25.6	24.6	23.6	24.5	25.2	22.4	22.7	21.3	11.2	22.8	29.5
NEXT 4 LARGEST COMPANIES	1.1	1.4	10.1	9.1	9.2	8.1	7.9	7.3	11.9	6.9	(D)	7.7	8.3
NEXT 12 LARGEST COMPANIES	3.4	3.9	14.2	14.7	14.2	14.6	14.1	15.7	14.7	30.0	(D)	33.1	13.2
NEXT 30 LARGEST COMPANIES	8.4	8.3	16.8	17.0	16.7	17.1	17.2	17.2	16.1	14.0	20.9	12.9	18.0
REMAINDER COMPANIES	86.0	84.6	33.3	34.6	36.3	35.6	35.6	37.4	34.6	27.8	56.4	23.4	31.0
INDUSTRY 2399, FABRICATED TEXTILE PRODUCTS, NEC													
TOTAL	845	878	1 152.9	31.1	263.8	26.0	47.1	187.4	531.0	19.4	3.7	15.7	630.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	.6	25.7	20.0	26.1	19.8	20.4	26.9	24.4	22.4	9.6	25.4	26.7
NEXT 4 LARGEST COMPANIES	.5	.9	10.9	7.1	7.3	7.1	7.6	7.5	9.0	8.2	9.1	8.0	12.6
NEXT 12 LARGEST COMPANIES	1.4	2.6	15.0	12.4	12.5	12.8	13.6	12.1	15.0	20.3	12.3	22.2	15.1
NEXT 30 LARGEST COMPANIES	3.6	4.2	15.2	18.1	16.8	17.6	17.9	16.9	15.6	14.6	10.3	15.6	15.1
REMAINDER COMPANIES	94.1	91.7	33.2	42.4	37.3	42.7	40.4	36.6	36.0	34.5	58.8	28.9	30.5
INDUSTRY 2411, LOGGING CAMPS, LOG CONTRACTORS													
TOTAL	15 344	15 469	6 230.1	83.3	1 009.0	74.5	127.7	840.1	2 418.7	386.5	56.3	330.2	3 826.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.0	.3	29.0	12.6	16.9	11.7	13.3	16.2	16.8	23.9	15.2	25.4	36.5
NEXT 4 LARGEST COMPANIES	.0	.1	6.7	2.6	3.8	2.3	2.8	3.4	4.4	3.5	(D)	4.0	8.0
NEXT 12 LARGEST COMPANIES	.1	.3	9.5	6.5	7.9	6.1	6.7	7.6	8.6	6.9	(D)	5.7	10.3
NEXT 30 LARGEST COMPANIES	.2	.3	4.9	4.6	4.4	4.2	4.4	4.2	5.5	5.8	3.9	6.1	4.7
REMAINDER COMPANIES	99.7	99.1	49.9	73.7	67.0	75.7	72.7	68.5	64.7	59.9	65.9	58.8	40.6
INDUSTRY 2421, SAWMILLS, PLANING MILLS, GENERAL													
TOTAL	6 966	7 544	10 866.7	175.2	1 943.0	155.8	315.6	1 622.7	4 452.8	535.8	86.8	449.0	6 499.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	2.0	16.6	11.5	14.7	11.4	11.9	15.1	14.7	19.4	11.2	21.0	17.8
NEXT 4 LARGEST COMPANIES	.1	.5	6.4	4.9	6.9	4.9	5.5	7.1	7.3	3.5	1.2	4.0	5.9
NEXT 12 LARGEST COMPANIES	.2	1.4	12.8	8.6	11.6	8.7	9.2	12.1	12.8	8.5	7.4	8.7	12.7
NEXT 30 LARGEST COMPANIES	.4	1.6	12.9	10.3	12.1	10.2	10.7	12.2	12.7	12.8	10.6	13.2	13.1
REMAINDER COMPANIES	99.3	94.5	51.4	64.7	54.8	64.8	62.6	53.4	52.5	55.8	69.5	53.1	50.6
INDUSTRY 2426, HARDWOOD DIMENSION AND FLOORING													
TOTAL	845	890	850.0	29.1	225.0	25.8	49.8	177.5	413.1	35.3	9.3	26.0	442.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	1.7	15.6	11.2	12.1	10.9	12.1	12.0	15.6	12.4	7.8	14.0	15.7
NEXT 4 LARGEST COMPANIES	.5	.9	6.0	6.1	6.4	6.0	6.1	6.5	5.7	3.1	1.5	3.7	6.3
NEXT 12 LARGEST COMPANIES	1.4	2.8	11.5	9.9	10.1	10.1	9.9	10.3	12.3	14.2	14.2	14.2	10.7
NEXT 30 LARGEST COMPANIES	3.6	3.8	17.4	17.3	18.2	17.3	17.4	18.1	16.6	20.9	22.0	20.6	18.4
REMAINDER COMPANIES	94.1	90.8	49.4	55.5	53.2	55.7	54.5	53.1	49.8	49.3	54.6	47.4	48.9
INDUSTRY 2429, SPECIAL PRODUCT SAWMILLS, NEC													
TOTAL	522	566	252.6	7.0	60.3	6.1	10.4	48.8	109.1	13.1	3.9	9.2	137.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.8	10.7	8.4	10.6	7.9	8.5	9.9	9.8	11.7	24.0	6.5	11.9
NEXT 4 LARGEST COMPANIES	.8	2.7	8.6	8.9	8.1	8.9	8.8	8.2	5.2	3.8	2.9	4.2	8.8
NEXT 12 LARGEST COMPANIES	2.3	3.0	16.4	13.9	14.7	13.9	13.7	15.2	12.9	18.3	15.0	19.7	17.5
NEXT 30 LARGEST COMPANIES	5.7	7.4	21.0	18.1	20.3	18.3	17.0	20.3	21.0	18.3	18.6	18.1	22.3
REMAINDER COMPANIES	90.4	85.2	43.4	50.7	46.2	51.0	51.9	46.4	51.2	47.9	39.5	51.5	39.5
INDUSTRY 2431, MILLWORK													
TOTAL	2 209	2 333	3 928.1	68.6	742.2	56.6	108.4	542.0	1 497.9	81.0	27.6	53.3	2 460.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.0	13.9	10.1	12.4	10.4	9.8	13.5	13.0	12.5	14.4	11.6	14.2
NEXT 4 LARGEST COMPANIES	.2	.7	5.8	4.5	4.5	4.7	4.7	4.9	5.2	3.0	.6	4.2	6.2
NEXT 12 LARGEST COMPANIES	.5	1.6	11.6	10.9	11.8	11.3	11.8	13.0	13.3	9.0	7.1	9.9	10.6
NEXT 30 LARGEST COMPANIES	1.4	2.3	15.0	14.7	14.1	14.8	15.2	14.4	14.6	22.1	27.9	19.1	15.3
REMAINDER COMPANIES	97.7	94.4	53.7	59.8	57.2	58.8	58.5	54.3	53.8	53.4	49.9	55.2	53.7
INDUSTRY 2434, WOOD KITCHEN CABINETS													
TOTAL	2 541	2 583	1 590.8	46.2	481.1	38.7	72.3	352.3	868.6	36.7	11.3	25.5	730.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.0	13.9	10.0	9.6	9.9	10.0	10.1	12.8	9.5	11.2	8.7	15.1
NEXT 4 LARGEST COMPANIES	.2	.4	7.1	5.7	5.2	6.0	6.3	5.3	6.9	6.6	10.2	5.1	7.4
NEXT 12 LARGEST COMPANIES	.5	.7	11.9	8.9	10.5	9.0	9.2	10.6	12.1	10.2	7.6	11.3	11.6
NEXT 30 LARGEST COMPANIES	1.2	1.4	11.4	12.6	12.8	12.6	12.3	12.8	12.0	9.9	9.2	10.1	10.8
REMAINDER COMPANIES	98.0	96.6	55.6	62.9	62.0	62.4	62.2	61.2	56.2	63.8	61.8	64.7	55.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2435, HARDWOOD VENEER AND PLYWOOD													
TOTAL	274	321	1 250.4	22.3	211.5	19.1	37.9	162.0	420.2	29.6	3.7	25.9	838.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.5	5.3	27.0	12.7	15.8	12.4	12.1	15.8	17.6	15.3	15.6	15.2	31.8
NEXT 4 LARGEST COMPANIES	1.5	3.1	12.7	6.5	7.5	6.4	6.7	7.8	9.8	(D)	-	(D)	13.9
NEXT 12 LARGEST COMPANIES	4.4	5.0	19.8	14.4	16.8	13.7	13.3	16.6	19.2	(D)	10.4	(D)	20.3
NEXT 30 LARGEST COMPANIES	10.9	12.5	18.1	23.2	23.0	23.2	23.8	22.6	20.8	24.9	32.7	23.8	16.9
REMAINDER COMPANIES	81.8	74.1	22.4	43.3	36.9	44.3	44.1	37.1	32.7	19.9	41.3	16.9	17.2
INDUSTRY 2436, SOFTWOOD VENEER AND PLYWOOD													
TOTAL	129	256	3 804.8	46.2	634.6	41.9	89.4	556.9	1 583.7	105.6	10.6	95.1	2 231.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.1	27.0	38.1	35.1	36.2	35.1	35.7	36.1	40.7	51.1	42.9	52.0	36.0
NEXT 4 LARGEST COMPANIES	3.1	12.1	15.1	13.9	13.1	14.0	13.6	13.6	16.1	4.1	3.2	4.2	14.7
NEXT 12 LARGEST COMPANIES	9.3	12.9	18.7	19.3	19.2	19.1	19.5	19.1	16.8	17.5	6.0	18.7	19.7
NEXT 30 LARGEST COMPANIES	23.3	16.0	19.1	20.4	21.1	20.5	20.7	21.2	18.8	16.3	28.9	14.9	19.5
REMAINDER COMPANIES	61.2	32.0	9.1	11.4	10.4	11.2	10.5	10.0	7.6	11.1	18.9	10.2	10.1
INDUSTRY 2439, STRUCTURAL WOOD MEMBERS, NEC													
TOTAL	620	656	807.7	13.8	147.0	11.0	20.8	101.6	330.0	19.7	5.4	14.4	484.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.4	15.7	10.2	11.6	10.1	9.6	12.3	14.9	17.4	22.2	(D)	16.4
NEXT 4 LARGEST COMPANIES	.6	.8	5.1	3.3	4.4	3.6	3.8	5.1	5.8	2.6	.1	(D)	4.5
NEXT 12 LARGEST COMPANIES	1.9	2.3	10.6	9.3	10.2	9.2	10.2	10.5	8.7	8.2	5.3	9.3	12.0
NEXT 30 LARGEST COMPANIES	4.8	6.7	16.2	16.4	18.1	16.7	16.9	17.9	17.4	16.8	16.6	16.8	15.4
REMAINDER COMPANIES	91.9	87.8	52.4	60.8	55.8	60.5	59.5	54.1	53.1	55.0	55.7	54.7	51.7
INDUSTRY 2441, NAILED WOOD BOXES AND SHOOK													
TOTAL	391	396	263.3	8.6	68.6	7.5	13.7	53.6	116.2	5.4	1.3	4.1	147.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.3	14.7	11.6	15.1	11.6	12.1	15.3	9.0	8.3	4.3	9.6	18.8
NEXT 4 LARGEST COMPANIES	1.0	1.0	9.5	6.4	8.6	6.5	6.4	8.7	9.8	6.1	7.2	5.7	9.7
NEXT 12 LARGEST COMPANIES	3.1	3.8	17.5	16.5	14.9	16.7	18.0	15.3	16.8	13.2	13.1	13.2	17.9
NEXT 30 LARGEST COMPANIES	7.7	7.6	21.8	22.6	21.0	22.5	23.2	21.6	23.9	28.6	29.8	28.2	20.1
REMAINDER COMPANIES	87.2	86.4	36.5	42.8	40.4	42.7	40.3	39.0	40.5	43.8	45.6	43.3	33.5
INDUSTRY 2448, WOOD PALLETS AND SKIDS													
TOTAL	1 267	1 290	698.0	20.3	163.8	17.9	32.1	126.3	303.1	21.3	4.4	17.0	397.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.3	6.0	1.6	2.0	1.6	1.7	2.0	2.9	.4	.1	.5	8.3
NEXT 4 LARGEST COMPANIES	.3	.5	4.2	3.3	4.0	3.4	3.4	3.5	4.2	3.6	.7	4.4	4.3
NEXT 12 LARGEST COMPANIES	.9	1.5	7.6	7.0	7.9	6.5	6.7	7.4	7.2	6.9	8.1	6.6	7.9
NEXT 30 LARGEST COMPANIES	2.4	2.9	11.5	10.1	11.0	9.8	10.7	10.7	11.1	13.7	14.6	13.4	11.7
REMAINDER COMPANIES	96.1	94.8	70.7	78.0	75.1	78.7	77.5	76.4	74.7	75.4	76.6	75.1	67.8
INDUSTRY 2449, WOOD CONTAINERS, NEC													
TOTAL	238	263	255.8	8.9	67.2	8.0	15.5	53.7	120.4	2.9	.6	2.3	134.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	5.7	24.8	17.8	19.3	16.8	16.7	18.7	22.6	5.7	(D)	5.8	26.8
NEXT 4 LARGEST COMPANIES	1.7	1.9	13.2	11.1	12.9	10.6	10.6	13.1	11.4	8.9	(D)	8.7	13.8
NEXT 12 LARGEST COMPANIES	5.0	6.1	25.5	28.8	25.4	29.8	31.1	26.6	25.8	29.9	58.0	22.4	25.4
NEXT 30 LARGEST COMPANIES	12.6	14.8	23.8	26.9	27.9	26.9	26.8	27.2	25.7	22.6	13.6	25.1	23.0
REMAINDER COMPANIES	79.0	71.5	12.7	15.4	14.5	15.9	14.8	14.5	14.4	32.8	13.6	37.9	11.1
INDUSTRY 2451, MOBILE HOMES													
TOTAL	308	597	3 199.3	50.5	527.6	41.8	80.5	371.8	1 030.5	69.8	27.1	42.7	2 175.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	19.6	24.3	21.4	22.7	21.8	21.6	21.5	23.8	16.3	(D)	12.4	24.6
NEXT 4 LARGEST COMPANIES	1.3	7.9	13.0	11.7	13.0	11.8	12.5	14.2	15.0	7.7	(D)	7.5	12.1
NEXT 12 LARGEST COMPANIES	3.9	11.2	20.9	18.9	20.3	18.6	18.7	20.5	20.0	20.3	10.5	26.5	21.3
NEXT 30 LARGEST COMPANIES	9.7	14.2	18.7	20.5	19.3	20.1	20.8	19.3	18.3	22.1	28.2	18.3	18.8
REMAINDER COMPANIES	83.8	47.1	23.1	27.6	24.6	27.6	26.5	24.6	23.0	33.6	31.0	35.3	23.2
INDUSTRY 2452, PREFABRICATED WOOD BUILDINGS													
TOTAL	512	568	1 948.6	29.0	330.6	21.2	40.6	204.4	758.6	40.2	15.9	24.3	1 207.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	4.4	23.5	20.1	22.7	18.4	19.5	21.6	25.4	24.1	(D)	18.8	22.2
NEXT 4 LARGEST COMPANIES	.8	2.8	12.4	6.8	7.4	7.7	8.8	9.2	10.7	10.5	(D)	10.2	13.4
NEXT 12 LARGEST COMPANIES	2.3	3.2	12.8	12.5	12.4	12.9	12.7	11.7	12.1	8.5	9.3	8.0	13.6
NEXT 30 LARGEST COMPANIES	5.9	6.2	16.4	18.1	17.6	17.8	18.1	18.4	16.3	20.9	17.3	23.2	16.6
REMAINDER COMPANIES	90.2	83.5	34.8	42.4	40.0	43.2	40.9	39.1	35.6	36.0	30.4	39.7	34.2

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2491, WOOD PRESERVING													
TOTAL	366	457	962.6	12.6	126.1	9.9	19.7	82.9	327.1	30.3	3.3	27.0	657.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	10.3	33.3	26.0	26.8	25.9	26.5	25.9	34.0	29.8	2.3	33.2	33.6
NEXT 4 LARGEST COMPANIES	1.1	4.8	8.4	10.3	10.2	10.0	9.4	10.3	9.5	8.5	10.9	8.2	8.0
NEXT 12 LARGEST COMPANIES	3.3	4.6	16.8	14.4	16.1	14.8	14.9	16.8	15.5	24.4	5.5	26.8	17.6
NEXT 30 LARGEST COMPANIES	8.2	9.2	17.4	16.2	18.4	15.5	16.8	18.3	15.7	14.9	39.8	11.9	18.0
REMAINDER COMPANIES	86.3	71.1	24.0	33.1	28.5	33.8	32.4	28.7	25.3	22.3	41.4	20.0	22.8
INDUSTRY 2492, PARTICLEBOARD													
TOTAL	36	63	452.9	6.2	79.1	5.0	10.9	60.3	207.2	32.5	3.2	29.3	245.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	11.1	33.3	48.2	41.3	44.9	41.2	41.2	45.2	48.4	29.9	32.4	29.6	47.9
NEXT 4 LARGEST COMPANIES	11.1	14.3	22.0	25.9	22.3	26.5	27.5	23.2	20.4	(D)	(D)	(D)	23.8
NEXT 12 LARGEST COMPANIES	33.3	23.8	24.4	24.7	25.2	23.8	23.6	24.2	25.4	(D)	(D)	(D)	23.6
NEXT 30 LARGEST COMPANIES	44.4	28.6	5.4	8.1	7.6	8.6	7.8	7.4	6.0	7.0	2.9	7.4	4.8
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2499, WOOD PRODUCTS, NEC													
TOTAL	2 909	3 050	2 557.6	64.6	608.1	53.9	102.3	438.0	1 265.5	116.9	20.3	96.5	1 302.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.6	18.3	12.3	16.6	11.0	11.9	15.8	17.4	27.0	11.3	30.3	19.0
NEXT 4 LARGEST COMPANIES	.1	.5	6.0	2.8	3.7	2.8	3.2	4.0	5.1	5.9	2.7	6.5	6.5
NEXT 12 LARGEST COMPANIES	.4	.7	11.4	8.7	10.5	8.6	9.0	10.4	11.2	19.2	8.3	21.5	11.6
NEXT 30 LARGEST COMPANIES	1.0	2.2	13.9	13.7	13.5	14.0	14.3	14.0	13.9	11.2	18.2	9.7	14.1
REMAINDER COMPANIES	98.3	96.0	50.4	62.6	55.7	63.6	61.6	55.7	52.4	36.8	59.4	32.0	48.8
INDUSTRY 2511, WOOD HOUSEHOLD FURNITURE													
TOTAL	2 795	2 983	4 148.8	141.0	1 138.8	124.8	245.0	898.7	2 239.9	101.9	26.8	75.2	1 934.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	1.1	14.3	12.1	12.3	12.9	13.8	14.1	13.8	11.8	9.6	12.6	14.7
NEXT 4 LARGEST COMPANIES	.1	.8	8.5	8.8	9.2	8.6	8.4	9.0	8.8	7.5	7.8	7.4	8.0
NEXT 12 LARGEST COMPANIES	.4	1.7	15.7	16.7	16.0	16.8	16.7	16.0	16.9	12.2	12.5	12.1	14.3
NEXT 30 LARGEST COMPANIES	1.1	2.8	17.1	16.8	16.9	16.7	17.1	16.9	16.9	13.7	10.9	14.6	17.8
REMAINDER COMPANIES	98.2	93.6	44.4	45.6	45.5	45.0	43.9	44.0	43.6	54.8	59.2	53.2	45.2
INDUSTRY 2512, UPHOLSTERED HOUSEHOLD FURNITURE													
TOTAL	1 357	1 473	2 931.0	89.1	779.2	75.7	137.6	583.9	1 437.3	50.4	16.6	33.9	1 510.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	2.2	14.7	12.6	14.6	12.4	12.2	14.9	14.9	11.7	15.8	9.7	14.7
NEXT 4 LARGEST COMPANIES	.3	1.3	7.9	7.3	7.6	7.4	7.4	7.5	7.8	10.7	6.8	12.7	7.8
NEXT 12 LARGEST COMPANIES	.9	2.7	13.7	13.7	13.5	13.7	13.6	13.5	14.5	15.9	19.9	13.9	13.1
NEXT 30 LARGEST COMPANIES	2.2	3.9	14.9	15.2	14.4	15.5	15.6	14.7	14.3	18.9	11.4	22.6	15.3
REMAINDER COMPANIES	96.3	89.9	48.9	51.2	49.9	51.0	51.3	49.4	48.5	42.8	46.1	41.1	49.1
INDUSTRY 2514, METAL HOUSEHOLD FURNITURE													
TOTAL	405	448	1 307.1	33.2	302.7	27.4	51.6	208.6	637.4	22.8	4.7	18.1	684.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.6	12.7	12.3	13.8	11.4	11.8	12.3	14.0	10.5	7.7	11.2	11.5
NEXT 4 LARGEST COMPANIES	1.0	2.9	8.9	10.2	7.3	11.4	10.6	8.7	8.3	8.7	3.3	10.1	10.4
NEXT 12 LARGEST COMPANIES	3.0	3.3	17.7	16.5	19.4	15.0	15.9	18.8	19.0	17.3	21.6	16.2	16.6
NEXT 30 LARGEST COMPANIES	7.4	11.6	27.5	26.5	26.7	27.0	26.4	26.9	26.6	29.3	28.2	29.6	28.5
REMAINDER COMPANIES	87.7	80.6	33.3	34.5	32.9	35.2	35.4	33.3	32.0	34.1	39.2	32.8	33.0
INDUSTRY 2515, MATTRESSES AND BEDSPRINGS													
TOTAL	832	962	1 398.5	27.0	279.8	20.6	39.3	175.3	616.6	14.5	3.7	10.8	788.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	4.6	21.0	22.4	25.0	22.4	23.2	27.5	20.8	12.8	16.5	(D)	21.0
NEXT 4 LARGEST COMPANIES	.5	3.2	10.2	5.4	6.4	5.2	5.4	6.1	11.1	10.7	(D)	(D)	9.7
NEXT 12 LARGEST COMPANIES	1.4	4.6	12.2	12.3	11.2	12.1	12.3	11.0	12.4	15.5	(D)	14.1	12.2
NEXT 30 LARGEST COMPANIES	3.6	4.8	14.5	13.6	13.6	14.0	13.9	13.0	14.4	12.6	3.5	15.8	14.5
REMAINDER COMPANIES	94.0	82.8	42.1	46.2	43.8	46.3	45.2	42.5	41.4	48.4	46.2	49.2	42.5
INDUSTRY 2517, WOOD TV AND RADIO CABINETS													
TOTAL	91	94	304.8	10.7	89.0	9.3	17.6	70.5	150.4	11.1	5.1	6.0	155.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.4	6.4	44.7	36.8	39.7	34.5	36.9	39.0	42.7	55.3	(D)	47.2	46.4
NEXT 4 LARGEST COMPANIES	4.4	4.3	29.9	31.8	32.7	33.1	32.1	34.3	32.9	21.9	(D)	26.5	27.7
NEXT 12 LARGEST COMPANIES	13.2	13.8	13.8	16.2	13.6	16.8	15.8	13.6	14.3	5.5	.4	9.8	12.9
NEXT 30 LARGEST COMPANIES	33.0	31.9	9.4	12.8	11.6	12.9	12.7	10.8	8.3	16.6	17.9	15.5	10.8
REMAINDER COMPANIES	45.1	43.6	2.2	2.5	2.4	2.7	2.5	2.3	1.7	.6	.3	.9	2.2

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2519, HOUSEHOLD FURNITURE, NEC													
TOTAL	198	201	301.9	8.7	79.7	7.5	14.3	61.7	131.0	10.4	3.3	7.1	172.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.0	2.0	39.1	37.7	44.7	37.4	36.1	46.5	27.2	(D)	(D)	(D)	47.4
NEXT 4 LARGEST COMPANIES	2.0	2.0	11.6	11.4	10.9	11.7	11.8	10.2	12.7	(D)	(D)	(D)	10.8
NEXT 12 LARGEST COMPANIES	6.1	6.5	22.4	21.5	18.4	21.4	21.8	18.4	28.5	19.4	10.3	23.7	18.5
NEXT 30 LARGEST COMPANIES	15.2	15.4	17.1	17.9	16.1	18.0	18.8	15.7	20.2	21.1	31.6	16.3	14.9
REMAINDER COMPANIES	74.7	74.1	9.8	11.5	9.9	11.5	11.5	9.3	11.5	11.1	8.4	12.3	8.4
INDUSTRY 2521, WOOD OFFICE FURNITURE													
TOTAL	319	331	612.0	16.0	165.0	12.8	25.5	110.2	381.3	26.5	12.4	14.1	239.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	1.5	32.3	18.3	23.3	16.9	18.1	19.9	35.9	(D)	(D)	52.8	26.6
NEXT 4 LARGEST COMPANIES	1.3	2.1	11.4	11.5	11.6	11.3	11.8	11.7	11.6	(D)	(D)	11.5	11.2
NEXT 12 LARGEST COMPANIES	3.8	4.5	18.2	23.1	20.8	22.6	21.7	20.4	17.4	5.6	.3	10.3	19.4
NEXT 30 LARGEST COMPANIES	9.4	10.0	19.1	22.1	20.9	22.6	22.9	22.2	17.6	10.2	6.5	13.4	21.7
REMAINDER COMPANIES	84.3	81.9	19.0	25.0	23.4	26.6	25.5	25.9	17.5	11.7	11.4	11.9	21.1
INDUSTRY 2522, METAL OFFICE FURNITURE													
TOTAL	167	192	1 397.4	29.0	377.6	22.3	43.6	265.7	854.8	41.1	11.4	29.7	553.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.4	7.3	47.2	38.0	48.3	38.2	39.9	49.8	49.8	58.4	60.6	57.6	42.2
NEXT 4 LARGEST COMPANIES	2.4	4.2	11.8	11.2	9.8	10.6	10.1	8.9	10.2	5.6	3.2	6.5	13.9
NEXT 12 LARGEST COMPANIES	7.2	8.9	18.8	22.7	20.3	22.3	21.9	20.0	18.8	17.9	21.7	16.4	19.6
NEXT 30 LARGEST COMPANIES	18.0	18.2	14.9	17.4	13.7	17.8	17.5	13.4	14.3	11.9	8.2	13.3	16.3
REMAINDER COMPANIES	70.1	61.5	7.3	10.7	7.9	11.1	10.6	7.9	6.9	6.2	6.3	6.2	7.9
INDUSTRY 2531, PUBLIC BLDG., RELATED FURNITURE													
TOTAL	401	420	787.4	20.0	214.3	15.0	29.2	132.9	414.9	22.3	6.8	15.5	381.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.9	23.1	17.4	20.8	17.1	17.8	19.7	22.9	23.3	24.5	22.7	24.1
NEXT 4 LARGEST COMPANIES	1.0	1.4	9.2	8.6	8.3	7.9	8.1	7.3	8.6	4.5	8.6	2.7	9.7
NEXT 12 LARGEST COMPANIES	3.0	3.8	17.5	15.8	18.7	14.1	15.1	17.6	18.9	19.3	6.8	24.8	16.1
NEXT 30 LARGEST COMPANIES	7.5	8.6	20.7	21.9	19.5	23.0	22.9	20.9	20.8	30.0	34.6	27.9	20.4
REMAINDER COMPANIES	87.5	84.3	29.5	36.3	32.8	37.9	36.2	34.5	28.8	23.0	25.6	21.8	29.7
INDUSTRY 2541, WOOD PARTITIONS AND FIXTURES													
TOTAL	1 572	1 598	1 105.8	29.4	352.9	23.0	45.3	241.0	621.4	22.4	7.4	15.0	496.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.5	6.3	5.8	4.2	5.9	6.2	4.2	4.3	21.6	28.6	18.1	8.6
NEXT 4 LARGEST COMPANIES	.3	.5	4.5	3.2	3.1	3.1	3.2	2.8	5.6	3.2	2.2	3.7	3.4
NEXT 12 LARGEST COMPANIES	.8	.8	9.3	8.0	9.2	8.1	8.1	9.5	8.9	4.9	3.1	5.8	9.9
NEXT 30 LARGEST COMPANIES	1.9	2.2	14.0	13.0	13.0	13.0	13.3	13.2	13.9	13.5	9.0	15.8	14.4
REMAINDER COMPANIES	96.8	96.0	65.9	70.0	70.6	69.9	69.2	70.3	67.3	56.7	57.1	56.6	63.7
INDUSTRY 2542, METAL PARTITIONS AND FIXTURES													
TOTAL	508	536	1 303.0	28.0	322.2	21.3	40.5	213.2	689.7	36.5	12.0	24.5	630.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.9	16.3	11.5	14.5	12.3	12.3	16.2	15.0	6.5	3.0	8.2	17.7
NEXT 4 LARGEST COMPANIES	.8	1.5	7.4	8.3	7.2	7.6	8.2	7.5	8.0	7.7	11.2	6.0	6.9
NEXT 12 LARGEST COMPANIES	2.4	3.7	17.4	13.8	14.4	13.3	13.9	14.2	16.5	21.4	28.9	17.7	18.2
NEXT 30 LARGEST COMPANIES	5.9	6.9	21.2	21.7	21.8	21.4	21.5	20.8	22.1	29.0	21.5	32.7	20.7
REMAINDER COMPANIES	90.2	86.0	37.6	44.7	42.2	45.3	44.0	41.2	38.5	35.4	35.4	35.5	36.6
INDUSTRY 2591, DRAPERY HARDWARE, BLINDS, SHADES													
TOTAL	435	456	675.1	13.6	145.6	10.3	20.0	99.1	345.0	16.7	5.8	10.9	331.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	3.7	45.5	36.1	44.1	37.6	41.2	47.0	46.4	63.0	73.5	57.4	45.3
NEXT 4 LARGEST COMPANIES	.9	1.8	19.1	22.5	18.2	20.9	21.0	18.0	18.0	12.7	10.3	14.0	19.1
NEXT 12 LARGEST COMPANIES	2.8	3.3	16.4	16.4	16.0	16.2	15.5	15.2	17.3	9.9	5.7	12.1	15.8
NEXT 30 LARGEST COMPANIES	6.9	6.8	7.6	9.7	8.9	9.8	9.1	7.7	6.9	5.5	3.8	6.5	8.3
REMAINDER COMPANIES	88.5	84.4	11.4	15.2	12.7	15.5	13.2	12.0	11.4	8.8	6.7	10.0	11.5
INDUSTRY 2599, FURNITURE AND FIXTURES, NEC													
TOTAL	528	541	705.2	18.1	201.4	13.7	27.0	131.0	401.9	12.0	3.3	8.6	310.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.1	18.5	13.6	15.5	11.3	12.1	12.9	18.1	9.9	6.7	11.2	18.6
NEXT 4 LARGEST COMPANIES	.8	1.5	8.2	7.7	6.7	8.2	8.0	7.4	7.6	4.1	.6	5.5	9.0
NEXT 12 LARGEST COMPANIES	2.3	2.6	13.7	11.2	11.5	10.6	10.0	10.9	13.2	16.4	22.0	14.3	14.2
NEXT 30 LARGEST COMPANIES	5.7	6.1	18.9	21.1	19.8	21.5	20.5	20.9	19.1	21.4	26.9	19.3	19.2
REMAINDER COMPANIES	90.5	88.7	40.7	46.4	46.4	48.5	49.5	47.8	42.0	48.1	43.8	49.8	39.0

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2611, PULPMILLS													
TOTAL	26	45	2 091.1	16.2	293.2	12.5	25.4	220.7	906.1	301.1	13.0	288.0	1 212.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	15.4	24.4	48.2	55.9	52.3	56.3	54.2	52.3	48.1	68.2	34.6	69.7	46.9
NEXT 4 LARGEST COMPANIES	15.4	17.8	27.6	21.9	25.9	21.5	22.3	26.3	28.2	16.0	8.0	16.4	28.8
NEXT 12 LARGEST COMPANIES	46.2	44.4	23.1	20.0	20.1	20.2	21.2	19.9	23.5	15.4	56.2	13.5	22.9
NEXT 30 LARGEST COMPANIES	23.1	13.3	1.1	2.1	1.8	2.1	2.2	1.6	.2	.4	1.2	.4	1.3
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2621, PAPERMILLS, EXCEPT BUILDING PAPER													
TOTAL	171	339	12 613.3	127.0	2 167.0	100.4	210.4	1 631.7	5 406.6	1 115.2	70.3	1 044.8	7 221.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	9.1	23.4	23.1	23.7	23.4	23.4	24.4	24.3	20.8	7.5	21.7	22.7
NEXT 4 LARGEST COMPANIES	2.3	11.5	18.2	16.7	17.8	16.9	16.7	18.1	19.7	19.5	18.1	19.6	16.9
NEXT 12 LARGEST COMPANIES	7.0	18.0	28.0	27.5	27.8	27.3	27.0	27.3	27.8	30.3	32.6	30.2	28.2
NEXT 30 LARGEST COMPANIES	17.5	16.8	21.9	21.8	21.3	21.7	21.6	21.0	20.9	24.3	33.2	23.7	22.9
REMAINDER COMPANIES	70.8	44.5	8.4	10.8	9.3	10.8	11.3	9.2	7.3	5.0	8.6	4.8	9.3
INDUSTRY 2631, PAPERBOARD MILLS													
TOTAL	120	249	7 124.3	67.6	1 175.8	53.0	112.5	888.0	3 080.7	933.7	71.4	862.3	4 049.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.3	11.2	27.0	25.7	26.0	25.2	24.8	25.3	27.1	30.4	11.9	31.9	26.8
NEXT 4 LARGEST COMPANIES	3.3	8.4	14.7	13.8	14.1	14.0	14.2	14.3	14.2	11.3	7.8	11.6	15.4
NEXT 12 LARGEST COMPANIES	10.0	14.9	26.8	22.8	24.3	22.5	22.3	24.2	27.3	42.0	57.0	40.7	26.5
NEXT 30 LARGEST COMPANIES	25.0	33.3	25.1	26.9	27.0	27.4	28.0	27.8	24.8	12.3	13.7	12.2	25.2
REMAINDER COMPANIES	58.3	32.1	6.4	10.8	8.6	10.9	10.7	8.5	6.5	4.0	9.6	3.6	6.2
INDUSTRY 2641, PAPER COATING AND GLAZING													
TOTAL	454	529	3 392.0	39.7	551.2	27.2	56.8	335.1	1 507.0	98.7	15.2	83.5	1 908.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	2.8	29.6	21.6	24.2	21.2	21.3	23.4	34.6	13.8	6.9	15.0	25.8
NEXT 4 LARGEST COMPANIES	.9	3.6	15.0	15.7	16.6	14.3	14.3	16.5	14.9	16.6	9.0	17.9	15.1
NEXT 12 LARGEST COMPANIES	2.6	5.5	19.4	20.0	18.9	20.4	20.6	19.7	17.1	16.3	23.1	15.1	21.2
NEXT 30 LARGEST COMPANIES	6.6	9.8	18.0	18.8	18.3	18.4	18.8	18.1	16.3	16.2	16.0	16.2	19.1
REMAINDER COMPANIES	89.0	78.3	18.0	24.0	22.0	25.6	25.0	22.4	17.0	37.1	44.9	35.7	18.8
INDUSTRY 2642, ENVELOPES													
TOTAL	182	265	990.5	22.6	270.0	17.6	34.6	182.4	503.4	22.9	3.5	19.4	493.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.2	14.3	28.2	26.1	26.4	26.2	26.9	27.7	27.0	29.0	27.8	29.3	29.4
NEXT 4 LARGEST COMPANIES	2.2	7.9	15.3	14.0	15.1	14.0	13.8	14.9	15.7	11.3	8.1	11.9	15.0
NEXT 12 LARGEST COMPANIES	6.6	12.5	22.5	23.9	24.6	23.6	23.2	23.2	23.4	19.1	32.0	16.8	21.6
NEXT 30 LARGEST COMPANIES	16.5	14.3	20.4	20.7	19.9	21.1	21.1	20.5	19.7	21.7	13.3	23.2	21.0
REMAINDER COMPANIES	72.5	50.9	13.6	15.2	14.0	15.1	15.0	13.8	14.2	18.8	18.9	18.8	13.0
INDUSTRY 2643, BAGS, EXCEPT TEXTILE BAGS													
TOTAL	462	596	3 482.3	48.7	584.1	38.8	77.6	411.7	1 349.6	93.4	19.4	74.0	2 140.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	8.4	26.4	23.9	24.7	24.3	25.3	26.0	28.2	23.6	22.3	23.9	25.2
NEXT 4 LARGEST COMPANIES	.9	3.2	13.6	11.6	12.6	11.9	12.0	14.0	13.3	13.0	11.5	13.3	13.9
NEXT 12 LARGEST COMPANIES	2.6	7.2	17.9	19.3	19.0	20.0	19.1	19.9	16.5	13.1	11.1	13.6	18.8
NEXT 30 LARGEST COMPANIES	6.5	8.2	17.5	18.3	18.7	17.6	18.1	17.3	17.3	20.3	29.2	17.9	17.6
REMAINDER COMPANIES	89.2	73.0	24.6	27.0	25.1	26.3	25.5	22.8	24.7	30.1	25.9	31.2	24.5
INDUSTRY 2645, DIE-CUT PAPER AND BOARD													
TOTAL	316	371	1 057.7	14.3	174.6	11.3	22.7	119.6	429.5	15.3	2.8	12.5	640.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	3.2	43.1	17.5	23.7	16.9	17.7	24.5	38.4	23.5	19.9	24.4	46.9
NEXT 4 LARGEST COMPANIES	1.3	7.3	11.7	21.2	18.0	21.7	22.3	19.3	11.9	14.2	20.2	12.8	11.5
NEXT 12 LARGEST COMPANIES	3.8	6.5	15.7	16.0	15.4	16.4	16.4	15.5	15.7	11.0	8.9	11.4	15.4
NEXT 30 LARGEST COMPANIES	9.5	10.8	14.3	20.3	20.3	20.2	20.1	18.9	15.9	25.1	20.0	26.2	13.0
REMAINDER COMPANIES	84.2	72.2	15.2	25.0	22.5	24.9	23.5	21.8	18.0	26.3	30.9	25.2	13.1
INDUSTRY 2646, PRESSED AND MOLDED PULP GOODS													
TOTAL	25	38	240.3	4.9	58.8	4.0	8.4	48.7	153.7	10.9	1.0	9.9	90.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	16.0	34.2	86.5	81.5	84.6	80.9	82.8	85.6	87.6	94.5	91.7	94.8	84.3
NEXT 4 LARGEST COMPANIES	16.0	18.4	7.8	8.3	7.0	8.8	7.3	6.9	6.6	1.8	1.3	1.9	10.0
NEXT 12 LARGEST COMPANIES	48.0	34.2	5.6	9.9	8.2	10.1	9.6	7.2	5.7	3.6	(D)	3.2	5.5
NEXT 30 LARGEST COMPANIES	20.0	13.2	.2	.3	.2	.3	.2	.2	.2	.1	(D)	.1	.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2647, SANITARY PAPER PRODUCTS													
TOTAL	72	120	4 921.2	34.5	509.1	27.4	54.5	381.8	2 194.5	199.1	39.0	160.1	2 781.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.6	22.5	65.0	47.9	52.0	50.1	49.8	55.3	64.1	47.8	(D)	43.1	65.0
NEXT 4 LARGEST COMPANIES	5.6	14.2	18.8	22.5	23.8	20.1	20.6	20.3	20.8	26.9	(D)	27.3	18.0
NEXT 12 LARGEST COMPANIES	16.7	18.3	12.6	22.7	18.8	22.7	22.1	19.2	12.1	21.9	5.1	26.0	13.0
NEXT 30 LARGEST COMPANIES	41.7	26.7	3.4	6.4	5.1	6.6	7.0	4.9	2.8	3.3	2.3	3.5	3.8
REMAINDER COMPANIES	30.6	18.3	.2	.5	.4	.5	.5	.4	.2	.1	.1	.1	.2
INDUSTRY 2648, STATIONERY PRODUCTS													
TOTAL	219	242	651.7	12.6	135.2	9.8	18.5	91.0	291.0	15.9	4.1	11.8	364.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	5.4	38.2	33.8	36.1	34.3	33.9	38.6	35.9	38.5	(D)	26.7	39.9
NEXT 4 LARGEST COMPANIES	1.8	3.7	11.7	12.2	12.0	12.3	12.5	11.5	12.2	12.7	(D)	17.0	11.2
NEXT 12 LARGEST COMPANIES	5.5	6.2	19.2	16.8	17.2	17.8	18.3	18.3	18.5	24.2	(D)	29.0	20.0
NEXT 30 LARGEST COMPANIES	13.7	14.9	18.5	21.0	20.4	20.3	20.7	18.4	19.8	12.0	8.3	13.3	17.4
REMAINDER COMPANIES	77.2	69.8	12.5	16.1	14.3	15.3	14.6	13.2	13.5	12.6	9.0	13.9	11.6
INDUSTRY 2649, CONVERTED PAPER PRODUCTS, NEC													
TOTAL	783	833	1 697.5	29.4	325.1	21.9	43.3	201.1	834.3	51.1	10.1	41.0	887.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	.6	16.8	17.6	17.5	15.9	15.2	14.9	19.5	2.9	1.2	3.4	14.6
NEXT 4 LARGEST COMPANIES	.5	1.0	7.9	8.4	8.4	9.1	9.5	9.8	9.6	9.6	3.1	11.2	6.8
NEXT 12 LARGEST COMPANIES	1.5	2.5	13.7	10.3	11.4	9.5	9.5	11.2	11.4	10.5	18.1	8.6	15.6
NEXT 30 LARGEST COMPANIES	3.8	5.2	19.8	14.9	16.6	14.9	15.7	16.2	17.4	21.2	17.1	22.2	22.1
REMAINDER COMPANIES	93.6	90.8	41.8	48.8	46.1	50.5	50.0	47.9	42.1	55.8	60.5	54.6	40.9
INDUSTRY 2651, FOLDING PAPERBOARD BOXES													
TOTAL	452	574	2 579.0	44.7	577.8	35.8	71.8	409.8	1 136.8	89.8	14.2	75.5	1 460.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	6.3	22.1	17.5	19.2	17.0	17.1	19.0	19.0	11.4	9.0	11.9	24.3
NEXT 4 LARGEST COMPANIES	.9	3.5	12.7	11.0	11.0	11.4	11.3	12.2	11.3	11.6	20.8	9.9	14.0
NEXT 12 LARGEST COMPANIES	2.7	9.1	21.2	17.8	18.2	18.0	17.9	19.2	20.2	22.9	22.2	23.0	22.0
NEXT 30 LARGEST COMPANIES	6.6	9.2	17.7	19.7	19.1	19.8	19.7	19.0	18.7	29.5	29.6	29.5	17.1
REMAINDER COMPANIES	88.9	72.0	26.3	34.0	32.5	33.9	34.0	30.8	30.8	24.5	18.4	25.6	22.6
INDUSTRY 2652, SETUP PAPERBOARD BOXES													
TOTAL	280	312	360.5	13.1	115.3	11.2	20.6	80.8	211.6	8.8	2.0	6.8	149.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	3.8	12.3	7.9	8.6	7.9	8.5	9.3	12.7	3.6	3.4	3.7	11.9
NEXT 4 LARGEST COMPANIES	1.4	4.8	8.4	8.0	7.3	8.5	8.6	7.8	8.4	8.1	10.8	7.4	8.3
NEXT 12 LARGEST COMPANIES	4.3	6.7	16.1	16.2	16.8	15.9	15.8	16.8	16.6	14.8	19.5	13.4	15.7
NEXT 30 LARGEST COMPANIES	10.7	10.3	20.7	19.6	20.9	20.0	20.2	21.0	19.4	32.2	24.4	34.5	22.6
REMAINDER COMPANIES	82.1	74.4	42.5	48.3	46.3	47.8	46.8	45.1	42.8	41.3	42.0	41.1	41.6
INDUSTRY 2653, CORRUGATED AND SOLID FIBER BOXES													
TOTAL	863	1 472	7 351.1	101.5	1 374.8	73.5	146.5	867.0	2 704.1	243.3	43.1	200.1	4 660.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	8.0	19.2	15.4	16.2	15.7	15.7	17.7	17.1	18.7	22.0	18.0	20.3
NEXT 4 LARGEST COMPANIES	.5	7.6	14.1	12.1	13.2	11.2	11.2	12.6	13.1	13.5	7.7	14.7	14.7
NEXT 12 LARGEST COMPANIES	1.4	14.1	25.0	24.9	25.4	24.8	24.9	26.3	23.7	24.4	29.1	23.4	25.8
NEXT 30 LARGEST COMPANIES	3.5	10.1	16.3	16.4	16.0	16.7	16.7	15.8	17.2	13.6	13.7	13.6	15.7
REMAINDER COMPANIES	94.2	60.1	25.4	31.3	29.2	31.6	31.5	27.5	28.9	29.8	27.5	30.3	23.4
INDUSTRY 2654, SANITARY FOOD CONTAINERS													
TOTAL	122	193	2 048.4	28.7	336.7	22.7	43.5	228.2	836.8	52.4	10.2	42.2	1 226.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.3	18.1	48.4	42.1	44.4	40.4	38.7	41.4	49.6	49.5	(D)	46.2	47.5
NEXT 4 LARGEST COMPANIES	3.3	10.9	20.0	20.0	17.8	21.2	20.6	19.9	18.9	18.9	(D)	21.6	20.9
NEXT 12 LARGEST COMPANIES	9.8	15.5	18.4	20.8	21.5	20.4	22.5	22.4	18.2	14.2	9.7	15.3	18.4
NEXT 30 LARGEST COMPANIES	24.6	17.1	9.4	11.6	11.5	12.2	12.3	11.3	9.0	12.6	12.4	12.6	9.7
REMAINDER COMPANIES	59.0	38.3	3.8	5.6	4.8	5.8	5.9	5.0	4.2	4.9	7.1	4.3	3.5
INDUSTRY 2655, FIBER CANS, DRUMS, SIMILAR PRODS													
TOTAL	166	309	1 011.1	16.1	197.3	13.4	26.7	147.6	406.9	26.7	4.3	22.4	606.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.4	24.6	53.9	45.1	49.9	44.4	43.0	49.8	52.2	48.6	(D)	51.2	55.2
NEXT 4 LARGEST COMPANIES	2.4	17.5	18.8	16.8	15.9	17.4	18.8	17.2	16.7	17.1	(D)	18.5	20.1
NEXT 12 LARGEST COMPANIES	7.2	7.1	12.1	15.2	14.4	15.0	15.2	14.4	13.5	21.7	43.2	17.6	11.1
NEXT 30 LARGEST COMPANIES	18.1	13.3	8.9	12.3	10.8	12.5	12.5	10.2	10.4	5.7	5.9	5.7	7.8
REMAINDER COMPANIES	69.9	37.5	6.3	10.6	9.0	10.6	10.4	8.4	7.2	6.8	6.0	7.0	5.8

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2661, BUILDING PAPER AND BOARD MILLS													
TOTAL	19	58	473.7	7.0	96.9	5.9	12.5	77.9	218.2	16.6	2.2	14.4	254.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	21.1	29.3	51.4	50.7	53.0	49.8	49.6	53.1	50.2	40.7	18.4	44.0	52.4
NEXT 4 LARGEST COMPANIES	21.1	27.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	57.9	43.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2711, NEWSPAPERS													
TOTAL	7 821	8 867	13 055.9	349.9	4 306.0	147.2	252.5	1 805.3	9 519.1	478.1	93.5	384.6	3 539.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	1.4	19.3	15.7	18.4	15.6	15.2	19.4	19.0	18.7	18.9	18.7	20.2
NEXT 4 LARGEST COMPANIES	.1	.7	11.4	7.8	10.1	7.5	7.5	10.3	11.2	11.5	17.3	10.1	11.7
NEXT 12 LARGEST COMPANIES	.2	1.2	14.2	11.8	13.8	11.6	11.8	14.5	13.8	9.7	8.3	10.1	15.1
NEXT 30 LARGEST COMPANIES	.4	2.6	16.8	15.9	16.4	14.3	14.3	16.1	16.7	16.1	17.0	15.9	16.8
REMAINDER COMPANIES	99.4	94.1	38.4	48.8	41.2	51.0	51.2	39.8	39.2	44.0	38.5	45.3	36.2
INDUSTRY 2721, PERIODICALS													
TOTAL	2 860	2 994	6 056.5	69.9	1 019.8	10.6	20.5	115.7	3 762.7	78.9	22.4	56.5	2 289.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.2	22.1	14.0	15.4	1.5	1.5	2.5	20.4	8.2	10.2	(D)	25.0
NEXT 4 LARGEST COMPANIES	.1	.3	12.8	9.2	10.5	(Z)	1.1	(Z)	11.4	13.4	25.1	(D)	15.4
NEXT 12 LARGEST COMPANIES	.4	.8	17.2	9.0	10.8	3.4	3.9	5.0	17.5	6.1	6.1	6.1	16.6
NEXT 30 LARGEST COMPANIES	1.0	2.5	14.7	17.9	18.5	8.7	9.2	13.9	16.6	31.9	10.3	40.4	11.5
REMAINDER COMPANIES	98.3	96.2	33.1	50.0	44.7	86.4	84.4	78.6	34.1	40.4	48.2	37.3	31.5
INDUSTRY 2731, BOOK PUBLISHING													
TOTAL	1 650	1 744	4 793.9	59.5	830.2	13.3	24.9	140.1	3 261.9	79.8	16.3	63.5	1 544.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.6	16.6	11.0	11.5	5.7	5.4	6.3	18.3	8.2	3.3	9.4	13.1
NEXT 4 LARGEST COMPANIES	.2	1.0	13.4	14.0	15.2	3.5	4.2	4.2	14.3	12.1	14.3	11.5	11.9
NEXT 12 LARGEST COMPANIES	.7	1.9	26.8	18.7	21.5	21.9	22.7	26.3	26.9	30.3	29.9	30.4	25.3
NEXT 30 LARGEST COMPANIES	1.8	3.1	17.4	19.0	19.0	20.9	21.6	23.6	16.1	17.5	16.8	17.7	20.6
REMAINDER COMPANIES	97.0	93.3	25.6	37.4	32.8	48.0	46.1	39.6	24.3	31.9	35.6	31.0	29.1
INDUSTRY 2732, BOOK PRINTING													
TOTAL	897	950	1 691.8	46.9	548.2	37.6	72.6	404.1	1 029.2	54.3	9.1	45.3	662.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.3	24.5	22.9	24.4	23.4	23.7	25.2	24.2	20.6	20.2	20.7	24.9
NEXT 4 LARGEST COMPANIES	.4	1.5	10.6	10.7	9.4	10.7	10.5	9.0	10.9	7.9	.7	9.3	10.2
NEXT 12 LARGEST COMPANIES	1.3	2.5	14.2	15.1	14.8	15.7	15.7	15.9	14.9	9.9	5.7	10.7	13.1
NEXT 30 LARGEST COMPANIES	3.3	4.5	15.1	14.1	13.9	14.0	14.5	14.1	14.6	14.4	12.8	14.7	15.8
REMAINDER COMPANIES	94.4	90.2	35.7	37.2	37.5	36.2	35.5	35.8	35.3	47.2	60.5	44.5	36.0
INDUSTRY 2741, MISCELLANEOUS PUBLISHING													
TOTAL	2 266	2 352	1 850.9	42.1	503.0	15.4	27.1	150.3	1 290.7	39.1	14.1	25.0	569.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.6	23.6	15.9	17.8	10.4	11.0	13.9	22.4	16.8	31.8	8.3	26.5
NEXT 4 LARGEST COMPANIES	.2	.5	10.4	11.8	12.0	7.0	7.1	9.6	11.8	(D)	(D)	11.8	7.2
NEXT 12 LARGEST COMPANIES	.5	1.1	16.0	15.6	16.4	14.8	16.5	16.4	17.7	(D)	(D)	19.7	12.2
NEXT 30 LARGEST COMPANIES	1.3	1.8	13.4	13.3	13.8	16.0	17.8	19.1	13.5	12.6	8.0	15.3	13.5
REMAINDER COMPANIES	97.8	96.0	36.5	43.4	40.0	51.8	47.6	41.0	34.6	38.3	26.6	45.0	40.5
INDUSTRY 2751, COMMERCIAL PRINTING, LETTERPRESS													
TOTAL	14 375	14 521	4 284.3	110.9	1 307.3	88.0	159.6	913.6	2 440.6	163.0	32.0	131.0	1 852.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	(Z)	.1	13.6	10.2	14.7	10.4	11.9	16.8	13.0	17.2	12.0	18.4	14.2
NEXT 4 LARGEST COMPANIES	(Z)	.1	5.3	2.7	3.5	3.0	3.3	4.2	4.4	7.3	2.4	8.5	6.6
NEXT 12 LARGEST COMPANIES	.1	.2	5.6	4.7	4.2	4.4	4.5	4.0	4.6	3.7	6.3	3.1	6.7
NEXT 30 LARGEST COMPANIES	.2	.4	7.0	5.9	6.1	5.5	5.7	6.0	6.7	4.6	3.7	4.8	7.4
REMAINDER COMPANIES	99.7	99.2	68.6	76.6	71.5	76.7	74.5	69.0	71.3	67.2	75.7	65.1	65.1
INDUSTRY 2752, COMMERCIAL PRINTING, LITHOGRAPHIC													
TOTAL	10 964	11 320	9 359.7	216.3	2 984.1	163.7	307.4	2 045.7	5 338.4	360.2	56.9	303.3	4 061.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	(Z)	.1	6.1	4.2	4.9	4.8	5.1	6.1	5.0	4.6	(D)	5.4	7.5
NEXT 4 LARGEST COMPANIES	(Z)	.1	3.7	2.8	3.2	3.0	3.1	3.6	3.7	4.3	(D)	4.3	3.7
NEXT 12 LARGEST COMPANIES	.1	.5	7.3	5.8	6.3	5.2	5.6	6.0	6.9	7.2	9.2	6.8	7.8
NEXT 30 LARGEST COMPANIES	.3	.7	8.5	6.8	7.8	6.9	7.4	8.1	8.7	7.9	4.7	8.6	8.4
REMAINDER COMPANIES	99.5	98.5	74.5	80.4	77.8	80.2	78.9	76.3	75.8	76.0	81.7	75.0	72.6

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2753, ENGRAVING AND PLATE PRINTING													
TOTAL	511	550	314.9	9.8	118.9	7.6	13.5	84.5	230.8	17.8	3.5	14.3	85.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.5	33.6	23.2	28.9	23.4	23.6	30.5	33.3	65.2	49.3	69.0	33.8
NEXT 4 LARGEST COMPANIES	.8	2.7	10.6	12.8	10.4	13.7	15.1	10.7	10.3	7.2	12.6	6.0	11.5
NEXT 12 LARGEST COMPANIES	2.3	2.7	12.4	14.8	14.3	13.0	14.6	13.9	12.9	7.7	(D)	7.3	11.0
NEXT 30 LARGEST COMPANIES	5.9	6.0	14.1	14.0	14.4	14.0	14.2	14.0	14.0	8.4	(D)	5.9	14.9
REMAINDER COMPANIES	90.2	87.1	29.3	35.2	32.1	35.9	32.5	30.8	29.4	11.5	10.0	11.8	28.7
INDUSTRY 2754, COMMERCIAL PRINTING, GRAVURE													
TOTAL	401	424	1 056.8	19.0	291.6	15.8	30.8	231.5	541.4	98.5	22.5	76.0	521.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	3.1	36.3	32.5	33.4	31.9	32.0	33.2	33.8	34.6	36.4	34.1	38.6
NEXT 4 LARGEST COMPANIES	1.0	1.7	17.5	16.1	21.3	17.3	18.3	22.9	19.6	(D)	(D)	31.7	15.5
NEXT 12 LARGEST COMPANIES	3.0	4.2	22.5	21.1	18.5	21.4	21.2	18.4	20.9	(D)	(D)	23.2	24.2
NEXT 30 LARGEST COMPANIES	7.5	8.3	13.1	13.7	14.0	12.9	12.7	12.8	13.6	5.1	5.0	5.1	12.5
REMAINDER COMPANIES	87.5	82.8	10.7	16.6	12.9	16.7	15.8	12.7	12.1	7.0	10.8	5.9	9.2
INDUSTRY 2761, MANIFOLD BUSINESS FORMS													
TOTAL	601	795	2 893.8	45.3	575.0	33.3	67.3	390.9	1 491.6	82.1	12.5	69.6	1 418.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	7.7	38.4	28.2	29.0	30.7	31.4	33.0	39.3	39.3	45.3	38.2	37.4
NEXT 4 LARGEST COMPANIES	.7	3.3	9.4	8.5	7.8	7.9	7.2	7.7	10.9	14.4	20.3	13.4	8.0
NEXT 12 LARGEST COMPANIES	2.0	8.9	16.3	15.5	15.8	15.0	15.5	14.5	14.4	12.6	4.0	14.1	18.4
NEXT 30 LARGEST COMPANIES	5.0	7.4	13.1	15.6	15.8	14.5	14.6	14.7	12.0	7.5	7.1	7.5	14.2
REMAINDER COMPANIES	91.7	72.7	22.8	32.2	31.6	31.9	31.3	30.1	23.4	26.3	23.3	26.8	22.0
INDUSTRY 2771, GREETING CARD PUBLISHING													
TOTAL	155	166	1 072.1	18.1	226.8	10.6	21.7	105.8	655.9	18.8	5.8	13.0	364.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	7.8	76.8	66.9	71.8	62.6	65.1	66.8	75.5	(D)	(D)	(D)	75.5
NEXT 4 LARGEST COMPANIES	2.6	2.4	7.8	10.7	8.3	9.1	8.7	7.7	9.4	(D)	(D)	(D)	6.1
NEXT 12 LARGEST COMPANIES	7.7	7.8	8.4	11.7	10.5	15.4	14.6	14.0	7.6	11.6	10.1	(D)	11.1
NEXT 30 LARGEST COMPANIES	19.4	18.7	5.0	8.0	7.0	10.2	9.2	9.1	5.2	4.0	3.4	4.3	5.5
REMAINDER COMPANIES	67.7	63.3	2.0	2.6	2.5	2.7	2.4	2.4	2.2	1.9	1.4	2.1	1.9
INDUSTRY 2782, BLANKBOOKS AND LOOSELEAF BINDERS													
TOTAL	371	505	1 122.6	31.8	338.5	25.2	49.8	235.0	739.9	36.0	9.0	27.1	396.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	15.6	43.3	38.9	44.5	41.2	41.7	47.9	48.4	38.4	28.4	41.7	34.6
NEXT 4 LARGEST COMPANIES	1.1	5.0	13.1	13.0	13.0	11.8	12.3	12.3	13.9	16.6	(D)	8.0	11.9
NEXT 12 LARGEST COMPANIES	3.2	5.9	13.1	10.8	10.0	10.2	10.4	9.1	11.2	11.3	(D)	10.8	15.9
NEXT 30 LARGEST COMPANIES	8.1	8.9	13.5	15.6	13.1	15.6	14.6	12.7	11.0	18.0	5.8	22.1	17.8
REMAINDER COMPANIES	86.5	64.6	17.1	21.8	19.5	21.2	21.0	18.0	15.5	15.7	10.6	17.4	19.8
INDUSTRY 2789, BOOKBINDING AND RELATED WORK													
TOTAL	974	987	533.6	24.1	240.6	20.9	38.8	183.6	408.8	19.3	2.2	17.1	126.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.5	9.8	7.4	6.7	7.0	7.6	6.0	8.3	5.4	4.3	5.5	15.1
NEXT 4 LARGEST COMPANIES	.4	.6	7.2	7.2	7.1	7.3	7.2	7.2	6.5	10.1	(D)	11.1	8.8
NEXT 12 LARGEST COMPANIES	1.2	1.4	12.7	11.6	11.2	11.6	11.5	10.9	11.5	18.1	(D)	18.9	16.7
NEXT 30 LARGEST COMPANIES	3.1	3.4	15.8	13.6	15.9	13.6	14.6	16.8	16.4	14.2	11.6	14.5	14.3
REMAINDER COMPANIES	94.9	94.0	54.4	60.3	59.1	60.5	59.1	59.0	57.3	52.1	69.4	49.9	45.0
INDUSTRY 2791, TYPESETTING													
TOTAL	2 370	2 406	730.6	27.2	364.7	21.7	38.8	271.6	623.4	36.7	5.9	30.8	110.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.2	5.9	5.3	4.5	5.5	5.6	4.6	5.4	3.4	3.7	3.4	8.7
NEXT 4 LARGEST COMPANIES	.2	.2	3.4	3.5	3.4	3.6	4.3	3.6	3.4	3.1	3.0	3.1	3.8
NEXT 12 LARGEST COMPANIES	.5	.5	7.3	5.1	7.1	4.8	4.7	6.8	7.3	4.5	5.5	4.3	7.2
NEXT 30 LARGEST COMPANIES	1.3	2.0	12.1	10.3	11.5	9.8	10.9	10.9	12.3	7.3	5.5	7.6	11.6
REMAINDER COMPANIES	97.9	97.0	71.3	75.8	73.5	76.4	74.4	74.1	71.6	81.7	82.3	81.6	68.7
INDUSTRY 2793, PHOTOENGRAVING													
TOTAL	440	449	218.0	5.7	89.3	3.8	6.8	58.4	168.2	7.5	1.2	6.3	50.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	1.1	28.1	17.2	20.0	13.2	13.4	17.8	26.0	18.1	7.6	20.1	35.1
NEXT 4 LARGEST COMPANIES	.9	1.3	10.2	9.2	11.1	9.8	9.4	10.6	10.8	27.6	(D)	28.0	8.0
NEXT 12 LARGEST COMPANIES	2.7	3.6	16.7	18.3	18.9	17.8	19.6	19.1	16.6	13.5	(D)	12.9	17.0
NEXT 30 LARGEST COMPANIES	6.8	6.7	15.7	17.9	18.5	18.2	18.5	19.1	16.3	16.2	21.4	15.3	13.8
REMAINDER COMPANIES	88.6	87.3	29.4	37.4	31.4	41.0	39.1	33.4	30.3	24.5	28.9	23.6	26.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2794, ELECTROTYPING AND STEREOTYPING													
TOTAL	40	40	13.8	.4	6.8	.3	.5	4.6	10.0	.1	-	.1	3.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	10.0	10.0	52.2	49.3	55.5	54.3	61.2	61.4	54.1	41.3	(X)	42.7	46.6
NEXT 4 LARGEST COMPANIES	10.0	10.0	17.6	16.9	15.3	13.7	13.7	13.2	17.8	25.4	(X)	23.6	17.2
NEXT 12 LARGEST COMPANIES	30.0	30.0	20.7	22.6	19.3	20.5	17.4	16.9	18.4	27.0	(X)	26.4	27.0
NEXT 30 LARGEST COMPANIES	50.0	50.0	9.6	11.2	9.8	11.6	7.7	8.5	9.7	6.3	(X)	7.3	9.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2795, LITHOGRAPHIC PLATEMAKING SERVICES													
TOTAL	677	697	667.0	15.2	273.9	10.6	20.4	181.5	466.8	27.4	3.5	23.9	198.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.4	16.8	11.4	11.5	8.6	9.4	8.1	14.2	7.8	5.1	8.2	20.7
NEXT 4 LARGEST COMPANIES	.6	1.3	6.5	5.6	6.8	5.8	6.3	6.5	6.5	3.6	4.2	3.6	6.9
NEXT 12 LARGEST COMPANIES	1.8	2.2	9.3	8.7	8.7	8.7	8.2	9.2	9.1	4.0	5.2	3.8	10.2
NEXT 30 LARGEST COMPANIES	4.4	4.3	15.3	15.0	16.5	15.2	16.0	17.1	15.8	19.0	7.9	20.6	14.5
REMAINDER COMPANIES	92.6	90.8	52.1	59.3	56.5	61.7	60.1	59.1	54.5	65.6	77.6	63.8	47.7
INDUSTRY 2812, ALKALIES AND CHLORINE													
TOTAL	30	49	1 654.8	11.8	215.9	8.0	16.0	136.2	822.5	220.0	22.2	197.7	826.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	13.3	28.6	66.5	72.1	73.0	71.3	71.2	71.5	66.0	61.9	54.2	62.8	66.7
NEXT 4 LARGEST COMPANIES	13.3	18.4	20.1	17.7	16.2	17.6	18.1	16.8	17.9	31.6	36.6	31.0	22.4
NEXT 12 LARGEST COMPANIES	40.0	30.6	13.3	10.0	10.6	10.9	10.5	11.4	16.0	(D)	9.1	(D)	10.7
NEXT 30 LARGEST COMPANIES	33.3	22.4	.1	.2	.2	.3	.2	.2	.1	(D)	.1	(D)	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2813, INDUSTRIAL GASES													
TOTAL	109	562	1 234.6	7.5	117.2	4.6	9.6	67.0	732.8	243.0	23.2	219.8	515.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.7	62.8	65.4	54.3	60.2	58.0	58.5	62.5	67.9	61.5	30.7	64.7	62.1
NEXT 4 LARGEST COMPANIES	3.7	14.2	18.7	18.9	17.0	16.5	17.0	15.9	18.0	29.1	37.9	28.2	19.9
NEXT 12 LARGEST COMPANIES	11.0	4.4	8.4	13.5	11.5	12.2	11.6	10.2	7.3	5.9	25.8	3.8	9.7
NEXT 30 LARGEST COMPANIES	27.5	7.5	5.3	8.7	7.5	7.7	7.7	7.0	4.9	2.7	3.8	2.6	5.9
REMAINDER COMPANIES	54.1	11.0	2.2	4.7	3.8	5.7	5.2	4.5	1.9	.7	1.8	.6	2.3
INDUSTRY 2816, INORGANIC PIGMENTS													
TOTAL	71	106	1 259.9	11.9	179.8	8.0	16.4	110.2	567.9	124.3	11.7	112.5	695.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.6	17.9	54.0	46.2	48.1	48.7	46.2	50.4	59.0	24.1	48.2	21.6	50.1
NEXT 4 LARGEST COMPANIES	5.6	11.3	24.4	24.6	25.3	23.4	25.1	24.6	19.8	60.5	21.3	64.6	27.7
NEXT 12 LARGEST COMPANIES	16.9	20.8	15.6	22.1	19.6	20.5	21.4	18.6	15.0	13.2	25.7	11.9	16.3
NEXT 30 LARGEST COMPANIES	42.3	30.2	5.6	6.5	6.3	6.8	6.8	5.8	5.7	1.9	4.2	1.7	5.4
REMAINDER COMPANIES	29.6	19.8	.5	.7	.6	.7	.6	.6	.5	.2	.6	.2	.5
INDUSTRY 2819, INDUSTRIAL INORGANIC CHEM., NEC													
TOTAL	345	565	8 695.7	78.8	1 334.2	47.3	96.7	720.1	4 363.9	468.2	81.7	386.6	4 391.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	9.6	32.6	35.0	35.5	33.1	32.6	33.1	37.5	29.1	36.8	27.5	27.4
NEXT 4 LARGEST COMPANIES	1.2	9.2	16.3	13.1	13.8	14.6	14.3	16.4	14.5	11.5	13.2	11.2	18.0
NEXT 12 LARGEST COMPANIES	3.5	7.6	24.8	23.0	23.6	22.6	24.2	23.9	24.0	15.2	11.0	16.0	25.8
NEXT 30 LARGEST COMPANIES	8.7	16.1	16.2	17.9	17.0	17.4	16.6	15.5	14.8	27.4	27.2	27.5	17.5
REMAINDER COMPANIES	85.5	57.4	10.1	11.1	10.0	12.3	12.4	10.9	9.1	16.7	11.7	17.8	11.3
INDUSTRY 2821, PLASTICS MATERIALS AND RESINS													
TOTAL	221	397	10 818.2	57.2	985.6	36.7	76.6	575.7	4 142.7	895.2	101.2	794.0	6 772.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	6.5	22.2	21.2	22.7	21.4	20.6	22.9	24.1	11.3	15.3	10.8	21.5
NEXT 4 LARGEST COMPANIES	1.8	2.8	14.3	13.0	14.6	13.0	13.2	14.6	16.1	22.2	24.7	21.9	13.2
NEXT 12 LARGEST COMPANIES	5.4	15.9	23.9	23.0	23.4	23.3	24.2	24.0	24.4	34.7	16.6	37.0	23.4
NEXT 30 LARGEST COMPANIES	13.6	22.2	27.0	23.5	23.4	23.1	23.4	23.9	23.9	24.2	24.6	24.2	28.7
REMAINDER COMPANIES	77.4	52.6	12.6	19.2	15.8	19.2	18.6	14.5	11.6	7.5	18.8	6.1	13.2
INDUSTRY 2822, SYNTHETIC RUBBER													
TOTAL	56	63	1 863.3	10.0	185.2	7.1	14.2	125.7	568.6	53.2	3.9	49.3	1 294.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	7.1	12.7	59.8	58.0	60.4	58.0	57.9	60.5	59.8	57.2	47.6	58.0	58.7
NEXT 4 LARGEST COMPANIES	7.1	7.9	23.6	22.6	22.8	23.8	24.1	24.4	20.7	24.0	11.7	25.0	25.3
NEXT 12 LARGEST COMPANIES	21.4	22.2	15.4	16.0	14.2	14.8	14.6	12.7	18.1	17.9	37.7	16.3	14.9
NEXT 30 LARGEST COMPANIES	53.6	47.6	1.2	3.3	2.5	3.4	3.4	2.4	1.4	.9	3.1	.8	1.1
REMAINDER COMPANIES	10.7	9.5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2823, CELLULOSIC MANMADE FIBERS													
TOTAL	5	10	1 002.8	16.0	213.7	12.6	25.2	151.8	327.2	29.4	1.1	28.3	683.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	80.0	90	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 4 LARGEST COMPANIES	20.0	10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2824, ORGANIC FIBERS, NONCELLULOSIC													
TOTAL	37	66	6 379.7	74.0	1 086.1	54.8	105.8	704.8	2 804.4	338.5	45.8	292.7	3 618.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	10.8	34.8	78.1	71.0	75.6	71.1	69.8	75.6	79.2	79.2	78.1	79.4	77.0
NEXT 4 LARGEST COMPANIES	10.8	13.6	12.2	17.1	14.2	16.5	16.8	13.8	11.8	12.4	13.2	12.2	12.7
NEXT 12 LARGEST COMPANIES	32.4	25.8	9.0	10.8	9.3	11.1	12.1	9.8	8.3	5.8	7.4	5.5	9.7
NEXT 30 LARGEST COMPANIES	45.9	25.7	.7	1.1	.9	1.2	1.3	.9	.7	2.6	1.3	2.8	.6
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2831, BIOLOGICAL PRODUCTS													
TOTAL	250	310	898.5	15.7	210.2	8.8	17.3	90.5	563.4	35.4	11.3	24.2	350.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	4.5	31.5	28.0	31.8	26.7	27.9	29.1	28.0	16.2	7.3	20.3	37.2
NEXT 4 LARGEST COMPANIES	1.6	3.2	17.7	14.1	17.1	14.3	15.0	17.8	19.3	14.9	6.0	19.0	15.2
NEXT 12 LARGEST COMPANIES	4.8	10.0	24.8	25.3	21.8	23.4	23.8	22.9	26.7	39.1	64.1	27.4	22.9
NEXT 30 LARGEST COMPANIES	12.0	14.8	17.3	20.2	18.3	21.7	19.8	18.1	16.9	21.3	15.0	24.2	16.7
REMAINDER COMPANIES	80.0	67.4	8.8	12.4	11.0	13.8	13.5	12.1	9.2	8.6	7.6	9.0	8.0
INDUSTRY 2833, MEDICINALS AND BOTANICALS													
TOTAL	153	177	1 889.9	14.4	219.9	8.4	17.1	127.2	1 162.2	123.8	19.8	104.0	739.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	6.2	65.1	56.7	58.7	54.7	54.4	63.4	72.0	64.0	35.2	69.4	54.8
NEXT 4 LARGEST COMPANIES	2.6	6.8	13.1	14.1	14.1	14.9	16.1	13.0	10.2	16.9	21.4	16.0	15.9
NEXT 12 LARGEST COMPANIES	7.8	11.3	10.5	11.8	12.3	11.6	11.2	10.1	9.0	8.7	14.2	7.7	14.1
NEXT 30 LARGEST COMPANIES	19.6	16.9	7.1	10.6	9.1	11.5	11.4	8.4	5.1	6.9	24.5	3.6	10.5
REMAINDER COMPANIES	67.3	58.8	4.1	6.8	5.7	7.3	6.9	5.2	3.7	3.5	4.7	3.3	4.8
INDUSTRY 2834, PHARMACEUTICAL PREPARATIONS													
TOTAL	655	756	11 459.4	126.4	2 029.5	63.1	123.1	779.4	8 214.4	419.3	123.8	295.5	3 394.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.8	23.7	18.5	22.7	17.3	17.4	19.5	24.3	20.7	16.1	22.6	21.7
NEXT 4 LARGEST COMPANIES	.6	1.5	19.6	17.2	18.3	17.0	17.5	20.9	19.9	19.0	14.7	20.9	18.9
NEXT 12 LARGEST COMPANIES	1.8	5.3	29.2	25.4	25.3	25.9	26.4	27.2	30.6	21.2	23.1	20.4	25.9
NEXT 30 LARGEST COMPANIES	4.6	6.6	18.0	24.6	23.0	23.8	22.4	20.7	17.5	30.8	39.3	27.3	19.7
REMAINDER COMPANIES	92.4	83.9	9.5	14.3	10.7	16.1	16.3	11.7	7.7	8.3	6.8	8.9	13.8
INDUSTRY 2841, SOAP AND OTHER DETERGENTS													
TOTAL	554	638	5 671.4	32.1	521.6	20.5	41.0	308.1	2 867.5	135.5	15.9	119.6	2 817.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	3.8	58.9	44.0	52.0	48.7	49.1	59.9	55.2	65.4	49.5	67.5	62.7
NEXT 4 LARGEST COMPANIES	.7	2.7	12.1	10.7	9.7	12.7	12.7	12.1	14.7	8.4	9.4	8.2	9.5
NEXT 12 LARGEST COMPANIES	2.2	4.7	11.0	12.4	10.7	10.3	10.5	8.0	12.9	7.5	7.9	7.4	8.9
NEXT 30 LARGEST COMPANIES	5.4	8.2	7.2	9.8	8.2	9.5	9.5	6.7	7.0	8.5	10.1	8.2	7.4
REMAINDER COMPANIES	91.0	80.7	10.8	23.1	19.4	18.8	18.2	13.3	10.1	10.3	23.0	8.6	11.5
INDUSTRY 2842, POLISHES AND SANITATION GOODS													
TOTAL	946	1 022	3 157.3	22.1	274.7	14.1	27.2	148.5	1 667.2	51.8	12.7	39.2	1 497.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	2.3	40.7	19.2	22.2	22.1	23.4	29.0	42.6	25.0	(D)	23.1	38.4
NEXT 4 LARGEST COMPANIES	.4	1.9	15.7	10.2	9.2	13.8	14.8	13.7	17.6	15.8	(D)	19.9	13.5
NEXT 12 LARGEST COMPANIES	1.3	2.4	11.0	14.3	14.1	12.7	12.6	11.9	10.1	10.0	10.4	9.8	12.1
NEXT 30 LARGEST COMPANIES	3.2	4.6	10.7	15.4	15.7	12.2	12.8	12.9	10.5	22.2	25.2	21.3	11.1
REMAINDER COMPANIES	94.7	88.7	21.9	40.8	38.9	39.2	36.4	32.6	19.2	27.0	30.1	26.0	24.9
INDUSTRY 2843, SURFACE ACTIVE AGENTS													
TOTAL	148	175	944.8	6.6	101.9	3.7	7.7	47.3	345.7	41.1	8.2	32.8	603.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.7	8.0	32.0	23.5	25.4	28.8	29.8	36.6	29.9	(D)	(D)	(D)	33.0
NEXT 4 LARGEST COMPANIES	2.7	5.1	13.8	9.7	9.8	9.6	9.8	10.0	12.0	(D)	(D)	(D)	14.8
NEXT 12 LARGEST COMPANIES	8.1	12.6	23.1	23.4	22.2	20.1	20.1	19.5	25.1	22.0	33.3	19.2	22.1
NEXT 30 LARGEST COMPANIES	20.3	18.3	20.6	24.0	24.3	21.5	21.2	18.5	21.7	16.5	17.6	16.3	20.1
REMAINDER COMPANIES	66.2	56.0	10.5	19.4	18.2	19.9	19.1	15.5	11.2	8.2	21.0	5.0	10.0

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2844, TOILET PREPARATIONS													
TOTAL	644	693	6 557.2	50.9	627.9	32.8	62.9	318.9	4 526.7	105.6	29.0	76.6	2 059.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.6	40.4	18.8	21.8	20.7	21.5	27.0	44.1	26.4	8.1	33.3	32.3
NEXT 4 LARGEST COMPANIES	.6	2.3	15.2	13.1	11.5	14.6	12.6	13.1	15.0	12.3	5.9	14.7	15.7
NEXT 12 LARGEST COMPANIES	1.9	2.9	18.2	21.7	22.6	20.5	21.0	20.1	17.1	24.5	42.8	17.6	20.7
NEXT 30 LARGEST COMPANIES	4.7	5.6	16.1	25.9	26.7	22.6	23.4	22.5	15.0	24.7	26.3	24.1	18.7
REMAINDER COMPANIES	92.2	87.6	10.0	20.6	17.4	21.6	21.4	17.3	8.8	12.2	16.8	10.4	12.6
INDUSTRY 2851, PAINTS AND ALLIED PRODUCTS													
TOTAL	1 288	1 579	6 629.7	61.4	882.6	33.0	66.2	394.1	2 821.3	167.4	52.5	114.9	3 848.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	2.8	23.9	18.5	19.9	19.1	18.8	22.7	26.2	47.7	(D)	44.2	22.1
NEXT 4 LARGEST COMPANIES	.3	2.1	11.8	7.7	8.2	8.0	7.9	9.0	10.1	4.9	(D)	5.7	13.0
NEXT 12 LARGEST COMPANIES	.9	5.3	16.4	15.3	16.4	15.6	16.2	16.3	16.3	10.0	(D)	11.0	16.5
NEXT 30 LARGEST COMPANIES	2.3	6.7	14.9	15.1	14.6	15.0	15.2	14.5	14.8	13.3	11.8	14.0	15.0
REMAINDER COMPANIES	96.1	83.2	33.1	43.4	40.9	42.2	41.7	37.5	32.5	24.1	22.1	25.0	33.5
INDUSTRY 2861, GUM AND WOOD CHEMICALS													
TOTAL	100	119	391.3	4.8	54.0	3.8	7.8	38.9	185.0	27.0	10.8	16.2	205.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.0	15.1	58.5	56.3	57.4	58.5	58.1	61.6	63.6	50.7	27.8	66.1	53.6
NEXT 4 LARGEST COMPANIES	4.0	5.0	21.1	17.0	19.6	14.5	16.4	16.6	16.0	3.8	2.4	4.7	25.1
NEXT 12 LARGEST COMPANIES	12.0	11.8	12.2	13.9	12.8	13.6	13.3	11.7	12.7	13.5	3.1	20.4	12.1
NEXT 30 LARGEST COMPANIES	30.0	26.1	6.5	10.2	8.2	10.3	9.6	8.0	5.9	5.7	4.9	6.2	7.3
REMAINDER COMPANIES	50.0	42.0	1.7	2.5	2.0	3.1	2.5	2.2	1.7	26.3	61.8	2.7	1.8
INDUSTRY 2865, CYCLIC CRUDES AND INTERMEDIATES													
TOTAL	135	191	5 637.0	35.7	631.5	23.4	46.6	369.8	2 214.4	443.1	52.6	390.5	3 453.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	7.9	41.7	33.6	39.9	34.1	32.8	37.7	41.3	33.9	(D)	35.6	41.8
NEXT 4 LARGEST COMPANIES	3.0	11.0	18.7	19.1	18.0	21.4	22.0	21.7	21.8	23.6	(D)	24.8	16.7
NEXT 12 LARGEST COMPANIES	8.9	9.4	18.6	20.3	19.4	19.5	19.9	19.3	16.6	25.4	34.4	24.2	20.1
NEXT 30 LARGEST COMPANIES	22.2	24.6	16.3	20.0	17.0	18.6	19.0	16.3	16.1	14.7	26.9	13.1	16.5
REMAINDER COMPANIES	63.0	47.1	4.6	6.9	5.7	6.4	6.3	5.0	4.2	2.4	3.5	2.3	4.9
INDUSTRY 2869, INDUSTRIAL ORGANIC CHEMICALS, NEC													
TOTAL	384	569	24 232.8	112.3	2 108.7	70.7	145.7	1 216.5	10 475.7	2 882.6	447.7	2 434.9	13 948.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	6.5	38.2	33.9	36.8	32.9	32.2	35.8	41.1	34.3	15.0	37.9	36.0
NEXT 4 LARGEST COMPANIES	1.0	3.0	17.2	13.1	13.8	12.6	13.0	12.7	17.2	30.5	(D)	24.9	17.3
NEXT 12 LARGEST COMPANIES	3.1	7.9	17.2	18.9	18.4	20.8	20.4	21.1	17.9	14.4	5.7	16.0	16.5
NEXT 30 LARGEST COMPANIES	7.8	14.4	17.3	17.8	17.1	18.2	19.2	17.9	14.2	12.3	8.3	13.0	19.6
REMAINDER COMPANIES	87.0	68.2	10.1	16.4	14.0	15.6	15.2	12.6	9.6	8.4	(D)	8.1	10.5
INDUSTRY 2873, NITROGENOUS FERTILIZERS													
TOTAL	110	152	2 603.4	12.1	207.9	7.9	17.1	128.4	1 202.0	734.4	34.7	699.6	1 450.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.6	11.8	33.8	24.4	27.1	24.6	25.7	26.0	37.0	38.0	10.7	39.3	31.7
NEXT 4 LARGEST COMPANIES	3.6	7.2	19.9	21.8	20.6	18.1	19.4	19.7	24.4	14.3	19.6	14.0	15.8
NEXT 12 LARGEST COMPANIES	10.9	17.8	28.7	32.3	32.4	34.7	32.7	34.2	22.3	21.6	50.1	20.2	32.8
NEXT 30 LARGEST COMPANIES	27.3	22.4	16.1	18.5	17.6	19.5	19.3	17.9	14.6	25.1	14.5	25.7	18.7
REMAINDER COMPANIES	54.5	40.8	1.4	3.0	2.4	3.0	2.9	2.3	1.6	1.0	5.1	.8	1.1
INDUSTRY 2874, PHOSPHATIC FERTILIZERS													
TOTAL	45	91	2 681.7	14.4	212.8	10.1	21.7	139.2	817.7	111.8	13.8	97.9	1 917.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	8.9	18.7	34.5	26.6	28.8	26.3	28.0	29.1	34.1	23.3	30.7	22.2	34.1
NEXT 4 LARGEST COMPANIES	8.9	13.2	22.3	20.8	20.3	20.7	20.4	19.8	19.0	17.6	15.4	17.9	23.9
NEXT 12 LARGEST COMPANIES	26.7	27.5	35.1	40.5	41.5	41.1	40.9	42.3	38.3	53.1	50.2	53.5	33.9
NEXT 30 LARGEST COMPANIES	55.5	40.7	8.1	12.1	9.4	12.0	10.8	8.8	8.7	6.0	3.7	6.4	8.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2875, FERTILIZERS, MIXING ONLY													
TOTAL	457	673	1 866.6	12.4	139.1	8.1	16.0	68.9	488.9	41.9	9.3	32.6	1 373.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	4.0	21.3	12.9	14.2	10.7	10.4	13.5	24.4	7.3	5.5	7.9	19.4
NEXT 4 LARGEST COMPANIES	.9	7.9	15.3	16.5	16.3	17.5	16.6	15.6	8.7	10.4	7.1	11.3	17.7
NEXT 12 LARGEST COMPANIES	2.6	9.4	19.6	16.5	17.9	15.2	15.6	16.5	20.6	19.4	26.4	17.4	19.7
NEXT 30 LARGEST COMPANIES	6.6	11.0	15.3	15.0	14.3	16.7	16.5	16.0	16.3	20.5	20.9	20.4	14.9
REMAINDER COMPANIES	89.1	67.8	28.6	39.2	37.2	39.8	40.9	38.5	30.1	42.4	40.1	43.0	28.2

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2879, AGRICULTURAL CHEMICALS, NEC													
TOTAL	338	409	2 780.4	15.0	224.1	9.3	17.9	118.2	1 299.3	219.2	41.1	178.0	1 496.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	2.9	44.0	29.4	37.7	29.1	29.5	40.5	48.6	27.5	21.3	29.0	40.4
NEXT 4 LARGEST COMPANIES	1.2	6.6	19.5	16.1	17.6	14.3	14.7	16.2	17.5	14.0	7.2	15.5	20.6
NEXT 12 LARGEST COMPANIES	3.6	8.1	14.8	16.4	13.9	18.0	17.1	14.4	13.4	14.0	31.5	9.9	16.5
NEXT 30 LARGEST COMPANIES	8.9	8.6	11.0	14.4	12.0	15.4	16.3	12.9	10.1	33.9	16.1	38.0	11.7
REMAINDER COMPANIES	85.2	73.8	10.7	23.8	18.7	23.2	22.4	16.0	10.5	10.6	23.9	7.5	10.7
INDUSTRY 2891, ADHESIVES AND SEALANTS													
TOTAL	405	573	1 813.1	16.7	230.7	10.2	20.6	113.5	748.7	39.0	9.4	29.6	1 071.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	11.5	23.5	16.2	16.8	16.3	16.9	17.7	21.7	16.3	14.2	17.0	24.7
NEXT 4 LARGEST COMPANIES	1.0	1.9	11.7	8.7	9.0	9.2	8.4	10.6	15.2	8.7	7.0	9.3	9.3
NEXT 12 LARGEST COMPANIES	3.0	10.3	18.5	18.3	19.0	18.8	19.1	21.4	16.0	20.0	9.5	23.3	20.1
NEXT 30 LARGEST COMPANIES	7.4	9.4	19.9	22.6	22.6	21.9	22.5	21.2	20.2	20.4	22.3	19.8	19.8
REMAINDER COMPANIES	87.7	66.8	26.4	34.2	32.6	33.8	33.1	29.1	27.0	34.5	47.0	30.6	26.1
INDUSTRY 2892, EXPLOSIVES[5]													
TOTAL	63	97	666.3	12.3	173.2	8.4	16.1	101.4	410.7	26.1	7.3	18.8	258.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.3	23.7	64.3	64.1	68.2	66.3	63.1	71.6	70.3	53.9	67.7	48.5	54.0
NEXT 4 LARGEST COMPANIES	6.3	10.3	15.1	14.3	12.6	13.3	15.1	10.9	12.9	12.8	8.8	14.4	18.8
NEXT 12 LARGEST COMPANIES	19.0	21.6	16.2	15.7	14.7	14.8	15.7	13.6	14.2	29.3	20.5	32.7	19.9
NEXT 30 LARGEST COMPANIES	47.6	30.9	4.3	5.9	4.4	5.5	6.0	3.8	2.4	3.9	2.9	4.3	7.2
REMAINDER COMPANIES	20.6	13.4	.1	.1	.1	.1	.1	.1	.1	.2	.1	.2	.1
INDUSTRY 2893, PRINTING INK													
TOTAL	205	446	944.9	10.1	145.1	5.8	11.4	71.6	367.8	17.0	4.3	12.8	583.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.0	25.6	43.1	31.1	30.6	29.1	31.4	29.2	38.4	41.5	37.9	42.7	46.2
NEXT 4 LARGEST COMPANIES	2.0	10.1	13.5	14.4	13.1	15.5	13.4	15.0	14.4	15.4	21.1	13.4	12.9
NEXT 12 LARGEST COMPANIES	5.9	15.5	17.8	23.3	24.6	23.7	24.1	25.3	19.1	15.6	24.0	12.8	17.0
NEXT 30 LARGEST COMPANIES	14.6	13.9	14.7	15.6	16.3	16.0	16.1	16.3	15.8	17.8	11.2	20.0	13.9
REMAINDER COMPANIES	75.6	35.0	11.0	15.6	15.5	15.7	14.9	14.2	12.3	9.7	5.7	11.1	10.0
INDUSTRY 2895, CARBON BLACK													
TOTAL	8	31	468.4	2.5	42.5	2.0	4.6	32.5	170.2	22.7	1.5	21.2	303.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	50.0	67.7	69.9	69.0	68.5	71.3	71.7	70.4	68.4	(D)	(D)	(D)	70.8
NEXT 4 LARGEST COMPANIES	50.0	32.3	30.1	31.0	31.5	28.7	28.3	29.6	31.6	(D)	(D)	(D)	29.2
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 2899, CHEMICAL PREPARATIONS, NEC													
TOTAL	1 479	1 639	3 950.6	35.3	483.4	20.7	41.5	242.0	1 841.7	182.6	49.8	132.9	2 122.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	1.2	14.9	11.2	12.3	13.5	13.6	16.4	15.9	14.2	11.3	15.3	14.0
NEXT 4 LARGEST COMPANIES	.3	1.3	9.7	4.3	5.2	3.6	3.7	4.6	10.7	7.5	6.5	8.0	9.0
NEXT 12 LARGEST COMPANIES	.8	2.0	15.2	9.8	10.7	9.8	10.0	10.5	13.4	10.0	13.9	8.5	16.6
NEXT 30 LARGEST COMPANIES	2.0	3.7	16.7	14.9	16.4	15.5	16.1	17.8	16.6	23.3	19.7	24.6	16.9
REMAINDER COMPANIES	96.6	91.7	43.5	59.9	55.5	57.5	56.6	50.6	43.4	45.0	48.7	43.6	43.5
INDUSTRY 2911, PETROLEUM REFINING													
TOTAL	192	349	91 688.8	102.5	2 055.3	70.8	144.4	1 366.4	14 423.9	2 108.6	589.2	1 519.5	77 854.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	11.2	30.3	28.5	29.0	27.6	27.7	27.5	36.0	20.8	37.6	14.3	29.1
NEXT 4 LARGEST COMPANIES	2.1	8.6	22.8	22.0	23.3	23.3	23.5	24.3	23.4	15.3	15.3	15.3	22.8
NEXT 12 LARGEST COMPANIES	6.2	17.8	27.5	25.2	25.6	25.0	24.1	26.0	23.4	45.3	21.4	54.5	28.0
NEXT 30 LARGEST COMPANIES	15.6	17.2	13.6	14.4	13.7	14.7	15.2	14.4	12.2	13.5	19.7	11.1	14.0
REMAINDER COMPANIES	74.0	45.3	5.9	9.9	8.5	9.3	9.5	7.7	5.0	5.1	6.0	4.8	6.0
INDUSTRY 2951, PAVING MIXTURES AND BLOCKS													
TOTAL	990	1 022	1 578.3	12.8	189.6	9.6	20.1	133.6	507.8	57.3	8.4	48.9	1 072.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	15.4	16.6	7.8	7.6	8.0	8.2	8.3	13.1	6.4	2.8	7.0	18.2
NEXT 4 LARGEST COMPANIES	.7	3.6	6.6	5.0	6.5	4.9	5.4	6.8	9.4	4.7	2.1	5.2	5.2
NEXT 12 LARGEST COMPANIES	2.0	7.2	11.3	12.1	14.7	12.7	12.7	15.7	11.3	9.9	7.5	10.3	11.3
NEXT 30 LARGEST COMPANIES	5.1	10.4	16.9	16.2	16.3	15.7	15.4	15.8	16.9	15.4	14.2	15.6	16.8
REMAINDER COMPANIES	91.5	63.4	48.6	58.9	54.9	58.7	58.3	53.5	49.2	63.6	73.4	62.0	48.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 2952, ASPHALT FELTS AND COATINGS													
TOTAL	146	275	2 077.6	19.5	271.7	14.3	31.0	185.9	764.2	55.2	13.0	42.2	1 320.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.7	15.3	45.1	40.6	43.0	46.3	47.7	52.0	44.6	31.7	17.4	36.1	45.6
NEXT 4 LARGEST COMPANIES	2.7	25.1	26.4	20.8	19.4	20.7	21.5	19.6	22.9	27.5	17.9	30.4	28.3
NEXT 12 LARGEST COMPANIES	8.2	10.9	15.5	22.4	22.2	17.1	15.5	14.3	19.2	26.0	49.9	18.7	13.2
NEXT 30 LARGEST COMPANIES	20.5	12.7	9.5	11.2	10.8	11.3	11.0	10.2	9.4	12.3	12.3	12.3	9.6
REMAINDER COMPANIES	65.8	36.0	3.5	5.0	4.6	4.7	4.5	3.9	3.9	2.5	2.6	2.5	3.3
INDUSTRY 2992, LUBRICATING OILS AND GREASES													
TOTAL	417	490	1 644.7	10.3	157.1	5.4	10.4	65.4	524.8	25.6	5.7	19.9	1 101.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	4.9	27.7	17.5	19.0	19.4	19.7	23.4	28.2	15.5	17.5	14.9	27.1
NEXT 4 LARGEST COMPANIES	1.0	4.9	12.1	7.0	6.8	9.1	9.6	11.2	8.1	14.0	7.4	15.9	14.3
NEXT 12 LARGEST COMPANIES	2.9	3.7	17.8	14.8	16.9	11.6	12.3	11.8	21.1	12.0	3.9	14.3	16.4
NEXT 30 LARGEST COMPANIES	7.2	8.6	18.2	19.7	17.9	19.6	19.0	18.3	15.7	14.3	15.8	13.8	18.7
REMAINDER COMPANIES	88.0	78.0	24.3	41.0	39.4	40.3	39.4	35.2	26.8	44.3	55.3	41.1	23.5
INDUSTRY 2999, PETROLEUM AND COAL PRODUCTS, NEC													
TOTAL	60	70	463.3	1.6	22.5	1.1	2.1	14.2	157.0	14.5	1.5	13.0	306.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.7	15.7	67.2	48.7	46.6	53.2	51.4	53.9	64.7	60.9	20.5	65.8	68.5
NEXT 4 LARGEST COMPANIES	6.7	8.6	16.4	9.9	11.4	11.0	12.1	12.9	18.7	12.5	15.2	12.2	15.2
NEXT 12 LARGEST COMPANIES	20.0	18.6	10.6	20.4	23.3	15.6	17.7	15.8	10.4	14.1	36.5	11.4	10.8
NEXT 30 LARGEST COMPANIES	50.0	42.9	5.6	20.3	18.1	19.3	18.1	16.8	6.1	12.3	27.5	10.5	5.3
REMAINDER COMPANIES	16.7	14.3	.2	.7	.6	.9	.8	.6	.2	.2	.4	.2	.1
INDUSTRY 3011, TIRES AND INNER TUBES													
TOTAL	121	200	8 971.0	114.0	1 832.4	88.3	176.4	1 366.0	4 347.3	289.0	38.4	250.6	4 803.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.3	23.5	70.3	70.7	73.3	70.0	70.2	73.0	72.2	75.3	(D)	74.5	69.3
NEXT 4 LARGEST COMPANIES	3.3	8.0	17.9	15.9	16.0	16.5	16.4	16.8	17.9	12.2	(D)	12.5	17.4
NEXT 12 LARGEST COMPANIES	9.9	15.5	9.1	9.5	7.9	9.5	9.7	7.8	7.2	9.8	4.8	10.5	10.7
NEXT 30 LARGEST COMPANIES	24.8	17.5	2.4	3.5	2.5	3.6	3.4	2.2	2.4	2.4	3.6	2.3	2.4
REMAINDER COMPANIES	58.7	35.5	.3	.3	.2	.4	.3	.2	.3	.3	.4	.2	.3
INDUSTRY 3021, RUBBER AND PLASTICS FOOTWEAR													
TOTAL	67	84	517.0	19.8	159.1	16.4	30.0	115.9	272.3	11.3	.9	10.4	256.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.0	15.5	57.9	54.6	55.7	52.2	53.2	54.6	55.7	66.7	54.6	67.7	62.7
NEXT 4 LARGEST COMPANIES	6.0	7.1	14.9	14.4	14.9	15.4	14.8	15.1	16.8	13.6	(D)	12.4	12.6
NEXT 12 LARGEST COMPANIES	17.9	21.4	22.0	25.2	23.9	26.1	25.9	24.5	22.0	15.5	(D)	16.4	20.2
NEXT 30 LARGEST COMPANIES	44.8	35.7	5.1	5.7	5.4	6.1	6.0	5.7	5.5	4.1	12.5	3.4	4.5
REMAINDER COMPANIES	25.4	20.2	.1	.2	.2	.2	.2	.2	(Z)	.1	.2	.1	.1
INDUSTRY 3031, RECLAIMED RUBBER													
TOTAL	21	21	41.6	.9	11.5	.7	1.5	8.4	24.8	.5	(Z)	.5	16.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	19.0	19.0	74.4	71.5	76.3	70.0	74.1	76.4	75.4	51.1	(D)	49.9	73.2
NEXT 4 LARGEST COMPANIES	19.0	19.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	57.1	57.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 30 LARGEST COMPANIES	4.8	4.8	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3041, RUBBER, PLASTICS HOSE AND BELTING													
TOTAL	101	146	1 765.7	34.4	457.4	23.4	45.3	274.9	973.5	55.3	15.3	40.1	800.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.0	11.6	54.9	56.8	61.3	53.0	51.7	57.3	58.3	63.9	74.6	59.8	49.7
NEXT 4 LARGEST COMPANIES	4.0	11.6	16.3	14.7	12.0	16.7	16.9	14.8	15.4	17.0	8.5	20.3	17.4
NEXT 12 LARGEST COMPANIES	11.9	13.7	15.4	14.7	14.6	15.3	15.9	15.2	13.4	9.6	7.0	10.6	18.7
NEXT 30 LARGEST COMPANIES	29.7	26.7	10.8	10.9	9.7	12.0	12.7	10.5	10.6	7.7	7.8	7.6	11.3
REMAINDER COMPANIES	50.5	36.3	2.6	2.9	2.4	3.0	2.8	2.3	2.3	1.8	2.1	1.7	2.9
INDUSTRY 3069, FABRICATED RUBBER PRODUCTS, NEC													
TOTAL	1 127	1 280	4 565.0	98.5	1 164.0	77.1	153.3	795.4	2 351.9	135.0	28.2	106.9	2 231.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.7	15.8	11.6	16.0	11.5	11.6	17.0	16.0	17.4	7.3	20.1	15.8
NEXT 4 LARGEST COMPANIES	.4	.7	8.6	6.6	7.8	6.6	7.2	8.4	7.4	7.2	10.7	6.2	10.0
NEXT 12 LARGEST COMPANIES	1.1	2.7	13.2	12.4	11.9	12.1	11.8	11.2	13.5	8.6	10.8	8.0	12.7
NEXT 30 LARGEST COMPANIES	2.7	5.3	17.8	15.6	15.9	15.2	15.9	15.4	16.9	19.7	19.8	19.7	18.7
REMAINDER COMPANIES	95.6	90.6	44.6	53.8	48.5	54.5	53.4	47.9	46.2	47.1	51.4	45.9	42.8

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3079, MISCELLANEOUS PLASTICS PRODUCTS													
TOTAL	8 817	10 212	23 692.6	453.7	4 911.7	358.0	704.1	3 281.0	11 770.1	1 154.2	223.7	930.5	12 110.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	(Z)	.7	7.0	4.3	5.1	4.1	4.2	5.2	8.6	4.6	3.2	4.9	5.6
NEXT 4 LARGEST COMPANIES	(Z)	.6	4.1	3.3	4.2	3.6	3.7	5.0	4.0	3.7	2.0	4.1	4.0
NEXT 12 LARGEST COMPANIES	.1	1.2	7.4	6.0	6.7	5.6	5.6	6.4	7.9	10.9	15.3	9.9	6.9
NEXT 30 LARGEST COMPANIES	.3	2.2	11.6	8.8	10.1	8.5	8.7	9.8	10.7	12.0	8.0	13.0	12.7
REMAINDER COMPANIES	99.4	95.3	70.0	77.5	73.9	78.2	77.8	73.6	68.9	68.8	71.5	68.1	70.8
INDUSTRY 3111, LEATHER TANNING AND FINISHING													
TOTAL	428	465	1 456.1	23.0	254.8	19.6	38.2	192.2	535.1	30.7	6.8	23.9	927.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	1.5	16.5	12.0	14.1	12.4	12.8	14.9	19.5	12.2	11.6	12.4	14.9
NEXT 4 LARGEST COMPANIES	.9	2.4	11.2	8.5	8.5	8.6	8.5	9.1	10.1	8.1	6.2	8.6	11.9
NEXT 12 LARGEST COMPANIES	2.8	6.0	23.7	25.0	25.6	25.1	25.0	25.8	21.6	33.3	33.8	33.2	24.8
NEXT 30 LARGEST COMPANIES	7.0	8.2	24.4	22.1	22.2	21.5	21.9	21.7	22.2	21.3	20.1	21.6	25.9
REMAINDER COMPANIES	88.3	81.9	24.2	32.4	29.6	32.4	31.8	28.4	26.6	25.1	28.3	24.3	22.6
INDUSTRY 3131, BOOT, SHOE CUT STOCK AND FINDINGS													
TOTAL	174	190	270.6	8.5	65.3	7.4	13.0	48.8	109.4	3.0	.8	2.2	159.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	3.7	20.6	17.5	20.2	16.8	16.8	20.1	18.1	19.7	11.3	22.8	22.3
NEXT 4 LARGEST COMPANIES	2.3	3.7	11.5	12.3	12.5	13.4	14.2	14.2	12.9	8.5	4.0	10.1	10.6
NEXT 12 LARGEST COMPANIES	6.9	7.9	22.9	20.0	21.9	19.5	20.4	21.3	21.7	34.3	48.3	29.3	22.8
NEXT 30 LARGEST COMPANIES	17.2	18.4	28.1	27.1	25.2	27.7	27.6	25.0	28.2	19.9	19.2	20.2	28.7
REMAINDER COMPANIES	71.3	66.3	16.8	23.1	20.1	22.7	21.1	19.5	19.1	17.5	17.2	17.7	15.5
INDUSTRY 3142, HOUSE SLIPPERS													
TOTAL	65	78	201.2	8.1	54.5	7.0	11.7	39.6	108.8	2.3	.7	1.6	92.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.2	17.9	43.8	40.3	42.2	39.9	40.7	42.5	46.0	36.0	81.5	15.1	41.4
NEXT 4 LARGEST COMPANIES	6.2	7.7	20.0	18.8	20.0	18.6	18.7	18.9	19.6	43.4	7.3	59.9	20.7
NEXT 12 LARGEST COMPANIES	18.5	15.4	23.2	24.3	22.2	24.3	23.6	22.5	21.9	13.7	7.7	16.5	24.6
NEXT 30 LARGEST COMPANIES	46.2	39.7	12.2	15.4	14.7	15.8	16.0	15.1	11.9	6.6	3.6	8.0	12.7
REMAINDER COMPANIES	23.1	19.2	.7	1.3	1.0	1.3	1.1	1.0	.5	.3	-	.4	.7
INDUSTRY 3143, MEN'S FOOTWEAR, EXCEPT ATHLETIC													
TOTAL	115	213	1 734.5	55.0	417.0	49.2	90.1	332.2	871.9	14.5	3.4	11.0	880.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.5	16.4	30.9	30.9	31.7	31.1	31.1	31.6	32.3	26.3	13.0	30.5	29.9
NEXT 4 LARGEST COMPANIES	3.5	11.3	14.9	12.7	13.7	12.9	12.6	14.1	14.7	11.9	5.2	14.0	15.1
NEXT 12 LARGEST COMPANIES	10.4	19.2	27.2	26.2	25.2	26.2	27.1	26.6	25.8	23.6	23.9	23.4	28.1
NEXT 30 LARGEST COMPANIES	26.1	22.5	22.4	24.1	23.6	23.7	23.3	21.9	22.7	33.5	54.4	26.9	22.4
REMAINDER COMPANIES	56.5	30.5	4.5	6.1	5.7	6.1	5.9	5.7	4.6	4.7	3.5	5.1	4.4
INDUSTRY 3144, WOMEN'S FOOTWEAR, EXCEPT ATHLETIC													
TOTAL	243	328	1 361.2	57.6	388.6	51.3	91.3	315.6	755.0	9.7	2.1	7.6	607.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	11.9	29.2	25.0	23.8	25.2	25.0	26.4	31.1	16.1	(D)	16.0	26.4
NEXT 4 LARGEST COMPANIES	1.6	4.3	9.5	8.5	9.6	8.9	9.5	9.1	10.5	6.3	(D)	5.3	8.6
NEXT 12 LARGEST COMPANIES	4.9	8.8	17.2	15.9	16.3	16.1	16.2	16.5	16.0	19.8	21.6	19.3	19.4
NEXT 30 LARGEST COMPANIES	12.3	14.6	22.9	25.1	25.6	24.5	25.0	24.6	22.5	18.3	6.9	21.4	23.9
REMAINDER COMPANIES	79.4	60.4	21.2	25.4	24.8	25.3	24.3	23.4	19.8	39.5	44.9	38.0	21.8
INDUSTRY 3149, FOOTWEAR, EXCEPT RUBBER, NEC													
TOTAL	159	192	594.8	24.8	171.4	21.8	38.2	135.1	333.7	10.6	2.8	7.8	269.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.5	10.4	23.5	20.9	22.7	21.3	20.4	22.6	20.5	21.9	19.7	22.7	28.0
NEXT 4 LARGEST COMPANIES	2.5	4.7	17.3	12.0	12.7	12.5	13.7	14.5	18.5	10.0	(D)	13.1	16.6
NEXT 12 LARGEST COMPANIES	7.5	9.4	26.8	27.7	26.8	28.0	28.2	26.9	28.5	25.3	(D)	30.7	23.7
NEXT 30 LARGEST COMPANIES	18.9	18.7	23.6	27.5	26.8	26.4	26.4	25.5	23.3	38.0	66.5	27.9	23.5
REMAINDER COMPANIES	68.6	56.8	8.9	11.9	11.0	11.8	11.3	10.6	9.2	4.9	2.7	5.6	8.2
INDUSTRY 3151, LEATHER GLOVES AND MITTENS													
TOTAL	84	101	178.0	5.5	33.9	4.7	8.2	25.5	67.6	1.9	.3	1.6	111.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.8	7.9	38.2	23.6	25.8	23.2	24.5	23.2	29.5	10.7	35.7	6.2	43.7
NEXT 4 LARGEST COMPANIES	4.8	8.9	15.7	13.2	13.9	12.3	12.5	12.8	17.5	10.1	(D)	8.8	14.1
NEXT 12 LARGEST COMPANIES	14.3	17.8	24.8	25.8	25.3	27.5	29.0	27.1	25.7	23.0	(D)	20.8	24.7
NEXT 30 LARGEST COMPANIES	35.7	31.7	18.2	31.3	29.9	30.8	28.7	31.8	23.5	54.4	11.2	62.3	15.0
REMAINDER COMPANIES	40.5	33.7	3.1	6.1	5.1	6.2	5.3	5.1	3.8	1.8	1.4	1.9	2.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3161, LUGGAGE													
TOTAL	286	298	654.9	19.2	164.1	15.8	29.0	105.5	328.3	8.1	1.0	7.1	328.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	2.0	39.5	26.8	32.8	24.8	25.3	30.1	36.7	40.8	17.0	44.1	41.0
NEXT 4 LARGEST COMPANIES	1.4	2.3	10.4	11.8	12.8	10.3	10.4	9.9	11.1	16.5	31.3	14.5	10.0
NEXT 12 LARGEST COMPANIES	4.2	5.7	16.0	15.9	14.6	16.9	17.0	15.3	15.4	8.5	8.9	8.5	17.5
NEXT 30 LARGEST COMPANIES	10.5	10.7	18.7	23.7	20.5	24.6	24.3	23.2	20.4	19.6	15.4	20.1	17.2
REMAINDER COMPANIES	82.5	79.2	15.4	21.9	19.3	23.3	23.0	21.5	16.4	14.6	27.4	12.8	14.3
INDUSTRY 3171, WOMEN'S HANDBAGS AND PURSES													
TOTAL	404	418	505.2	20.3	144.0	18.2	32.8	109.1	266.5	6.6	1.7	4.9	241.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.7	21.4	13.6	13.5	13.4	13.1	13.0	18.5	(D)	(D)	10.6	23.9
NEXT 4 LARGEST COMPANIES	1.0	2.4	9.4	8.1	8.2	8.4	8.6	7.6	8.3	(D)	(D)	11.3	11.1
NEXT 12 LARGEST COMPANIES	3.0	3.1	17.3	17.9	17.7	18.0	17.7	17.6	18.3	15.0	9.7	16.8	16.4
NEXT 30 LARGEST COMPANIES	7.4	7.9	22.3	22.9	24.1	22.8	23.6	24.6	22.5	18.4	10.0	21.3	21.8
REMAINDER COMPANIES	87.6	84.9	29.6	37.5	36.5	37.5	37.0	37.2	32.4	35.8	23.4	40.0	26.7
INDUSTRY 3172, PERSONAL LEATHER GOODS, NEC													
TOTAL	253	260	366.8	11.9	98.2	9.6	17.2	60.9	205.8	4.8	.7	4.1	161.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	3.1	38.3	36.2	41.6	35.1	34.8	39.9	38.9	35.4	35.9	35.3	36.7
NEXT 4 LARGEST COMPANIES	1.6	1.9	11.1	8.7	7.6	9.1	9.0	8.4	11.6	(D)	(D)	(D)	10.3
NEXT 12 LARGEST COMPANIES	4.7	5.0	17.5	14.4	15.2	14.0	15.4	14.4	15.2	(D)	(D)	(D)	21.3
NEXT 30 LARGEST COMPANIES	11.9	11.9	18.8	22.0	19.8	22.6	20.8	20.3	19.7	26.3	9.4	29.3	17.7
REMAINDER COMPANIES	80.2	78.1	14.3	18.6	15.9	19.2	20.0	16.9	14.5	9.1	9.7	9.0	14.0
INDUSTRY 3199, LEATHER GOODS, NEC													
TOTAL	512	532	284.2	8.6	67.9	7.0	12.4	43.7	136.7	4.1	1.4	2.7	154.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.3	13.2	11.5	11.9	11.3	11.5	12.7	15.2	14.1	34.0	3.9	12.7
NEXT 4 LARGEST COMPANIES	.8	1.7	10.3	9.2	9.9	9.3	9.6	10.1	10.0	20.2	2.7	29.1	10.6
NEXT 12 LARGEST COMPANIES	2.3	3.6	20.3	16.2	17.7	14.6	15.0	15.4	19.9	10.7	2.4	14.9	20.6
NEXT 30 LARGEST COMPANIES	5.9	6.2	21.6	23.0	22.7	23.2	24.1	22.7	21.3	23.8	25.4	23.0	21.5
REMAINDER COMPANIES	90.2	87.2	34.6	40.1	37.8	41.6	39.7	39.1	33.5	31.3	35.5	29.2	34.6
INDUSTRY 3211, FLAT GLASS													
TOTAL	43	62	1 576.6	21.9	401.0	18.5	39.9	328.2	931.0	81.1	11.8	69.3	656.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	9.3	27.4	89.9	83.6	88.9	83.8	84.5	89.1	91.3	89.0	94.8	88.0	88.5
NEXT 4 LARGEST COMPANIES	9.3	16.1	9.0	13.8	9.5	13.4	13.2	9.4	7.6	10.4	4.3	11.5	10.2
NEXT 12 LARGEST COMPANIES	27.9	19.4	.9	2.0	1.4	2.2	1.8	1.3	.9	.4	.6	.4	1.0
NEXT 30 LARGEST COMPANIES	53.5	37.1	.2	.5	.2	.6	.5	.2	.2	.2	.2	.1	.3
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3221, GLASS CONTAINERS													
TOTAL	31	126	3 664.2	70.8	975.4	62.5	120.1	823.0	2 138.9	220.9	34.3	186.7	1 495.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	12.9	38.1	53.7	54.6	55.0	55.3	53.8	56.0	54.3	51.6	51.4	51.7	52.3
NEXT 4 LARGEST COMPANIES	12.9	25.4	21.5	20.0	20.3	19.7	20.5	19.6	21.0	29.0	32.4	28.4	22.4
NEXT 12 LARGEST COMPANIES	38.7	27.0	22.8	23.5	22.9	23.1	23.6	22.6	22.9	16.4	(D)	18.0	23.2
NEXT 30 LARGEST COMPANIES	35.5	9.5	2.0	1.9	1.8	1.9	2.0	1.8	1.8	(D)	(D)	(D)	2.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(D)	(D)	(D)	(X)
INDUSTRY 3229, PRESSED AND BLOWN GLASS, NEC													
TOTAL	325	382	2 120.1	46.2	572.8	38.6	74.4	445.9	1 453.1	143.6	24.9	118.7	675.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	9.7	61.3	54.2	57.9	53.9	54.4	58.3	62.6	42.7	42.1	42.9	58.6
NEXT 4 LARGEST COMPANIES	1.2	4.5	16.8	17.0	16.6	17.4	17.8	17.1	16.8	14.1	11.9	14.6	16.9
NEXT 12 LARGEST COMPANIES	3.7	4.7	13.5	14.5	14.3	14.2	14.1	13.5	12.4	36.4	38.1	36.0	15.8
NEXT 30 LARGEST COMPANIES	9.2	8.1	5.3	9.5	7.4	9.7	9.1	7.3	5.1	5.0	5.7	4.9	5.7
REMAINDER COMPANIES	84.6	73.0	3.1	4.7	3.8	4.9	4.6	3.8	3.1	1.7	2.1	1.6	3.1
INDUSTRY 3231, PRODUCTS OF PURCHASED GLASS													
TOTAL	1 000	1 101	1 842.4	36.2	429.2	28.8	56.7	305.9	960.2	73.4	23.0	50.4	896.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	2.9	30.8	23.8	29.6	23.2	23.6	31.5	33.0	34.0	44.7	29.1	28.5
NEXT 4 LARGEST COMPANIES	.4	2.3	8.3	7.4	7.6	7.0	7.4	7.4	7.9	5.7	4.8	6.0	8.9
NEXT 12 LARGEST COMPANIES	1.2	2.5	13.6	13.3	12.7	13.6	13.6	12.9	13.9	15.9	15.1	16.3	13.4
NEXT 30 LARGEST COMPANIES	3.0	4.5	15.7	14.9	13.5	14.8	14.4	13.0	13.9	15.7	11.1	17.9	17.8
REMAINDER COMPANIES	95.0	87.8	31.6	40.7	36.6	41.4	40.9	35.3	31.3	28.7	24.3	30.7	31.5

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3241, CEMENT, HYDRAULIC													
TOTAL	87	201	3 042.3	27.8	485.1	22.2	44.4	380.0	1 671.5	296.6	41.7	254.9	1 343.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.6	18.4	23.7	22.6	23.1	22.9	22.6	23.1	23.7	16.5	6.6	18.1	23.8
NEXT 4 LARGEST COMPANIES	4.6	13.9	17.6	17.5	18.3	17.9	17.4	18.5	17.8	5.7	4.6	5.9	17.7
NEXT 12 LARGEST COMPANIES	13.8	28.4	33.0	34.0	33.9	34.6	34.4	34.9	33.0	24.6	22.1	25.0	32.4
NEXT 30 LARGEST COMPANIES	34.5	20.4	24.7	24.0	23.4	22.9	24.2	22.4	24.8	52.9	66.4	50.6	25.1
REMAINDER COMPANIES	42.5	18.9	.9	1.8	1.3	1.7	1.5	1.1	.8	.4	.3	.4	1.1
INDUSTRY 3251, BRICK AND STRUCTURAL CLAY TILE													
TOTAL	250	352	777.7	20.5	197.3	17.0	34.0	149.2	467.9	49.6	10.2	39.5	299.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	10.2	21.3	16.7	15.4	17.4	17.8	16.7	24.8	21.0	(D)	20.7	15.6
NEXT 4 LARGEST COMPANIES	1.6	6.2	9.5	8.8	7.8	9.1	9.1	8.1	9.0	5.9	(D)	6.2	9.8
NEXT 12 LARGEST COMPANIES	4.8	8.5	16.6	15.9	16.5	15.2	15.7	16.8	16.1	13.3	8.7	14.4	17.4
NEXT 30 LARGEST COMPANIES	12.0	14.8	22.3	23.4	24.8	23.0	22.8	24.2	22.8	28.4	20.3	30.5	22.2
REMAINDER COMPANIES	80.0	60.2	30.2	35.3	35.5	35.3	34.6	34.3	27.3	31.4	43.7	28.2	35.1
INDUSTRY 3253, CERAMIC WALL AND FLOOR TILE													
TOTAL	62	79	252.5	7.8	78.3	6.3	12.8	56.4	155.4	6.6	.7	6.0	98.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.5	16.5	59.8	51.6	56.1	50.3	51.7	55.7	61.1	49.0	26.9	51.5	57.7
NEXT 4 LARGEST COMPANIES	6.5	11.4	19.6	21.9	19.6	22.2	22.3	20.1	17.9	15.7	11.4	16.2	22.8
NEXT 12 LARGEST COMPANIES	19.4	19.0	16.0	19.7	18.5	20.4	19.5	18.7	16.7	24.7	51.5	21.6	14.9
NEXT 30 LARGEST COMPANIES	48.4	38.0	4.4	6.7	5.6	6.9	6.3	5.4	4.5	10.5	10.1	10.6	4.5
REMAINDER COMPANIES	19.4	15.2	.1	.1	.1	.2	.1	.1	-	.2	-	.2	.1
INDUSTRY 3255, CLAY REFRACTORIES													
TOTAL	98	167	607.2	11.3	146.8	8.8	17.6	106.5	308.4	20.0	4.4	15.6	296.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.1	17.4	46.9	44.1	45.0	44.5	42.5	46.9	44.4	53.2	40.2	56.9	49.0
NEXT 4 LARGEST COMPANIES	4.1	12.6	20.4	18.0	18.6	17.4	17.1	18.7	18.8	13.6	14.0	13.5	21.7
NEXT 12 LARGEST COMPANIES	12.2	18.6	19.1	21.3	22.0	21.3	24.6	20.7	21.8	19.8	31.4	16.6	17.0
NEXT 30 LARGEST COMPANIES	30.6	22.8	11.4	13.2	11.7	13.3	12.7	11.1	12.8	11.4	12.4	11.1	10.0
REMAINDER COMPANIES	49.0	28.7	2.2	3.4	2.7	3.5	3.1	2.6	2.2	2.0	2.0	2.0	2.3
INDUSTRY 3259, STRUCTURAL CLAY PRODUCTS, NEC													
TOTAL	94	113	214.6	5.5	64.0	4.5	8.9	48.2	126.1	6.1	1.4	4.6	90.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.3	14.2	39.7	42.0	39.2	41.3	41.0	37.5	39.2	46.8	40.9	48.7	39.6
NEXT 4 LARGEST COMPANIES	4.3	5.3	20.6	18.2	21.0	19.2	19.6	22.7	21.7	15.5	18.7	14.6	19.7
NEXT 12 LARGEST COMPANIES	12.8	15.0	24.6	22.0	22.8	22.7	22.9	24.3	23.5	18.3	17.2	18.6	26.3
NEXT 30 LARGEST COMPANIES	31.9	26.5	12.4	14.1	13.8	13.2	13.1	12.6	13.1	15.1	19.3	13.8	11.5
REMAINDER COMPANIES	46.8	38.9	2.6	3.7	3.3	3.6	3.4	2.8	2.5	4.2	3.9	4.3	2.8
INDUSTRY 3261, VITREOUS PLUMBING FIXTURES													
TOTAL	54	70	411.4	9.2	117.2	7.8	15.6	96.9	277.3	7.3	1.9	5.4	132.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	7.4	18.6	62.3	54.5	58.5	53.7	55.1	58.3	63.5	47.2	52.2	45.4	58.0
NEXT 4 LARGEST COMPANIES	7.4	14.3	20.2	23.7	23.7	24.3	24.1	24.4	20.1	38.9	41.3	38.0	21.2
NEXT 12 LARGEST COMPANIES	22.2	18.6	15.5	19.2	15.9	19.4	18.4	15.5	14.5	11.5	4.7	14.0	18.8
NEXT 30 LARGEST COMPANIES	55.6	42.9	2.0	2.6	1.9	2.6	2.4	1.9	1.9	2.4	1.7	2.6	2.1
REMAINDER COMPANIES	7.4	5.7	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
INDUSTRY 3262, VITREOUS CHINA FOOD UTENSILS													
TOTAL	26	28	170.7	7.3	72.3	6.0	11.1	53.6	140.0	5.4	1.6	3.8	34.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	15.4	17.9	71.4	70.1	71.2	68.3	67.6	70.2	71.5	76.9	79.1	76.0	70.2
NEXT 4 LARGEST COMPANIES	15.4	17.9	22.8	24.2	23.3	25.7	26.1	24.3	23.0	18.7	20.0	18.2	22.7
NEXT 12 LARGEST COMPANIES	46.2	42.9	5.8	5.6	5.4	5.9	6.2	5.4	5.4	4.3	.9	5.7	7.1
NEXT 30 LARGEST COMPANIES	23.1	21.4	.1	.1	.1	.1	.1	.1	.1	-	-	-	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3263, FINE EARTHENWARE FOOD UTENSILS													
TOTAL	22	23	81.3	4.7	38.4	3.5	6.4	27.1	61.2	1.7	.4	1.3	21.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	18.2	21.7	67.6	65.2	66.6	61.2	61.5	65.8	69.0	62.9	49.5	66.7	67.9
NEXT 4 LARGEST COMPANIES	18.2	17.4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	54.5	52.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 30 LARGEST COMPANIES	9.1	8.6	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3264, PORCELAIN ELECTRICAL SUPPLIES													
TOTAL	77	86	367.5	11.4	144.4	9.1	17.6	98.0	253.9	20.9	5.3	15.6	117.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.2	11.6	48.3	43.8	49.5	43.1	42.5	46.5	48.0	63.8	78.0	58.9	49.9
NEXT 4 LARGEST COMPANIES	5.2	4.7	15.9	15.8	15.7	15.3	15.3	16.5	15.5	8.5	(D)	9.8	15.4
NEXT 12 LARGEST COMPANIES	15.6	14.0	19.5	20.3	18.0	20.8	21.9	19.2	20.3	19.5	(D)	22.1	18.3
NEXT 30 LARGEST COMPANIES	39.0	38.4	14.5	18.1	15.1	18.7	18.4	16.0	14.4	6.4	2.8	7.6	14.8
REMAINDER COMPANIES	35.1	31.4	1.7	2.0	1.8	2.1	2.0	1.8	1.7	2.0	3.2	1.5	1.5
INDUSTRY 3269, POTTERY PRODUCTS, NEC													
TOTAL	713	727	230.0	10.6	87.4	9.2	17.1	66.2	161.2	9.8	2.4	7.5	70.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	.8	18.7	16.1	17.0	16.0	16.8	18.6	18.4	6.9	4.2	7.7	19.5
NEXT 4 LARGEST COMPANIES	.6	.8	12.3	8.8	10.1	8.8	9.6	9.9	13.0	7.2	13.0	5.3	11.1
NEXT 12 LARGEST COMPANIES	1.7	2.1	16.9	17.3	18.5	17.0	17.7	18.2	17.0	19.4	7.9	23.0	16.7
NEXT 30 LARGEST COMPANIES	4.2	4.7	19.9	21.2	22.1	21.0	21.1	21.4	20.7	35.3	45.4	32.1	18.3
REMAINDER COMPANIES	93.0	91.6	32.1	36.6	32.3	37.2	34.8	31.9	31.0	31.2	29.5	31.8	34.4
INDUSTRY 3271, CONCRETE BLOCK AND BRICK													
TOTAL	1 162	1 273	1 143.8	18.7	237.1	11.8	24.1	126.6	520.3	55.6	9.8	45.9	627.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	1.2	3.5	3.7	3.6	4.1	4.1	3.6	4.3	7.1	6.2	7.2	2.9
NEXT 4 LARGEST COMPANIES	.3	1.2	2.7	2.1	2.7	2.2	2.3	2.6	2.6	2.6	2.7	2.6	2.8
NEXT 12 LARGEST COMPANIES	1.0	2.1	5.8	4.7	5.4	4.8	4.7	5.4	6.6	5.1	4.8	5.2	5.0
NEXT 30 LARGEST COMPANIES	2.6	4.1	10.7	8.9	9.4	8.8	9.0	10.2	11.0	6.2	7.5	6.0	10.3
REMAINDER COMPANIES	95.7	91.4	77.4	80.7	79.0	80.1	79.8	78.2	75.4	78.9	78.8	78.9	79.0
INDUSTRY 3272, CONCRETE PRODUCTS, NEC													
TOTAL	3 475	3 916	2 736.2	61.7	734.9	48.1	96.0	494.5	1 529.3	134.4	30.2	104.2	1 234.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	1.3	8.6	6.3	7.5	6.3	6.6	8.0	9.0	11.1	21.8	8.0	8.1
NEXT 4 LARGEST COMPANIES	.1	1.4	5.3	4.3	4.5	4.6	4.9	4.9	5.6	4.2	2.6	4.7	5.0
NEXT 12 LARGEST COMPANIES	.3	1.9	9.3	8.0	7.8	8.3	8.5	8.3	9.4	8.0	2.4	9.6	9.2
NEXT 30 LARGEST COMPANIES	.9	2.8	11.5	10.3	10.8	10.0	10.2	10.8	10.7	16.2	11.3	17.6	12.5
REMAINDER COMPANIES	98.6	92.5	65.3	71.1	69.3	70.8	69.8	67.9	65.2	60.5	61.9	60.1	65.1
INDUSTRY 3273, READY-MIXED CONCRETE													
TOTAL	4 317	5 433	6 440.6	87.9	1 175.8	62.0	125.3	766.6	2 693.2	353.1	54.1	299.0	3 757.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	1.9	4.9	3.1	3.6	2.1	4.5	2.5	4.2	3.0	1.6	3.3	5.5
NEXT 4 LARGEST COMPANIES	.1	.8	3.2	2.0	2.4	2.1	2.3	2.8	2.7	2.9	2.1	3.0	3.5
NEXT 12 LARGEST COMPANIES	.3	1.9	6.3	5.9	6.2	6.1	6.3	6.3	5.9	4.5	2.6	4.8	6.5
NEXT 30 LARGEST COMPANIES	.7	2.7	8.4	7.3	8.0	7.0	6.8	7.9	8.3	9.1	9.2	9.1	8.5
REMAINDER COMPANIES	98.8	92.8	77.2	81.7	79.9	82.6	80.1	80.6	78.9	80.5	84.6	79.8	76.0
INDUSTRY 3274, LIME													
TOTAL	64	94	484.2	5.9	75.4	4.8	9.8	59.4	218.2	29.7	6.9	22.9	264.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.2	20.2	34.9	35.0	31.5	36.5	33.8	33.6	36.4	23.3	4.7	28.8	33.8
NEXT 4 LARGEST COMPANIES	6.2	9.6	15.4	12.3	13.0	12.2	13.5	12.8	16.0	24.1	.3	31.2	15.0
NEXT 12 LARGEST COMPANIES	18.7	18.1	28.9	31.3	33.0	31.2	32.2	33.0	29.1	36.6	88.4	21.1	28.7
NEXT 30 LARGEST COMPANIES	46.9	37.2	20.4	20.9	22.1	19.6	20.1	20.2	18.1	15.6	6.0	18.5	22.1
REMAINDER COMPANIES	21.9	14.9	.3	.5	.4	.5	.5	.4	.4	.5	.5	.5	.3
INDUSTRY 3275, GYPSUM PRODUCTS													
TOTAL	58	128	1 000.0	9.5	143.6	7.6	17.3	111.5	429.6	31.9	4.9	27.0	565.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	47.7	78.7	77.8	78.1	77.9	78.2	78.7	81.6	75.3	(D)	77.7	76.8
NEXT 4 LARGEST COMPANIES	6.9	10.2	12.7	10.6	11.9	11.1	11.4	12.7	11.1	13.9	(D)	(D)	13.6
NEXT 12 LARGEST COMPANIES	20.7	11.7	7.5	9.9	8.7	9.2	8.8	7.5	6.3	9.9	10.1	(D)	8.5
NEXT 30 LARGEST COMPANIES	51.7	24.2	1.1	1.7	1.2	1.7	1.6	1.1	.9	.9	1.4	.8	1.2
REMAINDER COMPANIES	13.8	6.2	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
INDUSTRY 3281, CUT STONE AND STONE PRODUCTS													
TOTAL	963	993	393.0	12.7	131.5	10.6	21.4	98.8	238.2	10.4	2.1	8.3	157.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.1	14.2	10.7	13.2	10.4	10.6	13.3	12.3	6.4	(D)	5.9	17.1
NEXT 4 LARGEST COMPANIES	.4	.8	6.0	5.2	6.5	5.5	5.6	7.2	6.2	7.6	(D)	8.2	5.6
NEXT 12 LARGEST COMPANIES	1.2	1.7	10.2	10.6	11.7	10.5	10.8	11.4	12.0	11.4	14.7	10.6	7.4
NEXT 30 LARGEST COMPANIES	3.1	3.6	12.7	12.9	12.3	12.4	11.8	12.7	13.1	19.6	11.8	21.5	12.4
REMAINDER COMPANIES	94.8	92.7	56.9	60.7	56.3	61.1	61.1	55.4	56.5	55.1	60.1	53.8	57.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3291, ABRASIVE PRODUCTS													
TOTAL	353	410	1 955.8	28.3	392.3	20.1	38.5	241.2	1 097.7	48.7	12.0	36.7	914.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	5.1	57.9	46.0	51.1	44.9	45.3	52.3	58.7	46.5	48.6	45.8	58.5
NEXT 4 LARGEST COMPANIES	1.1	1.7	7.4	9.6	9.0	9.1	8.5	8.3	8.4	3.9	(D)	4.8	5.7
NEXT 12 LARGEST COMPANIES	3.4	6.1	11.6	11.4	10.9	11.7	11.4	10.9	10.1	16.2	(D)	14.6	13.2
NEXT 30 LARGEST COMPANIES	8.5	12.0	10.5	15.1	12.9	15.6	16.0	12.9	10.3	19.2	12.4	21.5	10.2
REMAINDER COMPANIES	85.8	75.1	12.7	17.9	16.0	18.7	18.7	15.5	12.4	14.2	16.8	13.4	12.4
INDUSTRY 3292, ASBESTOS PRODUCTS													
TOTAL	86	123	882.1	13.9	179.9	11.0	22.6	137.4	439.3	26.0	5.4	20.6	448.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.7	16.3	42.2	32.0	37.5	32.4	32.2	38.4	44.9	36.6	42.4	35.1	39.4
NEXT 4 LARGEST COMPANIES	4.7	12.2	21.3	25.7	25.3	26.0	25.0	25.5	21.1	22.9	4.3	27.7	20.8
NEXT 12 LARGEST COMPANIES	14.0	15.4	26.8	29.2	25.8	28.4	30.1	25.6	23.7	26.8	38.2	23.8	30.2
NEXT 30 LARGEST COMPANIES	34.9	25.2	8.3	11.3	9.8	11.3	10.8	8.9	8.9	12.7	13.9	12.3	8.0
REMAINDER COMPANIES	41.9	30.9	1.5	1.8	1.6	1.9	1.9	1.6	1.5	1.1	1.2	1.0	1.4
INDUSTRY 3293, GASKETS, PACKING, SEALING DEVICES													
TOTAL	384	433	1 267.1	33.0	371.3	25.0	47.5	237.3	748.3	46.5	8.0	38.5	524.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	3.7	24.8	24.5	25.2	23.5	21.1	25.3	23.9	27.9	(D)	25.8	25.8
NEXT 4 LARGEST COMPANIES	1.0	3.0	13.8	17.0	16.8	18.0	18.6	18.0	15.0	14.1	(D)	14.7	12.3
NEXT 12 LARGEST COMPANIES	3.1	5.1	19.9	17.0	17.8	16.8	17.3	17.4	20.5	21.1	22.5	20.8	19.0
NEXT 30 LARGEST COMPANIES	7.8	9.9	18.1	18.3	17.8	18.6	19.5	18.4	18.7	14.7	10.1	15.6	17.5
REMAINDER COMPANIES	87.0	78.3	23.4	23.3	22.5	23.1	23.5	20.9	21.9	22.3	18.7	23.0	25.4
INDUSTRY 3295, MINERALS, GROUND OR TREATED													
TOTAL	318	466	957.3	11.5	156.3	8.9	18.1	111.8	479.4	50.2	9.7	40.5	480.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	9.9	26.8	20.4	21.6	19.3	20.0	21.0	24.5	12.3	3.8	14.3	29.0
NEXT 4 LARGEST COMPANIES	1.3	10.1	15.8	16.3	17.9	16.6	16.3	20.3	19.2	17.5	20.3	16.9	12.9
NEXT 12 LARGEST COMPANIES	3.8	8.2	22.3	16.8	19.3	17.1	18.0	19.0	20.6	18.2	27.2	16.0	23.9
NEXT 30 LARGEST COMPANIES	9.4	12.7	17.5	21.9	19.9	22.2	22.1	19.9	18.0	27.9	17.5	30.3	17.4
REMAINDER COMPANIES	84.3	59.2	17.5	24.6	21.3	24.8	23.7	19.7	17.7	24.1	31.2	22.4	16.8
INDUSTRY 3296, MINERAL WOOL													
TOTAL	95	153	1 790.5	22.6	313.8	18.6	38.3	244.5	1 053.7	85.9	12.2	73.7	738.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.2	19.6	71.9	66.0	70.4	67.3	65.3	72.9	75.9	72.8	74.4	72.5	66.2
NEXT 4 LARGEST COMPANIES	4.2	11.1	12.8	15.1	13.1	15.1	15.2	12.5	11.7	(D)	(D)	(D)	14.1
NEXT 12 LARGEST COMPANIES	12.6	17.6	10.7	12.8	11.6	11.8	14.0	10.3	8.7	(D)	(D)	(D)	13.8
NEXT 30 LARGEST COMPANIES	31.6	22.2	4.2	5.4	4.3	5.1	4.8	3.7	3.3	3.2	2.5	3.4	5.4
REMAINDER COMPANIES	47.4	29.4	.5	.7	.6	.7	.7	.6	.4	.3	.6	.3	.5
INDUSTRY 3297, NONCLAY REFRACTORIES													
TOTAL	74	109	680.2	9.1	134.3	6.8	13.5	92.5	352.1	37.1	6.9	30.2	336.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.4	17.4	45.8	38.9	40.7	41.4	41.1	43.3	48.6	64.9	69.0	63.9	43.0
NEXT 4 LARGEST COMPANIES	5.4	10.1	20.9	24.0	23.4	23.5	23.0	23.5	21.3	12.9	3.3	15.1	20.7
NEXT 12 LARGEST COMPANIES	16.2	21.1	22.7	25.0	24.2	23.4	24.1	22.7	20.1	15.3	22.0	13.8	25.6
NEXT 30 LARGEST COMPANIES	40.5	29.4	9.7	10.9	10.7	10.4	10.6	9.4	9.3	6.1	4.5	6.4	9.9
REMAINDER COMPANIES	32.4	22.0	.8	1.1	1.0	1.3	1.2	1.1	.8	.9	1.3	.8	.8
INDUSTRY 3299, NONMETALLIC MINERAL PRODUCTS, NEC													
TOTAL	681	696	387.3	7.7	87.2	6.2	11.4	59.1	224.1	28.7	11.2	17.4	166.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.4	37.2	25.5	28.4	25.1	27.3	31.0	35.5	37.9	(D)	23.9	40.0
NEXT 4 LARGEST COMPANIES	.6	.9	10.4	12.1	12.6	10.4	8.0	9.2	9.8	3.0	(D)	4.1	11.5
NEXT 12 LARGEST COMPANIES	1.8	2.2	17.7	14.4	15.7	14.1	14.6	14.7	19.1	16.6	(D)	18.3	15.8
NEXT 30 LARGEST COMPANIES	4.4	4.9	12.5	15.5	16.2	14.9	16.3	15.9	11.4	5.9	2.7	7.9	13.5
REMAINDER COMPANIES	92.7	90.7	22.2	32.4	27.1	35.5	33.8	29.2	24.2	36.6	22.2	45.8	19.1
INDUSTRY 3312, BLAST FURNACES AND STEEL MILLS[1]													
TOTAL	395	504	[2]41 998.2	441.9	8 725.7	350.2	668.7	6 653.0	15 331.9	2 143.0	225.5	1 917.6	26 715.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	9.5	51.0	48.9	49.1	48.7	47.5	48.7	44.7	43.9	63.6	41.6	54.6
NEXT 4 LARGEST COMPANIES	1.0	3.8	18.3	18.0	18.4	18.5	18.6	18.8	20.5	23.1	13.4	24.2	17.0
NEXT 12 LARGEST COMPANIES	3.0	4.6	16.5	15.6	16.4	15.8	16.6	16.8	19.1	16.8	10.7	17.5	15.1
NEXT 30 LARGEST COMPANIES	7.6	12.3	10.0	12.3	12.0	12.0	12.1	11.6	11.1	10.4	7.2	10.8	9.4
REMAINDER COMPANIES	87.3	69.8	4.2	5.1	4.1	5.0	5.2	4.0	4.6	5.8	5.1	5.9	3.9

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3313, ELECTROMETALLURGICAL PRODUCTS													
TOTAL	28	42	930.6	8.9	139.2	7.0	14.3	103.9	274.6	53.2	4.2	49.1	687.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	14.3	40.5	69.0	71.7	71.0	71.5	71.7	71.7	70.9	46.6	(D)	44.1	66.4
NEXT 4 LARGEST COMPANIES	14.3	11.9	14.8	12.3	13.5	12.2	12.4	12.8	15.0	12.2	(D)	12.2	16.0
NEXT 12 LARGEST COMPANIES	42.9	28.6	15.9	15.5	15.2	15.9	15.5	15.2	13.7	40.8	10.7	43.4	17.4
NEXT 30 LARGEST COMPANIES	28.6	19.0	.3	.4	.3	.4	.4	.3	.4	.4	1.2	.3	.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3315, STEEL WIRE AND RELATED PRODUCTS													
TOTAL	262	335	2 258.6	31.7	436.6	24.3	49.0	304.9	924.4	79.4	14.3	65.1	1 341.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.5	7.5	21.4	19.7	22.3	19.6	21.4	22.6	19.3	26.0	19.8	27.3	23.0
NEXT 4 LARGEST COMPANIES	1.5	3.9	10.5	10.3	10.2	9.7	9.4	9.1	11.0	4.4	1.3	5.1	9.7
NEXT 12 LARGEST COMPANIES	4.6	6.9	19.6	19.3	21.8	19.0	18.2	22.2	22.7	15.8	15.9	15.8	17.9
NEXT 30 LARGEST COMPANIES	11.5	14.6	24.5	23.1	21.9	23.0	23.3	22.6	24.2	19.2	20.8	18.9	24.7
REMAINDER COMPANIES	80.9	67.2	24.0	27.6	23.8	28.6	27.7	23.5	22.9	34.6	42.2	32.9	24.7
INDUSTRY 3316, COLD FINISHING OF STEEL SHAPES													
TOTAL	118	155	2 713.2	19.4	334.6	14.6	28.7	238.8	799.6	49.6	5.6	43.9	1 936.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.4	9.7	37.0	32.3	34.8	33.5	33.5	37.9	32.0	29.2	11.8	31.5	39.0
NEXT 4 LARGEST COMPANIES	3.4	7.1	17.4	13.4	14.6	12.4	13.0	14.1	17.0	12.3	18.8	11.4	17.5
NEXT 12 LARGEST COMPANIES	10.2	17.4	25.1	26.8	24.7	26.5	25.9	23.8	26.2	21.9	21.2	22.0	24.7
NEXT 30 LARGEST COMPANIES	25.4	21.3	17.7	22.6	21.8	22.6	22.7	20.6	21.3	31.5	42.2	30.2	16.2
REMAINDER COMPANIES	57.6	44.5	2.8	4.9	4.1	5.0	5.0	3.7	3.5	5.1	5.9	5.0	2.6
INDUSTRY 3317, STEEL PIPE AND TUBES													
TOTAL	130	180	2 681.4	27.8	449.4	21.8	43.7	330.6	987.9	117.5	19.6	97.9	1 731.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.1	4.4	24.0	19.9	24.6	20.6	21.2	26.6	23.3	45.0	(D)	42.7	25.2
NEXT 4 LARGEST COMPANIES	3.1	7.2	14.7	15.2	14.9	14.5	14.8	15.0	14.5	17.5	(D)	20.4	14.6
NEXT 12 LARGEST COMPANIES	9.2	16.7	29.5	27.9	28.5	27.6	27.1	28.8	29.4	9.7	(D)	10.2	28.9
NEXT 30 LARGEST COMPANIES	23.1	24.4	22.7	24.2	21.9	23.8	23.5	19.9	22.9	21.0	24.7	20.3	22.5
REMAINDER COMPANIES	61.5	47.2	9.2	12.8	10.1	13.4	13.3	9.7	9.8	6.7	8.3	6.4	8.8
INDUSTRY 3321, GRAY IRON FOUNDRIES													
TOTAL	865	984	7 388.7	138.8	2 146.0	116.8	236.1	1 703.2	4 070.7	503.1	102.3	400.8	3 355.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	1.7	33.6	23.9	33.5	24.4	26.9	35.4	33.7	(D)	11.3	(D)	33.5
NEXT 4 LARGEST COMPANIES	.5	1.2	10.5	10.9	11.1	11.0	10.7	11.3	10.7	(D)	50.8	(D)	10.4
NEXT 12 LARGEST COMPANIES	1.4	4.6	15.8	11.6	11.0	11.1	10.7	10.4	13.7	8.3	8.5	8.2	18.2
NEXT 30 LARGEST COMPANIES	3.5	6.0	13.4	14.4	13.1	14.3	14.3	13.0	13.7	12.0	9.0	12.8	13.1
REMAINDER COMPANIES	94.2	86.5	26.8	39.2	31.2	39.2	37.4	29.9	28.3	21.0	20.5	21.1	24.8
INDUSTRY 3322, MALLEABLE IRON FOUNDRIES													
TOTAL	58	66	721.9	18.2	273.0	14.6	27.9	202.5	458.8	28.9	6.5	22.4	265.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	12.1	54.2	44.9	51.6	44.3	43.9	51.9	53.0	59.1	62.3	58.2	56.3
NEXT 4 LARGEST COMPANIES	6.9	6.1	17.5	19.3	18.9	19.1	19.0	18.6	17.8	15.5	8.0	17.7	17.4
NEXT 12 LARGEST COMPANIES	20.7	24.2	16.2	20.3	16.9	20.8	21.6	16.5	17.2	12.9	13.9	12.6	14.3
NEXT 30 LARGEST COMPANIES	51.7	45.5	12.0	15.4	12.6	15.7	15.4	13.0	11.9	12.4	15.7	11.4	11.8
REMAINDER COMPANIES	13.8	12.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
INDUSTRY 3324, STEEL INVESTMENT FOUNDRIES													
TOTAL	80	92	407.5	10.5	128.7	8.1	16.5	85.9	267.4	10.9	1.6	9.3	144.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.0	12.0	56.4	51.4	51.8	48.7	47.3	49.5	55.2	40.7	27.4	43.0	58.8
NEXT 4 LARGEST COMPANIES	5.0	5.4	9.6	9.0	9.9	9.1	10.1	10.3	10.3	32.7	38.8	31.7	8.2
NEXT 12 LARGEST COMPANIES	15.0	15.2	15.4	16.8	17.0	18.0	18.6	18.1	15.5	10.5	15.9	9.5	15.0
NEXT 30 LARGEST COMPANIES	37.5	34.8	15.8	18.6	17.7	19.8	19.8	18.5	16.2	13.2	12.4	13.4	14.9
REMAINDER COMPANIES	37.5	32.6	2.9	4.1	3.5	4.3	4.2	3.6	2.8	2.9	5.5	2.4	3.1
INDUSTRY 3325, STEEL FOUNDRIES, NEC													
TOTAL	287	323	2 312.1	54.8	781.5	44.2	87.3	591.0	1 439.8	115.9	19.0	96.9	882.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	7.7	25.9	20.9	22.3	21.3	21.5	23.0	24.1	30.7	34.8	29.9	29.9
NEXT 4 LARGEST COMPANIES	1.4	2.5	11.7	11.4	11.6	11.0	10.7	11.3	12.4	8.8	3.9	9.7	10.1
NEXT 12 LARGEST COMPANIES	4.2	5.3	17.9	18.7	19.2	18.2	18.5	19.0	18.5	15.4	9.6	16.5	16.9
NEXT 30 LARGEST COMPANIES	10.5	9.9	21.1	21.5	22.5	21.7	21.6	22.9	21.5	20.6	14.7	21.7	20.0
REMAINDER COMPANIES	82.6	74.6	23.4	27.5	24.5	27.8	27.7	23.8	23.5	24.5	36.9	22.1	23.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3331, PRIMARY COPPER[1]													
TOTAL	8	27	[2]3 918.1	13.1	217.3	10.6	20.6	167.5	904.3	(D)	(D)	(D)	3 062.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	50.0	74.0	76.8	73.8	74.2	73.3	72.0	74.1	86.5	(D)	(D)	(D)	73.5
NEXT 4 LARGEST COMPANIES	50.0	26.0	23.2	26.2	25.8	26.7	28.0	25.9	13.5	(D)	(D)	(D)	26.5
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3332, PRIMARY LEAD[1]													
TOTAL	4	7	[2]699.6	2.5	40.5	2.0	4.1	30.2	189.5	(D)	(D)	(D)	524.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
NEXT 4 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3333, PRIMARY ZINC													
TOTAL	8	9	430.7	4.6	70.5	3.5	6.9	49.3	114.3	39.8	5.3	34.6	308.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	50.0	55.6	80.6	84.3	83.6	84.0	82.2	83.2	91.0	84.6	98.6	82.4	77.6
NEXT 4 LARGEST COMPANIES	50.0	44.4	19.4	15.7	16.4	16.0	17.8	16.8	9.0	15.4	1.4	17.6	22.4
NEXT 12 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3334, PRIMARY ALUMINUM													
TOTAL	12	32	4 647.8	28.6	555.0	22.8	45.5	426.3	1 980.9	158.7	22.2	136.5	2 694.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	33.3	68.7	76.2	73.0	75.3	74.6	75.6	77.4	78.8	80.3	88.9	78.9	74.2
NEXT 4 LARGEST COMPANIES	33.3	18.7	16.9	17.1	14.8	16.4	15.5	13.9	14.8	16.8	6.5	18.4	18.5
NEXT 12 LARGEST COMPANIES	33.3	12.5	6.9	9.9	9.9	9.0	8.9	8.7	6.4	2.9	4.6	2.6	7.3
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3339, PRIMARY NONFERROUS METALS, NEC													
TOTAL	81	85	963.9	8.6	148.8	6.0	12.1	95.1	429.5	97.1	7.4	89.7	553.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.9	5.9	56.4	48.1	53.8	43.6	44.2	50.9	67.1	25.4	7.3	26.9	48.8
NEXT 4 LARGEST COMPANIES	4.9	5.9	19.8	25.4	21.9	29.0	28.2	23.8	13.7	53.4	50.8	53.6	23.4
NEXT 12 LARGEST COMPANIES	14.8	16.5	20.1	22.1	20.2	22.7	23.1	21.5	16.6	16.2	35.2	14.7	23.2
NEXT 30 LARGEST COMPANIES	37.0	35.3	3.4	3.8	3.5	3.9	3.8	3.3	2.4	1.9	5.9	1.5	4.1
REMAINDER COMPANIES	38.3	36.5	.3	.6	.6	.7	.7	.5	.1	3.1	.8	3.3	.4
INDUSTRY 3341, SECONDARY NONFERROUS METALS													
TOTAL	393	460	3 558.0	18.9	269.8	14.0	28.4	169.7	769.3	114.3	36.7	77.6	2 792.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	5.9	22.3	18.6	19.6	18.4	18.6	20.6	24.6	48.2	(D)	40.7	22.1
NEXT 4 LARGEST COMPANIES	1.0	3.7	13.8	15.0	14.7	13.8	13.5	13.6	11.1	4.2	1.5	5.4	14.2
NEXT 12 LARGEST COMPANIES	3.1	6.3	18.5	14.3	14.2	14.4	15.2	15.0	18.1	6.6	1.5	9.1	18.4
NEXT 30 LARGEST COMPANIES	7.6	8.5	19.5	20.4	19.8	21.6	21.3	21.1	19.3	19.7	(D)	21.3	19.5
REMAINDER COMPANIES	87.3	75.7	25.9	31.7	31.8	31.8	31.4	29.8	26.8	21.3	16.7	23.5	25.9
INDUSTRY 3351, COPPER ROLLING AND DRAWING													
TOTAL	102	140	4 013.8	31.3	455.5	24.2	50.5	338.7	973.7	64.4	7.3	57.1	3 019.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.9	12.9	39.8	28.4	29.0	27.7	29.5	29.4	27.5	15.9	(D)	16.0	43.6
NEXT 4 LARGEST COMPANIES	3.9	8.6	22.7	27.7	28.9	27.7	26.1	29.1	26.8	49.2	(D)	53.2	21.3
NEXT 12 LARGEST COMPANIES	11.8	15.7	22.7	21.7	22.2	22.1	22.8	22.3	25.2	22.9	57.8	18.4	22.0
NEXT 30 LARGEST COMPANIES	29.4	25.0	13.1	19.6	17.5	19.9	19.0	16.9	18.2	9.8	5.8	10.3	11.6
REMAINDER COMPANIES	51.0	37.9	1.7	2.6	2.4	2.6	2.6	2.2	2.3	2.2	4.2	1.9	1.5
INDUSTRY 3353, ALUMINUM SHEET, PLATE, AND FOIL													
TOTAL	31	53	5 970.7	31.4	613.5	25.0	50.6	480.1	1 340.6	157.7	19.0	138.7	4 900.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	12.9	28.3	72.0	68.6	72.9	69.8	69.7	74.8	71.1	75.7	84.2	(D)	73.3
NEXT 4 LARGEST COMPANIES	12.9	13.2	16.2	15.5	14.4	15.2	15.1	13.8	16.3	11.6	1.4	(D)	15.6
NEXT 12 LARGEST COMPANIES	38.7	37.7	11.6	15.3	12.4	14.5	14.7	11.1	12.2	11.7	11.6	(D)	10.9
NEXT 30 LARGEST COMPANIES	35.5	20.8	.3	.6	.3	.5	.5	.3	.4	.9	2.8	(D)	.2
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3354, ALUMINUM EXTRUDED PRODUCTS													
TOTAL	133	193	2 050.0	26.5	355.9	21.2	44.0	264.1	678.6	48.2	8.6	39.6	1 386.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	9.8	37.9	32.4	40.0	32.9	33.6	42.0	33.7	42.9	42.3	43.0	40.0
NEXT 4 LARGEST COMPANIES	3.0	10.4	16.3	15.7	14.8	15.5	16.2	14.9	18.9	18.0	(D)	18.0	14.9
NEXT 12 LARGEST COMPANIES	9.0	14.0	23.4	23.0	20.9	22.8	22.7	20.5	24.1	11.2	(D)	11.8	23.1
NEXT 30 LARGEST COMPANIES	22.6	21.2	15.5	19.2	16.7	19.5	18.7	15.7	16.1	18.3	17.9	18.4	15.1
REMAINDER COMPANIES	62.4	44.6	7.0	9.8	7.6	9.3	8.8	6.9	7.2	9.6	13.7	8.8	6.9
INDUSTRY 3355, ALUMINUM ROLLING AND DRAWING, NEC													
TOTAL	18	22	1 001.0	4.7	78.1	3.6	6.9	56.5	222.8	16.1	2.2	13.9	754.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	22.2	31.8	80.7	76.4	81.4	78.7	78.5	84.4	81.1	91.7	(D)	91.0	79.7
NEXT 4 LARGEST COMPANIES	22.2	22.7	14.2	14.2	12.0	11.2	11.0	8.7	14.1	(D)	(D)	(D)	14.8
NEXT 12 LARGEST COMPANIES	55.6	45.5	5.1	9.4	6.6	10.1	10.5	7.0	4.8	(D)	(D)	(D)	5.5
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3356, NONFERROUS ROLLING & DRAWING, NEC													
TOTAL	153	173	2 596.5	17.2	260.2	12.0	24.7	158.7	569.0	34.3	6.0	30.1	2 000.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	5.2	43.7	30.8	31.9	30.5	28.8	32.5	28.6	30.0	29.9	30.0	47.3
NEXT 4 LARGEST COMPANIES	2.6	3.5	13.7	10.1	9.8	10.8	12.2	10.7	13.6	7.6	11.3	6.8	13.9
NEXT 12 LARGEST COMPANIES	7.8	12.7	22.2	31.7	32.4	29.8	31.0	31.1	33.0	33.0	35.7	33.5	19.4
NEXT 30 LARGEST COMPANIES	19.5	17.9	15.1	18.7	17.9	20.1	19.3	17.9	17.7	21.5	17.1	22.4	14.6
REMAINDER COMPANIES	67.5	60.7	5.3	8.7	8.0	8.0	8.7	7.8	7.1	7.9	6.0	7.3	4.8
INDUSTRY 3357, NONFERROUS WIREDRAWING, INSULATING													
TOTAL	245	421	6 595.4	66.3	876.8	50.0	101.8	603.4	2 117.6	139.8	19.6	120.2	4 493.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	14.3	39.8	27.9	32.5	28.0	28.8	34.3	34.2	41.4	26.2	43.9	42.6
NEXT 4 LARGEST COMPANIES	1.6	8.1	14.6	14.0	13.3	14.4	14.0	13.8	14.1	10.3	7.1	10.8	15.2
NEXT 12 LARGEST COMPANIES	4.9	11.9	19.5	21.8	20.4	22.5	22.7	20.8	22.4	17.3	22.5	16.5	18.1
NEXT 30 LARGEST COMPANIES	12.2	14.0	15.7	18.9	18.9	18.0	17.6	17.5	16.2	17.5	24.8	16.4	15.0
REMAINDER COMPANIES	79.6	51.8	10.4	17.4	14.9	17.2	16.9	13.7	13.2	13.4	19.3	12.4	9.1
INDUSTRY 3361, ALUMINUM FOUNDRIES													
TOTAL	994	1 038	2 459.1	52.2	691.4	44.2	86.3	531.0	1 262.7	121.1	23.2	97.9	1 213.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.8	23.4	14.6	21.0	14.7	15.4	22.4	20.9	47.3	(D)	49.5	26.2
NEXT 4 LARGEST COMPANIES	.4	1.0	6.0	5.0	5.6	4.6	4.8	5.0	5.4	3.4	3.1	3.5	6.3
NEXT 12 LARGEST COMPANIES	1.2	2.1	12.4	12.2	12.5	12.3	11.6	12.6	12.8	9.8	(D)	9.1	12.2
NEXT 30 LARGEST COMPANIES	3.0	4.4	15.9	15.7	15.4	15.8	16.3	15.5	16.9	12.4	18.2	11.0	15.0
REMAINDER COMPANIES	95.0	91.7	42.2	52.5	45.6	52.7	52.0	44.4	44.0	27.1	28.3	26.9	40.3
INDUSTRY 3362, BRASS, BRONZE, COPPER FOUNDRIES													
TOTAL	476	489	553.3	12.6	148.3	10.2	19.8	106.7	283.0	17.9	3.7	14.2	274.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.5	15.8	11.9	13.0	11.4	11.5	13.2	18.2	10.7	3.3	12.6	13.7
NEXT 4 LARGEST COMPANIES	.8	1.2	7.3	6.7	7.5	6.4	6.3	7.1	7.9	5.7	12.0	4.0	6.9
NEXT 12 LARGEST COMPANIES	2.5	2.5	13.7	11.9	11.9	11.2	11.4	12.0	12.3	12.9	12.9	12.9	15.0
NEXT 30 LARGEST COMPANIES	6.3	6.5	20.3	18.7	19.1	18.4	18.6	18.0	19.4	23.0	16.7	24.6	21.1
REMAINDER COMPANIES	89.5	87.3	42.8	50.8	48.6	52.5	52.2	49.8	42.2	47.8	55.1	45.8	43.4
INDUSTRY 3369, NONFERROUS FOUNDRIES, NEC													
TOTAL	359	365	813.7	17.3	204.1	14.2	28.0	144.9	413.9	24.7	5.1	19.6	396.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	1.4	20.2	17.7	20.3	17.1	17.4	21.0	19.9	23.4	12.1	26.3	19.8
NEXT 4 LARGEST COMPANIES	1.1	1.9	9.2	7.7	9.5	7.7	8.1	10.1	10.5	4.5	3.5	4.8	7.4
NEXT 12 LARGEST COMPANIES	3.3	3.6	17.4	14.6	15.4	14.3	14.4	15.6	16.4	19.6	29.6	17.1	18.9
NEXT 30 LARGEST COMPANIES	8.4	8.2	20.9	20.3	19.7	20.5	21.0	19.5	20.4	19.4	22.7	18.5	21.7
REMAINDER COMPANIES	86.1	84.9	32.3	39.7	35.0	40.3	39.0	33.8	32.8	33.1	32.0	33.3	32.3
INDUSTRY 3398, METAL HEAT TREATING													
TOTAL	682	753	744.9	16.9	220.1	13.3	27.6	147.9	466.8	42.2	9.2	33.0	281.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.7	24.1	10.3	12.1	11.1	12.3	14.7	14.6	12.3	11.5	12.5	39.9
NEXT 4 LARGEST COMPANIES	.6	1.2	7.7	4.5	5.3	4.0	4.3	4.8	7.5	5.3	6.6	(D)	8.8
NEXT 12 LARGEST COMPANIES	1.8	4.4	9.6	10.3	10.4	10.0	10.0	10.2	11.2	8.8	6.8	(D)	6.7
NEXT 30 LARGEST COMPANIES	4.4	5.4	12.6	14.0	13.9	13.8	13.8	13.6	14.4	12.5	5.9	14.3	9.4
REMAINDER COMPANIES	92.7	86.3	46.1	60.8	58.3	61.1	59.6	56.7	52.3	61.2	69.2	58.9	35.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3399, PRIMARY METAL PRODUCTS, NEC													
TOTAL	406	427	750.6	9.0	124.4	6.9	13.9	81.2	296.5	27.3	3.3	24.0	454.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.6	23.8	13.6	15.6	12.4	12.4	15.2	18.3	12.2	9.9	12.5	26.7
NEXT 4 LARGEST COMPANIES	1.0	1.4	11.8	10.0	11.4	10.1	10.6	12.0	8.8	6.2	8.4	5.9	13.6
NEXT 12 LARGEST COMPANIES	3.0	4.2	20.3	14.0	14.5	12.2	12.1	11.8	18.3	20.1	12.6	21.1	21.9
NEXT 30 LARGEST COMPANIES	7.4	8.2	21.0	24.2	23.9	24.4	25.8	24.3	25.2	17.8	20.9	17.3	18.7
REMAINDER COMPANIES	87.7	84.5	23.1	38.2	34.6	40.9	39.1	36.8	29.5	43.8	48.2	43.2	19.2
INDUSTRY 3411, METAL CANS													
TOTAL	153	403	8 242.8	59.8	1 066.3	50.2	106.4	870.8	3 254.3	176.9	19.6	157.3	5 068.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	41.7	59.1	55.2	60.2	56.5	58.7	62.3	57.6	47.5	34.2	49.2	60.4
NEXT 4 LARGEST COMPANIES	2.6	7.7	14.7	11.9	11.8	12.3	11.5	12.2	14.6	8.2	2.9	8.9	14.7
NEXT 12 LARGEST COMPANIES	7.8	13.2	16.2	18.1	17.1	16.5	15.8	15.4	17.8	36.3	54.6	34.1	15.3
NEXT 30 LARGEST COMPANIES	19.6	11.9	8.4	11.7	8.8	11.8	11.2	8.5	8.6	6.3	3.6	6.6	8.1
REMAINDER COMPANIES	67.3	25.6	1.5	3.0	2.1	2.9	2.7	1.7	1.5	1.6	4.7	1.2	1.5
INDUSTRY 3412, METAL BARRELS, DRUMS, AND PAILS													
TOTAL	120	184	937.1	12.4	180.3	9.8	20.1	128.8	389.6	31.8	6.1	25.7	551.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.3	22.8	33.5	28.8	33.4	29.4	29.6	34.5	30.1	37.4	47.8	34.9	36.2
NEXT 4 LARGEST COMPANIES	3.3	4.9	13.1	11.9	10.8	12.0	12.4	11.2	13.0	13.7	19.2	12.3	13.1
NEXT 12 LARGEST COMPANIES	10.0	11.4	24.8	26.9	26.6	26.1	26.6	26.0	27.4	18.8	11.1	20.6	22.3
NEXT 30 LARGEST COMPANIES	25.0	22.3	22.3	22.8	21.3	22.6	21.5	20.4	22.2	24.8	16.3	26.8	22.7
REMAINDER COMPANIES	58.3	38.6	6.3	9.5	7.9	10.0	9.8	7.9	7.2	5.4	5.6	5.3	5.7
INDUSTRY 3421, CUTLERY													
TOTAL	119	130	711.4	14.9	159.6	12.1	23.5	118.3	492.0	23.3	5.0	18.3	219.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.4	5.4	52.9	36.3	39.7	35.0	33.8	41.3	57.9	(D)	(D)	(D)	37.9
NEXT 4 LARGEST COMPANIES	3.4	6.2	12.1	19.9	19.0	20.5	21.4	19.9	12.4	(D)	(D)	(D)	12.1
NEXT 12 LARGEST COMPANIES	10.1	10.0	18.2	19.7	19.3	20.0	20.6	18.1	15.8	33.1	62.8	25.0	26.4
NEXT 30 LARGEST COMPANIES	25.2	25.4	14.2	20.6	18.8	20.8	20.9	17.7	11.5	13.1	11.7	13.4	20.8
REMAINDER COMPANIES	58.0	53.1	2.6	3.5	3.2	3.6	3.3	3.0	2.4	2.2	2.4	2.1	2.8
INDUSTRY 3423, HAND AND EDGE TOOLS, NEC													
TOTAL	662	724	2 279.2	47.0	566.4	36.9	72.8	394.7	1 421.4	72.0	14.1	58.0	898.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.3	24.7	16.9	19.3	16.4	16.9	19.5	25.5	29.5	17.2	32.5	24.8
NEXT 4 LARGEST COMPANIES	.6	1.9	13.1	13.2	12.9	13.8	13.5	14.3	14.4	7.8	(D)	7.4	9.9
NEXT 12 LARGEST COMPANIES	1.8	3.3	17.8	16.8	16.9	15.8	16.0	15.8	16.6	17.6	(D)	17.4	19.7
NEXT 30 LARGEST COMPANIES	4.5	5.5	20.2	22.4	22.2	22.9	23.2	22.8	19.8	20.0	22.0	19.5	21.0
REMAINDER COMPANIES	92.4	86.9	24.2	30.7	28.7	31.1	30.4	27.7	23.6	25.1	33.1	23.1	24.6
INDUSTRY 3425, HANDSAWS AND SAW BLADES													
TOTAL	105	115	363.3	7.6	94.3	5.7	11.4	62.7	230.6	13.4	1.4	12.0	137.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.8	10.4	52.7	49.2	51.9	49.2	47.5	53.7	52.9	67.9	(D)	69.3	51.8
NEXT 4 LARGEST COMPANIES	3.8	3.5	16.2	14.6	15.0	13.9	14.6	13.5	17.7	8.0	(D)	8.8	13.7
NEXT 12 LARGEST COMPANIES	11.4	12.2	16.8	17.8	17.2	17.8	18.5	16.7	15.7	11.2	(D)	10.1	19.2
NEXT 30 LARGEST COMPANIES	28.6	26.1	10.8	13.3	11.7	13.9	14.4	11.9	10.3	8.6	12.7	8.1	11.6
REMAINDER COMPANIES	52.4	47.8	3.5	5.1	4.2	5.2	5.1	4.2	3.3	4.3	10.3	3.7	3.7
INDUSTRY 3429, HARDWARE, NEC													
TOTAL	1 063	1 168	5 202.6	99.2	1 359.0	77.9	156.8	977.7	3 032.6	190.2	25.4	164.8	2 239.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.5	38.7	28.4	39.3	29.6	30.6	43.3	38.6	41.4	13.9	45.6	39.0
NEXT 4 LARGEST COMPANIES	.4	1.4	5.9	8.3	7.5	7.8	9.1	7.0	7.2	11.4	(D)	11.6	4.4
NEXT 12 LARGEST COMPANIES	1.1	2.7	12.0	12.7	11.0	12.3	11.4	10.3	12.0	10.8	(D)	10.8	12.2
NEXT 30 LARGEST COMPANIES	2.8	5.1	15.4	16.0	14.5	15.7	15.7	14.0	15.1	12.7	13.8	12.5	15.6
REMAINDER COMPANIES	95.3	89.4	27.9	34.7	27.8	34.6	33.2	25.3	27.1	23.8	51.5	19.5	28.8
INDUSTRY 3431, METAL SANITARY WARE													
TOTAL	96	101	477.6	8.1	109.7	6.7	14.4	87.5	248.7	11.3	2.0	9.3	223.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.2	6.9	54.2	50.4	58.9	52.0	56.0	63.1	59.6	53.9	50.7	54.6	47.0
NEXT 4 LARGEST COMPANIES	4.2	5.0	13.9	13.7	12.2	13.3	12.6	11.4	12.5	10.2	3.5	11.7	15.8
NEXT 12 LARGEST COMPANIES	12.5	11.9	20.0	20.7	16.2	19.9	17.8	14.0	16.7	15.8	14.0	16.2	24.0
NEXT 30 LARGEST COMPANIES	31.2	30.7	10.7	13.5	11.1	13.0	11.8	10.0	10.1	18.6	29.9	16.2	12.0
REMAINDER COMPANIES	47.9	45.5	1.1	1.8	1.6	1.8	1.7	1.5	1.1	1.4	1.9	1.3	1.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3432, PLUMBING FITTINGS AND BRASS GOODS													
TOTAL	191	213	1 166.4	19.3	215.0	15.3	30.0	145.0	579.3	30.3	3.8	26.5	601.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	3.8	32.9	23.5	27.3	22.6	24.3	25.3	34.5	33.7	11.8	36.9	32.4
NEXT 4 LARGEST COMPANIES	2.1	7.0	16.3	17.9	14.8	17.4	17.1	14.5	15.7	11.7	16.2	11.1	16.6
NEXT 12 LARGEST COMPANIES	6.3	7.5	19.7	19.7	22.2	20.0	19.8	24.0	19.7	26.2	37.8	24.5	19.9
NEXT 30 LARGEST COMPANIES	15.7	15.5	20.8	25.4	23.4	26.4	25.6	24.2	20.3	18.1	17.6	18.2	20.8
REMAINDER COMPANIES	73.8	66.2	10.2	13.5	12.3	13.6	13.2	12.0	9.8	10.2	16.5	9.3	10.3
INDUSTRY 3433, HEATING EQUIPMENT, EXC. ELECTRIC													
TOTAL	678	701	1 443.6	25.8	312.2	18.7	36.0	190.3	745.6	32.4	9.0	23.5	716.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.4	13.8	12.2	11.4	13.3	13.0	13.4	12.6	12.4	14.7	11.5	15.2
NEXT 4 LARGEST COMPANIES	.6	.9	11.8	7.8	8.1	8.5	9.4	9.8	10.1	8.9	13.0	7.4	13.3
NEXT 12 LARGEST COMPANIES	1.8	2.1	18.8	19.1	20.7	17.2	17.5	18.4	19.6	18.7	8.2	22.7	17.7
NEXT 30 LARGEST COMPANIES	4.4	4.9	24.2	23.5	25.2	22.8	22.8	25.0	26.1	23.9	24.4	23.6	22.6
REMAINDER COMPANIES	92.6	90.7	31.4	37.4	34.6	38.2	37.4	33.5	31.6	36.2	39.7	34.8	31.1
INDUSTRY 3441, FABRICATED STRUCTURAL METAL													
TOTAL	2 319	2 462	5 505.2	99.3	1 313.6	72.8	144.2	836.9	2 559.8	144.1	40.3	103.9	3 018.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.5	10.4	10.6	11.3	11.3	11.3	12.1	11.9	3.1	1.6	3.6	9.7
NEXT 4 LARGEST COMPANIES	.2	.7	4.7	4.0	3.7	4.0	3.8	3.9	4.3	3.0	2.2	3.3	4.8
NEXT 12 LARGEST COMPANIES	.5	1.1	8.0	7.0	7.1	6.5	6.5	7.0	7.9	6.1	2.8	7.3	8.2
NEXT 30 LARGEST COMPANIES	1.3	2.9	12.0	10.6	10.5	10.4	10.8	10.3	10.4	7.3	8.2	7.0	13.2
REMAINDER COMPANIES	97.8	94.8	65.0	67.8	67.4	67.8	67.6	66.6	65.5	80.5	85.1	78.8	64.2
INDUSTRY 3442, METAL DOORS, SASH, AND TRIM													
TOTAL	1 498	1 672	3 135.6	65.8	671.3	50.1	97.0	425.0	1 418.3	70.7	18.9	51.8	1 751.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	1.1	8.1	6.5	6.3	6.3	6.7	6.4	7.7	4.6	3.9	4.9	8.6
NEXT 4 LARGEST COMPANIES	.3	1.7	6.8	7.2	6.5	7.5	7.2	6.8	6.5	8.1	10.9	7.1	7.1
NEXT 12 LARGEST COMPANIES	.8	2.0	14.8	12.2	12.7	12.8	13.0	14.4	14.7	15.4	15.9	15.2	15.0
NEXT 30 LARGEST COMPANIES	2.0	4.1	17.9	16.6	17.3	16.7	17.0	17.4	16.8	14.9	12.1	15.9	18.8
REMAINDER COMPANIES	96.7	91.1	52.3	57.5	57.3	56.7	56.0	55.1	54.3	56.9	57.2	56.8	50.5
INDUSTRY 3443, FABRICATED PLATEWORK, BOILER SHOP													
TOTAL	1 683	1 864	7 432.4	123.5	1 777.8	87.7	171.6	1 125.8	4 075.3	179.8	52.6	127.3	3 395.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.4	26.0	18.1	18.3	18.8	18.4	20.0	27.0	17.1	(D)	17.8	23.8
NEXT 4 LARGEST COMPANIES	.2	.3	6.1	5.4	6.9	3.5	3.4	3.9	7.2	7.8	(D)	7.6	5.2
NEXT 12 LARGEST COMPANIES	.7	2.8	11.5	10.6	10.4	10.4	10.3	10.7	11.6	9.6	6.8	10.8	12.4
NEXT 30 LARGEST COMPANIES	1.8	4.3	13.4	13.5	14.0	12.8	12.6	13.5	12.4	14.7	17.8	13.5	14.0
REMAINDER COMPANIES	97.0	91.1	43.0	52.3	50.4	54.6	55.4	51.9	41.7	50.8	51.7	50.4	44.7
INDUSTRY 3444, SHEET METALWORK													
TOTAL	3 222	3 430	4 863.5	77.4	980.2	56.7	109.5	636.6	2 095.1	110.6	26.5	84.1	2 809.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	1.0	9.7	3.9	4.2	3.5	3.3	4.5	6.8	5.1	(D)	6.5	11.8
NEXT 4 LARGEST COMPANIES	.1	1.0	7.0	2.8	3.4	2.5	2.6	3.2	4.1	5.8	(D)	6.2	9.5
NEXT 12 LARGEST COMPANIES	.4	1.0	10.8	8.2	8.3	7.5	7.4	8.0	10.5	14.6	20.2	12.9	11.1
NEXT 30 LARGEST COMPANIES	.9	2.0	12.1	9.4	9.0	9.2	9.3	8.8	11.2	8.2	10.2	7.6	12.8
REMAINDER COMPANIES	98.4	94.9	60.3	75.7	75.1	77.2	77.4	75.5	67.5	66.2	64.2	66.8	54.8
INDUSTRY 3446, ARCHITECTURAL METALWORK													
TOTAL	1 477	1 511	947.1	20.8	247.7	15.1	29.4	152.3	505.5	22.2	6.6	15.7	450.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	1.0	17.0	12.4	12.9	12.2	12.2	14.2	13.9	12.7	(D)	14.6	20.3
NEXT 4 LARGEST COMPANIES	.3	.6	8.7	7.1	7.6	5.8	5.9	6.3	8.2	3.3	(D)	3.6	9.0
NEXT 12 LARGEST COMPANIES	.8	1.4	15.4	16.4	14.5	17.2	18.2	15.5	17.3	11.2	5.3	13.8	13.5
NEXT 30 LARGEST COMPANIES	2.0	2.1	15.4	11.5	12.9	10.8	11.0	12.0	15.6	9.3	8.8	9.5	16.3
REMAINDER COMPANIES	96.6	94.9	43.5	52.6	52.1	53.9	52.6	52.0	45.0	63.6	75.2	58.7	40.9
INDUSTRY 3448, PREFABRICATED METAL BUILDINGS													
TOTAL	414	466	1 779.2	22.7	289.7	15.9	31.6	174.9	694.5	32.2	8.8	23.4	1 100.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	3.2	22.1	16.1	18.4	18.0	18.6	21.8	22.5	15.6	(D)	16.1	21.7
NEXT 4 LARGEST COMPANIES	1.0	1.9	11.5	8.5	8.3	8.3	8.6	8.5	10.4	7.2	(D)	8.1	12.9
NEXT 12 LARGEST COMPANIES	2.9	6.7	24.5	21.4	21.6	20.3	19.3	19.4	21.9	22.3	17.2	24.2	25.5
NEXT 30 LARGEST COMPANIES	7.2	8.8	20.8	23.7	24.2	22.7	23.3	22.9	21.5	31.1	43.7	26.3	20.4
REMAINDER COMPANIES	87.9	79.4	21.1	30.3	27.5	30.7	30.1	27.4	23.7	23.8	19.8	25.3	19.5

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3449, MISCELLANEOUS METALWORK													
TOTAL	308	412	1 330.8	16.3	211.5	10.2	20.2	115.7	436.9	20.5	5.2	15.3	893.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	11.9	28.4	18.7	19.0	20.3	19.8	21.4	24.1	(D)	(D)	(D)	30.8
NEXT 4 LARGEST COMPANIES	1.3	6.3	16.6	18.2	17.6	15.3	14.9	15.5	18.7	(D)	(D)	(D)	15.7
NEXT 12 LARGEST COMPANIES	3.9	6.1	17.9	18.3	21.3	18.1	19.5	19.9	19.0	17.3	20.8	16.2	17.0
NEXT 30 LARGEST COMPANIES	9.7	12.9	18.6	22.0	21.2	22.2	22.4	21.2	19.3	14.9	10.4	16.4	18.0
REMAINDER COMPANIES	83.8	62.9	18.6	22.8	20.9	24.1	23.4	21.9	18.9	21.5	17.2	22.9	18.5
INDUSTRY 3451, SCREW MACHINE PRODUCTS													
TOTAL	1 727	1 770	1 771.7	43.8	551.6	36.0	74.3	395.5	1 023.9	71.9	9.1	62.8	762.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.7	7.4	5.2	6.2	4.6	5.0	5.9	7.5	6.5	6.9	6.4	7.5
NEXT 4 LARGEST COMPANIES	.2	.3	3.1	2.2	2.3	2.2	2.2	2.6	2.5	2.7	.3	3.1	4.1
NEXT 12 LARGEST COMPANIES	.7	.9	7.0	5.8	6.3	5.7	6.1	6.8	7.6	13.5	4.1	14.9	6.2
NEXT 30 LARGEST COMPANIES	1.7	2.1	12.0	10.2	11.1	10.1	10.3	11.1	11.9	10.2	6.5	10.7	12.2
REMAINDER COMPANIES	97.1	95.9	70.5	76.6	74.0	77.3	76.3	73.5	70.5	67.1	82.3	64.9	70.1
INDUSTRY 3452, BOLTS, NUTS, RIVETS, AND WASHERS													
TOTAL	723	857	3 319.5	60.9	862.4	45.6	93.9	587.6	1 840.3	112.3	17.5	94.8	1 510.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.9	13.0	13.2	13.5	13.8	13.4	14.6	12.4	10.1	6.3	10.8	13.4
NEXT 4 LARGEST COMPANIES	.6	2.3	9.9	10.6	11.4	10.3	10.3	11.5	11.0	12.5	4.2	14.0	8.6
NEXT 12 LARGEST COMPANIES	1.7	4.8	16.9	16.4	16.7	16.3	17.1	17.5	17.3	18.9	25.5	17.6	16.4
NEXT 30 LARGEST COMPANIES	4.1	8.3	22.6	20.6	22.2	20.4	20.7	22.2	22.8	21.7	26.9	20.7	22.3
REMAINDER COMPANIES	93.1	81.7	37.6	39.1	36.1	39.2	38.5	34.2	36.4	36.9	37.1	36.9	39.2
INDUSTRY 3462, IRON AND STEEL FORGINGS													
TOTAL	312	358	2 795.7	39.1	641.5	31.0	60.8	474.8	1 301.4	126.7	16.5	110.2	1 505.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	2.5	24.9	23.2	27.5	22.9	22.7	28.1	23.9	25.7	5.4	28.7	25.6
NEXT 4 LARGEST COMPANIES	1.3	3.1	9.2	7.0	7.4	7.1	7.7	7.6	9.9	11.0	15.9	10.2	8.8
NEXT 12 LARGEST COMPANIES	3.8	5.3	17.3	16.0	16.0	16.7	16.7	17.3	16.8	12.5	23.3	10.9	17.4
NEXT 30 LARGEST COMPANIES	9.6	13.7	22.7	23.3	22.1	22.7	22.9	21.4	22.7	30.9	28.1	31.3	22.9
REMAINDER COMPANIES	84.0	75.4	25.9	30.4	27.2	30.5	30.0	25.6	26.6	19.9	27.2	18.8	25.3
INDUSTRY 3463, NONFERROUS FORGINGS													
TOTAL	43	47	456.7	5.4	93.7	4.2	8.2	64.8	240.7	13.7	3.6	10.1	234.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	9.3	14.9	77.2	66.5	72.0	66.5	66.7	74.1	78.2	76.4	(D)	70.3	77.1
NEXT 4 LARGEST COMPANIES	9.3	10.6	8.2	9.7	8.7	9.7	9.9	8.9	6.3	5.2	(D)	5.9	9.6
NEXT 12 LARGEST COMPANIES	27.9	25.5	11.6	18.2	15.4	18.1	18.0	13.6	12.3	16.3	(D)	21.4	10.8
NEXT 30 LARGEST COMPANIES	53.5	48.9	3.0	5.6	3.9	5.7	5.4	3.4	3.2	2.1	(D)	2.5	2.5
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3465, AUTOMOTIVE STAMPINGS													
TOTAL	495	591	9 739.2	132.4	2 446.0	112.5	236.8	1 956.6	4 654.5	292.2	25.1	267.1	5 130.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	4.1	64.9	58.1	70.7	59.2	60.9	73.0	66.9	63.3	26.9	66.7	62.7
NEXT 4 LARGEST COMPANIES	.8	3.9	4.6	4.3	2.7	4.3	4.3	2.8	3.8	(D)	7.2	(D)	5.5
NEXT 12 LARGEST COMPANIES	2.4	4.2	7.3	8.3	6.0	8.4	8.2	6.1	7.0	(D)	5.2	(D)	7.7
NEXT 30 LARGEST COMPANIES	6.1	8.5	7.4	9.0	6.5	8.6	8.2	6.0	7.2	6.2	12.2	5.6	7.6
REMAINDER COMPANIES	89.9	79.4	15.8	20.3	14.1	19.6	18.3	12.2	15.1	20.9	48.5	18.3	16.5
INDUSTRY 3466, CROWNS AND CLOSURES													
TOTAL	42	56	536.9	7.9	104.8	6.5	12.6	80.2	265.4	17.1	2.0	15.1	283.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	9.5	19.6	52.9	43.8	50.1	43.5	44.2	50.4	52.5	45.6	73.9	41.9	52.0
NEXT 4 LARGEST COMPANIES	9.5	12.5	19.6	21.1	19.2	20.9	21.1	19.3	18.6	14.1	(D)	14.9	20.2
NEXT 12 LARGEST COMPANIES	28.6	28.6	22.7	28.1	24.9	28.5	27.6	25.1	23.4	34.7	17.0	37.0	23.4
NEXT 30 LARGEST COMPANIES	52.4	39.3	4.8	7.0	5.8	7.1	7.1	5.2	5.5	5.6	(D)	6.1	4.4
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3469, METAL STAMPINGS, NEC													
TOTAL	2 544	2 663	4 735.7	103.2	1 225.4	82.0	161.2	842.5	2 451.5	154.7	31.6	123.0	2 318.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.5	9.1	7.2	7.0	6.7	6.3	6.8	8.4	7.0	(D)	7.3	10.0
NEXT 4 LARGEST COMPANIES	.2	.4	6.6	4.2	4.3	3.9	3.9	4.0	6.0	3.4	(D)	3.6	7.3
NEXT 12 LARGEST COMPANIES	.5	1.1	10.4	8.9	9.1	8.8	8.7	9.2	10.3	11.4	5.1	13.0	10.6
NEXT 30 LARGEST COMPANIES	1.2	1.9	11.9	9.9	9.7	10.0	10.1	9.9	11.2	10.2	12.4	9.7	12.6
REMAINDER COMPANIES	98.0	96.1	61.9	69.9	69.9	70.6	71.0	70.0	64.1	68.0	74.3	66.4	59.5

SEE FOOTNOTES AT END OF TABLE.

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Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3471, PLATING AND POLISHING													
TOTAL	3 344	3 447	1 848.5	61.2	634.8	51.2	101.3	446.1	1 181.8	73.2	14.7	58.4	674.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.3	7.5	3.4	3.7	3.4	3.7	4.0	4.7	3.5	(D)	3.9	12.6
NEXT 4 LARGEST COMPANIES	.1	.2	4.2	2.8	3.1	2.7	2.8	3.1	3.3	.8	(D)	.9	5.7
NEXT 12 LARGEST COMPANIES	.4	1.0	6.2	3.9	4.7	3.8	4.0	4.8	5.0	4.2	6.4	3.6	8.3
NEXT 30 LARGEST COMPANIES	.9	1.4	9.0	6.7	7.5	6.6	6.8	7.4	8.2	16.3	14.2	16.8	10.5
REMAINDER COMPANIES	98.5	97.2	73.1	83.3	81.0	83.4	82.7	80.7	78.9	75.3	77.3	74.8	62.9
INDUSTRY 3479, METAL COATING AND ALLIED SERVICES													
TOTAL	1 556	1 648	1 607.7	32.3	373.7	25.9	52.2	260.2	781.1	47.9	7.5	40.4	831.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.4	21.8	7.3	10.4	7.2	7.5	11.9	13.9	20.2	3.5	23.3	29.2
NEXT 4 LARGEST COMPANIES	.3	.6	10.2	2.7	4.0	2.3	2.6	3.4	5.4	7.4	.5	8.6	14.6
NEXT 12 LARGEST COMPANIES	.8	1.6	14.3	8.2	10.8	7.7	8.2	11.1	14.3	12.8	19.0	11.7	14.2
NEXT 30 LARGEST COMPANIES	1.9	3.8	12.5	13.9	13.2	13.2	13.6	12.6	13.9	14.3	24.3	12.4	11.2
REMAINDER COMPANIES	96.8	93.6	41.3	67.8	61.5	69.6	68.1	60.9	52.4	45.3	52.7	43.9	30.7
INDUSTRY 3482, SMALL ARMS AMMUNITION													
TOTAL	59	65	436.2	10.3	138.1	7.7	15.4	95.3	247.5	42.9	5.7	37.1	183.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.8	13.8	86.4	88.7	90.4	87.5	88.1	89.7	84.8	91.6	66.4	95.4	88.1
NEXT 4 LARGEST COMPANIES	6.8	7.7	10.9	9.2	7.6	10.1	9.7	8.3	12.4	(D)	(D)	(D)	9.0
NEXT 12 LARGEST COMPANIES	20.3	18.5	2.2	1.8	1.6	1.8	1.8	1.6	2.2	5.6	25.3	(D)	2.4
NEXT 30 LARGEST COMPANIES	50.8	46.2	.5	.4	.4	.5	.4	.4	.5	(D)	(D)	.2	.5
REMAINDER COMPANIES	15.3	13.8	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
INDUSTRY 3483, AMMUNITION, EXC. SMALL ARMS, NEC[5]													
TOTAL	68	80	716.5	18.9	248.1	12.4	23.5	133.2	448.7	9.2	2.0	7.2	262.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.9	12.5	52.4	43.5	47.7	41.2	39.4	42.2	45.0	55.2	(D)	63.3	64.6
NEXT 4 LARGEST COMPANIES	5.9	7.5	19.0	28.5	26.3	29.0	28.7	28.6	28.7	2.0	(D)	1.4	2.9
NEXT 12 LARGEST COMPANIES	17.6	20.0	21.5	19.3	17.8	20.2	21.8	19.6	19.9	25.3	43.1	20.4	23.8
NEXT 30 LARGEST COMPANIES	44.1	37.5	7.0	8.6	8.1	9.6	10.1	9.5	6.3	17.5	26.7	14.9	8.7
REMAINDER COMPANIES	26.5	22.5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	.1	(Z)	.1
INDUSTRY 3484, SMALL ARMS													
TOTAL	105	112	754.9	17.5	237.8	13.1	27.1	157.3	481.5	20.5	6.1	14.4	286.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.8	6.2	58.2	49.3	53.3	48.2	48.3	52.7	57.3	58.5	60.6	57.6	62.4
NEXT 4 LARGEST COMPANIES	3.8	5.4	20.1	24.6	25.1	23.8	25.1	23.4	22.0	28.0	(D)	26.6	16.5
NEXT 12 LARGEST COMPANIES	11.4	11.6	16.6	19.9	16.8	21.5	20.3	19.2	15.8	10.1	(D)	11.7	15.5
NEXT 30 LARGEST COMPANIES	28.6	27.7	4.0	4.7	3.5	4.8	4.7	3.5	3.6	2.5	1.3	3.0	4.7
REMAINDER COMPANIES	52.4	49.1	1.2	1.5	1.2	1.6	1.6	1.2	1.3	1.0	.6	1.1	.9
INDUSTRY 3489, ORDNANCE AND ACCESSORIES NEC													
TOTAL	89	89	733.8	23.6	367.7	13.7	25.8	173.3	559.2	10.1	1.3	8.8	232.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.5	4.5	47.9	48.6	50.9	44.1	43.4	44.8	50.3	15.0	11.2	15.5	33.4
NEXT 4 LARGEST COMPANIES	4.5	4.5	24.4	31.3	34.3	30.0	30.3	34.9	30.9	(D)	(D)	(D)	23.7
NEXT 12 LARGEST COMPANIES	13.5	13.5	19.1	12.5	9.8	17.3	17.5	14.7	12.1	37.4	27.8	38.8	32.2
NEXT 30 LARGEST COMPANIES	33.7	33.7	8.3	7.3	4.8	8.3	8.5	5.4	6.5	(D)	(D)	(D)	10.4
REMAINDER COMPANIES	43.8	43.8	.3	.3	.3	.3	.3	.2	.2	.6	1.0	.5	.3
INDUSTRY 3493, STEEL SPRINGS, EXCEPT WIRE													
TOTAL	116	131	500.5	8.2	119.8	6.6	13.3	88.0	249.9	14.1	2.4	11.7	259.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.4	10.7	44.1	41.2	45.6	42.3	43.1	48.5	45.9	56.6	(D)	59.0	42.2
NEXT 4 LARGEST COMPANIES	3.4	3.8	14.7	13.8	12.6	14.6	16.3	13.5	13.6	13.5	(D)	12.8	16.1
NEXT 12 LARGEST COMPANIES	10.3	11.5	25.7	25.2	25.3	23.4	23.0	22.7	25.4	17.7	14.6	18.4	26.3
NEXT 30 LARGEST COMPANIES	25.9	23.7	12.4	15.8	12.9	15.6	13.8	11.8	12.6	10.3	21.1	8.2	12.0
REMAINDER COMPANIES	56.9	50.4	3.0	4.0	3.6	4.2	3.8	3.5	2.5	1.8	2.6	1.7	3.4
INDUSTRY 3494, VALVES AND PIPE FITTINGS													
TOTAL	741	902	5 662.3	108.7	1 467.3	76.0	149.6	909.8	3 385.9	201.2	42.5	158.7	2 382.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	3.8	12.6	11.2	12.1	10.9	11.2	12.0	13.3	15.0	11.9	15.8	12.2
NEXT 4 LARGEST COMPANIES	.5	3.0	8.0	9.0	8.8	9.1	9.0	9.4	8.0	8.2	6.8	8.6	7.9
NEXT 12 LARGEST COMPANIES	1.6	4.3	16.5	16.5	16.9	17.8	17.4	18.9	15.7	13.9	5.0	16.3	17.1
NEXT 30 LARGEST COMPANIES	4.0	8.1	22.3	21.1	20.5	20.8	20.5	20.0	21.5	17.4	11.9	18.8	23.3
REMAINDER COMPANIES	93.3	80.8	40.6	42.2	41.8	41.4	41.8	39.8	41.5	45.5	64.4	40.4	39.5

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3495, WIRE SPRINGS													
TOTAL	254	332	957.7	21.7	253.5	18.0	35.4	187.8	497.7	27.6	4.5	23.1	458.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	8.7	29.4	23.7	24.7	24.4	23.7	26.9	29.8	25.6	28.5	25.0	29.1
NEXT 4 LARGEST COMPANIES	1.6	4.5	11.3	10.3	10.9	10.5	10.9	11.4	9.8	7.4	(D)	8.6	13.1
NEXT 12 LARGEST COMPANIES	4.7	10.2	17.5	16.5	17.4	16.4	16.1	17.3	16.0	22.3	(D)	22.1	19.1
NEXT 30 LARGEST COMPANIES	11.8	13.0	19.4	20.1	20.0	19.0	19.9	19.1	20.1	17.4	14.8	17.9	18.8
REMAINDER COMPANIES	80.3	63.6	22.4	29.4	27.0	29.7	29.5	25.4	24.3	27.3	32.2	26.3	19.9
INDUSTRY 3496, MISC. FABRICATED WIRE PRODUCTS													
TOTAL	1 048	1 114	1 435.0	32.4	354.5	25.5	49.4	232.2	721.7	47.3	10.6	36.6	728.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.0	9.6	8.1	10.0	8.3	7.4	10.9	10.5	3.3	1.1	3.9	9.3
NEXT 4 LARGEST COMPANIES	.4	.5	6.6	4.9	5.3	4.6	4.9	5.4	5.3	15.5	35.3	9.7	7.7
NEXT 12 LARGEST COMPANIES	1.1	2.2	14.4	12.6	12.7	12.2	12.4	12.4	15.1	17.9	16.3	18.4	14.3
NEXT 30 LARGEST COMPANIES	2.9	4.2	17.3	14.8	15.1	14.4	14.9	14.5	15.9	21.8	9.4	25.4	18.2
REMAINDER COMPANIES	95.2	92.1	52.0	59.5	56.9	60.4	60.3	56.8	53.2	41.5	37.9	42.6	50.4
INDUSTRY 3497, METAL FOIL AND LEAF													
TOTAL	63	77	895.1	9.4	125.8	6.6	13.0	87.1	298.0	16.1	1.8	14.3	607.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.3	13.0	48.9	39.4	38.3	36.7	35.6	41.7	34.8	24.3	(D)	24.6	55.8
NEXT 4 LARGEST COMPANIES	6.3	6.5	16.8	18.1	18.9	19.5	19.2	19.5	21.4	10.8	(D)	11.4	14.5
NEXT 12 LARGEST COMPANIES	19.0	20.8	21.4	25.5	27.2	26.6	27.0	24.8	28.7	49.5	43.6	50.2	18.0
NEXT 30 LARGEST COMPANIES	47.6	42.9	12.4	16.1	14.7	16.3	17.3	13.0	14.4	14.6	27.0	13.0	11.3
REMAINDER COMPANIES	20.6	16.9	.5	.9	.9	1.0	1.0	1.0	.7	.8	1.6	.7	.4
INDUSTRY 3498, FABRICATED PIPE AND FITTINGS													
TOTAL	513	579	1 872.7	28.2	390.0	21.4	40.6	265.4	887.2	51.0	12.7	38.3	1 015.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.4	17.8	9.3	10.0	10.0	10.9	11.6	14.4	8.6	13.4	7.0	21.0
NEXT 4 LARGEST COMPANIES	.8	1.6	11.4	11.0	12.0	9.3	9.5	10.2	10.8	6.5	2.3	7.9	12.6
NEXT 12 LARGEST COMPANIES	2.3	4.0	19.7	18.0	20.0	17.8	17.2	20.2	23.8	27.5	35.2	25.0	15.9
NEXT 30 LARGEST COMPANIES	5.8	10.2	20.8	21.4	20.1	21.5	22.5	20.7	19.8	20.4	13.4	22.7	22.0
REMAINDER COMPANIES	90.3	81.9	30.3	40.3	38.0	41.6	39.9	37.3	31.2	37.0	35.8	37.4	28.6
INDUSTRY 3499, FABRICATED METAL PRODUCTS, NEC													
TOTAL	3 142	3 238	3 429.2	70.8	844.7	54.1	104.8	547.8	1 814.5	94.8	18.5	76.3	1 643.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.3	12.8	4.6	6.4	3.6	3.8	5.8	11.6	5.6	(D)	5.8	13.8
NEXT 4 LARGEST COMPANIES	.1	.3	5.3	4.9	5.5	4.4	4.4	5.2	6.3	5.6	(D)	6.6	4.2
NEXT 12 LARGEST COMPANIES	.4	.8	10.4	7.9	9.0	7.5	7.6	8.8	9.7	7.2	3.2	8.2	11.2
NEXT 30 LARGEST COMPANIES	1.0	1.7	13.7	12.1	12.0	12.4	12.3	12.8	12.7	13.1	5.8	14.8	15.2
REMAINDER COMPANIES	98.4	96.8	57.7	70.5	67.1	72.0	72.0	67.5	59.6	68.6	85.0	64.6	55.6
INDUSTRY 3511, TURBINES, TURBINE GENERATOR SETS													
TOTAL	68	83	2 729.7	40.8	709.1	24.8	51.1	368.5	1 553.1	44.1	5.4	38.8	1 243.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.9	19.3	86.1	84.1	86.1	83.1	83.5	84.6	85.9	85.4	80.0	86.2	86.9
NEXT 4 LARGEST COMPANIES	5.9	8.4	10.7	11.3	10.0	11.7	11.6	10.7	10.8	(D)	16.2	10.6	10.3
NEXT 12 LARGEST COMPANIES	17.6	14.5	2.5	3.7	3.2	4.2	3.9	3.9	2.7	(D)	2.0	2.4	2.0
NEXT 30 LARGEST COMPANIES	44.1	36.1	.7	.8	.7	.9	.9	.8	.6	.9	1.7	.8	.7
REMAINDER COMPANIES	26.5	21.7	(Z)	.1	(Z)	.1	(Z)	(Z)	(Z)	(Z)	.1	(Z)	(Z)
INDUSTRY 3519, INTERNAL COMBUSTION ENGINES, NEC													
TOTAL	187	232	7 696.5	88.8	1 528.6	65.3	130.1	1 036.2	3 406.5	285.8	39.1	246.7	4 459.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	6.9	48.8	40.7	46.3	38.0	38.2	42.1	46.2	62.9	58.4	63.6	51.7
NEXT 4 LARGEST COMPANIES	2.1	6.5	21.1	21.3	20.8	24.6	23.9	24.9	22.4	10.2	10.1	10.3	19.7
NEXT 12 LARGEST COMPANIES	6.4	9.9	18.0	19.0	17.4	18.2	18.0	17.3	15.7	12.5	14.9	12.1	19.0
NEXT 30 LARGEST COMPANIES	16.0	16.8	10.2	15.6	13.0	15.7	16.6	13.4	13.5	13.0	14.2	12.8	7.8
REMAINDER COMPANIES	73.3	59.9	2.0	3.3	2.4	3.4	3.3	2.3	2.1	1.3	2.4	1.1	1.8
INDUSTRY 3523, FARM MACHINERY AND EQUIPMENT													
TOTAL	1 868	2 004	10 281.7	131.3	1 971.9	96.2	182.7	1 313.3	4 854.4	341.9	70.5	271.3	5 469.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.0	46.2	34.8	43.2	37.1	36.7	48.3	46.2	59.6	41.8	64.2	45.6
NEXT 4 LARGEST COMPANIES	.2	.4	14.4	11.0	13.0	9.7	10.4	12.0	13.9	8.7	6.3	9.4	14.9
NEXT 12 LARGEST COMPANIES	.6	2.0	9.1	10.6	9.3	9.8	9.8	8.3	9.5	7.2	14.0	5.4	8.8
NEXT 30 LARGEST COMPANIES	1.6	3.4	8.2	10.3	8.4	9.7	9.8	7.0	8.3	5.7	8.5	5.0	8.3
REMAINDER COMPANIES	97.3	93.1	22.2	33.3	26.1	33.7	33.2	24.5	22.1	18.8	29.4	16.1	22.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3524, LAWN AND GARDEN EQUIPMENT													
TOTAL	137	155	1 575.3	19.6	224.6	14.7	27.7	143.1	635.8	28.6	4.9	23.8	941.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.9	7.1	29.9	24.5	25.5	26.3	28.6	29.4	26.7	22.2	20.4	22.6	34.9
NEXT 4 LARGEST COMPANIES	2.9	5.2	20.8	17.8	18.2	17.8	17.0	17.8	21.7	26.0	13.4	28.6	19.0
NEXT 12 LARGEST COMPANIES	8.8	11.0	31.5	34.2	34.6	32.5	31.6	32.3	34.2	35.5	46.7	33.3	28.5
NEXT 30 LARGEST COMPANIES	21.9	20.6	13.7	17.1	16.0	16.8	16.5	15.1	13.1	11.6	10.2	11.9	13.5
REMAINDER COMPANIES	63.5	56.1	4.1	6.4	5.6	6.5	6.3	5.5	4.3	4.7	9.3	3.7	4.2
INDUSTRY 3531, CONSTRUCTION MACHINERY													
TOTAL	807	922	12 628.7	155.3	2 547.1	111.2	212.7	1 708.1	5 744.3	498.3	151.4	346.8	6 822.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.2	47.4	36.4	42.8	38.5	38.5	45.6	46.9	59.5	60.5	(D)	47.5
NEXT 4 LARGEST COMPANIES	.5	2.0	11.8	12.0	11.4	11.9	10.8	11.8	11.2	11.3	(D)	(D)	11.5
NEXT 12 LARGEST COMPANIES	1.5	3.8	16.2	17.6	17.0	16.7	16.8	16.0	16.2	11.9	(D)	12.3	16.8
NEXT 30 LARGEST COMPANIES	3.7	6.6	10.4	13.7	12.1	13.2	13.7	11.3	10.3	5.9	5.6	6.0	10.5
REMAINDER COMPANIES	93.8	85.5	14.2	20.3	16.7	19.8	20.2	15.3	15.4	11.5	10.8	11.9	13.7
INDUSTRY 3532, MINING MACHINERY													
TOTAL	293	344	1 996.7	31.4	425.9	20.3	39.7	262.9	1 018.8	67.0	23.8	43.2	1 021.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	5.5	36.9	34.8	34.8	32.7	33.6	36.8	34.8	32.1	44.1	25.4	39.3
NEXT 4 LARGEST COMPANIES	1.4	3.5	13.4	15.1	15.1	14.0	12.9	14.0	13.9	11.4	8.8	12.8	13.6
NEXT 12 LARGEST COMPANIES	4.1	7.8	19.8	18.1	18.1	18.9	18.9	18.3	20.7	25.3	20.3	28.0	18.3
NEXT 30 LARGEST COMPANIES	10.2	11.6	17.6	16.4	17.4	17.4	18.3	16.4	18.3	17.5	14.4	19.3	16.7
REMAINDER COMPANIES	82.9	71.5	12.3	15.6	14.6	17.0	16.2	14.4	12.2	13.8	12.4	14.5	12.1
INDUSTRY 3533, OILFIELD MACHINERY													
TOTAL	386	478	3 912.4	58.6	867.5	39.8	83.4	543.3	2 437.6	257.5	67.9	189.7	1 493.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	4.8	29.9	29.0	30.7	29.6	28.2	31.4	32.7	27.3	27.8	27.2	22.4
NEXT 4 LARGEST COMPANIES	1.0	5.2	15.0	14.1	13.7	15.1	16.3	15.5	17.4	24.2	(D)	23.2	12.5
NEXT 12 LARGEST COMPANIES	3.1	6.1	21.0	20.0	19.9	19.5	19.7	19.7	18.8	20.6	(D)	21.1	25.6
NEXT 30 LARGEST COMPANIES	7.8	9.8	21.0	20.4	20.1	19.0	19.4	18.7	18.9	15.3	12.6	16.2	24.8
REMAINDER COMPANIES	87.0	74.1	13.1	16.6	15.6	16.8	16.4	14.7	12.1	12.7	13.6	12.3	14.8
INDUSTRY 3534, ELEVATORS AND MOVING STAIRWAYS													
TOTAL	134	152	489.7	10.2	141.9	5.9	11.5	69.4	284.5	8.8	1.8	7.1	205.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	8.6	51.5	47.2	49.9	41.6	41.4	43.1	57.7	52.3	46.8	53.7	41.8
NEXT 4 LARGEST COMPANIES	3.0	5.3	16.5	15.5	13.3	19.9	20.5	17.2	8.5	11.4	2.5	13.6	27.4
NEXT 12 LARGEST COMPANIES	9.0	8.6	13.7	14.1	14.5	15.7	15.7	17.1	14.5	12.2	21.3	9.9	13.1
NEXT 30 LARGEST COMPANIES	22.4	21.7	12.5	15.7	15.1	14.9	14.6	15.0	13.2	11.9	14.8	11.2	12.1
REMAINDER COMPANIES	62.7	55.9	5.9	7.6	7.2	7.9	7.8	7.5	6.0	12.2	14.5	11.6	5.7
INDUSTRY 3535, CONVEYORS AND CONVEYING EQUIPMENT													
TOTAL	572	616	1 897.9	32.9	476.5	19.2	38.5	226.6	1 018.9	34.7	9.0	25.7	899.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	2.9	19.4	16.1	16.2	14.3	13.9	15.0	17.7	14.8	6.1	17.8	19.7
NEXT 4 LARGEST COMPANIES	.7	1.3	10.3	7.7	10.8	5.3	5.7	6.3	9.8	9.0	5.4	10.2	11.1
NEXT 12 LARGEST COMPANIES	2.1	2.8	16.1	14.6	14.7	13.7	13.9	14.5	17.7	11.5	6.6	13.2	14.8
NEXT 30 LARGEST COMPANIES	5.2	7.0	18.0	18.7	17.8	18.7	18.8	18.3	18.6	23.2	29.8	20.8	17.7
REMAINDER COMPANIES	91.3	86.0	36.2	42.8	40.5	47.9	47.7	45.9	36.2	41.5	52.1	37.9	36.7
INDUSTRY 3536, HOISTS, CRANES, AND MONORAILS													
TOTAL	231	242	836.0	15.8	210.5	10.6	20.6	122.0	453.2	17.9	4.5	13.3	387.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	3.3	16.3	16.4	17.0	14.9	15.4	15.4	17.8	7.0	2.7	8.5	13.7
NEXT 4 LARGEST COMPANIES	1.7	1.7	13.6	12.9	12.2	13.4	13.7	12.9	11.9	22.3	(D)	21.0	14.6
NEXT 12 LARGEST COMPANIES	5.2	6.2	27.0	26.1	26.4	25.6	24.7	27.0	27.9	32.8	(D)	38.8	26.9
NEXT 30 LARGEST COMPANIES	13.0	13.2	23.3	23.7	23.4	24.2	24.7	23.2	23.0	18.1	18.9	17.9	23.8
REMAINDER COMPANIES	78.4	75.6	19.9	20.9	20.9	21.8	21.4	21.5	19.4	19.8	37.2	13.8	21.0
INDUSTRY 3537, INDUSTRIAL TRUCKS AND TRACTORS													
TOTAL	450	475	1 920.1	28.8	427.3	19.4	36.7	252.2	878.2	48.3	10.0	38.3	1 045.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	2.9	45.1	36.0	41.0	35.8	34.9	42.1	41.9	36.7	21.2	40.8	46.8
NEXT 4 LARGEST COMPANIES	.9	1.5	15.6	14.7	15.6	15.0	14.4	15.4	15.9	28.5	39.0	25.8	16.0
NEXT 12 LARGEST COMPANIES	2.7	3.6	14.5	16.5	15.1	15.4	15.9	13.7	16.6	13.0	16.9	12.0	12.5
NEXT 30 LARGEST COMPANIES	6.7	6.7	10.4	13.1	11.5	12.9	13.9	11.6	10.9	7.6	4.3	8.5	10.4
REMAINDER COMPANIES	88.9	85.3	14.4	19.7	16.8	20.9	21.0	17.2	14.8	14.1	18.7	12.9	14.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3541, MACHINE TOOLS, METAL-CUTTING													
TOTAL	874	919	2 819.1	59.5	951.0	37.3	76.6	542.2	1 871.0	82.2	15.4	66.8	1 049.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	1.2	22.2	21.0	21.7	18.3	17.7	20.4	21.0	16.7	16.6	16.8	22.6
NEXT 4 LARGEST COMPANIES	.5	1.8	12.4	12.0	12.5	11.7	11.5	11.8	12.5	13.2	15.7	12.6	12.5
NEXT 12 LARGEST COMPANIES	1.4	2.1	21.8	22.2	22.5	22.7	23.0	22.3	23.2	24.8	16.6	26.7	20.7
NEXT 30 LARGEST COMPANIES	3.4	4.0	20.7	19.7	19.7	20.0	21.1	20.7	20.5	18.0	12.7	19.3	21.7
REMAINDER COMPANIES	94.3	90.9	22.8	25.1	23.6	27.3	26.7	24.8	22.7	27.2	38.4	24.6	22.4
INDUSTRY 3542, MACHINE TOOLS, METAL-FORMING													
TOTAL	411	426	1 130.6	23.7	360.7	16.1	32.8	219.4	721.9	24.7	3.2	21.5	444.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.6	18.5	19.3	18.9	19.7	19.0	18.9	18.7	19.0	14.9	19.7	18.0
NEXT 4 LARGEST COMPANIES	1.0	1.4	13.4	12.1	11.9	12.1	12.2	12.5	13.5	11.2	5.0	12.1	13.2
NEXT 12 LARGEST COMPANIES	2.9	4.0	23.5	22.7	25.0	21.7	22.2	25.2	25.5	22.7	2.9	25.7	21.5
NEXT 30 LARGEST COMPANIES	7.3	7.5	21.4	19.3	19.3	18.6	18.6	18.1	20.2	24.3	36.6	22.4	23.2
REMAINDER COMPANIES	87.8	85.4	23.2	26.7	24.9	27.9	27.9	25.4	22.0	22.8	40.6	20.2	24.1
INDUSTRY 3544, SPECIAL DIES, TOOLS, JIGS, ETC													
TOTAL	7 033	7 152	3 901.3	105.6	1 706.3	86.3	183.8	1 260.4	2 786.9	175.7	29.3	146.4	1 170.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.2	7.6	4.2	6.5	4.0	4.5	6.6	6.9	2.8	.3	3.3	8.7
NEXT 4 LARGEST COMPANIES	.1	.1	2.4	2.3	2.7	2.0	2.1	2.7	2.5	1.7	.3	2.0	2.3
NEXT 12 LARGEST COMPANIES	.2	.3	4.4	3.6	3.9	3.6	3.6	3.9	4.4	3.8	3.7	3.8	4.8
NEXT 30 LARGEST COMPANIES	.4	.7	6.7	5.6	6.2	5.6	5.8	6.3	6.9	5.4	3.4	5.9	6.5
REMAINDER COMPANIES	99.3	98.6	78.9	84.3	80.7	84.7	83.9	80.6	79.3	86.3	92.3	85.1	77.7
INDUSTRY 3545, MACHINE TOOL ACCESSORIES													
TOTAL	1 271	1 412	2 384.5	54.1	762.5	39.9	80.2	498.2	1 585.8	77.2	13.8	63.4	833.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	3.3	20.1	14.2	14.6	13.7	13.0	13.4	17.5	23.2	26.3	22.5	24.9
NEXT 4 LARGEST COMPANIES	.3	1.3	11.2	11.5	12.8	11.5	11.2	13.4	12.9	6.5	3.2	7.2	7.8
NEXT 12 LARGEST COMPANIES	.9	1.8	13.7	13.8	13.9	13.4	13.3	13.6	14.7	10.8	12.0	10.6	12.3
NEXT 30 LARGEST COMPANIES	2.4	5.0	15.6	17.0	16.9	16.9	17.4	17.4	15.7	22.5	25.7	21.8	15.6
REMAINDER COMPANIES	96.1	88.6	39.4	43.7	41.8	44.5	45.2	42.2	39.2	37.0	32.9	37.9	39.5
INDUSTRY 3546, POWER DRIVEN HANDTOOLS													
TOTAL	99	124	1 623.2	27.7	325.7	20.0	38.5	210.4	931.9	39.0	7.4	31.6	703.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.0	9.7	49.8	42.7	38.7	46.4	45.6	41.3	50.3	45.0	42.2	45.7	50.5
NEXT 4 LARGEST COMPANIES	4.0	7.3	20.2	21.3	23.5	19.5	19.5	23.0	21.3	10.8	6.7	11.8	17.8
NEXT 12 LARGEST COMPANIES	12.1	18.5	25.1	29.6	31.3	27.9	28.7	30.0	22.8	39.3	47.4	37.4	27.8
NEXT 30 LARGEST COMPANIES	30.3	25.0	4.1	5.3	5.5	5.1	5.2	4.8	4.8	4.3	3.1	4.5	3.3
REMAINDER COMPANIES	49.5	39.5	.7	1.0	1.0	1.1	1.1	.9	.7	.6	.6	.6	.7
INDUSTRY 3547, ROLLING MILL MACHINERY													
TOTAL	58	63	507.4	7.9	128.2	5.4	10.4	78.4	286.9	9.1	.6	8.4	198.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	12.7	61.5	57.0	59.0	59.6	57.3	62.0	65.0	57.3	22.4	59.9	55.9
NEXT 4 LARGEST COMPANIES	6.9	7.9	15.6	12.7	14.4	11.0	11.6	11.9	15.6	18.1	17.9	18.1	17.7
NEXT 12 LARGEST COMPANIES	20.7	19.0	16.3	21.2	18.8	19.4	20.8	17.7	12.8	15.3	22.8	14.8	18.7
NEXT 30 LARGEST COMPANIES	51.7	47.6	6.4	8.9	7.7	9.7	10.0	8.2	6.4	9.1	36.2	7.1	7.4
REMAINDER COMPANIES	13.8	12.7	.2	.2	.2	.3	.3	.2	.2	.2	.6	.2	.2
INDUSTRY 3549, METALWORKING MACHINERY, NEC													
TOTAL	522	534	916.8	19.4	279.5	12.8	25.2	154.1	562.2	30.7	9.3	21.5	389.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	1.1	15.1	12.5	12.2	12.4	13.1	12.9	15.6	17.1	17.2	17.0	16.0
NEXT 4 LARGEST COMPANIES	.8	1.3	9.3	8.1	9.9	6.8	5.9	6.0	10.7	10.3	17.9	7.0	7.3
NEXT 12 LARGEST COMPANIES	2.3	3.2	18.4	18.1	18.4	17.0	17.0	17.7	16.8	12.3	9.6	13.4	19.9
NEXT 30 LARGEST COMPANIES	5.7	5.6	22.9	20.0	22.2	21.5	23.3	25.3	23.3	22.6	11.4	27.4	23.3
REMAINDER COMPANIES	90.4	88.8	34.3	41.3	37.3	42.3	40.7	38.1	33.5	37.7	43.8	35.1	33.5
INDUSTRY 3551, FOOD PRODUCTS MACHINERY													
TOTAL	685	740	1 786.8	36.3	522.1	22.8	45.4	292.6	1 056.4	46.9	9.0	37.9	765.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.0	14.3	14.4	13.9	13.9	14.4	14.1	14.5	15.9	22.8	14.3	14.5
NEXT 4 LARGEST COMPANIES	.6	.9	9.4	9.0	9.5	9.1	8.6	10.1	10.5	6.0	(D)	7.3	8.9
NEXT 12 LARGEST COMPANIES	1.8	2.6	16.3	15.9	17.6	15.2	15.0	17.4	16.6	11.1	(D)	11.2	15.6
NEXT 30 LARGEST COMPANIES	4.4	6.4	19.9	16.5	17.5	15.2	15.9	16.4	18.6	25.1	15.3	27.4	21.3
REMAINDER COMPANIES	92.7	88.1	40.1	44.3	41.5	46.6	46.1	42.1	39.8	41.9	50.8	39.8	39.7

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3552, TEXTILE MACHINERY													
TOTAL	600	639	951.0	26.0	300.8	18.3	36.3	185.3	540.0	32.2	7.9	24.3	389.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	1.7	22.3	22.8	22.7	23.0	23.3	23.2	21.0	19.2	25.6	17.1	20.4
NEXT 4 LARGEST COMPANIES	.7	1.1	12.5	12.3	12.3	12.1	11.9	13.7	14.3	15.2	(D)	15.1	11.4
NEXT 12 LARGEST COMPANIES	2.0	3.6	16.6	13.8	14.6	13.6	13.7	14.2	16.0	20.3	(D)	19.6	16.7
NEXT 30 LARGEST COMPANIES	5.0	6.9	17.7	18.6	18.4	18.3	18.5	17.5	16.8	15.5	10.6	17.1	19.8
REMAINDER COMPANIES	91.7	86.7	30.9	32.4	32.0	33.0	32.5	31.4	31.9	29.8	25.8	31.1	31.7
INDUSTRY 3553, WOODWORKING MACHINERY													
TOTAL	291	301	585.6	10.3	131.2	7.4	14.7	81.9	317.8	13.8	3.0	10.8	276.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	3.0	34.9	22.9	19.9	25.2	25.8	22.2	29.9	32.2	(D)	33.0	39.7
NEXT 4 LARGEST COMPANIES	1.4	2.0	11.0	12.6	13.1	12.7	11.8	12.8	14.5	12.5	(D)	12.7	8.2
NEXT 12 LARGEST COMPANIES	4.1	4.7	16.0	16.8	19.3	15.2	15.6	18.8	15.6	8.9	3.4	10.5	16.6
NEXT 30 LARGEST COMPANIES	10.3	10.3	18.3	21.1	22.6	19.7	19.9	21.3	19.2	15.1	21.0	13.5	17.4
REMAINDER COMPANIES	82.8	80.1	19.7	26.6	25.1	27.3	26.9	24.9	21.0	31.2	34.2	30.4	18.1
INDUSTRY 3554, PAPER INDUSTRIES MACHINERY													
TOTAL	193	213	826.9	16.4	247.5	9.3	18.8	123.8	464.9	17.2	4.5	12.6	357.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	4.2	40.4	33.5	34.3	28.9	28.1	29.8	38.8	23.0	23.0	23.0	41.8
NEXT 4 LARGEST COMPANIES	2.1	3.3	11.3	13.4	13.7	11.8	12.2	13.3	9.9	10.4	1.4	13.7	11.2
NEXT 12 LARGEST COMPANIES	6.2	7.0	17.5	18.8	18.7	20.7	21.1	20.5	18.8	21.1	16.8	22.6	16.4
NEXT 30 LARGEST COMPANIES	15.5	17.4	18.6	18.7	19.1	19.5	19.9	19.7	20.1	24.7	28.1	23.5	18.3
REMAINDER COMPANIES	74.1	68.1	12.2	15.7	14.2	19.0	18.7	16.6	12.3	20.8	30.7	17.2	12.2
INDUSTRY 3555, PRINTING TRADES MACHINERY													
TOTAL	520	595	1 350.9	25.5	369.2	15.6	31.7	192.9	793.6	46.8	14.0	32.7	573.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.9	39.6	32.7	35.1	31.1	33.8	34.1	43.1	51.6	(D)	50.0	35.7
NEXT 4 LARGEST COMPANIES	.8	1.2	10.0	7.5	7.6	6.1	6.3	6.4	6.9	3.8	(D)	4.2	14.3
NEXT 12 LARGEST COMPANIES	2.3	7.1	15.5	16.3	15.7	18.1	16.9	17.7	14.9	12.5	(D)	14.2	16.8
NEXT 30 LARGEST COMPANIES	5.8	8.2	14.2	17.9	17.7	16.9	16.8	16.6	15.2	16.5	22.9	13.8	12.9
REMAINDER COMPANIES	90.4	80.7	20.7	25.6	23.8	27.7	26.2	25.2	19.9	15.5	10.2	17.8	20.3
INDUSTRY 3559, SPECIAL INDUSTRY MACHINERY, NEC													
TOTAL	1 548	1 602	3 627.0	70.6	1 045.1	44.1	88.7	573.4	2 098.7	86.8	20.0	66.8	1 595.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.5	13.3	11.5	13.2	9.3	9.6	11.2	13.4	6.4	3.8	7.2	13.0
NEXT 4 LARGEST COMPANIES	.3	.6	7.0	7.0	7.3	6.6	7.2	7.4	7.0	4.6	3.2	5.0	6.6
NEXT 12 LARGEST COMPANIES	.8	1.1	14.0	12.5	13.3	12.2	11.7	12.9	15.2	15.0	11.4	16.0	12.4
NEXT 30 LARGEST COMPANIES	1.9	2.9	17.5	17.9	18.6	18.1	18.3	19.3	17.0	23.9	21.9	24.5	18.9
REMAINDER COMPANIES	96.8	94.9	48.1	51.1	47.6	53.8	53.2	49.2	47.5	50.1	59.8	47.3	49.1
INDUSTRY 3561, PUMPS AND PUMPING EQUIPMENT													
TOTAL	515	613	3 773.7	63.0	900.6	39.8	79.5	506.9	2 141.6	123.5	26.0	97.5	1 721.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.6	17.1	14.1	14.8	14.2	14.2	15.1	16.1	19.9	19.3	20.1	17.8
NEXT 4 LARGEST COMPANIES	.8	3.1	11.9	11.8	12.2	12.0	12.6	12.4	11.7	13.2	11.4	13.6	12.0
NEXT 12 LARGEST COMPANIES	2.3	4.9	22.8	23.4	24.3	23.3	22.2	23.6	23.9	19.7	14.2	21.2	21.4
NEXT 30 LARGEST COMPANIES	5.8	9.8	26.1	26.9	26.3	26.8	27.1	27.1	27.3	24.7	29.1	23.5	25.7
REMAINDER COMPANIES	90.3	79.6	22.1	23.9	22.3	23.7	23.9	21.7	21.0	22.5	26.0	21.5	23.2
INDUSTRY 3562, BALL AND ROLLER BEARINGS													
TOTAL	102	149	2 567.3	50.6	752.6	41.3	82.4	579.9	1 472.7	132.9	21.6	111.3	1 139.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.9	16.1	56.2	50.8	56.0	52.2	51.3	58.4	50.8	45.8	52.9	44.5	62.6
NEXT 4 LARGEST COMPANIES	3.9	8.7	15.2	19.2	18.2	18.5	19.1	17.5	18.4	9.2	3.6	10.3	11.8
NEXT 12 LARGEST COMPANIES	11.8	16.1	16.3	17.6	15.0	17.4	17.6	14.1	17.9	34.0	31.6	34.5	13.8
NEXT 30 LARGEST COMPANIES	29.4	24.2	11.2	10.8	9.6	10.2	10.4	8.8	11.7	10.3	11.5	10.1	10.8
REMAINDER COMPANIES	51.0	34.9	1.2	1.6	1.2	1.6	1.5	1.2	1.2	.6	.4	.6	1.1
INDUSTRY 3563, AIR AND GAS COMPRESSORS													
TOTAL	148	175	2 075.6	32.0	465.6	19.1	38.2	255.2	1 145.5	55.8	10.8	45.0	953.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.7	9.1	44.7	40.9	42.4	38.9	39.0	40.8	47.5	42.9	50.7	41.0	40.5
NEXT 4 LARGEST COMPANIES	2.7	5.1	19.6	19.3	20.5	17.5	18.1	20.2	19.8	21.3	(D)	23.4	20.0
NEXT 12 LARGEST COMPANIES	8.1	9.1	21.5	22.0	21.4	23.6	23.0	22.7	20.0	18.9	(D)	18.1	23.7
NEXT 30 LARGEST COMPANIES	20.3	18.9	9.8	12.0	10.8	13.2	13.3	11.1	8.7	12.7	8.5	13.6	10.9
REMAINDER COMPANIES	66.2	57.7	4.3	5.8	4.9	6.7	6.5	5.2	3.9	4.3	6.1	3.8	4.9

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3564, BLOWERS AND FANS													
TOTAL	432	482	1 430.8	28.0	356.8	18.6	36.7	209.6	776.7	37.5	11.2	26.3	662.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.9	2.5	16.7	11.9	12.5	10.1	9.9	12.1	16.7	16.0	(D)	9.9	16.5
NEXT 4 LARGEST COMPANIES	.9	2.1	11.2	9.6	11.4	10.5	11.1	11.9	10.9	12.5	(D)	16.9	11.9
NEXT 12 LARGEST COMPANIES	2.8	5.4	21.1	22.3	23.2	22.0	22.2	22.8	20.8	16.9	(D)	21.2	21.4
NEXT 30 LARGEST COMPANIES	6.9	9.3	26.3	27.5	25.9	27.4	26.8	26.4	26.5	26.1	34.8	22.4	26.3
REMAINDER COMPANIES	88.4	80.7	24.6	28.8	27.0	30.1	30.0	26.8	25.1	28.5	25.8	29.6	23.9
INDUSTRY 3565, INDUSTRIAL PATTERNS													
TOTAL	1 001	1 002	320.6	9.3	152.7	8.0	15.8	122.2	252.5	11.1	2.1	9.0	72.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.4	8.6	6.0	6.7	6.3	5.1	6.9	7.9	8.8	(D)	9.0	10.7
NEXT 4 LARGEST COMPANIES	.4	.4	5.2	3.7	4.8	3.7	3.8	4.9	5.3	4.6	(D)	5.6	5.8
NEXT 12 LARGEST COMPANIES	1.2	1.3	9.3	8.2	9.5	6.9	6.5	9.1	9.5	11.0	(D)	11.8	9.1
NEXT 30 LARGEST COMPANIES	3.0	3.0	13.0	13.0	14.7	12.3	12.2	14.8	13.3	16.1	17.3	15.8	12.4
REMAINDER COMPANIES	95.0	94.9	63.9	69.2	64.2	70.7	72.4	64.3	64.0	59.5	66.9	57.7	62.0
INDUSTRY 3566, SPEED CHANGERS, DRIVES, AND GEARS													
TOTAL	307	327	1 222.3	25.3	365.4	17.6	35.0	226.7	803.1	48.5	11.6	36.9	429.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	1.8	28.6	26.1	28.4	25.8	26.4	30.0	30.4	32.8	52.6	26.5	25.4
NEXT 4 LARGEST COMPANIES	1.3	1.5	13.1	12.4	12.2	10.7	9.5	9.9	13.2	10.9	7.6	12.0	13.5
NEXT 12 LARGEST COMPANIES	3.9	6.4	22.5	21.6	22.0	20.9	20.7	21.4	21.6	21.7	18.2	22.8	23.9
NEXT 30 LARGEST COMPANIES	9.8	10.1	17.0	17.1	16.3	17.6	18.2	16.7	16.0	13.6	7.3	15.6	18.8
REMAINDER COMPANIES	83.7	80.1	18.7	22.8	21.0	24.9	25.2	21.9	18.7	20.9	14.3	23.0	18.3
INDUSTRY 3567, INDUSTRIAL FURNACES AND OVENS													
TOTAL	311	327	746.3	15.2	209.4	9.3	17.9	107.4	469.3	13.4	2.6	10.8	305.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	3.1	25.8	23.7	25.6	23.1	21.4	26.1	25.1	22.4	9.2	25.6	27.9
NEXT 4 LARGEST COMPANIES	1.3	1.8	13.5	10.0	10.3	10.4	10.1	10.7	12.9	18.1	8.1	20.5	13.6
NEXT 12 LARGEST COMPANIES	3.9	4.3	19.1	19.4	20.5	17.2	20.3	19.0	20.2	16.9	14.5	17.4	18.8
NEXT 30 LARGEST COMPANIES	9.6	9.8	17.9	20.0	18.9	20.9	20.7	19.4	17.4	15.2	19.0	14.2	18.3
REMAINDER COMPANIES	83.9	81.0	23.7	26.8	24.7	28.4	27.4	24.8	24.3	27.5	49.1	22.2	21.4
INDUSTRY 3568, POWER TRANSMISSION EQUIPMENT, NEC													
TOTAL	184	226	1 626.0	32.5	464.8	23.8	45.8	306.8	1 009.1	50.3	8.1	42.3	650.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.2	5.3	26.0	21.7	24.7	21.8	21.1	25.0	25.2	15.8	9.2	17.0	26.6
NEXT 4 LARGEST COMPANIES	2.2	2.7	17.8	18.2	18.5	18.5	17.1	19.0	18.9	30.2	38.9	28.5	17.6
NEXT 12 LARGEST COMPANIES	6.5	13.3	25.1	26.2	25.0	26.7	28.1	25.6	24.3	24.3	22.9	24.6	26.0
NEXT 30 LARGEST COMPANIES	16.3	19.0	20.6	21.1	20.3	19.8	20.7	19.3	21.3	16.2	10.7	17.2	19.1
REMAINDER COMPANIES	72.8	59.7	10.6	12.8	11.5	13.2	13.0	11.1	10.4	13.6	18.3	12.7	10.7
INDUSTRY 3569, GENERAL INDUSTRIAL MACHINERY, NEC													
TOTAL	1 586	1 646	2 779.5	57.5	783.2	34.9	69.2	397.7	1 602.2	79.6	22.8	56.8	1 194.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.3	.5	10.1	7.2	8.4	6.5	6.9	7.7	9.1	5.8	6.1	5.7	11.4
NEXT 4 LARGEST COMPANIES	.3	.5	6.0	6.0	6.2	4.7	4.7	4.7	7.5	12.3	11.2	12.8	3.9
NEXT 12 LARGEST COMPANIES	.8	1.2	11.2	9.5	9.8	9.5	10.1	9.8	10.2	10.4	9.7	10.7	12.4
NEXT 30 LARGEST COMPANIES	1.9	2.8	16.5	16.2	16.9	15.1	15.4	15.4	16.6	14.6	12.5	15.4	16.3
REMAINDER COMPANIES	96.8	94.9	56.2	61.2	58.8	64.2	62.9	62.3	56.6	56.8	60.5	55.4	56.1
INDUSTRY 3573, ELECTRONIC COMPUTING EQUIPMENT[1]													
TOTAL	808	932	[2]12 923.6	192.7	3 004.3	85.5	172.4	978.4	7 623.5	651.5	107.3	544.2	5 701.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.4	42.9	29.8	35.8	26.2	26.9	29.7	43.7	36.8	44.2	35.4	43.0
NEXT 4 LARGEST COMPANIES	.5	3.0	13.4	14.2	13.0	14.6	15.0	15.2	11.6	8.7	15.2	7.4	16.2
NEXT 12 LARGEST COMPANIES	1.5	3.8	14.5	15.8	15.0	16.4	15.8	15.2	15.4	27.8	17.6	29.8	13.2
NEXT 30 LARGEST COMPANIES	3.7	6.5	14.3	18.6	17.9	17.9	17.9	18.3	14.3	14.0	8.2	15.1	13.2
REMAINDER COMPANIES	93.8	84.3	14.9	21.6	18.3	24.9	24.4	21.6	15.0	12.7	14.8	12.3	14.4
INDUSTRY 3574, CALCULATING, ACCOUNTING MACHINES													
TOTAL	58	64	850.0	17.1	220.7	10.4	18.1	92.9	391.3	56.3	26.2	30.2	450.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	12.5	59.1	57.7	56.7	59.4	60.1	56.4	58.6	84.0	90.5	78.3	59.0
NEXT 4 LARGEST COMPANIES	6.9	7.8	23.7	21.2	22.0	20.5	20.3	25.1	21.4	9.0	8.4	9.4	24.6
NEXT 12 LARGEST COMPANIES	20.7	20.3	15.6	18.8	19.2	17.6	16.9	16.3	18.0	6.3	.4	11.4	15.0
NEXT 30 LARGEST COMPANIES	51.7	46.9	1.6	2.2	2.0	2.4	2.7	2.2	1.9	.7	.6	.8	1.4
REMAINDER COMPANIES	13.8	12.5	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3576, SCALES, BALANCES, EXC. LABORATORY													
TOTAL	92	103	348.1	7.1	84.5	4.7	9.1	46.9	214.9	6.8	1.5	5.4	138.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.3	10.7	50.3	41.8	42.8	39.7	39.7	46.2	52.1	31.6	12.4	36.8	45.5
NEXT 4 LARGEST COMPANIES	4.3	3.9	15.8	16.5	16.0	17.3	17.5	14.7	15.4	26.7	27.9	26.3	17.6
NEXT 12 LARGEST COMPANIES	13.0	13.6	18.8	23.9	22.4	24.8	25.1	20.9	16.5	25.5	42.1	21.0	22.9
NEXT 30 LARGEST COMPANIES	32.6	30.1	12.9	15.3	16.4	15.6	15.3	16.0	13.6	14.3	15.1	14.1	12.2
REMAINDER COMPANIES	45.7	41.7	2.2	2.5	2.4	2.6	2.4	2.2	2.4	1.9	2.5	1.8	1.9
INDUSTRY 3579, OFFICE MACHINES, TYPEWRITERS, ETC													
TOTAL	191	215	2 719.7	42.4	639.1	22.9	43.7	266.1	1 691.4	111.5	31.1	80.4	1 077.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	6.0	59.7	47.5	56.6	37.7	36.7	45.7	56.9	(D)	(D)	(D)	65.3
NEXT 4 LARGEST COMPANIES	2.1	4.2	16.5	19.5	15.9	25.5	25.5	21.5	18.4	(D)	(D)	(D)	12.9
NEXT 12 LARGEST COMPANIES	6.3	8.4	12.1	14.9	13.7	14.4	14.8	14.8	12.6	(D)	(D)	19.6	11.5
NEXT 30 LARGEST COMPANIES	15.7	15.3	9.2	13.8	10.3	17.0	17.9	13.9	9.7	5.8	3.3	6.8	8.2
REMAINDER COMPANIES	73.8	66.0	2.5	4.3	3.5	5.3	5.2	4.2	2.5	2.5	1.5	2.8	2.2
INDUSTRY 3581, AUTOMATIC MERCHANDISING MACHINES													
TOTAL	108	113	410.1	8.8	103.2	6.4	12.4	65.1	211.7	7.9	1.6	6.3	214.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.7	5.3	45.7	42.6	42.3	45.7	47.7	45.1	47.2	37.1	25.3	40.2	44.2
NEXT 4 LARGEST COMPANIES	3.7	4.4	21.4	16.8	21.7	14.9	15.7	20.1	20.1	29.6	22.5	31.4	23.4
NEXT 12 LARGEST COMPANIES	11.1	11.5	25.8	29.4	27.1	28.2	26.1	26.4	25.8	19.7	(D)	14.3	25.5
NEXT 30 LARGEST COMPANIES	27.8	27.4	5.7	9.1	7.0	8.9	8.4	6.6	5.7	10.9	(D)	11.1	5.5
REMAINDER COMPANIES	53.7	51.3	1.5	2.2	1.9	2.3	2.1	1.9	1.2	2.7	1.6	3.0	1.4
INDUSTRY 3582, COMMERCIAL LAUNDRY EQUIPMENT													
TOTAL	90	94	220.3	4.6	54.4	3.3	6.4	35.6	117.3	2.2	.4	1.9	104.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.4	7.4	46.4	44.0	45.8	44.0	44.5	48.5	49.9	56.1	36.1	59.8	43.3
NEXT 4 LARGEST COMPANIES	4.4	4.3	16.4	14.6	14.4	14.9	15.0	15.0	15.9	11.9	(D)	6.3	16.9
NEXT 12 LARGEST COMPANIES	13.3	13.8	21.6	22.5	22.4	22.1	21.2	19.4	18.5	17.1	(D)	17.4	24.3
NEXT 30 LARGEST COMPANIES	33.3	31.9	13.9	17.0	15.6	17.0	17.4	15.4	14.1	14.0	6.2	15.4	13.8
REMAINDER COMPANIES	44.4	42.6	1.7	1.9	1.8	2.0	1.9	1.7	1.7	1.0	.9	1.1	1.6
INDUSTRY 3585, REFRIGERATION, HEATING EQUIPMENT[1]													
TOTAL	731	860	[2]9 638.1	138.6	1 849.7	104.4	205.4	1 270.2	4 469.2	233.0	42.2	190.8	5 235.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.9	35.4	28.0	34.3	29.2	29.8	37.7	41.3	47.9	30.9	51.6	30.7
NEXT 4 LARGEST COMPANIES	.5	2.0	12.5	12.7	12.6	12.8	12.0	11.5	10.0	10.3	10.8	10.3	14.6
NEXT 12 LARGEST COMPANIES	1.7	3.4	17.5	16.6	15.8	17.6	17.2	17.4	16.4	13.7	19.5	12.4	18.3
NEXT 30 LARGEST COMPANIES	4.1	8.1	17.2	19.0	16.7	16.5	16.4	14.7	14.4	13.4	17.2	12.5	19.2
REMAINDER COMPANIES	93.2	83.6	17.4	23.7	20.6	22.9	24.6	18.7	17.9	14.7	21.6	13.2	17.2
INDUSTRY 3586, MEASURING AND DISPENSING PUMPS													
TOTAL	57	59	375.7	7.4	97.3	5.1	9.7	57.9	218.0	6.2	1.1	5.2	158.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	7.0	8.5	50.3	49.8	51.9	49.0	50.3	51.0	53.0	61.9	66.5	60.9	46.5
NEXT 4 LARGEST COMPANIES	7.0	8.5	22.5	20.6	21.1	19.0	19.3	20.3	19.8	14.9	17.4	14.4	27.7
NEXT 12 LARGEST COMPANIES	21.1	20.3	23.2	24.4	22.3	26.8	25.3	24.4	23.2	16.1	6.6	18.1	21.9
NEXT 30 LARGEST COMPANIES	52.6	50.8	3.9	5.2	4.7	5.2	5.1	4.4	4.0	7.1	9.6	6.6	3.8
REMAINDER COMPANIES	12.3	11.9	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
INDUSTRY 3589, SERVICE INDUSTRY MACHINERY, NEC													
TOTAL	959	988	1 771.8	32.1	411.8	19.2	36.9	208.6	946.4	38.5	9.8	28.7	849.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	.5	11.2	8.8	10.7	6.9	7.0	8.8	12.2	13.9	3.2	17.6	9.8
NEXT 4 LARGEST COMPANIES	.4	1.0	9.5	8.7	9.5	7.8	7.8	9.6	9.6	9.9	13.2	8.8	9.5
NEXT 12 LARGEST COMPANIES	1.3	2.0	18.6	15.9	16.4	17.0	16.7	16.3	18.8	25.0	34.1	21.9	18.4
NEXT 30 LARGEST COMPANIES	3.1	3.6	20.0	19.7	19.3	19.9	20.3	21.0	19.6	13.9	5.6	16.7	20.8
REMAINDER COMPANIES	94.8	92.8	40.7	46.8	44.1	48.4	48.2	44.3	39.7	37.3	43.9	35.0	41.5
INDUSTRY 3592, CARBURETORS, PISTONS, RINGS, ETC													
TOTAL	131	151	1 400.6	32.2	508.5	26.0	52.5	388.5	924.9	79.9	16.7	63.3	503.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.1	7.9	51.7	42.8	47.3	43.6	44.0	48.1	52.6	(D)	(D)	(D)	51.1
NEXT 4 LARGEST COMPANIES	3.1	6.6	19.4	25.3	26.2	24.6	24.0	26.1	18.7	(D)	(D)	(D)	19.9
NEXT 12 LARGEST COMPANIES	9.2	10.6	21.1	22.2	18.9	22.0	22.4	18.7	21.2	8.0	(D)	8.6	20.9
NEXT 30 LARGEST COMPANIES	22.9	21.2	6.0	6.9	5.4	6.9	6.8	5.1	5.7	3.7	5.4	3.3	6.3
REMAINDER COMPANIES	61.8	53.6	1.8	2.8	2.2	2.9	2.8	2.1	1.8	2.4	3.0	2.3	1.7

SEE FOOTNOTES AT END OF TABLE.

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Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3599, MACHINERY, EXCEPT ELECTRICAL, NEC													
TOTAL	19 137	19 248	6 611.2	190.5	2 471.8	150.8	298.0	1 717.1	4 437.6	340.9	68.4	272.5	2 234.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	(Z)	.1	1.7	1.4	1.5	1.2	1.1	1.4	1.7	1.1	1.1	1.1	1.6
NEXT 4 LARGEST COMPANIES	(Z)	(Z)	1.1	.8	.9	.7	.7	.8	1.1	1.1	(D)	1.2	1.1
NEXT 12 LARGEST COMPANIES	.1	.1	2.6	1.9	2.0	1.7	1.7	1.9	2.4	3.5	(D)	4.3	3.1
NEXT 30 LARGEST COMPANIES	.2	.2	4.3	3.2	3.6	2.9	3.0	3.4	3.9	3.6	1.8	4.0	5.1
REMAINDER COMPANIES	99.7	99.6	90.2	92.8	92.0	93.5	93.5	92.5	90.8	90.7	96.0	89.4	89.1
INDUSTRY 3612, TRANSFORMERS													
TOTAL	229	279	2 209.1	43.3	529.6	32.8	62.5	349.8	1 170.0	67.2	8.7	58.5	1 061.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	7.9	55.7	49.0	58.0	46.3	46.1	56.8	62.3	68.4	44.1	72.0	47.8
NEXT 4 LARGEST COMPANIES	1.7	6.1	14.1	17.3	13.1	19.8	19.8	15.0	11.0	10.1	(D)	8.9	17.6
NEXT 12 LARGEST COMPANIES	5.2	8.2	15.6	14.8	13.5	14.5	14.9	13.3	12.9	6.0	(D)	5.5	18.9
NEXT 30 LARGEST COMPANIES	13.1	12.2	9.5	11.4	9.4	11.6	11.6	8.9	8.7	10.4	18.0	9.2	10.6
REMAINDER COMPANIES	78.2	65.6	5.1	7.5	6.0	7.8	7.7	5.9	5.1	5.0	10.0	4.3	5.1
INDUSTRY 3613, SWITCHGEAR, SWITCHBOARD APPARATUS													
TOTAL	542	668	3 562.6	72.0	901.7	52.1	99.9	560.1	2 165.9	73.9	16.0	58.0	1 437.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	9.1	50.8	42.5	48.1	41.6	41.2	49.4	51.5	40.4	30.1	43.3	49.6
NEXT 4 LARGEST COMPANIES	.7	5.4	13.8	13.7	12.4	15.1	14.5	13.2	13.6	20.6	11.3	23.2	14.3
NEXT 12 LARGEST COMPANIES	2.2	4.5	13.4	15.7	14.1	16.4	17.4	14.4	13.2	14.7	20.7	13.1	13.5
NEXT 30 LARGEST COMPANIES	5.5	6.6	10.0	13.9	11.8	13.1	13.0	10.3	10.7	11.6	15.8	10.4	9.0
REMAINDER COMPANIES	90.8	74.4	12.0	14.2	13.7	13.9	13.9	12.6	11.0	12.7	22.1	10.1	13.7
INDUSTRY 3621, MOTORS AND GENERATORS													
TOTAL	343	447	4 462.7	96.9	1 177.6	74.2	145.8	802.6	2 609.8	162.6	28.7	133.8	1 917.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	10.1	41.8	37.8	41.6	39.5	38.9	44.3	43.2	35.4	23.5	37.9	39.8
NEXT 4 LARGEST COMPANIES	1.2	3.6	12.9	10.9	12.4	10.5	10.5	11.6	12.8	16.2	24.8	14.3	12.9
NEXT 12 LARGEST COMPANIES	3.5	7.8	17.7	20.2	18.3	20.2	20.6	19.0	17.8	20.5	11.6	22.4	17.8
NEXT 30 LARGEST COMPANIES	8.7	10.5	13.2	13.5	12.7	12.0	12.2	11.0	12.0	15.5	16.6	15.2	14.7
REMAINDER COMPANIES	85.4	68.0	14.4	17.6	15.1	17.8	17.8	14.2	14.0	12.5	23.5	10.2	14.8
INDUSTRY 3622, INDUSTRIAL CONTROLS													
TOTAL	676	726	2 511.4	55.4	726.6	35.3	69.0	380.1	1 602.2	57.5	12.8	44.7	962.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	4.1	42.1	38.8	41.3	39.1	40.4	43.6	44.0	43.4	33.2	46.3	38.4
NEXT 4 LARGEST COMPANIES	.6	1.8	11.7	9.6	10.7	9.0	8.8	9.3	11.6	7.4	(D)	7.1	11.6
NEXT 12 LARGEST COMPANIES	1.8	2.5	13.9	15.2	14.4	15.4	14.8	14.0	12.9	11.9	(D)	11.3	15.6
NEXT 30 LARGEST COMPANIES	4.4	5.0	11.3	12.7	11.1	12.5	12.5	10.7	11.3	15.5	14.9	15.6	12.2
REMAINDER COMPANIES	92.6	86.6	21.0	23.6	22.4	24.1	23.5	22.4	20.2	21.9	29.8	19.6	22.2
INDUSTRY 3623, WELDING APPARATUS, ELECTRIC													
TOTAL	160	176	1 189.6	17.5	285.7	11.3	23.0	165.1	582.7	38.7	14.5	24.1	632.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.5	3.4	47.3	35.6	41.4	38.8	39.9	47.2	44.1	(D)	(D)	54.8	49.3
NEXT 4 LARGEST COMPANIES	2.5	6.2	17.3	19.7	17.5	16.2	14.3	12.7	18.0	(D)	(D)	15.5	16.3
NEXT 12 LARGEST COMPANIES	7.5	8.5	15.7	18.4	17.3	17.7	17.9	15.8	15.9	9.8	3.9	13.4	16.2
NEXT 30 LARGEST COMPANIES	18.7	18.7	13.8	17.2	16.1	17.7	18.6	16.5	15.4	6.8	2.0	9.6	12.8
REMAINDER COMPANIES	68.7	63.1	6.0	9.1	7.6	9.6	9.3	7.7	6.7	5.7	4.0	6.7	5.3
INDUSTRY 3624, CARBON AND GRAPHITE PRODUCTS													
TOTAL	58	74	735.2	12.1	164.1	9.0	17.7	110.9	408.4	35.4	4.6	30.8	337.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.9	24.3	80.2	68.7	71.4	68.8	69.0	73.1	77.1	82.6	66.3	85.0	84.1
NEXT 4 LARGEST COMPANIES	6.9	6.8	8.0	10.6	10.9	10.6	10.4	10.5	9.2	4.6	(D)	5.1	6.4
NEXT 12 LARGEST COMPANIES	20.7	17.6	8.6	14.6	13.0	14.6	14.9	11.8	9.8	6.3	(D)	4.2	6.9
NEXT 30 LARGEST COMPANIES	51.7	40.5	3.2	5.9	4.7	5.9	5.6	4.5	3.8	6.4	11.9	5.6	2.5
REMAINDER COMPANIES	13.8	10.8	(Z)	.1	.1	.1	.1	.1	.1	.1	.1	.1	(Z)
INDUSTRY 3629, ELEC. INDUSTRIAL APPARATUS, NEC													
TOTAL	213	223	692.4	16.5	188.6	12.2	23.4	113.4	411.0	16.8	3.8	13.0	294.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	2.2	28.1	20.9	26.2	20.8	21.1	25.8	31.0	34.7	(D)	31.5	23.3
NEXT 4 LARGEST COMPANIES	1.9	3.6	15.3	18.5	15.7	19.8	19.0	16.5	16.3	11.9	(D)	11.8	14.4
NEXT 12 LARGEST COMPANIES	5.6	6.3	22.8	22.0	21.8	20.1	20.2	18.3	21.6	19.4	11.2	21.8	25.6
NEXT 30 LARGEST COMPANIES	14.1	14.8	20.5	20.4	20.4	20.3	21.2	22.0	17.9	17.7	18.3	17.5	23.9
REMAINDER COMPANIES	76.5	73.1	13.3	18.2	15.9	19.0	18.5	17.4	13.3	16.3	12.3	17.5	12.8

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3631, HOUSEHOLD COOKING EQUIPMENT													
TOTAL	84	96	1 707.2	25.4	289.1	19.1	36.8	197.9	784.1	36.1	8.9	27.1	943.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.8	11.5	50.9	45.2	48.8	43.6	44.1	48.0	54.2	32.2	29.7	33.0	48.8
NEXT 4 LARGEST COMPANIES	4.8	7.3	20.4	22.1	22.1	22.4	22.3	22.7	19.1	25.1	16.2	28.0	21.7
NEXT 12 LARGEST COMPANIES	14.3	14.6	18.9	19.2	17.8	19.3	19.8	17.5	18.5	35.9	47.6	32.1	19.0
NEXT 30 LARGEST COMPANIES	35.7	31.2	9.1	12.6	10.5	13.6	12.8	11.0	7.6	6.3	6.0	6.4	9.8
REMAINDER COMPANIES	40.5	35.4	.7	1.0	.9	1.0	1.0	.9	.7	.5	.5	.5	.7
INDUSTRY 3632, HOUSEHOLD REFRIGERATORS, FREEZERS													
TOTAL	33	42	2 576.6	35.8	468.6	29.8	56.9	358.0	1 166.1	46.9	10.7	36.2	1 447.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	12.1	26.2	81.6	79.1	82.4	79.7	80.8	83.0	85.5	87.1	79.5	89.3	78.9
NEXT 4 LARGEST COMPANIES	12.1	9.5	16.2	17.6	15.1	17.0	16.1	14.6	12.3	10.1	13.6	9.1	18.9
NEXT 12 LARGEST COMPANIES	36.4	33.3	2.1	3.3	2.4	3.2	3.0	2.3	2.0	2.7	6.7	1.5	2.2
NEXT 30 LARGEST COMPANIES	39.4	31.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3633, HOUSEHOLD LAUNDRY EQUIPMENT													
TOTAL	21	31	1 792.8	19.4	262.4	15.9	29.4	202.4	844.7	27.3	7.6	19.7	953.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	19.0	38.7	89.0	83.5	86.8	84.5	84.7	87.9	90.1	84.8	91.1	82.4	87.5
NEXT 4 LARGEST COMPANIES	19.0	19.4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	57.1	38.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 30 LARGEST COMPANIES	4.8	3.2	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3634, ELECTRIC HOUSEWARES AND FANS													
TOTAL	239	291	2 531.2	47.3	458.7	37.6	71.4	305.0	1 365.7	47.8	8.3	39.5	1 169.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.7	7.6	45.9	40.9	47.3	38.3	38.6	45.0	51.1	37.9	12.3	43.3	40.6
NEXT 4 LARGEST COMPANIES	1.7	5.8	12.7	11.6	9.4	12.5	12.4	11.0	11.3	12.9	1.1	15.3	14.0
NEXT 12 LARGEST COMPANIES	5.0	6.5	19.0	19.5	17.9	20.4	20.8	18.6	17.7	22.3	41.4	18.3	20.2
NEXT 30 LARGEST COMPANIES	12.6	13.1	16.3	19.7	17.8	20.6	20.0	18.4	13.9	18.3	33.2	15.2	19.0
REMAINDER COMPANIES	79.1	67.0	6.0	8.3	7.5	8.2	8.1	7.0	6.1	8.6	11.9	7.9	6.2
INDUSTRY 3635, HOUSEHOLD VACUUM CLEANERS													
TOTAL	32	35	639.9	10.4	116.6	7.3	12.9	78.9	378.8	16.2	.7	15.5	264.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	12.5	17.1	82.6	82.0	82.4	82.3	82.0	86.0	85.8	89.8	77.3	90.4	77.7
NEXT 4 LARGEST COMPANIES	12.5	11.4	12.7	12.3	12.4	12.1	12.7	9.6	10.9	7.7	2.5	7.9	15.6
NEXT 12 LARGEST COMPANIES	37.5	37.1	4.4	5.3	4.8	5.1	4.7	4.0	2.9	2.2	18.6	1.5	6.4
NEXT 30 LARGEST COMPANIES	37.5	34.3	.4	.4	.4	.5	.5	.4	.4	.3	1.6	.2	.4
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3636, SEWING MACHINES													
TOTAL	86	91	304.9	8.2	107.0	6.1	10.6	66.8	208.9	8.1	.8	7.2	108.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.7	8.8	83.5	85.2	85.6	84.3	82.3	84.5	85.4	85.7	(D)	87.7	81.3
NEXT 4 LARGEST COMPANIES	4.7	5.5	7.8	6.0	5.6	6.7	7.6	6.2	6.2	(D)	1.2	(D)	10.2
NEXT 12 LARGEST COMPANIES	14.0	13.2	4.7	4.5	4.7	4.7	5.4	5.1	4.5	8.3	19.7	7.0	4.9
NEXT 30 LARGEST COMPANIES	34.9	33.0	3.3	3.6	3.5	3.6	4.2	3.6	3.3	(D)	(D)	(D)	3.2
REMAINDER COMPANIES	41.9	39.6	.6	.6	.6	.8	.6	.6	.6	.7	1.5	.6	.5
INDUSTRY 3639, HOUSEHOLD APPLIANCES, NEC													
TOTAL	65	80	1 184.0	15.7	195.6	12.8	25.1	143.2	527.9	24.6	5.4	19.2	667.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	6.2	13.7	51.5	48.8	50.5	51.6	49.9	55.7	51.1	38.4	32.2	40.2	52.0
NEXT 4 LARGEST COMPANIES	6.2	12.5	31.7	35.9	35.5	34.1	36.9	33.1	32.8	39.6	25.7	43.5	30.6
NEXT 12 LARGEST COMPANIES	18.5	17.5	14.5	12.5	11.1	11.6	10.5	8.8	14.0	18.8	36.4	13.9	14.7
NEXT 30 LARGEST COMPANIES	46.2	37.5	2.3	2.7	2.7	2.5	2.6	2.3	2.0	3.1	5.7	2.3	2.6
REMAINDER COMPANIES	23.1	18.7	.1	.1	.1	.2	.1	.1	.1	-	-	.1	.1
INDUSTRY 3641, ELECTRIC LAMPS													
TOTAL	128	167	1 651.4	28.7	322.4	25.3	47.5	266.3	1 089.2	36.6	5.9	30.7	574.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.1	24.0	89.6	83.0	85.5	84.1	83.6	86.9	91.3	73.8	92.3	70.2	86.3
NEXT 4 LARGEST COMPANIES	3.1	3.6	5.3	9.4	8.2	8.8	9.3	7.4	3.9	(D)	.6	(D)	8.3
NEXT 12 LARGEST COMPANIES	9.4	7.8	2.9	4.4	3.6	3.9	4.1	3.1	2.7	(D)	3.9	(D)	3.2
NEXT 30 LARGEST COMPANIES	23.4	18.0	1.4	2.0	1.7	2.0	1.9	1.6	1.3	1.2	1.9	1.1	1.5
REMAINDER COMPANIES	60.9	46.7	.8	1.1	1.0	1.2	1.1	.9	.8	1.2	1.4	1.2	.7

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3643, CURRENT-CARRYING WIRING DEVICES													
TOTAL	361	413	1 795.2	43.9	480.3	33.6	66.2	312.1	1 100.1	55.8	10.3	45.5	738.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	3.1	26.2	29.2	29.1	29.8	28.1	29.3	27.2	20.0	(D)	21.0	26.5
NEXT 4 LARGEST COMPANIES	1.1	2.4	11.6	9.2	11.0	8.6	9.8	10.3	11.8	10.2	1.3	12.3	10.9
NEXT 12 LARGEST COMPANIES	3.3	8.0	21.5	19.4	20.2	19.2	20.4	20.5	21.1	30.1	31.2	29.9	21.4
NEXT 30 LARGEST COMPANIES	8.3	9.9	22.8	21.5	21.1	21.3	21.4	21.5	22.5	18.7	(D)	18.9	22.8
REMAINDER COMPANIES	86.1	76.5	17.9	20.7	18.6	21.1	20.3	18.4	17.3	20.9	34.2	17.9	18.3
INDUSTRY 3644, NONCURRENT-CARRYING WIR'G DEVICES													
TOTAL	174	202	1 421.8	25.8	330.1	18.4	35.9	210.9	744.4	32.8	9.4	23.4	682.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.3	4.0	25.2	20.4	23.8	16.9	16.8	22.8	24.2	34.4	51.4	27.6	26.7
NEXT 4 LARGEST COMPANIES	2.3	4.0	13.5	16.8	18.0	17.5	18.6	17.3	14.5	8.5	4.8	9.9	11.9
NEXT 12 LARGEST COMPANIES	6.9	11.4	26.0	27.5	27.2	26.8	26.9	26.6	27.1	25.2	15.7	28.9	25.2
NEXT 30 LARGEST COMPANIES	17.2	18.8	24.3	21.8	19.0	24.2	23.4	20.7	22.9	21.1	19.0	21.9	25.3
REMAINDER COMPANIES	71.3	61.9	11.0	13.6	12.0	14.5	14.2	12.5	11.2	10.9	9.2	11.6	10.9
INDUSTRY 3645, RESIDENTIAL LIGHTING FIXTURES													
TOTAL	675	710	986.6	23.7	229.5	18.2	33.4	139.4	494.2	11.8	2.6	9.2	495.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	3.2	25.4	22.4	24.8	20.2	20.2	22.7	24.4	22.3	14.6	(D)	26.6
NEXT 4 LARGEST COMPANIES	.6	.7	7.6	7.5	8.9	7.0	7.1	8.7	7.8	4.9	(D)	(D)	7.5
NEXT 12 LARGEST COMPANIES	1.8	3.1	11.8	11.3	10.9	11.2	11.9	10.9	11.1	13.0	(D)	11.1	12.3
NEXT 30 LARGEST COMPANIES	4.4	4.5	16.2	16.2	14.8	17.5	17.2	16.1	17.3	24.2	27.1	23.3	14.9
REMAINDER COMPANIES	92.6	88.5	39.1	42.6	40.6	44.1	43.6	41.6	39.4	35.6	35.5	35.6	38.7
INDUSTRY 3646, COMMERCIAL LIGHTING FIXTURES													
TOTAL	192	218	922.7	15.6	169.1	11.1	20.6	98.8	434.7	18.0	3.5	14.6	498.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.1	4.1	30.2	20.7	21.1	18.3	18.9	17.6	29.5	30.1	(D)	26.3	30.5
NEXT 4 LARGEST COMPANIES	2.1	3.7	16.0	16.7	15.7	19.0	17.4	18.8	18.2	8.6	.7	10.5	14.0
NEXT 12 LARGEST COMPANIES	6.2	10.1	21.5	22.8	23.5	21.9	21.9	23.2	19.6	25.8	(D)	29.8	23.7
NEXT 30 LARGEST COMPANIES	15.6	15.6	18.4	20.3	20.9	21.0	21.5	21.3	18.2	20.1	34.8	16.6	18.4
REMAINDER COMPANIES	74.0	66.5	14.0	19.5	18.8	19.8	20.2	19.1	14.5	15.4	9.5	16.8	13.4
INDUSTRY 3647, VEHICULAR LIGHTING EQUIPMENT													
TOTAL	70	75	908.5	14.5	246.0	11.4	23.3	178.8	536.0	46.3	2.5	43.8	388.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.7	9.3	78.6	68.4	80.7	69.3	71.0	83.7	80.4	(D)	72.9	(D)	76.3
NEXT 4 LARGEST COMPANIES	5.7	5.3	7.8	10.9	7.4	10.7	10.2	6.3	7.3	(D)	(D)	(D)	8.4
NEXT 12 LARGEST COMPANIES	17.1	17.3	8.7	13.0	7.6	12.5	12.0	6.3	8.0	(D)	9.3	(D)	9.9
NEXT 30 LARGEST COMPANIES	42.9	41.3	4.7	7.5	4.2	7.3	6.7	3.6	4.2	(D)	(D)	(D)	5.2
REMAINDER COMPANIES	28.6	26.7	.1	.1	.1	.2	.1	.1	.1	-	.1	-	.1
INDUSTRY 3648, LIGHTING EQUIPMENT, NEC													
TOTAL	211	224	671.0	12.8	148.0	9.1	17.7	85.8	342.6	15.8	2.8	13.0	333.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	3.6	25.4	20.4	22.8	20.4	21.1	22.7	26.2	25.5	30.3	24.4	24.4
NEXT 4 LARGEST COMPANIES	1.9	2.7	13.8	14.1	12.8	14.0	14.5	13.4	14.4	12.1	4.5	13.7	13.3
NEXT 12 LARGEST COMPANIES	5.7	8.0	20.7	19.6	21.5	18.8	18.6	21.4	21.4	16.5	24.5	14.8	20.5
NEXT 30 LARGEST COMPANIES	14.2	13.4	21.9	23.1	21.7	23.0	22.5	22.0	20.2	30.2	20.9	32.2	23.8
REMAINDER COMPANIES	76.3	72.3	18.1	22.8	21.2	23.8	23.3	20.6	17.8	15.8	19.8	14.9	18.0
INDUSTRY 3651, RADIO AND TV RECEIVING SETS													
TOTAL	546	581	5 731.6	74.6	852.4	57.6	106.6	570.0	2 350.9	105.8	26.4	79.4	3 393.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	1.2	50.6	39.9	47.5	40.8	40.6	51.7	53.9	49.8	(D)	52.9	48.8
NEXT 4 LARGEST COMPANIES	.7	1.2	14.3	10.5	10.5	10.3	10.1	10.0	10.2	4.9	(D)	4.3	16.6
NEXT 12 LARGEST COMPANIES	2.2	4.1	16.3	17.4	15.7	17.4	17.7	14.9	14.6	23.3	17.7	25.2	17.6
NEXT 30 LARGEST COMPANIES	5.5	7.2	10.8	17.1	13.9	17.1	17.4	12.7	11.8	12.3	21.5	9.3	10.0
REMAINDER COMPANIES	90.8	86.2	8.0	15.1	12.4	14.4	14.2	10.8	9.4	9.6	13.2	8.4	7.0
INDUSTRY 3652, PHONO. RECORDS, PRERECORDED TAPE													
TOTAL	679	709	1 181.7	23.1	244.6	17.8	37.2	170.0	727.3	29.8	5.0	24.8	461.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.3	48.2	35.6	41.2	36.7	39.0	44.0	51.6	42.0	39.4	42.5	42.5
NEXT 4 LARGEST COMPANIES	.6	.8	13.9	14.8	13.3	12.6	12.4	11.2	13.6	9.6	(D)	10.7	14.3
NEXT 12 LARGEST COMPANIES	1.8	3.2	13.3	17.4	16.0	18.2	17.6	16.2	12.6	18.3	23.1	17.4	14.9
NEXT 30 LARGEST COMPANIES	4.4	4.8	9.9	12.1	11.3	11.3	10.9	10.3	9.2	13.0	(D)	14.0	10.8
REMAINDER COMPANIES	92.6	89.8	14.7	20.1	18.2	21.2	20.0	18.3	12.9	17.1	25.2	15.5	17.4

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3661, TELEPHONE AND TELEGRAPH APPARATUS[1]													
TOTAL	208	264	[2]7 858.3	124.4	1 818.0	87.1	164.2	1 125.9	4 192.0	217.3	17.1	200.2	3 858.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	13.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 4 LARGEST COMPANIES	1.9	5.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
NEXT 12 LARGEST COMPANIES	5.8	7.2	4.3	5.4	4.7	5.4	4.6	4.5	5.1	4.8	7.9	4.6	3.8
NEXT 30 LARGEST COMPANIES	14.4	12.3	3.6	4.8	4.0	3.8	3.8	2.8	4.1	6.2	31.3	4.0	3.0
REMAINDER COMPANIES	76.0	61.7	1.8	3.0	2.2	3.1	3.0	2.0	1.7	1.7	4.3	1.5	1.8
INDUSTRY 3662, RADIO AND TV COMMUNICATION EQUIP													
TOTAL	1 873	2 121	14 886.0	334.1	5 177.0	172.4	335.2	2 100.3	9 938.0	471.4	101.4	370.0	5 178.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.1	19.9	19.2	20.7	17.7	18.5	20.1	21.9	19.5	16.9	20.2	16.5
NEXT 4 LARGEST COMPANIES	.2	1.0	13.3	12.3	14.7	11.3	10.8	12.8	13.7	11.3	13.2	10.7	12.9
NEXT 12 LARGEST COMPANIES	.6	2.9	23.2	23.0	24.9	19.2	19.4	20.4	23.7	26.7	31.3	25.5	22.6
NEXT 30 LARGEST COMPANIES	1.6	3.8	16.4	15.7	14.9	18.2	17.9	18.9	16.2	16.7	11.6	18.1	16.3
REMAINDER COMPANIES	97.3	91.1	27.1	29.7	24.8	33.6	33.4	27.9	24.6	25.8	27.0	25.5	31.7
INDUSTRY 3671, ELECTRON TUBES, RECEIVING TYPE													
TOTAL	125	146	1 581.7	36.7	514.1	27.5	53.7	324.5	909.6	52.6	15.2	37.4	683.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.2	11.6	58.0	55.0	56.7	54.5	55.6	56.5	57.5	40.7	15.3	51.1	58.3
NEXT 4 LARGEST COMPANIES	3.2	4.1	19.5	22.1	23.1	23.0	22.3	24.3	19.2	40.4	69.8	28.4	20.5
NEXT 12 LARGEST COMPANIES	9.6	12.3	17.8	16.5	15.1	16.3	16.3	14.8	18.1	12.5	8.5	14.2	17.3
NEXT 30 LARGEST COMPANIES	24.0	20.5	3.9	5.5	4.3	5.3	4.9	3.6	4.5	5.7	5.9	5.6	3.2
REMAINDER COMPANIES	60.0	51.4	.8	.9	.8	.9	.9	.8	.7	.7	.5	.7	.8
INDUSTRY 3674, SEMICONDUCTORS, RELATED DEVICES													
TOTAL	499	545	5 327.1	114.0	1 601.1	63.5	126.5	670.3	3 414.0	409.0	60.8	348.2	2 011.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.9	42.0	40.8	44.0	31.8	32.5	34.6	40.4	47.7	41.2	48.8	46.8
NEXT 4 LARGEST COMPANIES	.8	1.7	19.8	16.0	18.1	17.7	18.2	20.8	21.0	20.0	16.3	20.6	17.3
NEXT 12 LARGEST COMPANIES	2.4	4.8	17.2	16.5	16.0	18.7	18.3	17.1	17.1	11.9	13.4	11.7	16.5
NEXT 30 LARGEST COMPANIES	6.0	7.2	11.4	13.8	11.8	16.0	15.4	14.5	11.6	12.0	17.8	11.0	10.8
REMAINDER COMPANIES	90.0	83.5	9.5	12.9	10.2	15.8	15.6	13.0	9.8	8.3	11.3	7.8	8.5
INDUSTRY 3675, ELECTRONIC CAPACITORS													
TOTAL	86	118	742.3	28.9	260.5	23.4	45.7	179.0	486.1	34.0	6.7	27.3	266.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.7	16.9	47.1	45.8	46.4	47.5	48.2	48.9	45.1	45.3	33.9	48.1	51.0
NEXT 4 LARGEST COMPANIES	4.7	5.9	14.8	12.9	13.6	10.8	11.6	12.0	14.0	6.2	2.3	7.2	16.1
NEXT 12 LARGEST COMPANIES	14.0	16.9	24.1	22.9	23.0	23.5	22.6	23.2	25.7	37.1	46.6	34.8	21.5
NEXT 30 LARGEST COMPANIES	34.9	29.7	12.1	15.8	14.7	15.7	15.2	13.8	13.1	10.4	16.5	8.9	9.6
REMAINDER COMPANIES	41.9	30.5	1.9	2.5	2.3	2.5	2.3	2.1	1.9	1.0	.7	1.0	1.8
INDUSTRY 3676, ELECTRONIC RESISTORS													
TOTAL	77	101	578.3	21.3	210.9	15.9	32.4	130.6	401.0	25.1	2.7	22.4	186.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.2	12.9	37.7	36.7	39.4	35.3	36.9	37.0	39.0	42.8	22.4	45.3	35.3
NEXT 4 LARGEST COMPANIES	5.2	9.9	24.9	22.5	23.9	21.5	21.9	24.8	25.9	20.3	19.8	20.4	22.3
NEXT 12 LARGEST COMPANIES	15.6	18.8	23.6	23.1	21.5	23.8	24.0	21.8	20.3	27.2	49.0	24.5	30.3
NEXT 30 LARGEST COMPANIES	39.0	31.7	12.1	15.4	13.1	16.9	14.9	14.3	13.0	8.4	7.0	8.5	10.7
REMAINDER COMPANIES	35.1	26.7	1.7	2.3	2.0	2.5	2.3	2.0	1.8	1.4	1.8	1.3	1.5
INDUSTRY 3677, ELECTRONIC COILS AND TRANSFORMERS													
TOTAL	276	294	506.4	20.7	166.6	17.1	31.8	113.1	289.1	9.2	2.1	7.1	221.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	1.7	19.7	14.1	15.2	14.6	14.7	17.3	15.6	20.7	20.4	20.7	26.0
NEXT 4 LARGEST COMPANIES	1.4	2.7	10.2	8.9	9.1	8.5	9.0	7.5	11.3	12.0	27.6	7.3	8.9
NEXT 12 LARGEST COMPANIES	4.3	5.1	15.8	14.3	14.4	14.5	14.6	14.8	16.8	14.6	14.7	14.5	15.3
NEXT 30 LARGEST COMPANIES	10.9	11.9	21.6	22.8	22.8	22.8	22.7	23.3	22.7	19.5	17.6	20.0	19.8
REMAINDER COMPANIES	81.9	78.6	32.7	39.9	38.5	39.6	39.0	37.0	33.6	33.3	19.6	37.4	30.0
INDUSTRY 3678, ELECTRONIC CONNECTORS													
TOTAL	106	133	1 104.6	26.0	303.6	19.1	37.6	185.1	754.2	40.4	3.9	36.6	371.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.8	14.3	45.3	39.2	42.0	39.6	39.3	43.0	47.2	54.2	30.6	56.7	43.2
NEXT 4 LARGEST COMPANIES	3.8	7.5	19.4	19.4	19.4	19.2	19.4	19.5	19.0	14.4	33.0	12.4	19.1
NEXT 12 LARGEST COMPANIES	11.3	11.3	17.2	18.6	18.7	18.2	18.1	17.9	15.7	19.0	25.3	18.4	19.0
NEXT 30 LARGEST COMPANIES	28.3	24.8	14.0	16.9	14.8	16.8	16.8	14.6	14.1	9.5	8.6	9.5	14.6
REMAINDER COMPANIES	52.8	42.1	4.0	5.9	5.1	6.2	6.4	5.0	3.9	2.9	2.6	2.9	4.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3679, ELECTRONIC COMPONENTS, NEC													
TOTAL	3 005	3 118	5 549.2	125.9	1 499.7	91.4	181.0	854.7	3 005.7	212.3	34.9	177.4	2 650.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.2	29.3	14.6	21.6	12.5	13.2	19.1	21.2	26.3	15.5	28.4	39.0
NEXT 4 LARGEST COMPANIES	.1	.4	6.7	5.5	5.7	5.8	5.7	6.1	6.5	4.2	2.1	4.6	6.8
NEXT 12 LARGEST COMPANIES	.4	.7	9.3	8.8	8.6	8.2	8.5	8.1	11.5	9.5	12.2	9.0	7.6
NEXT 30 LARGEST COMPANIES	1.0	1.8	10.8	11.5	11.5	11.4	11.3	11.4	11.4	14.2	12.2	14.5	9.7
REMAINDER COMPANIES	98.3	96.9	44.0	59.6	52.6	62.2	61.3	55.3	49.5	45.8	57.9	43.4	36.9
INDUSTRY 3691, STORAGE BATTERIES													
TOTAL	134	218	1 982.5	25.9	358.7	21.1	43.4	276.4	927.8	122.2	31.6	90.7	1 103.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	23.9	57.1	50.6	57.2	51.6	52.2	60.5	58.8	56.0	52.0	57.4	56.7
NEXT 4 LARGEST COMPANIES	3.0	14.7	27.0	27.6	24.2	28.4	27.7	24.7	26.3	21.2	17.3	22.5	27.0
NEXT 12 LARGEST COMPANIES	9.0	7.3	9.0	12.8	11.1	11.7	12.1	8.3	8.6	8.5	8.0	8.7	9.0
NEXT 30 LARGEST COMPANIES	22.4	15.1	5.2	6.6	5.4	5.9	5.8	4.6	4.6	12.5	21.0	9.5	5.6
REMAINDER COMPANIES	62.7	39.0	1.7	2.4	2.0	2.4	2.3	1.9	1.7	1.8	1.7	1.8	1.7
INDUSTRY 3692, PRIMARY BATTERIES, DRY AND WET													
TOTAL	41	58	666.1	11.0	118.2	9.0	18.0	87.4	343.2	35.4	5.8	29.6	329.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	9.8	34.5	86.8	79.2	79.7	81.4	82.3	83.4	84.3	89.4	89.4	89.4	89.2
NEXT 4 LARGEST COMPANIES	9.8	8.6	7.4	12.0	11.5	10.3	10.0	9.6	8.6	4.1	(D)	4.6	6.1
NEXT 12 LARGEST COMPANIES	29.3	20.7	5.2	8.2	8.1	7.7	7.1	6.4	6.4	6.1	(D)	5.6	4.2
NEXT 30 LARGEST COMPANIES	51.2	36.2	.6	.6	.6	.6	.6	.6	.6	.5	.6	.4	.5
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3693, X-RAY APPARATUS AND TUBES													
TOTAL	212	243	1 884.7	30.9	467.6	17.1	33.3	195.5	1 231.9	63.4	13.1	50.3	726.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.9	4.5	31.6	25.1	30.2	22.2	20.6	28.2	34.5	18.5	6.4	21.7	26.0
NEXT 4 LARGEST COMPANIES	1.9	5.3	19.8	17.6	16.2	20.0	20.3	19.3	17.1	12.0	5.9	13.5	23.9
NEXT 12 LARGEST COMPANIES	5.7	7.8	21.3	24.0	22.5	26.0	27.4	23.7	22.8	42.6	50.2	40.6	19.3
NEXT 30 LARGEST COMPANIES	14.2	14.8	17.7	20.4	19.2	18.4	18.8	17.5	17.2	19.8	30.4	17.1	19.5
REMAINDER COMPANIES	76.4	67.5	9.7	12.9	11.8	13.3	13.0	11.3	8.4	7.1	7.2	7.1	11.2
INDUSTRY 3694, ENGINE ELECTRICAL EQUIPMENT													
TOTAL	372	409	3 647.2	63.8	948.4	51.8	102.6	708.6	2 041.3	146.0	21.6	124.3	1 647.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	2.2	62.0	47.5	64.7	48.3	50.3	67.7	63.9	67.8	46.2	71.6	60.3
NEXT 4 LARGEST COMPANIES	1.1	5.4	13.0	16.1	9.8	15.7	14.9	8.7	11.9	9.3	22.4	7.0	14.0
NEXT 12 LARGEST COMPANIES	3.2	4.4	12.2	14.6	12.1	13.8	13.6	11.1	11.8	16.0	20.9	15.1	12.6
NEXT 30 LARGEST COMPANIES	8.1	9.0	7.3	11.9	7.3	11.9	11.4	6.4	7.0	4.0	6.9	3.5	7.6
REMAINDER COMPANIES	86.6	79.0	5.6	9.8	6.2	10.2	9.7	6.1	5.3	2.9	3.5	2.8	5.6
INDUSTRY 3699, ELECTRICAL EQUIP., SUPPLIES, NEC													
TOTAL	612	647	749.0	20.7	205.3	16.7	31.1	133.9	386.2	16.2	3.1	13.1	369.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	2.0	26.5	22.6	30.2	22.0	23.1	30.7	24.2	39.1	21.2	43.4	29.3
NEXT 4 LARGEST COMPANIES	.7	.8	6.9	6.9	5.5	7.3	7.4	5.9	6.7	10.0	24.2	6.6	7.3
NEXT 12 LARGEST COMPANIES	2.0	3.2	14.7	12.3	10.6	12.1	11.8	11.0	15.0	8.6	3.3	9.9	14.2
NEXT 30 LARGEST COMPANIES	4.9	5.9	16.9	18.7	16.6	19.0	18.9	16.9	17.0	13.5	21.3	11.7	16.4
REMAINDER COMPANIES	91.8	88.1	35.0	39.6	37.0	39.6	38.7	35.4	37.0	28.7	30.0	28.4	32.8
INDUSTRY 3711, MOTOR VEHICLES AND CAR BODIES													
TOTAL	254	322	76 517.8	343.6	7 077.6	289.9	620.4	5 724.9	18 723.7	1 706.1	229.1	1 477.1	58 131.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	17.7	93.4	88.6	91.2	90.0	90.9	92.3	92.0	(D)	(D)	(D)	93.9
NEXT 4 LARGEST COMPANIES	1.6	4.3	5.4	7.7	6.6	6.9	6.4	6.0	6.5	(D)	(D)	(D)	5.1
NEXT 12 LARGEST COMPANIES	4.7	5.3	1.0	2.8	1.6	2.4	2.0	1.2	1.2	(D)	(D)	(D)	.9
NEXT 30 LARGEST COMPANIES	11.8	9.3	.1	.5	.3	.4	.4	.3	.2	(D)	(D)	(D)	.1
REMAINDER COMPANIES	80.3	63.4	.1	.3	.3	.3	.3	.2	.1	(D)	(D)	(D)	.1
INDUSTRY 3713, TRUCK AND BUS BODIES													
TOTAL	770	820	2 003.3	34.8	428.6	27.4	53.9	307.6	946.3	44.2	11.2	33.0	1 076.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.0	32.7	20.5	26.0	21.6	23.5	29.1	38.9	(D)	(D)	(D)	27.1
NEXT 4 LARGEST COMPANIES	.5	.6	7.0	8.8	9.0	8.9	8.7	9.5	7.3	(D)	(D)	(D)	6.7
NEXT 12 LARGEST COMPANIES	1.6	2.4	12.1	10.9	10.3	10.7	10.3	10.0	10.0	8.0	7.9	(D)	14.0
NEXT 30 LARGEST COMPANIES	3.9	4.6	14.1	16.9	15.5	16.6	16.3	14.9	14.3	16.2	17.9	15.6	14.1
REMAINDER COMPANIES	93.5	90.4	34.1	42.9	39.2	42.2	41.2	36.5	29.5	30.1	48.0	24.0	38.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3714, MOTOR VEHICLE PARTS, ACCESSORIES													
TOTAL	2 194	2 623	35 750.8	450.7	8 004.0	372.5	777.2	6 284.9	16 263.8	1 833.2	189.9	1 643.3	19 749.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	2.5	62.2	50.9	63.7	52.4	55.0	66.1	59.3	(D)	(D)	(D)	64.5
NEXT 4 LARGEST COMPANIES	.2	1.8	7.7	6.3	6.0	5.8	5.6	5.5	7.8	(D)	(D)	(D)	7.6
NEXT 12 LARGEST COMPANIES	.5	3.4	9.2	11.5	9.0	11.7	11.0	9.1	10.6	(D)	5.4	(D)	8.0
NEXT 30 LARGEST COMPANIES	1.4	3.9	6.9	8.5	6.4	8.0	7.6	5.9	6.9	3.4	5.9	3.1	7.0
REMAINDER COMPANIES	97.7	88.4	14.0	22.8	14.9	22.0	20.8	13.4	15.4	8.4	16.1	7.5	12.9
INDUSTRY 3715, TRUCK TRAILERS													
TOTAL	316	353	1 910.1	28.1	322.0	22.5	43.1	229.9	645.9	36.2	15.8	20.3	1 285.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.3	6.8	42.7	36.2	37.4	36.7	37.7	38.9	36.4	58.7	73.9	46.9	45.8
NEXT 4 LARGEST COMPANIES	1.3	3.1	13.6	12.6	13.5	12.0	12.0	12.8	14.2	5.2	2.1	7.6	13.7
NEXT 12 LARGEST COMPANIES	3.8	4.5	14.6	16.3	14.5	16.4	15.4	14.6	15.9	9.9	12.2	8.1	13.7
NEXT 30 LARGEST COMPANIES	9.5	9.1	15.0	16.5	16.5	16.6	16.7	15.9	17.3	15.4	6.4	22.4	14.0
REMAINDER COMPANIES	84.2	76.5	14.1	18.4	18.1	18.3	18.2	17.8	16.2	10.8	5.4	15.0	12.8
INDUSTRY 3716, MOTOR HOMES													
TOTAL	80	116	1 564.5	19.2	205.4	15.4	29.6	135.1	443.3	16.4	8.9	7.5	1 132.5
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.0	25.9	42.8	37.4	43.5	36.2	35.6	39.7	40.7	36.2	36.2	36.3	44.2
NEXT 4 LARGEST COMPANIES	5.0	7.8	15.4	15.7	12.4	16.6	18.0	14.6	11.2	25.7	32.8	17.4	16.8
NEXT 12 LARGEST COMPANIES	15.0	11.2	17.0	19.5	17.6	19.9	20.0	19.2	19.6	16.3	16.5	16.0	16.1
NEXT 30 LARGEST COMPANIES	37.5	29.3	18.9	19.6	19.4	19.6	18.8	19.5	21.4	17.4	12.0	23.7	17.5
REMAINDER COMPANIES	37.5	25.9	5.8	7.8	7.1	7.8	7.6	7.0	7.1	4.4	2.6	6.6	5.4
INDUSTRY 3721, AIRCRAFT													
TOTAL	151	176	14 834.2	222.7	3 975.9	119.0	232.7	1 765.2	8 134.1	202.4	40.2	162.2	6 742.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.6	8.0	58.5	51.4	54.4	50.9	49.0	53.6	50.6	44.7	33.2	47.5	66.4
NEXT 4 LARGEST COMPANIES	2.6	5.1	22.7	21.7	21.4	19.6	20.6	19.3	27.6	21.7	32.9	18.9	15.5
NEXT 12 LARGEST COMPANIES	7.9	11.4	17.4	24.6	22.7	26.5	27.4	25.2	20.7	31.2	29.1	31.7	16.6
NEXT 30 LARGEST COMPANIES	19.9	18.2	1.3	2.1	1.4	2.6	2.7	1.7	1.1	2.4	4.6	1.8	1.4
REMAINDER COMPANIES	66.9	57.4	.1	.2	.2	.3	.2	.2	.1	.1	.1	.1	.1
INDUSTRY 3724, AIRCRAFT ENGINES AND ENGINE PARTS													
TOTAL	226	269	6 272.3	106.1	1 939.4	62.4	128.7	970.0	3 599.1	174.9	25.4	149.5	2 761.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	7.1	74.2	69.1	73.8	65.3	66.4	69.0	71.9	70.6	74.7	69.9	77.8
NEXT 4 LARGEST COMPANIES	1.8	3.3	11.4	12.0	11.3	12.1	11.4	12.2	12.6	12.5	8.1	13.3	9.3
NEXT 12 LARGEST COMPANIES	5.3	8.9	7.3	8.1	6.5	9.6	8.9	8.4	7.4	8.8	11.8	8.3	6.8
NEXT 30 LARGEST COMPANIES	13.3	14.1	3.8	5.4	4.3	6.4	6.7	5.5	4.3	4.1	2.8	4.3	3.3
REMAINDER COMPANIES	77.9	66.5	3.4	5.4	4.0	6.6	6.6	5.0	3.9	4.0	2.7	4.2	2.8
INDUSTRY 3728, AIRCRAFT EQUIPMENT, NEC													
TOTAL	681	728	4 760.6	102.0	1 705.2	58.7	113.7	828.3	2 998.4	131.1	24.3	106.8	1 747.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.1	44.7	39.1	44.4	31.0	29.3	34.3	41.9	37.7	36.1	38.1	46.1
NEXT 4 LARGEST COMPANIES	.6	1.1	11.4	11.3	11.7	10.9	11.6	12.2	11.9	11.5	9.8	11.8	12.3
NEXT 12 LARGEST COMPANIES	1.8	3.2	16.8	17.2	16.2	20.4	20.1	19.4	17.2	14.3	8.3	15.6	16.8
NEXT 30 LARGEST COMPANIES	4.4	5.6	12.0	14.3	12.4	16.3	16.7	15.1	13.1	19.5	27.8	17.7	10.6
REMAINDER COMPANIES	92.7	89.0	15.0	18.1	15.3	21.4	22.3	19.0	15.8	17.0	18.0	16.8	14.2
INDUSTRY 3731, SHIP BUILDING AND REPAIRING													
TOTAL	542	605	[6] 6 495.1	176.4	2 494.0	139.9	277.2	1 807.4	3 825.0	161.3	68.0	93.3	2 670.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	1.7	42.7	47.8	47.1	45.4	46.7	44.5	42.3	44.4	50.9	39.8	43.4
NEXT 4 LARGEST COMPANIES	.7	2.6	14.9	13.0	14.8	13.9	13.5	15.4	16.0	8.1	7.0	8.9	13.4
NEXT 12 LARGEST COMPANIES	2.2	5.0	17.8	15.8	15.6	16.7	16.4	16.9	17.3	16.7	17.1	16.3	18.5
NEXT 30 LARGEST COMPANIES	5.5	6.9	12.7	11.1	11.0	11.1	10.6	10.9	12.4	12.7	9.2	15.3	13.0
REMAINDER COMPANIES	90.8	83.8	11.9	12.2	11.4	12.9	12.9	12.2	12.0	18.1	15.8	19.7	11.7
INDUSTRY 3732, BOAT BUILDING AND REPAIRING													
TOTAL	2 148	2 190	1 822.6	43.8	445.8	35.6	68.4	324.7	856.3	42.3	14.7	27.6	984.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.5	11.0	9.3	9.2	8.6	9.1	8.7	9.6	7.8	6.8	8.4	11.9
NEXT 4 LARGEST COMPANIES	.2	.4	7.5	7.2	7.3	7.1	7.0	7.5	7.0	6.2	(D)	6.7	7.9
NEXT 12 LARGEST COMPANIES	.6	1.2	13.8	12.2	12.9	11.7	12.2	12.3	13.8	15.7	(D)	15.8	14.0
NEXT 30 LARGEST COMPANIES	1.4	1.5	16.2	14.9	15.0	15.0	15.0	15.1	16.6	16.6	15.5	17.1	16.1
REMAINDER COMPANIES	97.7	96.3	51.5	56.4	55.6	57.6	56.7	56.4	53.1	53.8	57.0	52.0	50.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3743, RAILROAD EQUIPMENT													
TOTAL	145	201	4 278.3	56.3	888.6	42.6	79.4	619.9	1 882.8	80.4	16.6	63.8	2 386.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.8	5.5	51.1	45.6	50.0	43.5	45.4	48.1	54.7	56.4	50.2	58.0	48.3
NEXT 4 LARGEST COMPANIES	2.8	3.0	14.3	14.6	14.2	15.0	14.3	15.2	12.4	17.1	15.1	17.7	14.5
NEXT 12 LARGEST COMPANIES	8.3	11.4	21.1	21.9	20.9	23.5	22.2	22.3	19.8	11.7	12.1	11.6	23.0
NEXT 30 LARGEST COMPANIES	20.7	30.8	10.8	12.8	11.0	12.8	13.0	10.5	10.0	11.3	17.8	9.6	11.6
REMAINDER COMPANIES	65.5	49.3	2.8	5.0	3.9	5.2	5.1	3.9	3.2	3.5	4.9	3.1	2.5
INDUSTRY 3751, MOTORCYCLES, BICYCLES, AND PARTS													
TOTAL	343	350	1 007.6	15.6	168.9	13.3	24.6	129.9	369.8	24.1	6.0	18.1	660.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.2	2.0	66.1	56.9	61.8	58.2	60.0	65.1	67.9	50.7	(D)	49.9	66.3
NEXT 4 LARGEST COMPANIES	1.2	1.4	15.1	15.1	12.5	15.6	13.8	12.9	9.9	27.9	(D)	29.0	17.5
NEXT 12 LARGEST COMPANIES	3.5	3.7	8.0	10.7	10.2	9.3	10.1	7.9	10.0	10.8	13.9	9.8	6.9
NEXT 30 LARGEST COMPANIES	8.7	8.6	4.3	7.5	6.4	7.2	7.0	5.8	6.0	3.7	2.3	4.1	3.3
REMAINDER COMPANIES	85.4	84.3	6.5	9.8	9.0	9.7	9.1	8.3	6.2	6.9	6.1	7.2	6.0
INDUSTRY 3761, GUIDED MISSILES, SPACE VEHICLES													
TOTAL	20	40	5 314.4	94.0	1 931.5	35.2	67.0	603.8	3 564.8	125.6	21.8	103.8	1 691.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	20.0	37.5	64.4	59.9	61.2	61.6	59.6	63.9	60.4	59.4	(D)	58.1	72.6
NEXT 4 LARGEST COMPANIES	20.0	25.0	29.7	32.4	31.5	29.6	31.2	27.7	33.2	36.3	(D)	37.2	22.2
NEXT 12 LARGEST COMPANIES	60.0	37.5	5.9	7.7	7.2	8.8	9.2	8.4	6.4	4.4	2.7	4.7	5.2
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3764, SPACE PROPULSION UNITS AND PARTS													
TOTAL	18	27	945.5	18.6	356.6	7.1	14.9	111.5	620.7	25.3	5.0	20.3	316.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	22.2	37.0	68.6	65.4	66.3	54.6	58.0	58.0	68.8	69.6	(D)	65.7	66.5
NEXT 4 LARGEST COMPANIES	22.2	25.9	24.3	28.0	27.4	34.7	32.1	32.6	22.0	27.2	(D)	31.2	25.6
NEXT 12 LARGEST COMPANIES	55.6	37.0	7.0	6.5	6.3	10.7	9.9	9.4	6.2	3.2	3.5	3.2	7.9
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3769, SPACE VEHICLE EQUIPMENT, NEC													
TOTAL	41	42	339.4	7.2	139.2	3.9	8.3	55.3	236.3	13.3	.8	12.5	110.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	9.8	9.5	75.8	70.5	77.9	60.4	63.0	66.5	77.7	89.2	60.3	(D)	72.0
NEXT 4 LARGEST COMPANIES	9.8	11.9	10.5	11.1	8.1	16.0	13.8	13.6	9.5	4.0	17.1	(D)	13.0
NEXT 12 LARGEST COMPANIES	29.3	28.6	11.1	15.2	11.6	21.1	20.9	17.9	10.6	5.1	11.9	(D)	12.7
NEXT 30 LARGEST COMPANIES	51.2	50.0	2.6	3.1	2.5	2.6	2.2	2.1	2.2	1.7	10.6	(D)	2.4
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3792, TRAVEL TRAILERS AND CAMPERS													
TOTAL	775	861	1 582.4	26.3	275.7	21.8	40.7	197.1	510.3	31.0	12.4	18.6	1 068.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	4.2	31.2	25.2	28.5	25.7	25.6	30.1	27.9	17.0	24.3	12.2	31.8
NEXT 4 LARGEST COMPANIES	.5	2.1	12.8	11.3	12.8	11.1	11.9	12.5	13.7	23.6	13.0	30.6	12.8
NEXT 12 LARGEST COMPANIES	1.5	2.6	14.1	13.0	13.2	13.3	13.8	13.7	15.3	5.5	5.0	5.9	13.9
NEXT 30 LARGEST COMPANIES	3.9	5.9	14.3	15.4	14.8	15.0	15.4	14.0	14.7	17.1	18.2	16.4	14.1
REMAINDER COMPANIES	93.5	85.2	27.6	35.1	30.7	34.8	33.4	29.7	28.4	36.7	39.5	34.9	27.5
INDUSTRY 3795, TANKS AND TANK COMPONENTS													
TOTAL	20	24	934.2	12.4	208.5	10.0	19.8	156.2	437.6	13.2	3.2	10.0	590.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	20.0	33.3	87.2	89.1	90.8	90.7	89.8	93.0	86.9	90.7	91.3	90.5	88.3
NEXT 4 LARGEST COMPANIES	20.0	16.7	10.1	7.5	6.6	6.2	6.7	4.8	10.9	6.7	8.1	6.2	9.0
NEXT 12 LARGEST COMPANIES	60.0	50.0	2.7	3.4	2.6	3.1	3.5	2.2	2.2	2.6	.6	3.3	2.7
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
INDUSTRY 3799, TRANSPORTATION EQUIPMENT, NEC													
TOTAL	408	429	620.9	10.3	106.6	7.4	13.3	62.6	232.7	9.8	2.2	7.7	384.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	1.6	35.3	25.7	29.2	20.0	20.3	24.7	34.2	16.3	1.3	20.5	37.1
NEXT 4 LARGEST COMPANIES	1.0	1.4	11.1	6.7	8.0	6.1	5.7	7.4	8.1	23.5	1.5	29.7	11.2
NEXT 12 LARGEST COMPANIES	2.9	4.0	16.4	17.8	16.5	19.1	20.8	19.1	17.9	23.2	47.4	16.4	15.6
NEXT 30 LARGEST COMPANIES	7.4	8.6	15.8	19.0	18.3	21.0	20.6	19.0	17.4	15.0	22.7	12.8	15.0
REMAINDER COMPANIES	87.7	84.4	21.5	30.8	28.1	33.7	32.6	29.8	22.5	22.1	27.2	20.6	21.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3811, ENGINEERING, SCIENTIFIC INSTRUMENTS													
TOTAL	740	786	1 926.7	42.3	584.4	24.7	48.7	280.7	1 287.2	57.4	13.2	44.2	681.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	1.4	25.0	23.6	28.0	22.0	21.9	26.5	25.5	31.1	10.3	37.3	23.6
NEXT 4 LARGEST COMPANIES	.5	1.1	11.9	10.3	9.8	10.6	10.6	9.6	11.8	11.5	17.6	9.7	12.0
NEXT 12 LARGEST COMPANIES	1.6	2.4	18.9	18.5	18.0	17.6	17.3	17.5	19.4	12.6	5.5	14.7	18.1
NEXT 30 LARGEST COMPANIES	4.1	5.9	16.5	17.9	16.4	19.0	20.2	17.9	16.3	18.9	30.2	15.5	17.6
REMAINDER COMPANIES	93.2	89.2	27.7	29.7	27.8	30.7	30.0	28.4	27.0	26.0	36.4	22.8	28.7
INDUSTRY 3822, ENVIRONMENTAL CONTROLS													
TOTAL	182	201	1 358.7	39.0	450.3	30.6	57.9	315.6	859.6	47.7	11.0	36.7	529.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.2	9.0	58.7	56.7	58.6	58.6	57.1	61.8	55.8	(D)	(D)	(D)	62.9
NEXT 4 LARGEST COMPANIES	2.2	4.0	21.9	19.4	19.9	19.2	20.1	19.4	23.2	(D)	(D)	(D)	18.8
NEXT 12 LARGEST COMPANIES	6.6	6.5	11.1	15.0	12.9	14.2	14.9	12.4	12.5	9.6	(D)	11.4	10.3
NEXT 30 LARGEST COMPANIES	16.5	14.9	5.3	5.9	5.7	5.1	5.0	3.8	5.5	2.6	1.4	2.9	5.2
REMAINDER COMPANIES	72.5	65.7	3.0	3.0	2.9	2.9	2.9	2.6	3.1	2.1	1.7	2.2	2.8
INDUSTRY 3823, PROCESS CONTROL INSTRUMENTS													
TOTAL	383	426	2 022.0	46.5	664.8	23.4	47.0	265.9	1 399.4	52.1	14.9	37.2	657.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	4.5	32.0	31.3	34.3	26.6	27.1	28.4	32.2	35.9	28.3	38.9	31.9
NEXT 4 LARGEST COMPANIES	1.0	2.3	14.1	16.9	17.1	17.7	19.1	18.3	14.8	9.9	(D)	9.3	13.0
NEXT 12 LARGEST COMPANIES	3.1	4.7	18.2	15.3	15.9	16.6	16.0	18.7	17.9	21.2	(D)	19.6	18.7
NEXT 30 LARGEST COMPANIES	7.8	9.2	16.4	16.6	14.8	16.9	16.4	15.2	15.8	16.0	19.1	14.7	17.3
REMAINDER COMPANIES	86.9	79.3	19.3	19.9	18.0	22.2	21.4	19.3	19.3	17.1	15.9	17.5	19.1
INDUSTRY 3824, FLUID METERS AND COUNTING DEVICES													
TOTAL	100	111	650.4	15.9	197.6	11.2	22.5	118.0	429.0	19.9	4.9	15.0	231.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	4.0	7.2	42.6	45.5	47.3	48.0	48.1	50.2	44.4	45.6	34.8	49.0	39.3
NEXT 4 LARGEST COMPANIES	4.0	5.4	24.3	19.5	21.0	19.4	19.8	21.3	25.0	26.1	26.9	25.8	23.3
NEXT 12 LARGEST COMPANIES	12.0	13.5	20.4	20.3	18.8	18.4	18.7	16.4	18.7	15.5	22.3	13.4	22.9
NEXT 30 LARGEST COMPANIES	30.0	28.8	10.6	12.2	10.5	11.8	11.1	9.9	9.8	11.2	14.0	10.3	12.3
REMAINDER COMPANIES	50.0	45.0	2.1	2.6	2.3	2.4	2.3	2.1	2.1	1.6	2.0	1.5	2.2
INDUSTRY 3825, INSTRU. TO MEASURE ELECTRICITY													
TOTAL	622	671	2 761.0	66.5	889.1	40.4	78.3	414.5	1 807.7	99.1	28.8	70.3	1 026.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	1.8	33.1	34.7	36.7	34.9	34.2	36.1	31.7	(D)	(D)	40.7	36.3
NEXT 4 LARGEST COMPANIES	.6	1.0	9.8	7.0	7.5	6.9	7.6	8.8	9.1	3.7	1.0	4.8	11.2
NEXT 12 LARGEST COMPANIES	1.9	4.0	18.7	16.4	18.3	15.8	15.6	16.6	20.5	16.5	(D)	19.8	15.5
NEXT 30 LARGEST COMPANIES	4.8	6.1	16.1	16.5	15.0	16.8	16.9	15.9	16.5	(D)	5.5	13.7	14.8
REMAINDER COMPANIES	92.0	87.0	22.3	25.4	22.6	25.6	25.6	22.6	22.2	19.7	16.4	21.1	22.2
INDUSTRY 3829, MEASUR'G, CONTROL'G DEVICES, NEC													
TOTAL	649	670	1 118.1	32.3	464.0	15.8	31.8	174.5	746.6	49.3	14.8	34.5	405.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	.7	24.5	35.0	42.7	21.6	24.1	28.5	24.2	(D)	(D)	52.8	26.0
NEXT 4 LARGEST COMPANIES	.6	1.0	10.3	8.7	7.9	9.3	9.2	7.5	10.3	(D)	(D)	5.8	10.4
NEXT 12 LARGEST COMPANIES	1.8	2.2	17.1	13.4	12.9	15.0	15.1	17.0	18.4	7.3	1.9	9.5	15.7
NEXT 30 LARGEST COMPANIES	4.6	4.8	16.7	14.0	12.1	16.0	15.3	14.0	16.1	11.3	12.0	11.0	17.0
REMAINDER COMPANIES	92.3	91.2	31.4	28.9	24.4	38.2	36.3	33.0	31.0	24.9	34.1	20.9	30.9
INDUSTRY 3832, OPTICAL INSTRUMENTS AND LENSES													
TOTAL	510	545	1 330.4	30.0	421.2	16.9	33.6	188.0	897.4	51.3	18.4	32.9	455.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.9	30.1	24.5	29.4	21.7	20.8	22.4	31.8	15.4	(D)	20.9	27.3
NEXT 4 LARGEST COMPANIES	.8	1.3	13.3	11.5	12.3	10.5	10.7	11.0	12.4	14.7	(D)	10.7	14.5
NEXT 12 LARGEST COMPANIES	2.4	4.4	19.5	20.4	20.6	21.3	22.1	24.8	20.4	33.4	43.6	27.8	18.9
NEXT 30 LARGEST COMPANIES	5.9	6.2	17.9	19.3	17.1	19.6	20.3	18.0	17.1	19.6	16.6	21.2	19.1
REMAINDER COMPANIES	90.2	85.1	19.2	24.3	20.6	26.9	26.0	23.8	18.4	17.0	12.6	19.4	20.2
INDUSTRY 3841, SURGICAL AND MEDICAL INSTRUMENTS													
TOTAL	575	651	1 833.1	43.2	491.4	29.2	57.5	261.4	1 208.8	87.2	21.7	65.5	648.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	3.8	31.8	25.5	27.3	24.8	25.5	28.0	33.4	30.6	17.5	34.9	29.1
NEXT 4 LARGEST COMPANIES	.7	4.0	16.2	17.7	16.9	17.9	17.2	15.9	16.2	16.4	27.2	12.8	16.5
NEXT 12 LARGEST COMPANIES	2.1	4.6	19.2	21.2	20.2	21.7	21.9	20.7	19.2	21.8	21.1	22.0	19.1
NEXT 30 LARGEST COMPANIES	5.2	5.4	14.3	14.5	14.7	14.6	14.7	15.1	14.5	12.3	16.6	10.8	13.9
REMAINDER COMPANIES	91.3	82.2	18.5	21.2	20.9	20.9	20.7	20.3	16.7	19.0	17.7	19.4	21.3

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3842, SURGICAL APPLIANCES AND SUPPLIES													
TOTAL	1 017	1 154	2 597.3	53.9	624.1	36.8	70.5	345.6	1 594.5	68.6	16.2	52.5	1 039.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.4	1.6	37.6	27.9	32.6	25.6	25.9	31.5	39.2	31.5	25.7	33.2	34.6
NEXT 4 LARGEST COMPANIES	.4	1.0	11.1	7.2	7.6	7.7	7.8	7.8	11.4	10.0	(D)	11.0	11.4
NEXT 12 LARGEST COMPANIES	1.2	3.0	13.5	13.5	14.3	12.3	12.5	12.6	13.7	13.9	(D)	13.7	13.4
NEXT 30 LARGEST COMPANIES	2.9	5.0	14.7	18.3	16.2	19.5	19.4	18.2	13.6	14.9	16.9	14.2	16.2
REMAINDER COMPANIES	95.1	89.3	23.1	33.0	29.3	35.0	34.3	30.0	22.1	29.7	36.1	27.8	24.3
INDUSTRY 3843, DENTAL EQUIPMENT AND SUPPLIES													
TOTAL	507	550	786.7	16.3	203.3	10.7	21.2	104.8	458.6	16.2	3.7	12.5	339.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.8	2.5	32.6	27.3	27.1	27.2	29.9	28.6	31.0	16.4	14.7	16.9	33.7
NEXT 4 LARGEST COMPANIES	.8	1.8	13.8	11.9	14.8	11.0	10.5	13.6	12.1	15.9	29.2	11.9	16.4
NEXT 12 LARGEST COMPANIES	2.4	4.4	22.3	20.0	21.1	17.1	15.6	18.1	22.5	24.1	13.7	27.2	22.8
NEXT 30 LARGEST COMPANIES	5.9	7.6	17.3	19.8	19.0	21.1	21.8	20.1	19.1	26.8	27.5	26.6	15.0
REMAINDER COMPANIES	90.1	83.6	14.0	21.0	18.0	23.6	22.3	19.6	15.3	16.9	14.9	17.5	12.1
INDUSTRY 3851, OPHTHALMIC GOODS													
TOTAL	593	634	971.8	30.0	314.1	21.7	43.1	188.4	656.2	44.1	13.2	30.9	331.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	2.1	45.2	41.5	47.9	37.5	39.3	45.1	47.9	46.0	50.9	43.9	41.1
NEXT 4 LARGEST COMPANIES	.7	1.4	11.0	10.7	9.9	11.8	11.1	11.3	11.2	6.9	3.8	8.2	10.6
NEXT 12 LARGEST COMPANIES	2.0	3.0	13.6	15.1	12.4	16.4	16.1	13.7	11.8	14.2	17.5	12.7	16.6
NEXT 30 LARGEST COMPANIES	5.1	6.2	14.6	14.4	13.4	15.0	15.7	13.1	13.8	18.1	14.5	19.7	15.7
REMAINDER COMPANIES	91.6	87.4	15.6	18.4	16.4	19.2	17.8	16.8	15.3	14.9	13.3	15.5	15.9
INDUSTRY 3861, PHOTOGRAPHIC EQUIP. AND SUPPLIES													
TOTAL	702	780	9 946.9	111.7	1 899.6	61.7	119.4	886.5	6 732.4	322.7	69.2	253.5	3 245.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	2.9	72.2	60.8	66.9	60.4	60.6	68.3	76.8	71.5	66.9	72.7	62.5
NEXT 4 LARGEST COMPANIES	.6	2.3	13.3	15.5	15.8	14.3	15.2	13.6	11.2	16.8	21.1	15.7	17.5
NEXT 12 LARGEST COMPANIES	1.7	3.7	4.7	6.6	5.2	6.1	6.4	4.6	3.6	2.9	1.3	3.3	7.0
NEXT 30 LARGEST COMPANIES	4.3	5.4	4.1	6.8	4.8	7.5	7.4	5.1	3.2	3.7	5.5	3.2	5.9
REMAINDER COMPANIES	92.9	85.6	5.7	10.3	7.4	11.7	10.4	8.3	5.1	5.1	5.2	5.1	7.1
INDUSTRY 3873, WATCHES, CLOCKS, AND WATCHCASES													
TOTAL	283	302	1 594.7	31.5	316.6	24.0	46.3	199.4	684.5	23.2	5.4	17.9	912.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.4	5.3	58.1	47.7	49.3	46.9	45.9	48.3	52.1	44.8	(D)	43.6	63.3
NEXT 4 LARGEST COMPANIES	1.4	1.3	8.1	7.0	8.1	5.7	5.9	6.1	8.9	7.9	(D)	8.2	8.2
NEXT 12 LARGEST COMPANIES	4.2	5.6	15.4	20.3	18.6	22.4	22.4	21.9	19.1	32.0	30.9	32.3	12.4
NEXT 30 LARGEST COMPANIES	10.6	10.6	12.0	15.4	14.9	15.5	15.6	14.9	12.7	7.9	3.2	9.3	10.6
REMAINDER COMPANIES	82.3	77.2	6.3	9.6	9.0	9.6	10.2	8.8	7.2	7.4	10.3	6.6	5.5
INDUSTRY 3911, JEWELRY, PRECIOUS METAL													
TOTAL	2 165	2 206	2 107.0	42.1	432.0	29.2	53.3	241.4	979.8	25.6	7.9	17.8	1 154.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	.5	18.1	12.0	14.0	9.7	10.5	11.5	18.2	16.4	(D)	12.4	17.4
NEXT 4 LARGEST COMPANIES	.2	.3	5.9	10.6	6.3	8.4	7.9	6.6	6.9	6.5	(D)	4.1	5.3
NEXT 12 LARGEST COMPANIES	.6	1.1	10.6	8.9	9.8	9.3	9.8	9.7	10.6	6.0	8.3	5.1	11.1
NEXT 30 LARGEST COMPANIES	1.4	1.9	13.6	13.2	14.5	13.1	13.6	14.3	13.1	20.5	15.0	22.9	13.9
REMAINDER COMPANIES	97.7	96.3	51.7	55.3	55.4	59.5	58.3	57.9	51.3	50.6	39.2	55.6	52.3
INDUSTRY 3914, SILVERWARE AND PLATED WARE													
TOTAL	247	258	457.0	10.8	119.8	8.3	15.7	80.2	255.1	8.0	.7	7.3	205.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	4.3	51.3	43.7	47.9	44.0	42.4	48.8	50.7	44.6	(D)	45.0	52.1
NEXT 4 LARGEST COMPANIES	1.6	2.7	15.7	16.2	16.3	14.9	15.8	15.6	16.9	24.2	2.4	26.2	15.0
NEXT 12 LARGEST COMPANIES	4.9	5.0	16.1	17.7	16.7	17.7	18.2	15.8	15.9	18.7	30.1	17.6	16.0
NEXT 30 LARGEST COMPANIES	12.1	11.6	9.2	12.4	10.6	13.0	13.7	11.5	8.9	6.7	(D)	6.2	9.3
REMAINDER COMPANIES	79.8	76.4	7.6	10.0	8.5	10.4	9.9	8.2	7.5	5.8	15.2	4.9	7.7
INDUSTRY 3915, JEWELERS' MATS., LAPIDARY WORK													
TOTAL	650	654	685.2	8.3	85.9	6.8	12.2	51.3	213.6	5.9	1.6	4.4	491.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.6	.8	16.7	8.7	10.0	8.7	9.5	10.0	(D)	(D)	(D)	18.1	19.4
NEXT 4 LARGEST COMPANIES	.6	.6	10.6	6.1	6.6	6.2	7.1	7.1	(D)	(D)	(D)	7.8	12.2
NEXT 12 LARGEST COMPANIES	1.8	2.0	20.9	11.1	12.5	10.6	11.9	12.0	15.8	9.2	2.3	11.6	22.8
NEXT 30 LARGEST COMPANIES	4.6	4.6	22.2	18.7	19.6	18.0	18.1	19.4	19.7	27.6	46.9	20.6	22.4
REMAINDER COMPANIES	92.3	92.0	29.6	55.5	51.3	56.6	53.4	51.4	42.9	43.7	49.0	41.8	23.2

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3931, MUSICAL INSTRUMENTS													
TOTAL	400	450	924.9	25.2	252.7	20.6	38.2	178.2	488.2	13.8	2.7	11.2	428.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	4.9	31.0	28.1	28.5	28.5	28.4	28.7	27.1	41.5	33.2	43.5	36.4
NEXT 4 LARGEST COMPANIES	1.0	3.3	22.0	21.0	21.6	20.5	19.7	21.0	24.7	11.1	5.6	12.5	18.8
NEXT 12 LARGEST COMPANIES	3.0	6.4	25.0	26.2	25.1	25.9	26.1	24.8	25.6	21.3	21.8	21.2	24.9
NEXT 30 LARGEST COMPANIES	7.5	7.3	12.9	14.1	14.6	14.4	15.4	15.5	15.1	17.5	28.3	14.9	10.9
REMAINDER COMPANIES	87.5	78.0	9.2	10.6	10.2	10.7	10.4	10.0	7.4	8.5	11.0	7.9	9.0
INDUSTRY 3942, DOLLS													
TOTAL	223	231	340.2	9.1	65.3	8.0	13.3	43.5	181.6	6.4	1.4	5.0	171.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	2.6	36.5	18.6	25.1	17.5	21.0	22.2	36.9	35.3	(D)	29.8	37.8
NEXT 4 LARGEST COMPANIES	1.8	1.7	9.7	11.1	9.4	11.4	8.1	8.1	9.4	4.4	(D)	5.6	10.4
NEXT 12 LARGEST COMPANIES	5.4	5.6	20.1	18.3	20.2	18.0	18.1	19.4	19.8	22.8	(D)	26.8	20.2
NEXT 30 LARGEST COMPANIES	13.5	14.7	21.1	32.1	27.3	32.6	33.7	31.0	21.6	18.9	15.3	19.9	19.7
REMAINDER COMPANIES	77.6	75.3	12.6	19.9	18.0	20.5	19.1	19.3	12.4	18.5	20.5	17.9	11.8
INDUSTRY 3944, GAMES, TOYS, CHILDREN'S VEHICLES													
TOTAL	754	801	2 719.7	53.1	520.6	39.2	73.2	295.0	1 544.6	78.5	19.5	58.9	1 205.6
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	2.1	34.4	27.8	31.4	25.5	28.1	29.9	36.4	33.2	40.9	30.7	31.6
NEXT 4 LARGEST COMPANIES	.5	1.1	12.7	12.3	12.5	12.5	10.2	10.7	12.6	11.2	(D)	10.6	13.8
NEXT 12 LARGEST COMPANIES	1.6	2.7	18.7	18.7	18.8	18.9	18.8	20.0	18.2	23.3	(D)	26.5	18.9
NEXT 30 LARGEST COMPANIES	4.0	5.4	16.6	18.0	17.0	18.0	17.9	17.6	15.7	17.5	20.1	16.7	17.4
REMAINDER COMPANIES	93.4	88.6	17.7	23.3	20.2	25.2	25.0	21.7	17.1	14.7	11.9	15.6	18.3
INDUSTRY 3949, SPORTING AND ATHLETIC GOODS, NEC													
TOTAL	1 757	1 878	2 425.1	57.2	525.8	46.1	85.9	358.6	1 273.6	62.7	12.3	50.4	1 182.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.2	1.7	20.5	17.1	20.3	16.2	17.2	20.4	20.1	15.0	12.4	15.7	20.4
NEXT 4 LARGEST COMPANIES	.2	1.2	7.6	5.6	6.0	5.6	5.9	5.9	7.5	7.7	(D)	8.3	7.6
NEXT 12 LARGEST COMPANIES	.7	1.4	13.3	11.2	12.2	11.4	11.7	13.4	13.3	8.4	(D)	8.0	13.5
NEXT 30 LARGEST COMPANIES	1.7	2.9	17.2	18.2	17.7	18.3	18.9	17.3	17.8	19.2	10.7	21.3	17.4
REMAINDER COMPANIES	97.2	92.9	41.5	47.9	43.8	48.5	46.3	43.0	41.3	49.7	61.5	46.8	41.1
INDUSTRY 3951, PENS AND MECHANICAL PENCILS													
TOTAL	133	141	669.8	13.2	135.6	10.4	20.6	92.9	419.8	32.8	9.1	23.7	257.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.0	5.0	49.5	31.9	41.2	32.6	33.0	43.1	56.9	65.7	(D)	64.1	38.6
NEXT 4 LARGEST COMPANIES	3.0	2.8	14.4	14.4	14.7	13.4	14.4	13.5	12.3	7.2	(D)	8.9	16.6
NEXT 12 LARGEST COMPANIES	9.0	9.9	16.2	20.9	18.9	20.7	20.7	18.4	14.1	17.9	(D)	16.9	19.6
NEXT 30 LARGEST COMPANIES	22.6	23.4	14.0	21.7	17.1	22.0	21.8	17.2	11.1	5.4	2.9	6.4	18.6
REMAINDER COMPANIES	62.4	58.9	5.9	11.0	8.1	11.3	10.1	7.8	5.5	3.7	3.8	3.7	6.5
INDUSTRY 3952, LEAD PENCILS AND ART GOODS													
TOTAL	127	134	275.9	6.6	63.1	4.7	9.2	37.6	145.5	10.8	1.8	9.0	134.0
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	3.1	6.0	49.3	42.9	40.6	43.7	45.2	45.2	51.7	70.8	61.6	72.6	47.3
NEXT 4 LARGEST COMPANIES	3.1	3.7	19.1	21.7	26.1	18.9	18.1	21.2	21.0	10.9	3.9	12.3	17.6
NEXT 12 LARGEST COMPANIES	9.4	10.4	15.6	16.6	16.6	17.2	17.6	16.2	13.3	11.0	22.8	8.7	17.9
NEXT 30 LARGEST COMPANIES	23.6	22.4	13.3	14.4	13.3	15.4	14.9	13.8	11.7	5.4	9.1	4.7	14.7
REMAINDER COMPANIES	60.6	57.5	2.7	4.3	3.5	4.8	4.2	3.6	2.4	1.8	2.5	1.7	2.5
INDUSTRY 3953, MARKING DEVICES													
TOTAL	583	612	248.7	7.4	78.7	4.7	9.1	39.6	160.0	5.5	.8	4.7	90.3
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.7	3.9	28.9	21.6	23.5	21.5	22.2	21.4	28.5	44.1	12.2	49.4	29.8
NEXT 4 LARGEST COMPANIES	.7	1.0	9.4	8.1	7.3	6.7	7.1	7.0	10.1	7.3	2.1	8.1	8.4
NEXT 12 LARGEST COMPANIES	2.1	2.9	12.9	10.5	13.0	11.3	11.7	13.5	12.2	7.2	19.0	5.2	14.1
NEXT 30 LARGEST COMPANIES	5.1	5.1	14.4	17.6	16.7	16.9	16.7	17.8	14.9	13.5	16.6	13.0	13.3
REMAINDER COMPANIES	91.4	87.1	34.4	42.2	39.5	43.6	42.4	40.3	34.3	27.9	50.1	24.3	34.4
INDUSTRY 3955, CARBON PAPER AND INKED RIBBONS													
TOTAL	78	100	344.0	4.6	53.7	3.4	6.9	33.1	142.4	6.2	.9	5.3	205.4
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	5.1	22.0	47.4	43.7	44.8	42.5	44.8	47.1	49.3	47.9	(D)	45.4	45.8
NEXT 4 LARGEST COMPANIES	5.1	6.0	15.3	15.2	15.9	15.9	16.0	15.6	17.3	15.2	(D)	17.4	14.4
NEXT 12 LARGEST COMPANIES	15.4	13.0	22.6	23.3	23.3	23.6	22.2	23.3	20.3	12.2	(D)	11.7	23.8
NEXT 30 LARGEST COMPANIES	38.5	31.0	13.7	16.1	14.3	16.2	15.4	12.4	12.0	23.6	18.7	24.5	14.9
REMAINDER COMPANIES	35.9	28.0	1.1	1.7	1.6	1.8	1.7	1.6	1.1	1.0	1.6	.9	1.1

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
INDUSTRY 3961, COSTUME JEWELRY													
TOTAL	837	847	816.6	25.0	215.9	20.8	36.1	136.1	485.1	17.6	7.8	9.8	338.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.5	.7	23.3	14.5	18.8	13.7	14.6	18.5	25.5	10.5	5.5	14.5	20.5
NEXT 4 LARGEST COMPANIES	.5	.7	9.2	7.9	9.6	7.6	8.6	9.2	9.3	4.8	.0	8.6	9.2
NEXT 12 LARGEST COMPANIES	1.4	1.7	14.8	15.3	14.4	15.7	15.7	15.2	15.0	25.5	32.8	19.8	14.2
NEXT 30 LARGEST COMPANIES	3.6	3.9	15.9	19.4	18.6	19.9	19.5	18.8	14.9	32.8	45.5	22.7	17.3
REMAINDER COMPANIES	94.0	93.0	36.8	42.9	38.6	43.1	41.6	38.4	35.3	26.4	16.2	34.4	38.8
INDUSTRY 3962, ARTIFICIAL FLOWERS													
TOTAL	222	233	180.2	5.0	38.2	4.2	7.1	25.2	91.5	3.0	1.0	2.0	89.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.8	4.3	37.6	21.4	25.7	22.7	22.3	25.4	34.3	36.2	(D)	35.4	40.4
NEXT 4 LARGEST COMPANIES	1.8	1.7	11.8	12.6	12.0	12.3	13.1	12.2	10.2	14.2	(D)	13.2	13.7
NEXT 12 LARGEST COMPANIES	5.4	6.9	18.0	19.6	20.2	18.5	20.0	18.1	20.0	27.9	33.9	24.9	16.0
NEXT 30 LARGEST COMPANIES	13.5	12.9	16.3	20.8	19.7	20.8	22.0	19.9	18.0	13.1	5.0	17.1	14.7
REMAINDER COMPANIES	77.5	74.2	16.3	25.6	22.4	25.7	22.6	24.4	17.5	8.6	7.1	9.4	15.3
INDUSTRY 3963, BUTTONS													
TOTAL	150	159	95.2	3.2	30.8	2.6	4.7	20.0	50.0	1.4	.3	1.2	43.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	2.7	6.3	34.7	30.2	32.2	28.3	25.9	30.5	30.8	32.9	55.2	(D)	36.5
NEXT 4 LARGEST COMPANIES	2.7	2.5	15.1	12.8	16.0	13.3	15.5	14.1	15.5	15.5	16.8	(D)	15.4
NEXT 12 LARGEST COMPANIES	8.0	8.2	21.2	22.2	21.5	22.6	24.6	23.7	22.1	17.8	7.6	20.0	20.9
NEXT 30 LARGEST COMPANIES	20.0	20.1	19.9	22.4	20.2	22.5	23.0	21.5	21.4	26.9	14.8	29.5	18.7
REMAINDER COMPANIES	66.7	62.9	9.2	12.4	10.1	13.4	11.0	10.2	10.2	6.9	5.6	7.1	8.4
INDUSTRY 3964, NEEDLES, PINS, AND FASTENERS													
TOTAL	249	275	674.2	17.7	165.6	14.0	27.5	111.8	375.4	22.0	3.0	19.0	302.8
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.6	9.5	49.6	46.4	46.7	45.8	46.1	46.1	50.8	32.2	27.7	32.9	48.4
NEXT 4 LARGEST COMPANIES	1.6	1.8	11.3	9.8	11.0	10.5	10.3	12.1	9.8	20.3	30.8	18.6	12.9
NEXT 12 LARGEST COMPANIES	4.8	4.4	12.2	12.8	13.2	11.7	12.6	12.0	12.5	17.6	4.8	19.6	11.6
NEXT 30 LARGEST COMPANIES	12.0	10.9	13.6	15.7	15.4	16.7	16.4	16.2	13.5	21.6	26.2	20.9	14.3
REMAINDER COMPANIES	79.9	73.5	13.3	15.4	13.8	15.2	14.7	13.6	13.4	8.3	10.4	8.0	12.9
INDUSTRY 3991, BROOMS AND BRUSHES													
TOTAL	391	409	673.1	16.5	163.8	12.7	24.0	101.1	353.6	15.7	2.4	13.3	326.7
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.0	2.0	19.6	15.0	17.0	13.8	15.3	15.7	17.8	9.6	(D)	10.3	21.6
NEXT 4 LARGEST COMPANIES	1.0	1.7	13.7	11.2	13.9	10.6	11.1	13.7	14.4	13.6	(D)	15.6	13.3
NEXT 12 LARGEST COMPANIES	3.1	4.4	19.4	19.3	19.5	20.0	20.1	21.5	21.9	32.5	33.2	32.4	16.9
NEXT 30 LARGEST COMPANIES	7.7	8.1	21.0	20.5	20.6	20.0	20.1	19.2	20.5	20.8	8.6	23.0	21.6
REMAINDER COMPANIES	87.2	83.9	26.4	33.9	29.0	35.6	33.5	29.9	25.5	23.5	49.8	18.7	26.7
INDUSTRY 3993, SIGNS AND ADVERTISING DISPLAYS													
TOTAL	3 373	3 468	1 738.7	49.7	566.6	36.8	69.2	343.1	1 060.9	43.0	13.5	29.5	689.2
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	.1	.5	6.2	4.3	5.2	4.0	4.1	5.3	6.5	6.1	(D)	4.5	5.9
NEXT 4 LARGEST COMPANIES	.1	.6	4.5	4.2	4.4	3.9	4.2	4.1	4.4	3.1	(D)	2.1	4.7
NEXT 12 LARGEST COMPANIES	.4	.6	7.8	6.1	6.9	5.6	6.0	6.3	7.4	8.6	6.3	9.6	8.5
NEXT 30 LARGEST COMPANIES	.9	1.3	11.9	9.3	9.6	9.3	9.6	9.1	11.4	18.5	35.8	10.6	12.9
REMAINDER COMPANIES	98.5	96.9	69.6	76.1	73.8	77.1	76.1	75.2	70.3	63.7	43.1	73.2	68.1
INDUSTRY 3995, BURIAL CASKETS													
TOTAL	376	406	505.9	12.0	129.7	9.3	17.8	79.7	264.2	16.3	2.2	14.2	244.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	1.1	3.0	36.2	28.1	35.7	26.3	28.7	32.5	41.6	(D)	(D)	(D)	30.2
NEXT 4 LARGEST COMPANIES	1.1	2.2	11.5	12.5	11.8	13.7	11.6	13.2	12.2	(D)	(D)	(D)	11.1
NEXT 12 LARGEST COMPANIES	3.2	4.7	14.4	15.0	15.3	14.7	14.4	15.5	13.3	8.0	5.6	8.3	15.8
NEXT 30 LARGEST COMPANIES	8.0	8.6	12.6	13.7	12.3	14.2	14.5	13.2	10.9	5.9	17.6	4.1	14.3
REMAINDER COMPANIES	86.7	81.5	25.3	30.7	24.9	31.0	30.9	25.7	22.1	10.4	19.3	9.0	28.7
INDUSTRY 3996, HARD SURFACE FLOOR COVERINGS													
TOTAL	20	21	607.2	6.4	93.5	5.0	10.4	68.6	321.3	16.9	1.9	15.1	291.9
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES	20.0	23.8	89.6	84.1	86.5	85.4	85.8	88.6	91.3	95.4	97.2	95.2	88.4
NEXT 4 LARGEST COMPANIES	20.0	19.0	7.8	12.7	10.9	12.0	11.6	9.6	6.2	1.9	-	2.2	9.2
NEXT 12 LARGEST COMPANIES	60.0	57.2	2.6	3.2	2.6	2.7	2.6	1.8	2.6	2.7	2.8	2.6	2.5
NEXT 30 LARGEST COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
REMAINDER COMPANIES	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

SEE FOOTNOTES AT END OF TABLE.

Table 8. **Share of Selected Items Accounted for by the 4 Largest Companies and Complementary Groupings Ranked on Value of Shipments for Each Industry: 1977**—Con.

Company size group	Number of--		Value of shipments (million dollars)	All employees		Production workers			Value added by manufacture (million dollars)	New capital expenditures			Cost of materials (million dollars)
	Companies	Establishments		Number (thousands)	Payroll (million dollars)	Number (thousands)	Hours (millions)	Wages (million dollars)		Total (million dollars)	Structures and additions to plant (million dollars)	Machinery and equipment (million dollars)	
	INDUSTRY 3999, MANUFACTURING INDUSTRIES, NEC												
TOTAL.	3 921	3 976	2 662.0	67.3	669.1	52.0	92.3	408.5	1 484.7	81.3	21.5	59.8	1 208.1
PERCENT OF ABOVE TOTALS ACCOUNTED FOR BY--													
4 LARGEST COMPANIES. . . .	.1	.2	18.2	11.2	16.8	10.6	10.8	14.8	17.6	19.4	(D)	15.7	19.5
NEXT 4 LARGEST COMPANIES .	.1	.1	6.4	6.3	7.1	5.2	5.4	6.3	7.4	5.7	(D)	6.3	5.4
NEXT 12 LARGEST COMPANIES.	.3	.5	10.2	8.9	9.5	8.8	9.8	10.3	9.8	15.0	(D)	16.1	10.8
NEXT 30 LARGEST COMPANIES.	.8	1.2	11.9	10.2	9.7	10.3	10.2	10.2	11.3	14.6	7.9	17.1	12.5
REMAINDER COMPANIES. . . .	98.7	98.0	53.2	63.4	56.9	65.1	63.8	58.5	53.7	45.2	46.3	44.9	51.8

- Represents zero. (X) Not applicable. (D) Withheld to avoid disclosing operations of individual companies. (Z) Less than one half of one percent.

[1]Value added by manufacture is the basis for determing company rank in this industry rather than value of shipments.

[2]The value of shipments figures for this industry include extensive duplication due to shipments between establishments within the industry.

[3]Establishments in this industry reported value of production rather than value of shipments. Consequently, the formula for computing value added by manufacture was modified to include only changes in work-in-process inventories between the beginning and end of the year.

[4]In this industry, which contains a large number of very small establishments, there is a possibility that some of these small establishments have been misclassified. Only the company and establishment counts are affected by the misclassifications.

[5]Government-owned, contractor-operated plants are included in addition to privately-owned establishments. For these government-owned, contractor-operated plants, the value added and shipments data are calculated using value added based upon averages reported for commercial establishments in prior years but exclude capital expenditures and government-owned materials furnished to these establishments.

[6]Value of work done rather than value of shipments is reported for this industry; therefore, value added has not been adjusted for any inventory change.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS				
2011-	Meat packing plants....1977..	[4]27,875.7	21	33	50	66
	1972..	[4]21,637.3	26	39	53	67
	1967..	[4]14,665.2	27	38	49	62
	1963..	[4]11,768.7	30	40	50	62
	1958..	[4]11,257.0	33	44	54	64
20111	Beef, not canned or made into sausage....1977..	14,095.8	25	36	53	69
	1972..	11,790.1	30	42	58	72
	1967..	7,398.5	26	35	49	63
	1963..	5,707.8	26	34	46	59
	1958..	5,019.4	31	38	49	61
	1954..	3,943.1	36	43	51	(NA)
20112	Veal, not canned or made into sausage....1977..	319.3	32	56	85	98
	1972..	241.5	27	46	70	91
	1967..	307.7	37	50	68	86
	1963..	310.8	36	44	60	78
	1958..	414.1	41	50	65	80
	1954..	397.6	49	56	67	(NA)
20113	Lamb and mutton, not canned or made into sausage....1977..	329.5	58	82	97	99+
	1972..	330.4	55	76	96	99+
	1967..	312.7	57	73	91	99
	1963..	300.1	54	67	85	97
	1958..	305.2	60	69	85	96
	1954..	298.5	61	74	87	(NA)
20114	Pork, fresh and frozen....1977..	5,647.5	37	55	78	95
	1972..	4,221.0	37	50	73	91
	1967..	2,791.0	33	48	68	87
	1963..	2,202.5	36	50	67	83
	1958..	2,124.3	39	53	69	83
	1954..	1,928.8	42	56	69	(NA)
20115	Lard....1977..	214.1	39	59	83	97
	1972..	171.0	37	59	78	92
	1967..	182.2	33	51	71	87
	1963..	223.6	33	51	71	85
	1958..	332.0	41	58	75	87
	1954..	383.2	45	63	78	(NA)
20116	Pork, processed (not canned or made into sausage) made in meat packing plants. (See product class 20136.)....1977..	[4]2,095.3	31	49	76	94
	1972..	[4]1,443.3	34	48	69	88
	1967..	[4]1,324.0	30	47	67	85
	1963..	[4]1,176.1	33	49	66	82
	1958..	[4]1,349.0	37	56	71	84
20117	Sausage, and similar products (not canned), made in meat packing plants. (See product class 20137.)....1977..	[4]1,859.3	29	41	63	86
	1972..	[4]1,340.7	26	38	58	80
	1967..	[4]1,353.4	27	40	57	75
	1963..	[4]850.6	27	41	56	72
	1958..	[4]836.0	28	39	54	68
20118	Canned meats (except animal feed and baby food) containing 20 percent or more meats, made in meat packing plants. (See product class 20138.)[5]....1977..	[4]561.7	59	83	99+	100
	1972..	[4]622.1	68	87	99+	100
	1967..	[4]490.4	57	82	98	100
	1963..	[4]482.2	58	81	98	100
	1958..	[4]406.5	62	83	97	99
20119	Hides, skins, and pelts....1977..	807.7	23	35	53	72
	1972..	580.4	30	41	56	72
	1967..	276.3	32	43	55	69
	1963..	223.4	33	41	53	67
	1958..	295.7	33	39	(NA)	(NA)
	1954..	225.5	43	49	57	(NA)
2011A	Miscellaneous byproducts of meat packing plants, except sausage casings....1977..	235.7	(S)	(S)	(S)	(S)
	1972..	126.8	(S)	(S)	(S)	(S)
	1967..	100.7	(S)	(S)	(S)	(S)
	1963..	87.8	37	61	(NA)	(NA)
	1958..	105.7	49	63	(NA)	(NA)
	1954..	109.0	61	69	79	(NA)
20110	Meat packing plant products, n.s.k.[5]....1977..	1,709.8	(X)	(X)	(X)	(X)
	1972..	823.2	(X)	(X)	(X)	(X)
	1967..	461.0	(X)	(X)	(X)	(X)
	1963..	203.8	(X)	(X)	(X)	(X)
	1958..	169.2	(X)	(X)	(X)	(X)
	1954..	60.5	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2013-	Sausages and other prepared meats					
	1977	[4]7,146.8	18	27	41	58
	1972	[4]3,905.1	16	25	37	53
	1967	[4]2,583.1	15	22	36	51
	1963	[4]1,798.7	14	21	35	50
	1958	[4]1,494.5	16	24	(NA)	(NA)
20136	Pork, processed or cured (not canned or made into sausage), not made in meat packing plants. (See product class 20116.)					
	1977	[4]1,683.3	26	41	65	84
	1972	[4]985.9	24	35	54	75
	1967	[4]684.0	20	31	53	76
	1963	[4]458.6	21	34	56	76
	1958	[4]472.7	23	36	58	80
20137	Sausage and similar products (not canned), not made in meat packing plants. (See also product class 20117.)					
	1977	[4]2,820.7	31	42	56	72
	1972	[4]1,923.7	23	31	43	59
	1967	[4]1,265.9	22	30	41	55
	1963	[4]905.6	18	25	37	51
	1958	[4]690.2	19	25	36	51
20138	Canned meats (except animal feed and baby foods) containing 20 percent or more meat, not made in meat packing plants. (See product class 20118.)[5]					
	1977	[4]694.6	43	64	88	99+
	1972	[4]472.0	34	51	77	97
	1967	[4]366.0	33	49	71	94
	1963	[4]247.9	34	48	74	95
	1958	[4]192.1	34	48	75	96
20139	Natural sausage casings[6]					
	1977	33.2	36	58	87	99+
	1972	114.9	40	58	79	97
	1967	83.4	32	52	79	95
	1963	91.7	37	54	77	94
20130	Sausages and other prepared meats, n.s.k.					
	1977	1,914.9	(X)	(X)	(X)	(X)
	1972	408.6	(X)	(X)	(X)	(X)
	1967	183.8	(X)	(X)	(X)	(X)
	1963	73.2	(X)	(X)	(X)	(X)
2016-	Poultry dressing plants					
	1977	5,291.9	17	28	49	73
20161	Young chickens (usually under 20 weeks of age), including broilers, fryers, roasters, and capons processed in slaughtering plant (See product class 20171.)[7]					
	1977	[4](D)	(D)	(D)	(D)	(D)
	1972 product class 20161, Young chickens (usually under 20 weeks of age), including broilers, fryers, roasters, and capons. (1977 product classes 20161 and 20171)					
	1972	2,198.0	17	27	47	71
20162	Hens and/or fowl, processed in slaughtering plant. (See product class 20172.)[7]					
	1977	[4](D)	(D)	(D)	(D)	(D)
	1972 product class 20162, Hens and/or fowl. (1977 product classes 20162 and 20172)					
	1972	147.8	39	57	82	98
20163	Turkeys, processed in slaughtering plant. (See product class 20173.)[7]					
	1977	[4](D)	(D)	(D)	(D)	(D)
	1972 product class 20163, Turkey. (1977 product classes 20163 and 20173)					
	1972	538.9	40	56	79	98
	1967	504.7	28	39	61	87
	1963	371.9	23	35	56	85
	1958	257.9	23	32	52	79
	1954	203.8	22	31	49	(NA)
20164	Other poultry and small game, processed in slaughtering plant. (See product class 20174.)[7]					
	1977	[4](D)	(D)	(D)	(D)	(D)
	1972 product class 20164, Other poultry and small game. (1977 product classes 20164 and 20174)					
	1972	23.7	69	89	100	(X)
	1967	19.7	81	91	99+	100
	1963	14.3	83	89	98	100
	1958	19.4	44	58	81	96
20165	Processed poultry and small game, except soup, processed in a slaughtering plant. (See product class 20175.)[7]					
	1977	[4]331.4	70	85	98	100
	1972 product class 20171, Processed poultry except soups					
	1972	358.1	34	51	78	98
20160	Poultry dressing plants, n.s.k.					
	1977	[4]116.1	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2017-	Poultry and egg processing....1977..	[4]1,066.5	21	34	55	85
20171	Young chikens (usually under 20 weeks of age), including broilers, fryers, roasters, and capons, not processed in slaughtering plant (See product class 20161.)[7]....1977..	[4](D)	(D)	(D)	(X)	(X)
	1972 product class 20161, Young chickens (usually under 20 weeks of age), including broilers, fryers, roasters, and capons (1977 product classes 20161 and 20171)....1972..	2,198.0	17	27	47	71
20172	Hens and/or fowl, not processed in slaughtering plant (See product class 20162.)[7]....1977..	[4](D)	(D)	(D)	(X)	(X)
	1972 product class 20162, Hens and/or fowl (1977 product classes 20162 and 20172)....1972..	147.8	39	57	82	98
20173	Turkeys, not processed in slaughtering plant[7]....1977..	[4](D)	(D)	(D)	(X)	(X)
	1972 product class 20163, Turkeys (1977 product classes 20163 and 20173)....1972..	538.9	40	56	79	98
	1967..	504.7	28	39	61	87
	1963..	371.9	23	35	56	85
	1958..	257.9	23	32	52	79
	1954..	203.8	22	31	49	(NA)
20174	Other poultry and small game, not processed in slaughtering plant (See product class 20164.)[7]....1977..	[4](D)	(D)	(X)	(X)	(X)
	1972 product class 20164, Other poultry and small game (1977 product classes 20164 and 20174)....1972..	23.7	69	89	100	(X)
	1967..	19.7	81	91	99+	100
	1963..	14.3	83	89	98	100
	1958..	19.4	44	58	81	96
20175	Processed poultry and small game, except soup, not processed in slaughtering plant (See product class 20165.)[7]....1977..	[4]657.7	45	62	95	100
	1972 product class 20171, Processed poultry and small game, except soup....1972..	358.1	34	51	78	98
20179	Liquid, dried, and frozen eggs (1972 product class 20172)....1977..	312.7	30	49	85	
	1972..	156.7	36	53	82	100
	1967..	159.6	43	58	82	99+
	1963..	139.7	33	48	74	98
	1958..	150.7	30	45	73	97
	1954..	148.0	34	51	76	(NA)
20170	Poultry and egg processing, n.s.k....1977..	96.1	(X)	(X)	(X)	(X)
20210	Creamery butter....1977..	1,109.7	30	42	64	84
	1972..	791.1	37	47	61	78
	1967..	836.5	14	20	33	51
	1963..	820.4	8	14	25	40
	1958..	802.3	11	15	24	37
	1954..	858.5	14	19	28	(NA)
2022-	Cheese, natural and processed....1977..	5,528.1	38	50	62	75
	1972..	2,753.5	40	51	62	74
	1967..	1,533.8	45	53	62	71
	1963..	[8]1,070.0	45	50	59	68
	1958..	[8]761.9	([8])	([8])	([8])	([8])
20221	Natural cheese, except cottage cheese....1977..	2,727.2	32	41	56	73
	1972..	1,400.0	36	46	63	77
	1967..	829.2	38	44	55	68
	1963..	[8]681.5	34	39	49	61
20222	Process cheese and related products....1977..	2,518.5	59	76	88	98
	1972..	1,134.0	60	74	86	95
	1967..	562.5	72	84	94	99
	1963..	[8]388.5	67	74	(NA)	(NA)
20220	Natural and processed cheese, n.s.k....1977..	282.3	(X)	(X)	(X)	(X)
	1972..	219.5	(X)	(X)	(X)	(X)
	1967..	142.1	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2023-	Condensed and evaporated milk....1977..	3,086.1	32	47	65	83
	1972..	1,722.6	34	52	66	80
	1967..	1,422.7	35	47	61	73
	1963..	1,104.5	33	42	55	70
	1958..	977.9	38	48	58	72
20231	Dry milk products....1977..	1,735.4	38	52	69	91
	1972..	880.3	45	59	73	90
	1967..	632.0	35	45	57	73
	1963..	504.4	22	30	47	65
	1958..	421.1	22	33	49	69
20232	Canned milk products (consumer type cans)....1977..	672.4	72	91	100	(X)
	1972..	427.7	69	83	98	100
	1967..	475.5	62	81	95	100
	1963..	363.0	66	78	93	100
	1958..	352.1	78	85	97	99
	1954..	341.2	79	86	97	(NA)
20233	Concentrated milk, shipped in bulk....1977..	264.2	33	50	80	98
	1972..	131.9	29	47	75	98
	1967..	79.3	31	49	75	94
	1963..	75.3	41	54	74	91
	1958..	84.2	38	54	76	92
	1954..	91.1	45	58	73	(NA)
20234	Ice cream mix and ice milk mix....1977..	293.2	22	36	60	85
	1972..	227.7	16	30	50	72
	1967..	201.1	15	26	44	70
	1963..	157.8	17	26	45	69
	1958..	118.5	23	35	56	77
	1954..	119.5	24	33	46	(NA)
20230	Condensed and evaporated milk, n.s.k....1977..	121.0	(X)	(X)	(X)	(X)
	1972..	55.0	(X)	(X)	(X)	(X)
	1967..	34.8	(X)	(X)	(X)	(X)
	1963..	3.9	(X)	(X)	(X)	(X)
	1958..	2.0	(X)	(X)	(X)	(X)
20240	Ice cream and ices....1977..	2,229.4	27	36	53	71
	1972..	1,519.3	27	37	54	70
	1967..	1,273.6	32	42	57	68
	1963..	1,210.0	34	43	57	65
	1958..	1,137.7	35	44	54	62
	1954..	954.3	33	41	52	(NA)
2026-	Fluid milk....1977..	11,602.8	17	26	43	58
	1972..	7,662.5	17	26	41	54
	1967..	6,603.4	21	29	40	49
	1963..	6,016.6	22	29	38	46
	1958..	5,577.0	23	29	37	44
20261	Bulk fluid milk and cream....1977..	2,123.8	25	38	57	75
	1972..	1,258.8	23	34	53	72
	1967..	923.5	17	27	42	60
	1963..	950.5	15	22	34	50
	1958..	817.5	16	24	38	53
	1954..	715.6	18	27	39	(NA)
20262	Packaged fluid milk and related products....1977..	7,345.5	18	30	46	62
	1972..	5,078.9	19	29	45	59
	1967..	4,454.9	25	34	45	55
	1963..	4,285.1	25	32	42	50
	1958..	4,110.3	26	32	40	47
20263	Cottage cheese (including bakers' cheese, pot chesse, and farmers' cheese)....1977..	545.6	25	38	62	84
	1972..	340.9	27	41	62	81
	1967..	218.0	36	50	68	81
	1963..	189.1	32	45	58	72
	1958..	185.3	32	44	58	70
20264	Buttermilk, chocolate drink, and other flavored milk products....1977..	851.7	32	44	60	74
	1972..	423.0	29	39	55	70
	1967..	286.0	31	39	50	62
	1963..	252.7	31	40	50	59
	1958..	213.0	30	37	44	53
20260	Fluid milk and related products, n.s.k....1977..	736.3	(X)	(X)	(X)	(X)
	1972..	560.9	(X)	(X)	(X)	(X)
	1967..	721.0	(X)	(X)	(X)	(X)
	1963..	339.2	(X)	(X)	(X)	(X)
	1958..	250.9	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2032-	Canned specialties....1977..	$2,429.0	59	73	87	96
	1972..	$1,629.9	62	76	89	96
	1967..	$1,190.7	64	77	88	96
	1963..	$946.6	69	79	89	96
	1958..	$827.6	(10)	(10)	(10)	(10)
20321	Canned baby foods[5]....1977..	$401.3	98	(D)	100	(X)
	1972..	$346.7	95	99	99+	100
	1967..	$246.3	93	98	100	(X)
	1963..	$230.8	95	99	100	(X)
	1958..	$185.2	94	99	100	(X)
	1954..	$148.7	(D)	100	(X)	(X)
20323	Canned dry beans....1977..	$556.5	51	68	90	100
	1972..	$305.8	50	68	89	99+
	1967..	$246.1	49	64	86	98
	1963..	$200.3	44	63	85	97
	1958..	$166.9	46	63	81	94
20322, 20324, 20320	Soups and other canned specialties and canned specialties, n.s.k....1977..	$1,471.2	67	80	(NA)	(NA)
	1972..	$977.4	64	86	(NA)	(NA)
	1967..	$698.3	83	89	(NA)	(NA)
	1963..	$515.5	84	89	(NA)	(NA)
2033-	Canned fruits and vegetables....1977..	$6,621.4	19	31	53	72
	1972..	$3,922.7	18	29	51	69
	1967..	$3,222.3	23	35	52	68
	1963..	$2,585.8	24	35	49	64
	1958..	$2,191.5	(11)	(11)	(11)	(11)
20331	Canned fruits (except baby foods)....1977..	$1,289.3	37	51	78	93
	1972..	$828.4	35	50	75	92
	1967..	$818.3	34	51	75	90
	1963..	$721.7	37	52	73	86
	1958..	$639.7	(11)	(11)	(11)	(11)
20332	Canned vegetables (except hominy and mushrooms)....1977..	$1,650.9	38	49	70	89
	1972..	$1,067.1	35	46	64	85
	1967..	$957.5	38	46	61	78
	1963..	$767.7	34	41	55	71
	1958..	$638.6	(12)	(12)	(12)	(12)
20333	Canned hominy and mushrooms....1977..	$149.8	53	73	96	100
	1972..	$98.2	39	57	89	100
	1967..	$51.6	39	62	91	100
	1963..	$39.0	34	55	90	100
	1958..	$34.8	37	57	90	100
20334	Canned fruit juices, nectars, and concentrates....1977..	$1,223.4	34	47	69	88
	1972..	$709.2	29	45	66	85
	1967..	$413.5	31	45	69	86
	1963..	$380.5	31	43	66	85
	1958..	$294.2	(11)	(11)	(11)	(11)
20335	Canned vegetable juices....1977..	$251.8	67	81	95	100
	1972..	$155.7	62	76	92	99+
	1967..	$104.2	62	72	88	98
	1963..	$91.1	55	69	86	98
	1958..	$93.3	58	69	84	96
	1954..	$64.5	58	69	81	(NA)
20336	Catsup and other tomato sauces....1977..	$1,350.0	52	71	88	98
	1972..	$603.3	56	70	87	98
	1967..	$507.7	55	68	86	97
	1963..	$297.9	49	63	80	94
	1958..	$245.6	55	65	80	93
20338	Jams, jellies, and preserves....1977..	$396.9	49	63	84	98
	1972..	$280.3	40	55	79	96
	1967..	$245.2	35	49	70	90
	1963..	$227.3	31	44	63	84
	1958..	$197.9	28	38	56	76
	1954..	$160.0	26	36	53	(NA)
20330	Canned fruits and vegetables, n.s.k....1977..	$309.2	(X)	(X)	(X)	(X)
	1972..	$180.5	(X)	(X)	(X)	(X)
	1967..	$124.3	(X)	(X)	(X)	(X)
	1963..	$58.5	(X)	(X)	(X)	(X)
	1958..	$47.4	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2034-	Dehydrated fruits, vegetables, and soups....1977..	1,200.2	36	52	73	92
	1972..	625.9	31	50	74	92
	1967..	450.9	29	46	70	91
	1963..	334.9	35	51	74	92
	1958..	276.8	44	64	80	96
	1954..	185.5	50	68	85	(NA)
20341	Dried fruits and vegetables, except soup mixes....1977..	898.6	39	56	82	98
	1972..	466.4	32	51	79	97
	1967..	344.9	32	50	77	97
	1963..	284.5	39	55	77	95
20342	Soup mixes, dried....1977..	224.7	78	88	98	100
	1972..	126.7	75	86	97	100
	1967..	76.4	73	83	97	100
	1963..	44.5	84	91	99	100
20340	Dehydrated fruits, vegetables, and soup mixes, n.s.k....1977..	76.9	(X)	(X)	(X)	(X)
	1972..	32.8	(X)	(X)	(X)	(X)
	1967..	29.6	(X)	(X)	(X)	(X)
	1963..	5.9	(X)	(X)	(X)	(X)
2035-	Pickes, sauces, and salad dressings....1977..	[9]2,242.8	39	47	60	77
	1972..	[9]1,165.1	30	42	57	76
	1967..	[9]792.9	29	40	56	74
	1963..	[9]619.0	29	40	55	71
	1958..	[9]496.1	29	38	51	68
20352	Pickes and other pickled products....1977..	[9]553.2	40	53	78	96
	1972..	[9]362.5	38	51	74	91
	1967..	[9]260.6	29	43	65	86
	1963..	[9]220.5	23	34	53	77
	1958..	[9]170.1	20	30	50	73
	1954..	[9]135.6	18	29	49	(NA)
20353	Meat sauces (except tomato)....1977..	[9]261.6	49	65	85	98
	1972..	[9]151.3	50	66	86	97
	1967..	[9]98.5	47	63	82	95
	1963..	[9]102.0	45	57	78	92
	1958..	[9]67.6	35	47	66	83
20354	Mayonnaise, salad dressings, and sandwich spreads....1977..	[9]1,292.3	60	67	79	93
	1972..	[9]576.0	52	62	76	92
	1967..	[9]373.9	55	65	78	92
	1963..	[9]278.6	56	68	80	93
20350	Pickles, sauces, and salad dressings, n.s.k....1977..	[9]135.7	(X)	(X)	(X)	(X)
	1972..	[9]75.3	(X)	(X)	(X)	(X)
	1967..	[9]59.9	(X)	(X)	(X)	(X)
	1963..	[9]18.0	(X)	(X)	(X)	(X)
2037-	Frozen fruits and vegetables....1977..	[9]3,047.2	23	41	60	82
	1972..	[9]1,644.4	28	42	64	86
20371	Frozen fruits, juices, and ades[5]....1977..	[9]1,153.5	36	50	75	94
	1972..	[9]730.0	41	54	77	93
	1967..	[9]419.5	30	43	68	90
	1963..	[9]436.3	28	42	65	86
	1958..	[9]358.0	34	48	72	90
	1954..	[9]256.5	40	54	74	(NA)
20372	Frozen vegetables....1977..	[9]1,797.9	34	56	79	97
	1972..	[9]914.4	35	57	82	97
	1967..	[9]579.9	34	53	76	95
	1963..	[9]396.0	39	56	75	92
	1958..	[9]231.1	45	59	76	93
	1954..	[9]168.1	52	63	78	(NA)
20370	Frozen fruits and vegetables, n.s.k....1977..	95.8	(X)	(X)	(X)	(X)
	1972..	([13])	(X)	(X)	(X)	(X)
2038-	Frozen specialties....1977..	[9]2,911.9	33	49	68	85
	1972..	[9]1,743.0	36	48	65	82
20381	Frozen pies and other frozen baked goods[14]....1977..	[9]770.3	52	72	88	99
	1972..	[9]387.5	51	65	89	99
20382	Frozen dinners, beef, pork, poultry pies, and nationality foods, etc.[14]....1977..	[9]1,297.7	45	58	80	97
	1972..	[9]702.5	58	72	90	99
20383	Other frozen specialties[14]....1977..	[9]718.2	58	72	88	99
	1972..	[9]492.5	35	54	81	95

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2038-	Frozen specialties--Con.					
	1967 SIC 20373, Frozen specialties[14] ..... 1967..	[9]889.4	49	59	74	87
	1963..	[9]608.1	46	53	66	81
	1958..	[9]292.9	([12])	([12])	([12])	([12])
20380	Other frozen specialties, n.s.k. ..... 1977..	125.7	(X)	(X)	(X)	(X)
	1972..	[13]160.5	(X)	(X)	(X)	(X)
2041-	Flour and other grain mill products ..... 1977..	[4]3,678.6	33	54	76	91
	1972..	[4]2,374.1	32	53	76	91
	1967..	[4]2,322.5	31	45	70	88
	1963..	[4]2,070.6	36	51	70	87
	1958..	[4]1,914.1	([15])	([15])	([15])	([15])
20411	Wheat flour, except flour mixes ..... 1977..	2,208.9	38	66	88	99
	1972..	1,626.7	37	62	84	96
	1967..	1,557.7	37	55	78	94
	1963..	1,490.9	40	58	77	92
	1958..	1,398.9	([15])	([15])	([15])	([15])
20412	Wheat mill products other than flour ..... 1977..	455.4	39	64	88	99
	1972..	222.6	37	61	84	97
	1967..	204.3	35	55	77	94
	1963..	199.5	38	56	77	93
	1958..	167.9	40	55	71	89
	1954..	195.1	42	58	74	(NA)
20413	Corn mill products ..... 1977..	413.3	62	85	96	
	1972..	241.9	60	77	92	99
	1967..	261.8	62	77	91	97
	1963..	193.0	([16])	([16])	([16])	([16])
20415	Flour mixes and refrigerated doughs, made in flour mills. (See product class 20455.) ..... 1977..	[4]287.2	74	89	99+	100
	1972..	[4]143.5	79	91	99	100
	1967..	[4]148.6	70	93	99	100
	1963..	[4]115.1	71	86	96	99
	1958..	[4]134.5	([15])	([15])	([15])	([15])
	1954..	[4]194.1	([15])	([15])	([15])	([15])
20416	Other grain mill products ..... 1977..	98.3	67	81	99+	100
	1972..	45.6	51	77	99	100
	1967..	43.4	46	69	97	100
	1963..	46.0	([16])	([16])	([16])	([16])
20410	Flour and other grain mill products, n.s.k. ..... 1977..	215.5	(X)	(X)	(X)	(X)
	1972..	93.8	(X)	(X)	(X)	(X)
	1967..	106.7	(X)	(X)	(X)	(X)
	1963..	26.3	(X)	(X)	(X)	(X)
	1958..	25.3	(X)	(X)	(X)	(X)
20430	Cereal breakfast foods ..... 1977..	1,832.9	81	95	99	100
	1972..	934.6	84	96	99	100
	1967..	715.7	82	94	99	100
	1963..	561.4	82	94	99	100
	1958..	431.8	80	91	98	99
	1954..	331.0	78	89	98	(NA)
20440	Milled rice and byproducts ..... 1977..	1,242.3	47	72	94	100
	1972..	671.2	42	67	90	99+
	1967..	548.0	45	67	88	100
	1963..	407.1	46	68	86	100
	1958..	281.3	44	65	82	99
	1954..	264.8	40	59	81	(NA)
20455	Flour mixes and refrigerated doughs, not made in flour mills. (See product class 20415.)[15] ..... 1977..	[4]1,204.3	57	75	90	98
	1972..	[4]648.4	62	79	90	97
	1967..	[4]496.3	63	80	90	96
	1963..	[4]410.9	65	79	89	95
20460	Wet corn milling ..... 1977..	1,946.1	61	86	99	100
	1972..	786.8	63	85	99	100
	1967..	646.6	64	87	98	100
	1963..	547.2	65	87	97	100
	1958..	482.6	68	88	(NA)	(NA)
2047-	Dog, cat, and other pet food[17] ..... 1977..	3,071.0	52	67	80	89
	1972..	1,463.9	50	67	81	90
20471	Dog and cat food[17] ..... 1977..	2,717.1	58	76	87	95
	1972..	1,317.4	54	73	87	95

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2047-	Dog, cat, and other pet food-Con.					
20472	Other pet and specialty feed[17] 1977	268.1	34	47	70	90
	1972	146.5	26	38	60	82
20470	Dog, cat, and other pet food, n.s.k. 1977	85.7	(X)	(X)	(X)	(X)
2048-	Prepared feeds, n.e.c.[17] 1977	8,350.2	21	30	44	59
	1972	4,662.8	22	30	42	57
20481	Poultry feeds, except duck and geese (1972 product classes 20481, 20482, and 20483)[18] 1977	2,758.6	24	37	58	78
	1972 product class 20481, Egg-type feed, including starter-grower and layer-breeder (1977 product class 20481, part)[17] 1972	711.6	30	42	59	78
	1972 product class 20482, Broiler feed (1977 product class 20481, part)[17] 1972	568.8	26	41	65	94
	1972 product class 20483, Turkey feed (1977 product class 20481, part)[17] 1972	159.9	34	50	76	96
20482	Dairy cattle feeds, complete (1972 product class 20484, part)[18] 1977	1,145.6	31	41	62	82
20483	Dairy cattle feed, supplements and concentrates (1972 product class 20484, part)[18] 1977	308.5	40	52	73	89
	1972 product class 20484, Dairy cattle feed (1977 product classes 20482 and 20483)[17] 1972	754.7	32	43	62	79
20484	Swine feeds, complete (1972 product class 20485, part)[18] 1977	575.8	35	48	67	83
20485	Swine feed, supplements and concentrates (1972 product class 20485, part)[18] 1977	892.3	46	61	80	92
	1972 product class 20485, Swine feed (1977 product classes 20484 and 20485)[17] 1972	754.2	38	53	72	86
20486	Beef cattle feeds, complete (1972 product class 20486, part)[18] 1977	367.1	31	40	57	80
20487	Beef cattle feed, supplements and concentrates (1972 product class 20486, part)[18] 1977	603.8	35	50	73	90
	1972 product class 20486, Beef cattle feed (1977 product classes 20486 and 20487)[17] 1972	546.0	27	38	57	75
20488	Other poultry and livestock feeds (1972 product classes 20487 and 20488)[18] 1977	337.9	35	49	67	83
	1972 product class 20487, Horse and mule feed (1977 product class 20488, part)[17] 1972	92.3	34	46	64	83
	1972 product class 20488, Other poultry and livestock feeds (1977 product class 20488, part)[17] 1972	145.0	44	56	75	90
20489	Other prepared animal feeds[17] 1977	338.0	21	33	51	73
	1972	167.7	23	35	54	75
20480	Prepared feeds, n.e.c., n.s.k.[17] 1977	1,022.6	(X)	(X)	(X)	(X)
	1972	[19]762.6	(X)	(X)	(X)	(X)
2051-	Bread, cake, and related products 1977	7,965.9	32	40	53	66
	1972	5,160.9	27	37	48	60
	1967	4,320.4	25	36	45	56
	1963	3,829.8	22	34	43	54
	1958	3,555.9	21	33	42	51
	1954	2,987.9	19	32	42	(NA)
20511	Bread, white, wheat, and rye[20] 1977	3,500.7	36	47	61	76
	1972	2,444.5	32	43	56	68
20512	Rolls, bread-type, including brown and serve, stuffing and crumbs[20] 1977	1,679.6	27	40	54	70
	1972	896.5	28	38	51	66
	1967 product class 20511, Bread and bread-type rolls[20] 1967	2,793.5	28	38	49	60
	1963	2,496.6	24	36	47	59
	1958	2,221.0	25	37	48	58
	1954	2,009.2	22	35	47	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2051-	Bread, Cake, and related products--Con.					
20513	Sweet yeast goods....1977..	640.4	28	42	61	79
	1972..	430.2	24	36	56	74
	1967..	393.0	19	30	46	63
	1963..	330.5	21	29	43	56
	1958..	295.5	20	28	41	54
	1954..	233.9	15	23	37	(NA)
20514	Soft cakes....1977..	949.9	51	67	80	92
	1972..	552.4	48	60	74	88
	1967..	478.5	39	57	70	84
	1963..	438.0	31	50	64	76
	1958..	413.3	32	48	62	75
	1954..	372.4	31	45	48	(NA)
20515	Pies....1977..	297.1	54	66	80	94
	1972..	224.0	41	55	72	88
	1967..	226.7	40	53	66	84
	1963..	205.9	27	38	55	71
	1958..	201.5	23	33	50	66
	1954..	185.9	20	28	43	(NA)
20516	Pastries....1977..	31.2	40	61	86	98
	1972..	49.6	33	55	77	93
	1967..	51.2	32	46	67	83
	1963..	51.2	24	37	56	76
	1958..	39.9	(15)	(15)	(15)	(15)
20517	Doughnuts (cake type)....1977..	241.1	60	69	82	96
	1972..	179.3	50	60	72	87
	1967..	164.0	38	53	64	78
	1963..	141.4	32	44	56	69
	1958..	125.2	23	34	47	62
	1954..	113.3	21	32	45	(NA)
20510	Bread, cake, and related products, n.s.k....1977..	625.8	(X)	(X)	(X)	(X)
	1972..	384.4	(X)	(X)	(X)	(X)
	1967..	213.6	(X)	(X)	(X)	(X)
	1963..	166.3	(X)	(X)	(X)	(X)
	1958..	259.6	(X)	(X)	(X)	(X)
2052-	Cookies and crackers....1977..	2,812.4	59	67	80	91
	1972..	1,713.3	58	67	80	91
	1967..	1,349.5	56	65	78	89
	1963..	1,137.6	58	66	77	89
	1958..	982.0	61	68	77	86
20521	Crackers and pretzels....1977..	1,168.9	70	80	92	99+
	1972..	715.0	68	77	89	98
	1967..	494.0	71	78	89	(NA)
	1963..	450.2	71	81	92	98
	1958..	349.8	77	84	92	99
20522	Cookies and ice cream cones....1977..	1,578.4	55	66	82	94
	1972..	976.5	55	67	81	93
	1967..	832.2	51	63	78	91
	1963..	679.8	52	60	75	88
	1958..	618.8	(15)	(15)	(15)	(15)
20520	Cookies and crackers, n.s.k....1977..	65.1	(X)	(X)	(X)	(X)
	1972..	21.8	(X)	(X)	(X)	(X)
	1967..	23.3	(X)	(X)	(X)	(X)
	1963..	7.6	(X)	(X)	(X)	(X)
	1958..	13.4	(X)	(X)	(X)	(X)
20610	Cane sugar mill products and byproducts....1977..	707.6	42	61	86	99+
	1972..	419.6	43	60	83	99
	1967..	363.5	42	62	82	99
	11 1963..	373.5	47	65	82	100
20620	Refined cane sugar and byproducts....1977..	2,168.0	63	90	99+	100
	1972..	1,746.4	58	83	99	100
	1967..	1,336.2	59	83	100	(X)
	1963..	1,255.0	62	82	100	(X)
	1958..	996.2	69	87	(D)	100
	1954..	859.0	(12)	(12)	100	(X)
20630	Refined beet sugar and byproducts....1977..	1,160.4	67	95	100	(X)
	1972..	866.4	66	97	100	(X)
	1967..	550.8	67	96	100	(X)
	1963..	553.7	66	97	100	(X)
	1958..	379.8	64	94	100	(X)
	1954..	289.6	66	96	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2065-	Confectionery products[21] 1977	[4]4,170.2	36	46	63	78
	1972	[4]2,337.0	32	43	59	75
	1967	[4]1,812.7	24	35	51	67
	1963	[4]1,393.9	15	26	44	63
	1958	[4]1,172.8	17	26	41	60
	1954	[4]982.5	18	26	41	(NA)
20652	Chocolate and cholate-type confectionery products (1972 product classes 20651, 20652, 20653, 20654, 20655, and 20657.) (See also product class 20662.) 1977	[4]1,709.3	50	64	81	93
20653	Nonchocolate confectionery products (1972 product classes 20651, 20652, 20653, 20654, 20655, and 20657.) 1977	1,241.7	36	48	66	86
	1972 product class 20651, Bar goods (except solid chocolate bars), (1977 product classes 20652, part and 20653, part) 1972	427.7	66	81	93	99
	1967	354.4	54	71	87	96
	1963	265.6	48	61	82	96
	1958	262.3	51	62	81	94
	1954	230.2	49	62	78	(NA)
	1972 product class 20652, 5 cent and 10 cent specialties (1977 product classes 20652, part and 20653, part) 1972	244.1	51	69	88	99
	1967	203.2	48	66	87	98
	1963	128.2	51	65	83	96
	1958	102.7	42	56	78	94
	1954	85.1	40	54	75	(NA)
	1972 product class 20653, Package goods (except solid chocolate), (1977 product classes 20652, part and 20653, part) 1972	713.6	37	49	68	85
	1967	551.6	31	41	59	80
	1963	480.3	24	36	53	74
	1958	386.9	23	32	50	70
	1954	297.5	24	36	57	(NA)
	1972 product class 20654, Bulk goods (except solid chocolate), (1977 product classes 20652, part and 20653, part) 1972	134.5	31	41	61	85
	1967	136.3	28	40	55	78
	1963	132.6	26	38	54	74
	1958	135.7	23	34	50	69
	1954	154.7	23	33	50	(NA)
	1972 product class, 20655, Penny goods (1977 product classes 20652, part and 20653, part) 1972	67.6	34	52	82	99
	1967	66.8	34	51	77	96
	1963	62.7	33	46	71	92
	1958	50.1	37	49	70	90
	1972 product class 20657, Chocolate-type confectionery made from purchased chocolate (1977 product classes, 20652, part and 20653, part) 1972	116.8	44	60	81	97
20658	Confectionery products, n.e.c. 1977	1,004.0	58	69	83	96
	1972	528.5	47	57	76	91
	1967	384.8	37	45	63	84
	1963	294.0	28	40	58	78
	1958	216.4	29	40	58	78
20650	Confectionery products, n.s.k. 1977	215.2	(X)	(X)	(X)	(X)
	1972	104.2	(X)	(X)	(X)	(X)
	1967	115.6	(X)	(X)	(X)	(X)
	1963	30.4	(X)	(X)	(X)	(X)
	1958	18.9	(X)	(X)	(X)	(X)
2066-	Chocolate and cocoa products 1977	[4]1,603.3	71	86	98	99+
	1972	[4]724.0	72	86	99+	100
	1967	[4]546.4	74	87	99	100
	1963	[4]480.6	71	83	96	100
	1958	[4]442.3	69	83	97	100
20661	Chocolate coatings 1977	340.9	62	90	99+	100
	1972	167.0	54	84	99	100
	1967	137.8	56	84	98	100
	1963	139.6	45	73	96	100
	1958	143.6	46	71	97	100
20662	Chocolate and chocolate-type confectionery products, (made from cocoa beans ground in the same establishment.) (See also product class 20652.) 1977	[4]565.4	82	98	100	(X)
	1972	[4]289.5	(D)	98	100	(X)
	1967	[4]205.1	(D)	99	100	(X)
	1963	[4]179.9	(D)	98	100	(X)
	1958	[4]141.8	88	96	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2066-	Chocolate and cocoa products--Con.					
20668	Other chocolate and cocoa products (made from cocoa beans or nibs ground in the same establishment) (See also product class 20998.)					
	1977	4680.6	85	95	100	(X)
	1972	4262.5	83	93	100	(X)
	1967	4192.8	89	97	100	100
	1963	4161.2	79	88	98	100
	1958	4156.8	81	93	100	(X)
20660	Chocolate and cocoa products, n.s.k. 1977	16.4	(X)	(X)	(X)	(X)
	1972	5.0	(X)	(X)	(X)	(X)
	1967	10.7	(X)	(X)	(X)	(X)
20670	Chewing gum and chewing gum base 1977	649.3	93	97	(D)	100
	1972	384.8	84	97	99+	100
	1967	271.9	81	94	99+	100
	1963	206.8	86	95	100	(X)
	1958	175.1	83	92	98	100
	1954	153.5	84	93	99	(NA)
2074-	Cottonseed oil mill products (1967 product group 2091-) 1977	763.1	42	59	81	99
	1972	410.8	42	55	74	96
	1967	365.7	44	60	76	94
	1963	490.7	40	54	68	88
	1958	377.3	44	56	72	91
	1954	559.6	44	54	70	(NA)
20741	Cottonseed oil, crude (1967 product class 20911) 1977	146.6	41	59	85	100
	1972	125.9	43	57	78	99
	1967	114.8	43	58	77	97
	1963	174.1	41	53	69	90
	1958	162.7	43	53	72	91
20742	Cottonseed oil, once refined (1967 product class 20912) 1977	236.5	54	77	99+	100
	1972	73.4	62	88	100	(X)
	1967	56.2	75	96	100	(X)
	1963	65.7	68	85	100	(X)
	1958	47.7	71	89	99	100
20743	Cotton linters (1967 product class 20913) 1977	43.4	44	63	84	100
	1972	29.2	40	57	80	99
	1967	38.3	41	62	80	96
	1963	37.7	37	54	71	90
	1958	28.7	40	57	75	92
20744	Cottonseed cake, meal, and other byproducts (1967 product class 20914) 1977	323.9	42	59	83	100
	1972	175.3	39	58	78	98
	1967	148.0	40	60	77	95
	1963	208.1	37	53	68	89
	1958	131.3	42	55	71	89
20740	Cottonseed oil mill products, n.s.k. (1967 product class 20910) 1977	12.6	(X)	(X)	(X)	(X)
	1972	7.0	(X)	(X)	(X)	(X)
	1967	8.4	(X)	(X)	(X)	(X)
	1963	5.1	(X)	(X)	(X)	(X)
	1958	6.9	(X)	(X)	(X)	(X)
2075-	Soybean oil mill products (1967 product group 2092-) 1977	6,116.5	50	71	93	99+
	1972	2,652.2	52	68	90	99
	1967	1,740.8	55	73	90	99
	1963	1,293.6	48	67	86	99
	1958	919.7	37	61	84	97
	1954	762.9	37	62	87	(NA)
20751	Soybean oil (1967 product class 20921) 1977	2,070.1	53	73	(D)	100
	1972	802.4	51	70	91	99+
	1967	594.3	55	73	90	99+
	1963	458.9	46	67	86	99
	1958	425.9	39	61	84	98
20752	Soybean cake, meal, and other byproducts (1967 product class 20922) 1977	4,016.7	49	70	94	100
	1972	1,844.0	53	70	92	99+
	1967	1,143.4	56	76	92	99+
	1963	831.4	49	69	87	99
	1958	487.4	37	61	85	98
20750	Soybean oil mill products, n.s.k. (1967 product class 20920) 1977	29.7	(X)	(X)	(X)	(X)
	1972	5.8	(X)	(X)	(X)	(X)
	1967	3.1	(X)	(X)	(X)	(X)
	1963	3.4	(X)	(X)	(X)	(X)
	1958	6.4	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2076-	Vegetable oil mill products, n.e.c. (1967 product group 2093-)...1977..	401.0	33	53	84	99
	1972..	272.1	45	70	94	100
	1967..	205.9	46	67	95	99+
	1963..	196.8	54	79	93	100
	1958..	189.3	61	88	98	99
20761	Linseed oil (1967 product class 20931).....1977..	72.5	98	(D)	100	(X)
	1972..	44.4	98	100	(X)	(X)
	1967..	48.2	86	99	100	(X)
	1963..	50.2	84	99	100	(X)
	1958..	63.2	77	99	100	(X)
20762	Vegetable oils (other than cottonseed, soybean, and linseed) (1967 product class 20932).....1977..	210.8	40	59	89	100
	1972..	157.4	53	70	94	100
	1967..	113.4	52	74	97	100
	1963..	105.2	66	83	95	100
	1958..	82.7	75	88	98	100
20763	Other vegetable oil mill products, except cottonseed and soybean (1967 product class 20933).....1977..	86.9	48	67	94	100
	1972..	67.9	61	82	99	100
	1967..	41.8	53	78	98	100
	1963..	39.5	59	85	98	100
	1958..	43.3	70	92	99	100
20760	Vegetable oil mill products, n.e.c., n.s.k. (1967 product class 20930).....1977..	30.8	(X)	(X)	(X)	(X)
	1972..	2.4	(X)	(X)	(X)	(X)
	1967..	2.5	(X)	(X)	(X)	(X)
	1963..	2.0	(X)	(X)	(X)	(X)
2077-	Animal and marine fats and oils (1967 product group 2094-).....1977..	2,102.2	19	29	46	64
	1972..	977.1	17	26	41	60
	1967..	709.4	18	26	41	57
	1963..	642.9	18	27	40	56
	1958..	[22]534.3	19	28	(NA)	(NA)
20771	Grease and inedible tallow (1967 product class 20941).....1977..	989.4	25	36	57	76
	1972..	419.4	22	33	51	72
	1967..	302.6	23	33	49	65
	1963..	264.2	26	34	48	64
	1958..	246.7	23	34	47	61
	1954..	182.6	25	36	49	(NA)
20772	Meat meal and tankage (1967 product class 20942).....1977..	753.9	20	33	50	70
	1972..	389.2	19	31	48	68
	1967..	277.8	20	31	47	66
	1963..	246.7	20	29	45	64
	1958..	174.3	22	30	44	60
	1954..	169.7	29	37	52	(NA)
20773	Animal and marine oil products, including foots (1967 product class 20943).....1977..	250.4	44	56	81	98
	1972..	121.8	42	54	75	95
	1967..	96.3	41	54	74	94
	1963..	111.3	36	50	74	94
	1958..	104.3	37	50	69	91
20770	Animal and marine fats and oils, n.s.k. (1967 product class 20940)...1977..	108.4	(X)	(X)	(X)	(X)
	1972..	46.7	(X)	(X)	(X)	(X)
	1967..	32.7	(X)	(X)	(X)	(X)
	1963..	20.7	(X)	(X)	(X)	(X)
	1958..	8.9	(X)	(X)	(X)	(X)
2079-	Shortening and cooking oils (1967 product group 2096-).....1977..	4,272.2	41	58	85	98
	1972..	2,232.6	40	61	87	99
	1967..	1,690.4	42	64	88	99
	1963..	1,230.7	41	63	89	99
	1958..	1,191.3	43	65	89	99
20791	Shortening and cooking oils (1967 product class 20961).....1977..	3,166.3	47	63	87	99
	1972..	1,643.6	50	70	89	99
	1967..	1,233.9	53	72	92	99
	1963..	907.4	51	74	92	98
	1958..	895.4	50	73	94	99
	1954..	888.3	55	79	95	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2079-	Shortening and cooking oils--Con.					
20792	Margarine (1967 product class 20962) 1977	1,070.4	60	84	99+	100
	1972	586.3	54	81	99	100
	1967	456.5	47	72	97	100
	1963	323.2	50	73	97	100
	1958	295.9	46	70	94	100
	1954	278.5	39	64	93	(NA)
20790	Shortening and cooking oils, n.s.k. 1977	35.6	(X)	(X)	(X)	(X)
	1972	2.7	(X)	(X)	(X)	(X)
2082-	Malt beverages[22] 1977	6,612.9	65	83	98	99+
	1972	4,038.6	52	70	91	99
	1967	2,900.3	40	59	87	98
	1963	2,282.0	34	52	79	94
	1958	1,972.1	29	45	69	88
	1954	1,854.8	27	41	60	(NA)
20821	Canned beer and ale[23] 1977	3,548.9	66	89	99	100
	1972	2,206.3	59	77	96	100
20822	Bottled beer and ale[23] 1977	2,263.1	68	83	98	100
	1972	1,416.6	46	65	89	99
20823	Beer and ale in barrels and kegs[23] 1977	398.1	58	78	98	100
	1972	264.1	51	67	91	100
20824	All other malt beverages and brewing byproducts[23] 1977	379.7	70	91	99+	100
	1972	116.5	73	86	98	100
20820	Malt beverages, n.s.k.[23] 1977	23.1	(X)	(X)	(X)	(X)
	1972	35.1	(X)	(X)	(X)	(X)
	1967 product class 20820, Malt liquors and brewing products[23] 1967	2,900.3	40	59	87	98
	1963	2,282.0	34	52	79	94
	1958	1,972.1	29	45	69	88
	1954	1,854.8	27	41	60	(NA)
20830	Malt and malt byproducts 1977	488.9	60	81	98	100
	1972	212.9	49	76	98	100
	1967	200.0	42	67	95	100
	1963	185.1	37	62	94	100
	1958	184.9	50	69	95	100
	1954	193.1	47	68	93	(NA)
20840	Wines, brandy, and brandy spirits 1977	[24]1,357.7	52	69	85	95
	1972	[24]851.0	52	66	84	94
	1967	[24]414.9	48	62	78	91
	1963	[24]352.6	50	63	76	90
2085-	Distilled liquor, except brandy 1977	[9]1,955.0	51	69	89	99+
	1972	[9]1,557.2	50	72	90	99
	1967	[9]1,246.1	52	70	87	99
	1963	[9]959.9	56	73	92	99
	1958	[9]809.9	60	77	94	98
	1954	[9]684.3	63	80	93	(NA)
20851	Distilled liquors, except brandy 1977	[9]205.7	54	81	99	100
	1972	[9]153.7	49	76	98	100
	1967	[9]202.3	50	74	96	100
	1963	[9]163.0	51	76	97	100
	1958	[9]144.9	55	71	95	100
20853	Bottled liquors, except brandy 1977	[9]1,703.3	54	72	94	100
	1972	[9]1,396.3	51	73	92	99+
	1967	[9]1,043.8	53	71	89	99+
	1963	[9]796.6	58	75	93	100
	1958	[9]664.1	61	80	96	99
	1954	[9]540.2	67	82	95	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2085-	Distilled liquor, except brandy--Con.					
20850	Distilled liquor, except brandy, n.s.k. 1977	[9]46.0	(X)	(X)	(X)	(X)
	1972	[9]7.2	(X)	(X)	(X)	(X)
	1967	-	(X)	(X)	(X)	(X)
	1963	[9]0.4	(X)	(X)	(X)	(X)
	1958	[9]0.9	(X)	(X)	(X)	(X)
20860	Bottled and canned soft drinks 1977	8,503.6	14	21	26	51
	1972	4,800.5	14	20	32	45
	1967	2,996.8	13	19	27	38
	1963	2,136.2	11	16	23	33
	1958	1,451.3	11	15	22	31
2087-	Flavoring extracts and sirups, n.e.c. 1977	2,620.7	61	68	75	84
	1972	1,455.7	62	70	76	84
	1967	1,037.9	63	70	77	85
	1963	790.3	55	63	72	80
	1958	523.0	([12])	([12])	([12])	([12])
	1954	464.2	48	56	69	(NA)
20871	Flavoring extracts, emulsions, and other liquid flavors 1977	226.4	21	38	67	92
	1972	119.0	23	34	56	83
	1967	95.0	18	28	49	78
	1963	99.3	27	36	52	72
	1958	71.7	28	38	55	76
	1954	65.2	35	43	59	(NA)
20872	Liquid beverage bases, not for use by soft drink bottlers 1977	213.0	78	91	99	100
	1972	97.9	65	79	93	99
	1967	129.9	74	87	96	99
	1963	76.1	73	85	93	99
	1958	59.2	63	78	91	99
	1954	38.3	83	89	95	(NA)
20873	Flavoring sirups for use by soft drink bottlers 1977	919.6	86	91	96	99
	1972	637.1	89	94	98	99+
	1967	353.0	(D)	97	99	99+
	1963	298.7	(D)	91	95	98
	1958	217.4	89	93	96	98
	1954	194.2	89	95	97	(NA)
20874	Other flavoring agents (except chocolate sirups) 1977	1,062.7	76	81	88	96
	1972	529.9	68	74	82	92
	1967	410.6	(D)	72	81	92
	1963	299.1	51	61	73	87
	1958	162.8	([12])	([12])	([12])	([12])
	1954	159.5	38	47	62	(NA)
20870	Flavoring extracts and sirups, n.s.k. 1977	199.0	(X)	(X)	(X)	(X)
	1972	71.8	(X)	(X)	(X)	(X)
	1967	49.4	(X)	(X)	(X)	(X)
	1963	17.1	(X)	(X)	(X)	(X)
	1958	12.0	(X)	(X)	(X)	(X)
20910	Canned and cured seafood, including soup (except frozen) (1967 product class 20310) 1977	1,025.5	37	53	71	86
	1972	[9]585.0	38	56	71	85
	1967	[9]421.1	34	52	68	82
	1963	[9]384.5	33	47	62	78
	1958	[9]367.0	([11])	([11])	([11])	([11])
2092-	Fresh or frozen packaged fish (1967 product group 2036-)[25] 1977	[9]2,459.2	15	24	41	58
	1972	[9]1,000.2	21	32	52	72
	1967	[9]529.7	24	35	53	71
	1963	[9]362.8	23	34	49	65
	1958	[9]274.1	18	28	45	66
	1954	[9]158.0	23	36	53	(NA)
20922	Fresh packaged fish and other seafood (1967 product class 20362)[25] 1977	[9]460.5	10	16	29	51
	1972	[9]135.2	28	39	59	80
	1967	[9]66.2	23	35	58	83
	1963	[9]76.6	14	21	37	58
	1958	[9]58.4	16	26	42	63
	1954	[9]53.6	20	31	50	(NA)
20923	Frozen packaged fish, excluding shellfish[25] [26] 1977	[9]744.4	36	52	76	92
	1972	[9]299.0	42	64	87	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2092-	Fresh or frozen packaged fish (1967 product group 2036-)--Con.					
20924	Frozen packaged shellfish and other seafood, including soup[26] 1977	[9]887.6	27	42	65	85
	1972	[9]414.9	32	48	70	92
	1967 product class 20361, Frozen packaged fish and other seafood, including soup[25] [26] 1967	[9]383.9	32	50	70	88
	1963	[9]267.0	31	46	66	84
	1958	[9]203.3	23	37	59	83
	1954	[9]104.0	31	49	68	(NA)
20920	Fresh or frozen packaged fish, n.s.k. (1967 product class 20360)[25] 1977	[9]366.8	(X)	(X)	(X)	(X)
	1972	[9]151.1	(X)	(X)	(X)	(X)
	1967	[9]79.2	(X)	(X)	(X)	(X)
	1963	[9]19.2	(X)	(X)	(X)	(X)
	1958	[9]12.5	(X)	(X)	(X)	(X)
2095-	Roasted coffee[27] 1977	5,217.8	62	74	90	97
	1972	2,163.3	64	79	91	97
	1967	1,793.9	57	74	88	96
	1963	1,602.7	54	70	84	93
	1958	1,768.2	46	59	76	89
	1954	1,886.7	45	59	75	(NA)
20951	Roasted coffee, whole bean or ground 1977	3,674.5	57	71	90	99
	1972	1,517.7	60	75	91	98
	1967	1,375.3	56	73	88	96
	1963	1,206.4	51	66	81	92
20952	Concentrated coffee 1977	1,387.8	(D)	98	99+	100
	1972	599.2	(D)	97	99+	100
	1967	365.6	85	94	99+	100
	1963	396.3	81	91	98	100
20950	Roasted coffee, n.s.k.[16] 1977	155.5	(X)	(X)	(X)	(X)
	1972	46.4	(X)	(X)	(X)	(X)
	1967	53.0	(X)	(X)	(X)	(X)
20970	Manufactured ice 1977	140.6	22	36	47	60
	1972	105.7	29	42	52	61
	1967	85.8	32	41	50	61
	1963	94.8	32	40	48	58
	1958	115.2	32	40	49	59
	1954	133.0	26	33	41	(NA)
20980	Macaroni, spaghetti, and noodles 1977	751.7	32	51	76	94
	1972	353.8	34	50	74	93
	1967	248.3	31	49	73	93
	1963	215.9	28	46	69	90
	1958	165.3	25	41	63	86
	1954	151.1	25	37	57	(NA)
2099-	Food preparations, n.e.c 1977	6,616.7	26	35	48	61
	1972	3,762.1	26	36	50	65
	1967	2,501.0	23	34	50	64
	1963	1,962.0	26	35	48	63
	1958	1,467.2	([27])	([27])	([27])	([27])
20991	Desserts (ready-to-mix) 1977	412.9	81	87	97	99+
	1972	267.2	(D)	86	96	99+
	1967	218.2	(D)	89	96	99+
	1963	191.6	86	92	97	100
	1958	138.8	81	88	95	99
	1954	123.1	80	89	95	(NA)
20992	Chips, (potato, corn, etc.) 1977	1,797.4	52	61	76	90
	1972	1,042.1	49	61	76	89
	1967	648.0	41	55	72	87
	1963	466.0	41	51	69	84
	1958	294.3	35	46	61	77
20993	Sweetening sirups and molasses 1977	296.8	52	69	86	98
	1972	167.3	53	71	86	98
	1967	138.8	54	68	89	98
	1963	136.5	63	76	91	98
	1958	95.6	([12])	([12])	([12])	([12])
	1954	78.2	65	77	91	(NA)
20994	Baking powder and yeast 1977	170.2	78	89	99	100
	1972	82.6	89	95	99	100
	1967	79.0	81	93	99	100
	1963	80.8	86	91	98	100
	1958	83.0	78	87	94	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 20, FOOD AND KINDRED PRODUCTS--Con.				
2099-	Food preparations, n.e.c.--Con.					
20995	Tea in consumer packages[28] 1977	616.8	79	88	97	99+
	1972	359.8	79	92	98	99+
20996	Vinegar and cider 1977	122.8	54	71	88	99
	1972	80.6	48	66	86	99
	1967	56.7	53	67	84	97
	1963	53.9	49	60	77	91
	1958	44.2	41	53	71	88
	1954	41.5	46	57	72	(NA)
20998	Chocolate and cocoa products, except confectionery, made from purchased chocolate or cocoa. (See also code 20668.) 1977	4207.5	54	70	87	99
	1972	455.9	39	54	78	96
	1967	452.2	39	59	78	95
	1963	451.1	36	54	78	96
	1958	450.1	44	60	81	93
20999	Other food preparations, n.e.c.[28] 1977	2,159.8	18	30	49	67
	1972	1,358.9	24	35	53	70
	1967 product class 20999, Other food preparations, n.e.c. (1972 product classes 20995 and 20999) 1967	1,073.3	27	40	57	74
	1963	883.3	23	34	52	66
	1958	684.2	22	36	50	100
20990	Miscellaneous foods, n.s.k. 1977	832.5	(X)	(X)	(X)	(X)
	1972	347.7	(X)	(X)	(X)	(X)
	1967	234.8	(X)	(X)	(X)	(X)
	1963	98.9	(X)	(X)	(X)	(X)
	1958	76.9	(X)	(X)	(X)	(X)
		MAJOR GROUP 21, TOBACCO MANUFACTURES				
21110	Cigarettes 1977	96,098.2	88	(D)	100	(X)
	1972	93,589.4	84	(D)	100	(X)
	1967	92,942.1	(D)	100	(X)	(X)
	1963	92,568.2	(D)	100	(X)	(X)
	1958	92,137.0	80	99	100	(X)
	1954	91,623.9	82	99	100	(X)
21210	Cigars 1977	9256.2	54	75	94	99
	1972	9357.3	55	77	94	99
	1967	9362.1	58	82	95	99
	1963	9353.2	59	81	92	99
	1958	9351.4	54	75	86	96
	1954	9333.3	45	64	81	(NA)
21310	Chewing and smoking tobacco and snuff 1977	9401.4	65	91	99+	100
	1972	9257.5	60	87	99+	100
	1967	9193.8	50	77	98	100
	1963	9217.9	53	78	98	100
	1958	9192.8	53	78	98	99
	1954	9173.7	56	80	99	(NA)
2141-	Tobacco stemming and redrying 1977	91,769.1	66	66	100	100
	1972	91,335.9	66	86	98	100
	1967	91,111.9	67	89	98	100
	1963	91,129.8	72	92	98	100
	1958	9976.2	75	91	96	100
	1954	91,018.6	81	91	97	(NA)
21411	Tobacco, redried 1977	9170.7	67	92	100	100
	1972	9124.0	60	83	99	100
	1967	9115.9	65	81	99	100
	1963	9165.4	77	88	99	100
	1958	9223.0	72	82	95	100
	1954	9350.4	82	87	96	(NA)
21412	Tobacco, stemmed 1977	91,531.7	72	90	99+	100
	1972	91,194.4	72	89	99	100
	1967	9974.3	76	94	99	100
	1963	9964.3	82	95	99	100
	1958	9753.2	86	97	99	100
	1954	9668.1	89	97	99	(NA)
21410	Reconstituted tobacco and tobacco stemming and redrying, n.s.k.[29] 1977	66.7	(X)	(X)	(X)	(X)
	1972	17.5	(X)	(X)	(X)	(X)
	1967	21.7	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS				
2211-	Cotton broad woven fabrics.....1977..	[24]4,197.8	([24])	([24])	([24])	([24])
	1972..	[24]2,596.6	([24])	([24])	([24])	([24])
	1967..	[24]3,026.6	([24])	([24])	([24])	([24])
	1963..	[24]3,396.8	([24])	([24])	([24])	([24])
	1958..	([24])	([24])	([24])	([24])	([24])
	Gray goods:					
22111	Cotton duck and allied fabrics, including combed duck.....1977..	205.3	60	80	99	100
	1972..	126.7	58	72	96	100
	1967..	202.2	49	64	87	100
	1963..	124.1	46	61	86	100
	1958..	111.6	44	56	82	99
	1954..	128.1	44	59	81	(NA)
22112	Cotton sheeting and allied coarse and medium yarn fabrics.....1977..	571.1	46	66	92	100
	1972..	531.6	28	46	77	100
	1967..	655.7	26	41	68	96
	1963..	619.4	27	44	72	95
	1958..	526.3	24	42	68	92
	1954..	545.6	24	43	63	(NA)
22113	Cotton print cloth yarn fabrics.....1977..	344.7	64	88	100	(X)
	1972..	299.3	47	73	99	100
	1967..	376.7	38	64	95	100
	1963..	419.0	37	60	92	100
	1958..	440.7	34	54	82	99
	1954..	515.6	28	45	69	(NA)
22114	Cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics, including blanketing.....1977..	758.7	58	78	99	100
	1972..	274.5	52	79	97	100
	1967..	169.9	51	71	94	100
	1963..	207.2	57	76	98	99
	1958..	248.7	52	75	93	99
22115	Fine cotton fabrics.....1977..	99.1	78	98	100	(X)
	1972..	73.1	63	84	99+	100
	1967..	330.1	51	71	94	100
	1963..	474.3	43	64	90	99
	1958..	384.8	40	59	84	99
	1954..	318.9	40	57	80	(NA)
22116	Other broad woven cotton gray fabrics and specialties.....1977..	636.2	42	67	94	100
	1972..	329.7	50	72	94	100
	1967..	243.5	30	51	80	99
	1963..	181.0	35	50	74	95
	1958..	202.9	24	41	66	91
	1954..	247.4	19	30	53	(NA)
22117	Finished cotton broad woven fabrics (made in weaving mills). (See also product class 22617.).....1977..	(4)	(4)	(4)	(4)	(4)
	1972..	(4)	(4)	(4)	(4)	(4)
	1967..	(4)	(4)	(4)	(4)	(4)
	1963..	(4)	(4)	(4)	(4)	(4)
	1958..	(4)	(4)	(4)	(4)	(4)
	Fabricated cotton textile products (made in weaving mills):					
22118	Cotton sheets and pillowcases. (See also product classes 22219 and 23928.).....1977..	(4)	(4)	(4)	(4)	(4)
	1972..	(4)	(4)	(4)	(4)	(4)
	1967..	(4)	(4)	(4)	(4)	(4)
	1963..	(4)	(4)	(4)	(4)	(4)
	1958..	(4)	(4)	(4)	(4)	(4)
22119	Cotton towels and washcloths. (See also product classes 22210 and 23929.).....1977..	(4)	(4)	(4)	(4)	(4)
	1972..	(4)	(4)	(4)	(4)	(4)
	1967..	(4)	(4)	(4)	(4)	(4)
	1963..	(4)	(4)	(4)	(4)	(4)
	1958..	(4)	(4)	(4)	(4)	(4)
22110	Other fabricated cotton textile products made in weaving mills, including fabrics, n.s.k.....1977..	238.2	(X)	(X)	(X)	(X)
	1972..	119.3	(X)	(X)	(X)	(X)
	1967..	133.5	(X)	(X)	(X)	(X)
	1963..	92.5	(X)	(X)	(X)	(X)
	1958..	87.8	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2221-	Manmade fiber and silk broad woven fabrics....1977..	[24]5,981.5	([24])	([24])	([24])	([24])
	1972..	[24]3,520.0	([24])	([24])	([24])	([24])
	1967..	[24]2,394.3	([24])	([24])	([24])	([24])
	1963..	[24]1,760.2	([24])	([24])	([24])	([24])
	Gray goods:					
22211	100 percent filament rayon and/or acetate fabrics, including combinations chiefly rayon and/or acetate[16]....1977..	265.7	53	69	92	100
	1972..	261.5	46	63	85	99+
	1967..	277.8	53	70	86	99
22212	100 percent filament fabrics, except rayon and/or acetate[16]....1977..	1,149.5	56	72	90	99
	1972..	514.3	56	68	86	99+
	1967..	292.5	57	72	93	100
22213	100 percent spun rayon and/or acetate fabrics, including blends[16]....1977..	184.3	44	73	98	100
	1972..	183.0	44	68	93	100
	1967..	226.8	52	79	96	100
22214	100 percent spun polyester blends with cotton[16]....1977..	1,664.1	51	78	98	100
	1972..	1,004.6	45	69	95	100
	1967..	502.0	53	79	97	100
22215	All other 100 percent spun noncellulosic fabrics[16]....1977..	404.0	44	68	94	100
	1972..	267.7	57	72	93	100
	1967..	165.4	71	87	98	100
22216	Combinations of filament and spun yarn fabrics, chiefly manmade fibers[16]....1977..	461.5	45	61	88	100
	1972..	279.3	53	70	90	100
	1967..	195.0	52	69	90	99
22217	Blanketing, silk, paper, and other specialty manmade fiber fabrics[16]....1977..	171.7	67	86	(D)	100
	1972..	101.8	43	69	97	100
	1967..	219.1	41	55	78	98
22218	Finished manmade fiber and silk broad woven fabrics (made in weaving mills). (See also product class 22628.)....1977..	([4])	([4])	([4])	([4])	([4])
	1972..	([4])	([4])	([4])	([4])	([4])
	1967..	([4])	([4])	([4])	([4])	([4])
	1963..	([4])	([4])	([4])	([4])	([4])
	1958..	([4])	([4])	([4])	([4])	([4])
	Fabricated manmade fabric and silk textile products (made in weaving mills):					
22219	Manmade fiber and silk sheets and pillowcases (made in weaving mills) (See also product classes 22118 and 23928) (1972 product class 22219, part)....1977..	([4])	([4])	([4])	([4])	([4])
22210	Other fabricated manmade fiber and silk textile products (made in weaving mills) including fabrics, n.s.k. (1972 product classes 22219, part and 22210)....1977..	126.9	(X)	(X)	(X)	(X)
	1972 product class 22219, Fabricated manmade fiber and silk textile products (made in weaving mills) (1977 product classes 22219, part and 22210, part)....1972..	280.0	86	97	100	(X)
	1967..	73.1	73	96	100	(X)
	1963..	93.1	81	98	100	(X)
	1958..	65.5	79	96	100	(X)
	1972 product class 22210, Weaving mills, manmade fiber and silk, n.s.k. (1977 product class 22210, part)....1972..	46.7	(X)	(X)	(X)	(X)
	1967..	29.5	(X)	(X)	(X)	(X)
	1963..	10.8	(X)	(X)	(X)	(X)
	1958..	13.2	(X)	(X)	(X)	(X)
2231-	Wool broad woven fabrics....1977..	[30]554.5	36	46	([30])	([30])
	1972..	[30]414.0	34	45	([30])	([30])
	1967..	[30]851.8	51	59	([30])	([30])
	1963..	[30]834.7	46	55	([30])	([30])
	1958..	[30]840.0	38	46	([30])	([30])
22311	Finished wool yarn, tops or raw stock, not combed or spun at same establishment....1977..	39.5	75	92	100	(X)
	1972..	61.5	59	84	100	(X)
	1967..	65.7	78	92	100	(X)
	1963..	63.7	74	95	100	(X)
	1958..	27.1	85	98	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2231-	Wool broad woven fabrics--Con.					
22312	Wool fabrics (gray goods)....1977..	97.3	55	81	100	(X)
	1972..	31.4	80	95	100	(X)
	1967..	137.3	81	94	99	100
	1963..	129.9	73	87	99	99+
	1958..	128.5	62	73	87	97
22313	Finished wool apparel fabrics....1977..	299.3	49	69	(D)	100
	1972..	213.5	49	64	87	100
	1967..	533.6	56	67	82	98
	1963..	547.5	49	59	74	93
	1958..	581.5	38	47	65	87
22314	Finished wool nonapparel fabrics and felts....1977..	83.2	62	83	100	(X)
	1972..	80.1	49	75	99	100
	1967..	68.9	56	75	97	100
	1963..	66.1	59	76	97	100
	1958..	64.0	58	74	96	100
22319	Wool and chiefly wool blankets....1977..	9.2	79	(D)	100	(X)
	1972..	13.0	89	(D)	100	(X)
	1967..	17.5	84	(D)	(D)	(X)
	1963..	16.9	67	87	100	(X)
	1958..	15.8	73	89	100	(X)
22310	Wool broad woven fabrics, finished wool fabrics, etc., n.s.k....1977..	26.0	(X)	(X)	(X)	(X)
	1972..	14.5	(X)	(X)	(X)	(X)
	1967..	28.8	(X)	(X)	(X)	(X)
	1963..	10.6	(X)	(X)	(X)	(X)
	1958..	23.0	(X)	(X)	(X)	(X)
2241-	Narrow fabric mills....1977..	645.0	16	25	46	71
	1972..	521.5	18	28	46	68
	1967..	411.0	17	27	45	67
	1963..	303.2	15	25	42	63
	1958..	270.4	15	23	38	59
	1954..	249.9	14	21	36	(NA)
22411	Woven narrow fabrics....1977..	413.5	22	36	60	86
	1972..	355.2	21	35	54	79
	1967..	292.0	23	35	54	77
	1963..	211.1	20	32	50	73
	1958..	179.5	18	27	46	69
22414	Braided narrow fabrics....1977..	133.4	29	48	80	100
	1972..	103.8	31	48	76	98
	1967..	71.9	26	43	73	97
	1963..	59.8	30	46	70	94
	1958..	57.4	25	39	65	90
22415	Covered rubber thread....1977..	56.1	68	87	100	(X)
	1972..	40.0	56	78	99+	100
	1967..	35.6	49	73	98	100
	1963..	26.9	60	77	97	100
	1958..	25.3	59	75	96	100
	1954..	21.4	71	86	99	(NA)
22410	Narrow fabrics, n.s.k....1977..	42.0	(X)	(X)	(X)	(X)
	1972..	22.5	(X)	(X)	(X)	(X)
	1967..	11.5	(X)	(X)	(X)	(X)
	1963..	5.4	(X)	(X)	(X)	(X)
	1958..	8.2	(X)	(X)	(X)	(X)
2251-	Women's hosiery, except socks....1977..	819.1	50	61	77	92
	1972..	899.5	34	47	67	85
	1967..	805.8	29	42	61	79
	1963..	582.7	34	46	62	78
	1958..	[15]519.4	([15])	([15])	([15])	([15])
22511	Women's finished full-fashioned stockings....1977..	(D)	(D)	(X)	(X)	(X)
	1972..	8.1	77	93	100	(X)
	1967..	27.9	51	73	93	100
	1963..	56.4	33	47	70	92
	1958..	220.6	24	35	57	79
	1954..	347.2	24	34	53	(NA)
22513	Women's finished seamless hosiery, full-length and knee-length....1977..	722.4	53	66	83	97
	1972..	759.5	34	47	68	88
	1967..	554.2	33	46	69	89
	1963..	395.5	36	46	64	82
22514	Women's full-fashioned hosiery shipped in the greige....1977..	(D)	(D)	(X)	(X)	(X)
	1972..	9.6	(D)	100	(X)	(X)
	1967..	7.9	64	85	99	100
	1963..	20.9	66	76	91	100
	1958..	80.5	34	48	67	83
	1954..	132.6	28	36	53	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2251-	Women's hosiery, except socks--Con.					
22515	Women's seamless full-length and knee-length hosiery shipped in the greige					
	1977	58.4	57	70	91	100
	1972	101.1	64	79	95	100
	1967	145.5	37	53	75	91
	1963	103.4	46	60	75	90
22519	Receipts for contract and commission work on women's full-length and knee-length hosiery. Seamless and full-fashioned, done for others on their materials[16]					
	1977	(NA)	(NA)	(NA)	(NA)	(NA)
	1972	(NA)	(NA)	(NA)	(NA)	(NA)
	1967	33.1	38	56	80	100
22510	Women's hosiery, except socks, n.s.k.					
	1977	37.3	(X)	(X)	(X)	(X)
	1972	21.2	(X)	(X)	(X)	(X)
	1967	37.2	(X)	(X)	(X)	(X)
	1963	6.4	(X)	(X)	(X)	(X)
2252-	Hosiery, n.e.c.					
	1977	893.6	19	29	45	65
	1972	588.7	21	31	47	67
	1967	454.5	22	29	44	64
	1963	402.4	16	22	35	54
	1958	[15]377.6	([15])	([15])	([15])	([15])
22522	Men's finished seamless hosiery					
	1977	464.6	24	36	59	82
	1972	285.9	27	40	61	85
	1967	238.3	24	34	54	80
	1963	202.1	17	27	45	70
	1958	[15]195.7	([15])	([15])	([15])	([15])
22523	All other finished seamless hosiery					
	1977	274.3	26	36	57	84
	1972	188.7	27	39	61	84
	1967	131.7	25	39	60	85
	1963	149.4	17	27	44	68
	1958	[15]129.1	([15])	([15])	([15])	([15])
22524	Seamless hosiery (except women's full-length and knee-length) shipped in the greige					
	1977	93.5	42	55	77	99
	1972	78.6	42	54	72	93
	1967	61.0	45	58	76	95
	1963	43.2	40	50	70	91
	1958	[15]42.9	([15])	([15])	([15])	([15])
22520	Hosiery, n.e.c., n.s.k.[15]					
	1977	61.2	(X)	(X)	(X)	(X)
	1972	35.5	(X)	(X)	(X)	(X)
	1967	23.5	(X)	(X)	(X)	(X)
	1963	7.8	(X)	(X)	(X)	(X)
	1958	9.9	(X)	(X)	(X)	(X)
2253-	Knit outerwear mills[31]					
	1977	2,136.6	15	25	42	59
	1972	[4]1,571.2	15	25	41	56
	1967	[4]1,170.0	11	17	28	43
	[32]1963	[4]945.8	7	12	22	38
	[33]1963	[4]840.0	7	12	([30])	([30])
	1958	[4]634.8	5	10	([30])	([30])
22531	Sweaters, knit jackets, and jerseys (made from yarns or fabrics knit in the same establishment). (See also product classes 23292, 23393 and 23690.)[31]					
	1977	555.5	19	33	55	79
	1972	[4]473.9	18	29	46	70
	1967	[4]506.0	15	23	39	59
	1963	[4]483.2	10	16	30	51
	1958	[4]426.7	7	12	24	43
22532	Knit outerwear sport shirts (made from yarns or fabrics knit in the same establishment). (See also product classes 23212, 23312 and 23612.)[31]					
	1977	518.1	38	55	83	98
	1972	[4]342.8	40	59	79	97
	1967	[4]210.9	24	37	62	89
	1963	[4]159.9	24	40	62	86
	1958	[4]116.9	22	35	62	90
	1954	[4]166.7	13	21	39	(NA)
22533	All other knit outerwear products (made from yarns or fabrics knit in the same establishment). (See also product classes 23292, 23393, and 23690.)[31]					
	1977	689.7	28	43	64	86
	1972	[4]445.0	33	50	73	92
	1967	[4]225.0	38	49	66	87
	1963	[4]142.8	24	38	60	83
	1958	[4]68.7	27	41	60	84

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2253-	Knit outerwear mills--Con.					
22539	Contract and commission receipts for knitting and/or dyeing knit outerwear products....1977..	154.2	15	26	47	69
	1972..	205.8	13	20	37	57
	1967..	131.1	10	17	30	50
	1963..	109.5	9	15	26	45
22530	Knit outerwear mills, n.s.k.[31]....1977..	219.1	(X)	(X)	(X)	(X)
	1972..	103.7	(X)	(X)	(X)	(X)
	1967..	97.0	(X)	(X)	(X)	(X)
	1963..	54.1	(X)	(X)	(X)	(X)
	1958..	22.5	(X)	(X)	(X)	(X)
2254-	Knit underwear mills[31]....1977..	579.5	38	56	83	98
	1972..	4481.4	44	58	81	97
	1967..	4396.7	34	50	72	92
	1963..	4336.4	30	48	68	89
	1958..	4288.5	27	41	60	84
22541	Men's and boys' knit underwear and nightwear (made from yarns or fabrics knit in the same establishment). (See also product classes 23215 and 23221.)[31]....1977..	431.0	50	71	92	100
	1972..	4360.2	54	70	92	99+
	1967..	4271.0	50	66	83	98
	1963..	4221.5	44	61	78	93
	1958..	4173.5	42	57	75	93
22542	Women's and children's knit underwear (made from yarns or fabrics knit in the same establishment). (See also product class 23412.)[31]....1977..	95.4	51	73	94	100
	1972..	473.0	50	70	94	100
	1967..	476.5	43	63	86	100
	1963..	470.8	36	55	77	98
	1958..	475.5	27	43	69	92
22543	Women's and children's knit nightwear (made from yarns or fabrics knit in the same establishment). (See also product class 23413.)[31]....1977..	50.0	66	91	100	(X)
	1972..	445.9	50	79	100	(X)
	1967..	445.5	48	70	99	100
	1963..	443.1	47	72	96	100
	1958..	439.5	49	67	91	98
22540	Knit underwear mills, n.s.k....1977..	3.1	(X)	(X)	(X)	(X)
	1972..	2.3	(X)	(X)	(X)	(X)
	1967..	3.7	(X)	(X)	(X)	(X)
	1963..	1.1	(X)	(X)	(X)	(X)
2257-	Circular knit fabric mills....1977..	3,111.2	18	29	48	69
	1972..	2,756.7	20	28	46	66
22571	Greige goods, except hosiery[34]....1977..	343.5	49	73	92	100
	1972..	165.4	59	72	92	100
22572	Underwear and nightwear finished fabric[34]....1977..	139.5	51	78	99	100
	1972..	82.4	54	76	99+	100
22574	High pile finished fabric[34]....1977..	202.3	72	92	100	(X)
	1972..	185.0	70	88	100	(X)
22575	Single knit outerwear finished fabric (1972 product class 22573, part)[35]....1977..	564.6	36	54	84	99+
22577	Double knit outerwear finished fabric (1972 product class 22573, part)[35]....1977..	1,050.8	28	46	69	94
	1972 product class 22573, Outerwear finished fabric (1977 product classes 22575 and 22577)....1972..	1,657.2	25	36	58	83
22578	All other circular knit finished fabric (1972 product class 22576)[35]....1977..	364.5	58	75	93	100
	1972..	156.1	58	78	95	100
	1967 product class 22562, Circular knit fabrics[34]....1967..	694.7	16	28	51	81
	1963..	417.8	17	29	51	77
	1958..	245.3	25	39	63	85
	1954..	167.8	25	41	66	(NA)
22579	Contract and commission receipts for knitting and/or dyeing circular knit fabric (1967 product class 22569)[36]....1977..	286.1	21	37	61	84
	1972..	389.8	11	20	37	61
22570	Circular knit fabric mills, n.s.k.[34]....1977..	159.9	(X)	(X)	(X)	(X)
	1972..	120.8	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2258-	Warp knit fabric mills					
	1977	1,568.4	26	40	64	85
	1972	928.6	25	44	69	88
22581	Greige goods, except hosiery[37]					
	1977	363.3	51	73	95	100
	1972	151.9	43	63	88	99+
22582	Underwear and nightwear finished fabric[37]					
	1977	405.2	38	56	87	100
	1972	276.0	44	71	98	100
22583	Outerwear finished fabric[37]					
	1977	328.2	44	64	90	100
	1972	212.5	41	65	95	100
22584	All other finished warp knit fabric[37]					
	1977	302.9	38	56	81	99
	1972	186.8	39	56	87	100
	1967 product class 22561, Warp knit fabrics[37]					
	1967	537.8	32	49	73	93
	1963	318.7	30	44	67	89
	1958	217.1	29	43	65	88
	1954	175.3	31	48	70	(NA)
22589	Contract and commission receipts for knitting and/or dyeing warp knit fabric (1967 product class 22569)[36]					
	1977	138.7	45	64	87	99+
	1972	95.5	31	50	75	93
	1967 product class 22569, Receipts for commission knitting and/or dyeing knit fabric (1972 product classes 22579 and 22589)[36]					
	1967	93.2	23	36	63	88
	1963	76.3	22	32	49	73
22580	Warp knit fabric mills, n.s.k.[37]					
	1977	30.1	(X)	(X)	(X)	(X)
	1972	5.9	(X)	(X)	(X)	(X)
22590	Knit gloves and knit products, n.e.c., made from yarns or fabrics knit in the same establishment. (See also product classes 23811 and 23812.)[31]					
	1977	112.9	31	42	59	79
	1972	[4]85.0	40	58	78	96
	1967	[4]35.7	54	71	89	99
	1963	[4]39.9	32	48	73	94
	1958	[4]31.4	30	49	73	94
2261-	Finished cotton broad woven fabrics					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
22617	Finished cotton broad woven fabrics (not finished in weaving mills). (See also product class 22117.)					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
22610	Finished cotton, broad woven fabrics, n.s.k.					
	1977	9.6	(X)	(X)	(X)	(X)
	1972	19.9	(X)	(X)	(X)	(X)
	1967	4.7	(X)	(X)	(X)	(X)
	1963	17.3	(X)	(X)	(X)	(X)
2262-	Finished manmade fiber and silk broad woven fabrics					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
22628	Finished manmade fiber and silk broad woven fabrics (not finished in weaving mills). (See also product class 22218.)					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
22620	Finished manmade fiber and silk broad woven fabrics, n.s.k.					
	1977	3.7	(X)	(X)	(X)	(X)
	1972	8.2	(X)	(X)	(X)	(X)
	1967	14.4	(X)	(X)	(X)	(X)
	1963	3.3	(X)	(X)	(X)	(X)
	1958	6.0	(X)	(X)	(X)	(X)
22690	Finished yarn, raw stock and narrow fabrics, except knit and wool (not spun, thrown, woven, or braided in same establishment). (See also product classes 22811, 22812, 22813, and 22814.)					
	1977	[4]764.9	32	46	69	90
	1972	[4]539.9	(S)	(S)	(S)	(S)
	1967	[4]211.7	33	47	68	89
	1963	[4]160.6	33	48	75	95
	1958	[4]135.9	41	56	78	93

See footnotes at end of page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
22710	Woven carpets and rugs					
	1977	167.9	69	81	95	99
	1972	202.5	62	80	95	99+
	1967	223.4	60	84	97	100
	1963	250.8	61	83	97	100
	1958	297.8	50	70	95	99
22720	Tufted carpets and rugs					
	1977	4,172.2	20	34	60	80
	1972	2,625.8	21	34	57	80
	1967	1,332.4	26	42	67	88
	1963	779.1	25	40	64	86
	1958	319.9	28	43	68	94
22790	Carpets, rugs, and mats, n.e.c.					
	1977	93.0	47	65	88	98
	1972	116.5	50	70	87	98
	1967	95.5	72	82	92	99
	1963	51.8	46	59	78	94
	1958	48.8	52	63	79	94
2281-	Yarn mills, except wool					
	1977	[4]4,156.4	20	31	50	74
	1972	[4]2,332.8	20	30	47	71
	1967	[4]1,574.6	20	29	47	70
	1963	[4]1,183.8	16	26	43	65
	1958	[4]903.7	15	24	50	62
22811	Carded cotton yarns. (See also product class 22690.)					
	1977	[4]905.6	32	50	73	93
	1972	[4]523.7	18	32	58	86
	1967	[4]404.6	22	36	58	83
	1963	[4]377.1	21	32	53	80
	1958	[4]328.2	19	30	50	75
22812	Combed cotton yarns. (See also product class 22690.)					
	1977	[4]520.6	37	52	78	99+
	1972	[4]297.9	37	53	76	99
	1967	[4]304.1	27	41	65	93
	1963	[4]310.5	26	39	61	90
	1958	[4]281.9	23	35	57	85
22813	Rayon and/or acetate spun yarns. (See also product class 22690.)					
	1977	[4]199.4	46	64	88	99+
	1972	[4]225.3	40	56	80	98
	1967	[4]190.9	35	49	71	95
	1963	[4]153.4	30	43	68	94
	1958	[4]106.9	34	47	70	95
22814	Spun noncellulosic fiber and silk yarns. (See also product class 22690.)					
	1977	[4]2,485.9	26	38	58	83
	1972	[4]1,239.5	29	42	64	86
	1967	[4]642.5	33	46	70	92
	1963	[4]326.5	34	49	73	95
	1958	[4]166.8	39	51	74	96
22810	Yarn mills, except wool, n.s.k.					
	1977	44.9	(X)	(X)	(X)	(X)
	1972	46.4	(X)	(X)	(X)	(X)
	1967	32.5	(X)	(X)	(X)	(X)
	1963	16.2	(X)	(X)	(X)	(X)
	1958	19.9	(X)	(X)	(X)	(X)
2282-	Textured thrown, and rewound yarns					
	1977	[30]1,496.8	38	49	([30])	([30])
	1972	[30]1,694.4	35	51	([30])	([30])
	1967	[30]538.3	52	65	([30])	([30])
	1963	[30]302.9	45	56	([30])	([30])
	1958	[30]172.4	34	46	([30])	([30])
22822	Rewound, plied, etc., yarns, other than wool (not spun or thrown at same establishment)					
	1977	109.3	83	93	100	(X)
	1972	100.7	60	80	96	100
	1967	71.6	63	80	96	100
	1963	69.0	46	71	94	100
	1958	51.4	44	65	91	100
22823	Thrown filament yarns, except textured[16]					
	1977	136.1	35	54	86	100
	1972	119.1	61	76	94	100
	1967	81.4	64	76	91	99
22825	Textured, crimped, or bulked filament yarns, including stretch yarns[38]					
	1977	[38]1,220.7	([38])	([38])	([38])	([38])
	1972 product class 22824, Textured, crimped, or bulked filament yarns[16]					
	1972	[39]1,465.6	37	54	79	97
	1967	365.8	67	80	96	100
22820	Textured, thrown, and rewound yarns, n.s.k.[16]					
	1977	30.8	(X)	(X)	(X)	(X)
	1972	9.0	(X)	(X)	(X)	(X)
	1967	19.5	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2283-	Wool yarn mills					
	1977	234.4	44	59	81	98
	1972	220.5	32	48	76	96
	1967	335.5	25	38	63	90
	1963	411.7	24	39	63	87
	1958	278.5	22	34	56	85
22831	Wool yarns, except carpet yarns, including yarns spun and finished at same establishment					
	1977	177.6	53	71	96	100
	1972	133.0	36	54	85	(D)
	1967	239.1	30	46	70	98
	1963	271.1	25	43	69	93
	1958	180.7	19	32	60	91
22832	Wool yarns, carpet					
	1977	37.4	58	80	100	(X)
	1972	70.7	72	87	99+	100
	1967	78.7	55	78	98	100
	1963	140.7	56	75	94	100
	1958	97.9	53	75	96	99
	1954	77.9	75	88	99	(NA)
22830	Wool yarn mills, n.s.k.[16]					
	1977	19.4	(X)	(X)	(X)	(X)
	1972	16.8	(X)	(X)	(X)	(X)
	1967	17.7	(X)	(X)	(X)	(X)
2284-	Thread					
	1977	551.1	58	77	91	99+
	1972	340.3	58	74	90	99
	1967	248.1	62	77	93	99
	1963	194.3	63	80	95	99
	1958	163.0	61	71	87	98
	1954	167.0	61	73	88	(NA)
22841	Finished thread for use in the home					
	1977	(D)	(D)	(D)	(D)	(X)
	1972	39.7	85	(D)	100	(X)
	1967	28.3	92	99	100	(X)
	1963	27.5	88	99	100	(X)
	1958	26.6	90	96	100	(X)
22842	Finished thread for industrial or manufactures' use					
	1977	408.7	52	74	92	100
	1972	239.0	53	72	92	100
	1967	175.9	57	74	94	100
	1963	131.5	56	76	96	100
	1958	99.3	56	71	90	99
22843	Unfinished thread shipped for finishing					
	1977	(D)	(D)	(D)	(X)	(X)
	1972	56.4	96	100	(X)	(X)
	1967	40.8	(D)	(D)	(X)	(X)
	1963	32.5	98	100	(X)	(X)
	1958	30.5	96	100	(X)	(X)
22840	Thread, n.s.k.					
	1977	7.4	(X)	(X)	(X)	(X)
	1972	5.2	(X)	(X)	(X)	(X)
	1967	3.1	(X)	(X)	(X)	(X)
	1963	2.8	(X)	(X)	(X)	(X)
	1958	6.5	(X)	(X)	(X)	(X)
22910	Pressed, punched, or needled felts, except hats					
	1977	186.2	47	72	95	100
	1972	131.2	50	69	93	100
	1967	131.0	50	70	96	100
	1963	119.6	50	68	94	100
	1958	94.1	43	62	91	99
	1954	89.1	42	63	89	(NA)
22920	Lace and net goods					
	1977	39.8	57	73	89	100
	1972	41.7	28	50	77	95
	1967	55.8	29	51	77	93
	1963	49.4	26	47	75	92
	1958	55.0	22	38	69	87
	1954	54.6	27	45	70	(NA)
22930	Paddings and upholstery filling					
	1977	260.6	28	43	66	87
	1972	154.3	24	38	58	84
	1967	164.5	28	40	61	82
	1963	150.3	30	45	64	83
	1958	137.8	27	40	58	78
	1954	149.4	30	48	65	(NA)
22940	Processed textile waste					
	1977	164.2	41	58	82	95
	1972	124.8	50	64	84	97
	1967	82.0	43	55	73	90
	1963	83.3	43	56	72	90
	1958	74.3	22	33	54	79
	1954	76.6	18	31	55	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2295-	Coated fabrics, not rubberized....1977..	987.1	37	52	69	86
	1972..	842.3	32	48	67	85
	1967..	571.3	26	43	67	86
	1963..	427.3	33	50	73	88
	1958..	245.2	36	54	72	90
	1954..	215.2	38	58	78	(NA)
22951	Pyroxylin-coated fabrics....1977..	37.6	86	97	100	(X)
	1972..	26.3	80	92	100	(X)
	1967..	38.6	75	87	100	(X)
	1963..	39.3	72	86	99	100
	1958..	38.4	60	77	98	100
	1954..	49.1	54	71	93	(NA)
22952	Vinyl coated fabrics....1977..	680.5	53	68	86	98
	1972..	608.2	43	62	83	98
	1967..	345.2	41	63	85	99
	1963..	233.4	47	71	90	99
	1958..	121.2	47	67	90	99
	1954..	115.9	55	73	92	(NA)
22953	Other coated fabrics....1977..	220.7	33	48	74	99
	1972..	153.9	27	44	69	93
	1967..	164.5	42	58	78	98
	1963..	137.4	42	53	76	94
	1958..	80.6	47	61	82	98
	1954..	50.3	54	69	88	(NA)
22950	Coated fabrics, except rubberized, n.s.k....1977..	48.3	(X)	(X)	(X)	(X)
	1972..	35.9	(X)	(X)	(X)	(X)
	1967..	23.0	(X)	(X)	(X)	(X)
	1963..	17.2	(X)	(X)	(X)	(X)
	1958..	5.0	(X)	(X)	(X)	(X)
22960	Tire cord and tire fabrics....1977..	919.8	78	(D)	100	(X)
	1972..	620.8	81	96	100	(X)
	1967..	404.6	74	91	100	(X)
	1963..	349.2	71	87	100	(X)
	1958..	332.1	64	86	100	(X)
2297-	Nonwoven fabrics....1977..	1,095.2	38	55	77	95
	1972..	521.0	43	57	79	95
22971	Nonwoven fabrics[40]....1977..	782.5	48	66	90	99
	1972..	376.1	57	71	88	99+
22972	Fabricated nonwoven products[40]....1977..	260.8	36	59	90	100
	1972..	124.3	33	60	93	100
	1967 product class 22991, Nonwoven textiles[40]....1967..	[41]164.3	40	61	86	99
	1963..	[41]110.6	46	68	88	99
	1958..	([42])	([42])	([42])	([42])	([42])
22970	Nonwoven fabrics, n.s.k....1977..	51.9	(X)	(X)	(X)	(X)
	1972..	20.6	(X)	(X)	(X)	(X)
2298-	Cordage and twine....1977..	291.7	29	45	68	89
	1972..	175.8	31	48	69	88
	1967..	174.9	33	49	73	92
	1963..	145.0	30	47	71	90
	1958..	132.3	36	53	74	92
	1954..	159.9	38	55	76	(NA)
22981	Hard fiber cordage and twine....1977..	42.5	74	92	100	(X)
	1972..	42.2	63	88	100	(X)
	1967..	36.3	69	89	100	(X)
	1963..	42.3	64	88	99	100
	1958..	52.3	62	85	99	100
	1954..	64.8	69	87	99	(NA)
22982	Soft fiber cordage and twine (except cotton)....1977..	183.8	31	48	73	95
	1972..	87.4	36	53	78	98
	1967..	83.3	41	59	83	99
	1963..	59.8	30	48	72	94
	1958..	34.1	30	48	81	99
	1954..	42.5	31	48	79	(NA)
22983	Cotton cordage and twine....1977..	47.7	66	83	100	(X)
	1972..	30.7	59	79	98	100
	1967..	43.4	47	70	95	100
	1963..	38.2	47	70	95	99
	1958..	40.4	59	78	94	(D)
	1954..	52.6	61	79	94	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**--Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 22, TEXTILE MILL PRODUCTS--Con.				
2298-	Cordage and twine--Con.					
22980	Cordage and twine, n.s.k. 1977	17.7	(X)	(X)	(X)	(X)
	1972	15.5	(X)	(X)	(X)	(X)
	1967	11.9	(X)	(X)	(X)	(X)
	1963	4.8	(X)	(X)	(X)	(X)
	1958	5.5	(X)	(X)	(X)	(X)
2299-	Textile goods, n.e.c. 1977	280.8	31	43	59	74
	1972	215.3	32	41	58	75
22992	Jute goods (except jute felts, cordage or twine) and linen goods 1977	37.5	69	85	100	(X)
	1972	21.0	68	89	100	(X)
	1967	29.9	70	87	98	-
	1963	42.9	57	71	91	100
	1958	54.0	56	67	84	98
22993	Scouring and combing mill products (1967 product class 22970) 1977	96.8	77	94	100	(X)
	1972	60.8	92	98	99+	100
	1967	89.9	80	90	98	100
	1963	111.1	71	86	98	99
	1958	89.7	72	83	94	99
	1954	91.0	(D)	81	93	(NA)
22990	Textile goods, n.s.k. 1977	146.5	(X)	(X)	(X)	(X)
	1972	133.5	(X)	(X)	(X)	(X)
	1967	37.1	(X)	(X)	(X)	(X)
	1963	10.4	(X)	(X)	(X)	(X)
	1958	[4]69.6	(X)	(X)	(X)	(X)
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS				
2311-	Men's and boys' suits and coats[31] 1977	2,719.2	20	30	46	66
	1972	2,234.2	19	30	46	65
	1967	1,779.6	17	27	42	59
	[32]1963	1,439.7	14	22	37	55
	[33]1963	1,195.4	13	22	([30])	([30])
	1958	1,000.9	13	20	([30])	([30])
	1954	927.1	11	18	33	(NA)
23111	Men's suits[31] 1977	1,273.4	33	45	66	85
	1972	898.5	28	42	64	83
	1967	789.1	25	38	60	82
	1963	727.1	17	29	50	75
	1958	629.6	15	26	44	67
23112	Men's overcoats and topcoats[31] 1977	179.8	28	46	75	97
	1972	100.4	31	48	77	98
	1967	130.5	20	32	57	89
	1963	121.8	18	28	50	77
	1958	129.0	14	24	45	72
23113	Men's tailored dress and sport coats and jackets[31] 1977	623.0	19	33	62	85
	1972	626.5	18	30	52	78
	1967	379.5	15	25	46	72
	1963	214.6	12	21	41	67
	1958	147.3	11	19	35	59
23114	Boys' suits, coats, and tailored jackets[31] 1977	149.7	41	58	87	100
	1972	100.0	42	58	84	99
	1967	111.6	26	40	65	93
	1963	102.6	19	30	54	80
	1958	76.9	18	28	50	79
23119	Contract and commission work on men's and boys' suits and coats 1977	371.5	20	35	53	77
	1972	445.5	23	32	44	63
	1967	304.3	23	29	42	62
	1963	243.3	23	33	45	62
23110	Men's and boys' suits and coats, n.s.k.[31] 1977	121.8	(X)	(X)	(X)	(X)
	1972	63.3	(X)	(X)	(X)	(X)
	1967	64.6	(X)	(X)	(X)	(X)
	1963	29.3	(X)	(X)	(X)	(X)
	1958	18.1	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2321-	Men's and boys' shirts and nightwear[31] 1977	2,836.5	16	25	46	65
	1972	[4]1,934.9	20	29	48	67
	1967	[4]1,340.5	19	29	48	66
	[32]1963	[4]1,183.7	18	27	44	62
	[33]1963	[4]984.5	20	30	([30])	([30])
	1958	[4]776.9	16	24	([30])	([30])
23212	Men's and boys' knit outerwear sport shirts, made from purchased knit fabrics. (See also product class 22532.)[31] 1977	809.0	25	40	64	87
	1972	[4]390.3	22	37	66	89
	1967	[4]129.2	31	46	69	93
	1963	[4]83.2	34	48	71	95
	1958	[4]48.7	35	48	74	98
23214	Men's and boys' dress and sport shirts except knit outerwear sport shirts[31] 1977	1,344.6	26	40	61	79
	1972	1,043.3	30	41	63	83
	1967	862.0	27	39	59	80
	1963	794.4	23	35	55	74
	1958	656.5	19	28	46	66
	1954	634.0	20	29	44	(NA)
23215	Men's and boys' nightwear, made of woven or purchased knit fabrics. (See also product class 22541.)[31] 1977	152.8	46	64	94	100
	1972	[4]105.3	44	59	83	99+
	1967	[4]84.5	41	54	76	100
	1963	[4]88.6	33	47	74	98
	1958	[4]71.7	35	53	78	98
23219	Contract and commission work on men's and boys' shirts (except work) and nightwear 1977	372.6	25	38	52	73
	1972	340.5	19	32	49	71
	1967	217.1	17	28	46	68
	1963	192.9	14	25	42	63
23210	Men's and boys' shirts and nightwear, n.s.k. 1977	157.5	(X)	(X)	(X)	(X)
	1972	55.5	(X)	(X)	(X)	(X)
	1967	47.7	(X)	(X)	(X)	(X)
	1963	18.1	(X)	(X)	(X)	(X)
23221	Men's and boys' underwear, made from woven or purchased knit fabrics. (See also product class 22541.)[31] 1977	350.0	66	82	95	100
	1972	[4]233.3	49	69	90	99+
	1967	[4]190.9	39	55	82	99
	1963	[4]136.7	39	54	80	97
	1958	[4]94.5	31	47	76	96
23230	Men's, youths', and boys' neckwear[31] 1977	211.2	28	40	60	85
	1972	279.4	26	38	55	76
	1967	128.4	25	34	51	72
	1963	105.6	19	27	42	65
	1958	89.7	17	25	39	61
	1954	101.3	16	24	40	(NA)
2327-	Men's and boys' separate trousers[31] 1977	1,631.4	24	35	53	71
	1972	1,779.7	25	37	56	73
	1967	1,195.1	17	27	44	62
	[32]1963	863.4	11	20	34	51
	[33]1963	692.7	14	23	([30])	([30])
	1958	436.3	9	16	30	50
	1954	369.1	11	17	31	(NA)
23271	Men's and boys' separate dress and sport trousers and dress shorts 1977	1,308.3	28	39	57	78
	1972	1,394.1	29	41	61	81
	1967	931.3	18	30	49	70
	1963	676.4	14	24	39	59
23279	Contract and commission work on men's and boys' separate dress and sport trousers 1977	264.5	24	37	59	81
	1972	332.8	23	32	51	84
	1967	226.7	22	29	44	65
	1963	168.0	14	22	35	57

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2327-	Men's and boys' separate trousers--Con.					
23270	Men's and boys' separate trousers, n.s.k.....1977..	58.6	(X)	(X)	(X)	(X)
	1972..	52.8	(X)	(X)	(X)	(X)
	1967..	37.2	(X)	(X)	(X)	(X)
	1963..	16.3	(X)	(X)	(X)	(X)
2328-	Men's and boys' work clothing[31].....1977..	3,394.1	47	56	70	84
	1972..	1,619.0	40	50	67	82
	1967..	1,023.1	29	41	60	78
	[32]1963..	717.4	24	37	55	75
	[33]1963..	635.2	25	36	([30])	([30])
	1958..	526.1	15	31	([30])	([30])
23281	Men's and boys' work shirts[31].....1977..	191.6	36	52	78	99
	1972..	141.7	30	49	78	99
	1967..	121.7	31	45	70	95
	1963..	87.3	23	38	67	92
	1958..	78.3	29	42	65	88
	1954..	90.5	(D)	43	67	(NA)
23283	Men's and boys' jeans and jean-cut casual slacks (1972 product class 23282, part)[43].....1977..	1,962.8	63	74	87	97
23284	Men's and boys' work clothing (1972 product class 23282, part)[43].....1977..	729.6	35	50	74	93
	1972 product class 23282, Men's and boys' work clothing (except shirts) and washable service apparel (1977 product classes 23283 and 23284)[43].....1972..	1,266.5	45	56	74	89
	1967..	722.2	35	47	66	85
	1963..	540.3	29	40	59	78
	1958..	447.8	22	32	49	70
	1954..	404.6	19	30	47	(NA)
23289	Contract and commission work on men's and boys' work clothing.....1977..	410.6	41	50	64	83
	1972..	188.4	34	43	59	80
	1967..	138.6	29	46	71	92
	1963..	80.7	32	52	71	91
23280	Men's and boys' work clothing, n.s.k.....1977..	99.5	(X)	(X)	(X)	(X)
	1972..	22.4	(X)	(X)	(X)	(X)
	1967..	40.6	(X)	(X)	(X)	(X)
	1963..	7.6	(X)	(X)	(X)	(X)
2329-	Men's and boys' clothing, n.e.c.[31].....1977..	925.5	12	19	35	56
	1972..	[4]648.5	17	24	([30])	([30])
	1967..	[4]542.0	17	25	38	56
	1963..	[4]403.6	16	23	36	55
	1958..	[4]318.3	14	29	33	51
23291	Men's and boys' heavy outerwear coats and jackets, nontailored[31].....1977..	397.3	21	34	57	83
	1972..	311.8	26	36	57	84
	1967..	290.4	21	31	50	76
	1963..	258.7	15	25	43	67
	1958..	212.7	17	25	42	64
	1954..	167.8	14	23	28	(NA)
23292	Men's and boys' outerwear, n.e.c., made from woven or purchased knit fabrics. (See also product classes 22531 and 22533.)[31].....1977..	423.3	14	23	44	72
	1972..	[4]297.0	21	31	50	72
	1967..	[4]216.5	25	35	51	74
	1963..	[4]135.8	26	34	50	70
	1958..	[4]90.1	23	33	50	72
23290	Men's and boys' clothing, n.s.k.[31].....1977..	105.0	(X)	(X)	(X)	(X)
	1972..	39.7	(X)	(X)	(X)	(X)
	1967..	35.1	(X)	(X)	(X)	(X)
	1963..	9.1	(X)	(X)	(X)	(X)
	1958..	15.6	(X)	(X)	(X)	(X)
2331-	Women's and misses' blouses and waists[31].....1977..	2,543.9	8	13	24	40
	1972..	[4]1,278.8	10	17	29	45
	1967..	[4]754.6	11	18	29	46
	[32]1963..	[4]699.2	10	15	25	40
	[33]1963..	[4]545.3	11	18	([30])	([30])
	1958..	[4]381.4	11	16	([30])	([30])
23312	Women's, misses', and juniors' knit outerwear sport shirts, made from purchased knit fabrics. (See also product class 22532.)[31].....1977..	[4]499.1	19	29	48	75
	1972..	[4]189.1	32	47	71	89
	1967..	[4]101.1	40	52	77	97
	1963..	[4]58.4	32	47	73	95
	1958..	[4]34.1	45	65	92	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2331-	Women's and misses' blouses and waists--Con.					
23317	Women's, misses', and juniors' blouses and shirts, except knit outerwear sport shirts....1977..	1,421.7	14	21	35	56
	1972..	713.6	14	22	37	59
	1967..	426.2	16	25	41	63
	1963..	442.0	13	20	35	56
	1958..	347.3	12	18	28	44
	1954..	315.7	12	17	27	(NA)
23319	Contract and commission work on women's, misses', and juniors' blouses and shirts....1977..	487.7	10	15	25	39
	1972..	268.5	18	26	36	49
	1967..	152.8	14	22	33	47
	1963..	153.9	10	14	23	38
23310	Women's and misses' blouses and waists, n.s.k....1977..	135.4	(X)	(X)	(X)	(X)
	1972..	107.6	(X)	(X)	(X)	(X)
	1967..	74.5	(X)	(X)	(X)	(X)
	1963..	44.8	(X)	(X)	(X)	(X)
2335-	Women's and misses' dresses....1977..	[4]4,132.8	7	10	17	26
	1972..	[4]3,536.2	9	13	18	27
	1967..	[4]3,068.0	7	10	15	24
	[32]1963..	[4]2,385.1	7	9	14	23
	[33]1963..	[4]1,961.8	8	10	([30])	([30])
	1958..	[4]1,624.8	4	7	([30])	([30])
23351	Women's, misses', and juniors' dresses sold at a unit price[31]....1977..	1,997.7	10	17	30	44
	1972..	1,827.7	14	20	29	44
	1967..	1,733.9	11	14	22	35
	1963..	1,378.2	10	13	19	31
	1958..	1,307.2	5	9	14	24
23352	Women's, misses', and juniors' dresses sold at a dozen price[31]....1977..	399.1	27	40	63	86
	1972..	378.2	21	30	49	76
	1967..	384.8	17	27	46	70
	1963..	349.8	15	26	49	74
	1958..	317.5	16	27	47	70
	1954..	296.8	14	25	46	(NA)
23359	Contract and commission work on women's, misses', and juniors' dresses....1977..	694.5	7	11	18	29
	1972..	729.7	7	11	17	26
	1967..	538.0	5	7	12	20
	1963..	423.3	4	7	12	19
23350	Women's and misses' dresses, n.s.k....1977..	1,041.5	(X)	(X)	(X)	(X)
	1972..	600.6	(X)	(X)	(X)	(X)
	1967..	411.3	(X)	(X)	(X)	(X)
	1963..	233.9	(X)	(X)	(X)	(X)
2337-	Women's and misses' suits and coats....1977..	2,725.6	11	15	24	37
	1972..	1,725.3	7	11	19	31
	1967..	1,648.0	8	10	17	28
	[32]1963..	1,444.7	4	6	12	23
	[33]1963..	1,256.4	4	7	([30])	([30])
	1958..	1,034.0	3	5	([30])	([30])
23371	Women's, misses', and juniors' coats (except fur and leather)[31]....1977..	612.1	14	23	42	69
	1972..	570.1	10	16	33	56
	1967..	606.6	11	17	28	47
	1963..	542.9	6	11	21	39
	1958..	490.1	6	10	20	37
	1954..	509.4	6	10	19	(NA)
23372	Women's, misses', and juniors' suits[31]....1977..	665.3	22	33	51	73
	1972..	313.2	11	19	37	63
	1967..	189.2	14	23	39	64
	1963..	211.5	12	20	34	56
	1958..	186.1	9	15	29	53
	1954..	245.6	10	17	30	(NA)
23374	Women's, misses', and juniors' skirts and jackets[31]....1977..	738.3	21	29	43	64
	1972..	443.5	20	31	48	72
	1967..	469.9	18	24	39	60
	1963..	374.4	13	20	34	54
	1958..	311.2	9	15	27	46
23379	Contract and commission work on women's, misses', and juniors' suits, coats, and skirts....1977..	423.9	14	18	26	38
	1972..	282.7	6	9	17	28
	1967..	222.8	4	8	13	24
	1963..	188.3	4	7	12	22

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2337-	Women's and misses' suits and coats--Con.					
23370	Women's and misses suits and coats, n.s.k.[31] 1977	285.9	(X)	(X)	(X)	(X)
	1972	115.8	(X)	(X)	(X)	(X)
	1967	159.5	(X)	(X)	(X)	(X)
	1963	127.6	(X)	(X)	(X)	(X)
	1958	46.6	(X)	(X)	(X)	(X)
	1954	73.6	(X)	(X)	(X)	(X)
2339-	Women's and misses' outerwear, n.e.c. 1977	[4]3,166.9	14	19	29	44
	1972	[4]1,648.1	14	23	34	49
	1967	[4]857.2	13	18	29	44
	[32]1963	[4]763.3	11	16	26	41
	[33]1963	[4]662.6	12	18	([30])	([30])
	1958	[4]420.7	10	15	([30])	([30])
23392	Women's, misses', and juniors' washable service apparel 1977	193.2	33	51	82	99
	1972	105.2	36	55	82	99
	1967	121.2	23	36	62	91
	1963	98.9	24	35	58	83
	1958	91.7	22	33	52	76
	1954	56.6	20	30	50	(NA)
23394	Women's, misses', and juniors' bathing suits (1972 product class 23393) (See also product class 22533.)[44] 1977	163.8	42	58	85	99+
23395	Women's, misses', and juniors' slacks (1972 product class 23393) (See also product class 22533.)[44] 1977	1,460.1	21	29	45	69
23397	Women's, misses', and juniors' outerwear, n.e.c. (1972 product class 23393) (See also product class 22531.)[44] 1977	458.1	18	28	48	76
	1972 product class 23393, Women's, misses', and juniors' outerwear, n.e.c. (1977 product classes 23394, 23395, and 23397) (See also product classes 22531 and 22533.)[44] 1972	[4]1,137.1	17	28	43	62
	1967	[4]522.1	17	25	40	61
	1963	[4]487.9	15	23	37	56
	1958	[4]329.0	13	19	32	47
23399	Contract and commission work on women's, misses', and juniors' outerwear, n.e.c. 1977	501.1	15	22	32	48
	1972	304.8	13	18	27	40
	1967	124.6	[8]	13	24	43
	1963	100.7	[8]	13	24	41
23390	Women's and misses' outerwear, n.e.c., n.s.k. 1977	390.6	(X)	(X)	(X)	(X)
	1972	98.7	(X)	(X)	(X)	(X)
	1967	89.3	(X)	(X)	(X)	(X)
	1963	75.8	(X)	(X)	(X)	(X)
	1958	22.9	(X)	(X)	(X)	(X)
2341-	Women's and children's underwear[31] 1977	[4]1,750.0	20	28	42	63
	1972	[4]1,288.7	14	22	40	60
	1967	[4]1,071.8	14	21	36	54
	[32]1963	[4]941.4	10	16	29	47
	[33]1963	[4]834.2	[9]	16	([30])	([30])
	1958	[4]714.2	8	14	([30])	([30])
23412	Women's and children's underwear, made from woven or purchased knit fabrics. (See also product class 22542.)[31] 1977	[4]585.8	19	30	52	77
	1972	[4]416.7	23	35	55	82
	1967	[4]487.1	18	26	43	68
	1963	[4]462.3	13	21	38	60
	1958	[4]454.2	12	19	33	52
23413	Women's and children's nightwear, made from woven or purchased knit fabrics. (See also product class 22543.)[31] 1977	[4]852.2	21	31	52	76
	1972	[4]597.5	16	26	49	76
	1967	[4]380.2	14	26	48	70
	1963	[4]350.0	12	19	33	56
	1958	[4]241.2	12	19	34	57
23419	Contract and commission work on women's and children's underwear and nightwear 1977	247.1	38	50	67	86
	1972	186.4	18	28	46	72
	1967	126.6	27	39	56	76
	1963	107.2	21	31	49	69
23410	Women's and children's underwear, n.s.k.[31] 1977	64.9	(X)	(X)	(X)	(X)
	1972	88.1	(X)	(X)	(X)	(X)
	1967	77.9	(X)	(X)	(X)	(X)
	1963	22.0	(X)	(X)	(X)	(X)
	1958	18.8	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2342-	Brassieres and allied garments[31] 1977	546.6	34	49	75	91
	1972	679.5	35	46	68	86
	1967	600.5	24	37	59	79
	[32]1963	565.9	26	41	61	79
	[33]1963	532.0	26	40	([30])	([30])
	1958	412.3	28	41	([30])	([30])
23421	Brassieres[31] 1977	346.1	43	62	88	99+
	1972	385.1	43	59	83	98
	1967	261.3	31	49	72	94
	1963	258.8	32	50	72	92
	1958	220.0	34	51	70	89
	1954	189.9	34	49	69	(NA)
23422	Corsets, girdles, combinations, and accessories[31] 1977	153.3	33	50	78	99
	1972	236.6	31	41	65	90
	1967	279.5	24	36	61	88
	1963	238.4	24	37	59	84
	1958	182.8	28	40	58	82
23429	Contract and commission work on corsets and allied garments 1977	23.6	59	80	100	(X)
	1972	38.5	35	52	85	100
	1967	38.1	40	57	81	99
	1963	33.9	47	66	88	100
23420	Brassieres and allied garments, n.s.k.[31] 1977	23.6	(X)	(X)	(X)	(X)
	1972	19.1	(X)	(X)	(X)	(X)
	1967	21.6	(X)	(X)	(X)	(X)
	1963	7.9	(X)	(X)	(X)	(X)
	1958	9.5	(X)	(X)	(X)	(X)
23510	Millinery[31] 1977	74.2	19	28	48	78
	1972	58.9	17	25	43	67
	1967	111.1	12	17	27	45
	1963	159.5	9	14	22	37
	1958	186.9	6	10	19	32
	1954	170.2	7	12	20	(NA)
2352-	Hats and caps, except millinery[31] 1977	270.4	28	42	62	82
	1972	147.6	25	37	56	75
	1967	180.0	31	41	57	74
	1963	160.7	32	42	53	70
	1958	156.6	29	38	50	66
23521	Hats and hat bodies (except cloth and millinery)[31] 1977	66.4	61	78	95	100
	1972	44.5	53	75	95	100
	1967	66.9	63	78	94	100
	1963	83.9	58	74	88	99
	1958	92.2	49	63	80	95
23522	Cloth hats and caps[31] 1977	176.6	31	46	70	92
	1972	84.0	23	38	61	86
	1967	98.7	22	36	55	78
	1963	68.9	12	20	39	66
	1958	64.4	11	18	32	55
	1954	62.9	11	17	31	(NA)
23520	Hats and caps, except millinery, n.s.k. 1977	27.4	(X)	(X)	(X)	(X)
	1972	19.1	(X)	(X)	(X)	(X)
	1967	14.4	(X)	(X)	(X)	(X)
	1963	7.9	(X)	(X)	(X)	(X)
2361-	Children's dresses and blouses[31] 1977	839.1	14	21	37	59
	1972	654.7	14	22	37	58
	1967	522.0	12	19	31	51
	[30]1963	450.2	12	18	32	50
	[31]1963	388.8	12	20	([28])	([28])
	1958	308.4	13	21	([28])	([28])
23610	Children's and infants' dresses, blouses and shirts, except knit sport shirts[31] 1977	528.5	12	21	40	64
	1972	434.9	17	27	44	68
	1967	386.3	14	22	37	60
	1963	345.8	13	21	38	60
	1958	289.4	14	22	39	60
	1954	251.2	13	21	35	(NA)
23612	Children's and infants' knit sport shirts, made from purchased knit fabrics. (See also product class 22532.)[31] 1977	[4]176.1	55	73	95	100
	1972	[4]115.3	46	63	89	100
	1967	[4]55.1	47	69	94	100
	1963	[4]43.0	38	56	83	100
	1958	[4]19.0	31	53	85	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
2361-	Children's dresses and blouses--Con.					
23619	Contract and commission work on children's and infants' dresses, blouses, and shirts					
	1977	134.5	17	27	49	70
	1972	104.5	18	26	42	62
	1967	80.6	15	23	38	58
	1963	61.4	17	26	40	62
2363-	Children's coats and suits					
	1977	191.5	21	35	61	86
	1972	199.8	17	28	50	78
	1967	190.6	16	26	46	71
	[30]1963	172.4	13	20	38	61
	[31]1963	148.7	14	23	42	67
23630	Children's and infants' coats, suits, snowsuits, and coat-and-legging sets[31]					
	1977	173.6	22	37	65	91
	1972	172.5	18	30	54	86
	1967	168.6	16	27	47	75
	1963	148.7	14	23	42	67
	1958	158.5	11	19	34	58
	1954	167.5	14	21	33	(NA)
23639	Contract and commission work on children's and infants' coats and suits					
	1977	17.9	27	46	76	100
	1972	27.3	27	39	64	92
	1967	22.0	29	44	64	89
	1963	23.7	16	28	56	83
2369-	Children's outerwear, n.e.c					
	1977	[4]765.9	20	31	48	69
	1972	[4]623.1	16	25	40	60
	1967	[4]450.8	15	23	37	56
	[30]1963	[4]402.2	12	19	31	47
	[31]1963	[4]356.8	13	20	33	51
23690	Children's and infants' outerwear, n.e.c., made from woven or purchased knit fabric. (See also product classes 22531 and 22533.)[31]					
	1977	[4]685.9	22	33	52	73
	1972	[4]545.5	17	28	44	65
	1967	[4]393.7	16	25	40	61
	1963	[4]356.8	13	20	33	51
	1958	[4]238.1	11	18	30	48
23699	Contract and commission work on children's and infants' outerwear, n.e.c					
	1977	80.0	22	37	62	86
	1972	77.6	19	30	49	72
	1967	57.1	19	29	50	75
	1963	45.4	17	26	44	69
23710	Fur goods[31]					
	1977	358.5	12	20	33	52
	1972	213.7	7	12	23	39
	1967	322.6	5	8	15	27
	1963	321.4	4	7	14	26
	1958	267.2	6	9	16	27
	1954	215.5	4	6	11	(NA)
2381-	Fabric dress and work gloves[31]					
	1977	[4]278.3	40	60	78	93
	1972	[4]172.9	42	58	78	93
	1967	[4]138.3	38	50	74	92
	1963	[4]130.9	30	45	70	87
	1958	[4]109.0	30	46	70	85
23811	Dress and semidress gloves and mittens, including leather and fabric combinations made from woven or purchased knit fabrics. (See also product class 22590.)[31]					
	1977	[4]16.1	75	92	100	(X)
	1972	[4]10.7	66	90	100	(X)
	1967	[4]22.2	52	77	98	100
	1963	[4]37.2	47	66	87	99
	1958	[4]37.6	43	59	79	95
23812	Work gloves and mittens, including leather and fabric combinations made from woven or purchased knit fabrics. (See also product class 22590.)[31]					
	1977	[4]246.2	43	64	83	98
	1972	[4]148.6	47	65	86	99
	1967	[4]110.5	46	63	86	99
	1963	[4]88.3	44	64	82	96
	1958	[4]71.4	44	65	81	94
23810	Fabric dress and work gloves, n.s.k.[31]					
	1977	16.0	(X)	(X)	(X)	(X)
	1972	13.6	(X)	(X)	(X)	(X)
	1967	5.6	(X)	(X)	(X)	(X)
	1963	5.5	(X)	(X)	(X)	(X)
23840	Robes and dressing gowns, except children's[31]					
	1977	243.3	27	44	70	94
	1972	166.2	24	41	64	90
	1967	178.4	17	28	51	82
	1963	160.1	16	27	49	79
	1958	116.1	14	24	44	72

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
23850	Raincoats and other waterproof outergarments[31] 1977	313.1	34	46	68	90
	1972	291.2	33	43	60	83
	1967	327.8	25	36	55	77
	1963	202.8	21	29	48	72
	1958	128.3	19	28	51	76
	1954	116.6	19	29	50	(NA)
23860	Leather and sheep lined clothing[31] 1977	210.6	15	27	50	79
	1972	173.6	16	29	54	79
	1967	102.1	23	36	61	88
	1963	58.4	24	39	62	90
	1958	62.7	17	29	51	82
	1954	56.7	18	30	50	(NA)
2387-	Apparel belts[31] 1977	244.3	19	29	45	67
	1972	234.0	22	31	48	72
	1967	109.1	22	32	48	69
	1963	92.4	16	24	38	58
	1958	82.0	21	27	39	57
	1954	95.0	19	26	38	(NA)
23871	Leather belts (for sale separately)[31] 1977	155.5	27	42	64	87
	1972	157.9	31	44	67	91
	1967	64.3	33	50	70	93
	1963	47.0	29	42	61	83
	1958	48.1	31	41	57	79
	1954	52.7	29	37	53	(NA)
23872	Belts, other than leather[31] 1977	58.2	22	33	53	85
	1972	46.9	24	39	61	91
	1967	26.6	20	31	54	86
	1963	32.5	15	25	44	73
	1958	27.5	13	23	43	67
	1954	35.4	19	30	46	(NA)
23870	Apparel belts, n.s.k.[31] 1977	30.6	(X)	(X)	(X)	(X)
	1972	29.2	(X)	(X)	(X)	(X)
	1967	18.2	(X)	(X)	(X)	(X)
	1963	12.8	(X)	(X)	(X)	(X)
	1958	6.4	(X)	(X)	(X)	(X)
23890	Apparel, n.e.c.[5] [31] 1977	175.7	28	41	59	76
	1972	123.2	23	33	53	75
	1967	121.2	17	27	49	73
	1963	103.1	17	27	46	71
	1958	92.1	13	22	41	65
23910	Curtains and draperies, except lace 1977	936.7	25	35	47	59
	1972	631.6	29	36	46	58
	1967	374.9	28	39	50	63
	1963	278.3	21	33	45	61
	1958	198.7	27	35	45	61
	1954	167.6	21	29	43	(NA)
2392-	Housefurnishings, n.e.c 1977	[4]2,202.3	(4)	(4)	(4)	(4)
	1972	[4]1,445.2	(4)	(4)	(4)	(4)
	1967	[4]941.4	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
23926	Bedspreads and bedsets, not made in weaving mills (See also product class 22110.) 1977	[4]300.4	29	45	71	92
	1972	[4]261.6	31	44	66	90
	1967	[4]173.8	37	51	69	91
	1963	[4]111.9	28	41	62	86
	1958	[4]83.5	35	47	64	85
23928	Sheets and pillowcases, not made in weaving mills (See also product classes 22118 and 22219.) 1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
23929	Cotton towels and washcloths, not made in weaving mills (See also product classes 22119, and 22210.) 1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
23920	Other housefurnishings 1977	1,145.8	10	17	32	50
	1972	775.0	9	16	30	49
	1967	567.4	10	16	29	45
	1963	449.1	10	14	24	39
	1958	354.9	8	14	26	42

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 23, APPAREL AND OTHER TEXTILE PRODUCTS--Con.				
23930	Textile bags, except laundry, wardrobe, and shoe....1977..	277.8	20	30	49	76
	1972..	230.6	24	38	58	79
	1967..	277.9	31	48	67	86
	1963..	181.9	39	48	64	83
	1958..	174.9	39	51	66	82
	1954..	210.2	44	55	69	(NA)
23940	Canvas and related products....1977..	465.6	17	26	40	54
	1972..	271.4	21	27	37	52
	1967..	254.3	20	30	42	60
	1963..	153.5	16	22	34	50
	1958..	114.2	14	22	32	47
	1954..	124.0	13	18	30	(NA)
2395-	Pleating and stitching....1977..	[30]516.5	26	36	([30])	([30])
	1972..	277.4	19	28	43	59
	1967..	[30]77.6	11	20	([30])	([30])
	1963..	[30]77.7	3	6	([30])	([30])
23951	Embroideries (except Schiffli machine products), stamped art goods, and art needlework....1977..	390.3	38	53	71	89
	1972..	148.3	33	50	75	93
	1967..	37.9	(S)	(S)	(S)	(S)
	1963..	46.0	14	21	38	64
23950	Pleating and stitching n.s.k....1977..	126.2	(X)	(X)	(X)	(X)
	1972..	68.1	(X)	(X)	(X)	(X)
	1967..	39.7	(X)	(X)	(X)	(X)
	1963..	31.6	(X)	(X)	(X)	(X)
2396-	Automotive and apparel trimmings....1977..	2,191.1	74	79	84	89
	1972..	1,146.6	70	76	81	87
	[45]1967..	797.0	60	66	71	79
	1963..	556.3	58	63	71	79
23961	Men's and boys' suit and coat findings, hatters' fur, and other hat and cap material....1977..	104.4	59	74	93	100
	1972..	94.5	52	63	85	99
	1967..	55.8	31	48	76	98
	1963..	45.0	25	39	63	87
23962	Automobile trimmings....1977..	1,737.7	93	97	99+	100
	1972..	823.1	95	98	99+	100
	[45]1967..	513.4	93	97	99	100
	1963..	360.2	90	97	99	99+
23963	Other trimmings and findings....1977..	187.4	27	38	57	81
	1972..	146.5	35	43	59	78
	1967..	192.5	20	26	40	60
	1963..	127.4	16	24	40	60
23960	Automotive and apparel trimmings, n.s.k....1977..	161.6	(X)	(X)	(X)	(X)
	1972..	82.3	(X)	(X)	(X)	(X)
	1967..	35.3	(X)	(X)	(X)	(X)
	1963..	23.8	(X)	(X)	(X)	(X)
23970	Schiffli machine embroideries....1977..	146.3	24	35	50	68
	1972..	99.1	20	30	45	62
	1967..	[46]83.5	15	22	36	55
	1963..	[46]73.0	18	27	40	58
	1958..	[46]52.3	14	21	33	49
	1954..	[46]49.8	19	28	40	(NA)
23990	Fabricated textile products, n.e.c.[5]....1977..	1,158.9	26	36	48	64
	1972..	725.7	22	34	49	66
	1967..	529.3	19	30	49	67
	1963..	353.8	14	22	39	55
	1958..	257.3	14	24	39	53
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS				
2411-	Logging camp products and contract logging....1977..	5,757.5	23	30	39	44
	1972..	2,612.9	20	27	35	40
	1967..	1,515.2	16	24	([30])	([30])
	1963..	1,185.6	18	26	([30])	([30])
24111	Softwood logs, bolts, and timber (1972 product class code 24110, part)....1977..	2,580.7	47	61	78	86
24112	Hardwood logs, bolts, and timber (1972 product class code 24410, part)....1977..	241.8	15	25	40	54
24113	Pulpwood (1972 product class code 24110, part)....1977..	383.2	32	47	61	71

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.				
2411-	Logging camp products and contract logging--Con.					
24114	Other roundwood products (1972 product class code 24110, part).....1977..	71.3	34	45	63	83
24110	Logging products and contract logging, n.s.k. (1972 product class code 24110, part).....1977..	1,722.9	3	5	7	12
	1972 product class code 24110, Logs, bolts, and pulpwood.....1972..	2,208.7	(X)	(X)	(X)	(X)
	1967..	1,244.5	(X)	(X)	(X)	(X)
	1963..	849.3	(X)	(X)	(X)	(X)
24119	Receipts for contract logging.....1977..	757.5	5	8	15	25
	1972..	404.1	9	12	19	31
	1967..	270.4	(NA)	(NA)	(NA)	(NA)
	1963..	336.3	(NA)	(NA)	(NA)	(NA)
2421-	Sawmill and planing mill products.....1977..	10,465.7	18	24	36	48
	1972..	5,999.9	17	22	32	43
	1967..	3,288.0	10	14	21	30
	1963..	2,742.9	10	13	(30)	(30)
24211	Hardwood lumber, rough and dressed, except siding[47].....1977..	972.9	10	15	24	36
	1972..	516.3	14	19	31	45
24212	Softwood lumber, rough and dressed, except siding[47].....1977..	6,899.7	21	29	45	61
	1972..	3,907.8	20	27	40	55
24215	Wood chips[48].....1977..	1,079.5	32	43	55	66
	1972..	505.5	40	48	57	67
	1967..	188.1	18	23	32	44
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)
24217	Softwood cut stock.....1977..	229.5	20	35	64	90
	1972..	155.8	(S)	(S)	(S)	(S)
	1967..	84.9	23	37	60	83
	1963..	87.9	22	34	55	77
	1958..	56.3	20	33	57	82
24218	Softwood flooring, siding, and other general sawmill and planing mill products[47].....1977..	125.2	16	26	44	67
	1972..	133.0	14	22	36	60
	1967..	54.5	16	24	41	64
	1963..	57.4	16	23	34	50
24219	Contract or custom sawing of logs or lumber owned by others.....1977..	90.7	34	43	56	75
	1972..	41.0	35	42	57	80
	1967..	31.3	18	26	44	66
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)
24210	Sawmill and planing mill products, n.s.k.....1977..	1,068.2	(X)	(X)	(X)	(X)
	1972..	740.4	(X)	(X)	(X)	(X)
	1967..	524.2	(X)	(X)	(X)	(X)
	1963..	199.5	(X)	(X)	(X)	(X)
2426-	Hardwood dimension and flooring[49].....1977..	807.5	14	19	31	46
	1972..	571.8	11	17	26	41
24261	Hardwood flooring.....1977..	159.6	46	61	84	100
	1972..	118.4	32	41	62	92
	1967..	129.2	29	37	55	78
	1963..	154.2	25	34	49	71
	1958..	148.4	17	24	40	62
24262	Hardwood dimension stock, furniture parts, and vehicle stock.....1977..	451.1	15	22	36	57
	1972..	304.6	15	22	36	56
	1967..	216.7	9	16	30	51
	1963..	169.8	8	14	27	47
24266	Wood frames for household furniture.....1977..	104.1	24	35	51	75
	1972..	77.1	24	33	50	74
	1967..	52.4	19	30	49	72
	1963..	53.4	16	25	37	55
	1958..	36.5	13	18	29	48
24260	Hardwood dimension and flooring, n.s.k.....1977..	92.6	(X)	(X)	(X)	(X)
	1972..	71.8	(X)	(X)	(X)	(X)
	1967..	24.3	(X)	(X)	(X)	(X)
24290	Shingles, shakes, cooperage stock, and excelsior.....1977..	258.7	12	19	35	56
	1972..	173.6	(S)	(S)	(S)	(S)
	1967..	115.6	21	31	43	61
	1963..	50177.3	12	18	28	42

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.				
2431-	Millwork[51] 1977	3,693.3	13	19	30	45
	1972	2,229.2	9	14	24	39
24311	Wood window units 1977	609.3	57	69	84	95
	1972	279.3	50	64	80	93
	1967	149.6	47	57	73	87
	1963	119.1	41	51	65	81
24312	Wood sash, including combination screen and storm sash, but excluding window screens and window units 1977	95.4	48	65	84	97
	1972	60.7	36	51	74	95
	1967	39.8	21	33	60	88
	1963	40.4	18	29	54	80
24313	Wood window and door frames 1977	264.6	27	44	67	85
	1972	147.0	20	30	52	78
	1967	56.6	20	30	51	76
	1963	68.5	17	26	46	72
24314	Wood doors, interior and exterior (including those shipped with glazed sections and doors shipped in door units) 1977	707.5	21	33	51	72
	1972	527.6	16	26	46	69
	1967	287.5	15	24	42	70
	1963	254.9	11	20	41	69
24315	Other wood doors, including garage, screen, storm, and combination screen and storm, and louvre 1977	479.1	30	43	61	82
	1972	193.2	26	35	56	81
	1967	117.4	27	37	56	79
	1963	127.9	20	30	51	73
24316	Wood moldings (standard) except prefinished moldings, made from purchased moldings[46] 1977	569.1	20	31	52	73
	1972	406.4	19	29	51	73
	1967	195.7	15	23	39	63
	1963	166.6	10	17	32	54
	1958	148.1	10	17	31	51
24317	Prefinished wood moldings (standard) made from purchased moldings[52] 1977	75.0	46	63	90	99
	1972	74.1	51	73	94	100
24318	Other millwork products, including window screens and architectural millwork 1977	288.3	14	24	43	62
	1972	161.6	12	18	33	55
	1967	108.3	9	16	30	51
	1963	89.4	9	15	26	42
24310	Millwork products, n.s.k. 1977	605.1	(X)	(X)	(X)	(X)
	1972	379.3	(X)	(X)	(X)	(X)
	1967	241.0	(X)	(X)	(X)	(X)
	1963	125.4	(X)	(X)	(X)	(X)
2434-	Wood kitchen cabinets[53] 1977	1,563.2	14	21	33	45
	1972	864.4	12	20	33	48
24341	Wood kitchen cabinets, stock line 1977	689.2	29	42	68	83
	1972	442.4	23	26	58	77
	1967	250.8	17	30	50	71
	1963	250.1	14	23	38	56
24342	Wood kitchen cabinets, custom[54] 1977	433.2	10	15	26	39
	1972	234.9	12	20	35	51
24343	Vanities and other cabinetwork[54] 1977	146.4	18	26	39	55
	1972	71.6	20	27	44	64
	1967 product class 24317, Cabinetwork, to be built in [54] 1967	141.2	8	13	22	37
	1963	149.6	9	14	21	33
	1958	76.7	7	11	20	34
24340	Wood kitchen cabinets, n.s.k. 1977	294.5	(X)	(X)	(X)	(X)
	1972	115.1	(X)	(X)	(X)	(X)
2435-	Hardwood veneer and plywood[55] 1977	1,160.0	27	39	56	73
	1972	873.2	32	40	56	73
24351	Hardwood plywood 1977	455.8	30	44	64	87
	1972	368.9	35	45	63	85
	1967	333.0	29	39	57	78
	1963	292.8	27	37	54	76
	1958	182.6	20	29	49	72

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.				
2435-	Hardwood veneer and plywood-Con.					
24352	Prefinished hardwood plywood, made from purchased plywood[56].....1977..	383.8	52	80	99	100
	1972..	286.7	61	78	97	100
24353	Hardwood plywood type products[56].....1977..	60.8	57	74	97	100
	1972..	33.1	83	98	100	(X)
	1967 product class 24324, Prefinished hardwood plywood made from purchased plywood and other plywood-type products, except particleboard[56].....1967..	162.2	48	61	85	99
	1963..	81.6	37	51	77	97
24354	Hardwood veneer not reinforced or backed.....1977..	213.7	24	40	61	87
	1972..	161.3	21	33	55	80
	1967..	126.0	16	26	46	74
	1963..	122.2	14	22	42	67
	1958..	88.8	10	18	34	59
24350	Hardwood veneer and plywood, n.s.k.....1977..	46.0	(X)	(X)	(X)	(X)
	1972..	25.3	(X)	(X)	(X)	(X)
2436-	Softwood veneer and plywood[55].....1977..	3,582.3	36	51	69	87
	1972..	1,941.7	36	48	65	83
24361	Softwood plywood, interior type[57].....1977..	1,828.0	48	64	84	99
	1972..	527.0	33	49	72	96
	1967..	382.6	31	49	68	89
	1963..	415.3	27	40	56	80
	1958..	320.8	18	29	48	77
24362	Softwood plywood, exterior type (1967 product class 24323)[57].....1977..	1,226.7	33	49	72	98
	1972..	1,068.5	42	57	77	96
	1967..	401.1	39	53	69	92
	1963..	225.2	29	40	60	91
	1958..	126.7	28	42	64	96
24363	Softwood plywood type products[56].....1977..	102.6	68	87	99+	100
	1972..	39.6	79	91	99+	100
24364	Softwood veneer, not reinforced or backed.....1977..	404.5	27	44	73	98
	1972..	304.3	21	35	65	94
	1967..	135.3	20	32	59	91
	1963..	129.2	18	28	52	89
	1958..	81.8	20	31	59	92
24360	Softwood veneer and plywood, n.s.k.....1977..	20.6	(X)	(X)	(X)	(X)
	1972..	2.3	(X)	(X)	(X)	(X)
24390	Fabricated structural wood products[58].....1977..	781.7	15	21	31	46
	1972..	448.9	13	19	30	46
2441-	Nailed wood boxes and shook.....1977..	265.3	14	21	36	56
	1972..	232.8	23	30	43	60
	1967..	255.3	17	23	36	53
	1963..	189.4	14	19	29	44
24411	Nailed or lock-corner wooden boxes.....1977..	93.8	21	35	58	82
	1972..	86.5	29	43	66	88
	1967..	111.9	26	39	58	80
	1963..	83.8	15	23	36	58
24412	Wooden box and crate shook.....1977..	127.0	28	39	57	80
	1972..	100.0	39	49	65	85
	1967..	109.1	24	33	50	74
	1963..	90.2	23	31	46	70
	1958..	104.8	([12])	([12])	([12])	([12])
24410	Nailed wood boxes and shook, n.s.k.....1977..	44.5	(X)	(X)	(X)	(X)
	1972..	46.3	(X)	(X)	(X)	(X)
	1967..	34.3	(X)	(X)	(X)	(X)
	1963..	15.4	(X)	(X)	(X)	(X)
24480	Wood pallets and skids (1967 product class 24992).....1977..	642.9	5	8	14	25
	1972..	286.5	6	10	18	33
	1967..	187.0	8	13	24	40
	1963..	98.7	6	11	20	36

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.				
2449-	Wood containers, n.e.c.[59] 1977	235.3	24	38	62	86
	1972	218.1	22	36	58	85
	1967	236.6	(NA)	(NA)	(NA)	(NA)
	1963	186.3	(NA)	(NA)	(NA)	(NA)
24491	Wirebound boxes made from lumber, veneer, and plywood 1977	129.1	35	53	84	99+
	1972	129.9	30	45	75	95
	1967	131.2	32	48	74	96
	1963	107.6	30	47	72	94
24493	Veneer and plywood containers, except boxes and crates 1977	27.3	43	64	90	100
	1972	20.7	39	55	79	98
	1967	27.5	34	45	70	94
	1963	29.2	34	45	66	92
24495	Slack and tight cooperage 1977	58.1	74	91	99+	100
	1972	65.5	56	76	94	100
	1967	77.9	55	82	94	100
	1963	49.5	48	73	91	99
	1958	67.5	46	67	85	95
24490	Wood containers, n.e.c., n.s.k. 1977	20.8	(X)	(X)	(X)	(X)
	1972	2.0	(X)	(X)	(X)	(X)
2451-	Mobile homes[60] 1977	3,175.4	25	37	58	77
	1972	3,181.7	27	38	57	78
24511	Mobile homes (35 feet or more in length)[60] 1977	2,895.7	27	41	64	83
	1972	3,117.4	27	39	58	78
24512	Mobile buildings, nonresidential (35 feet or more in length) 1977	83.3	45	64	91	100
	1972	44.5	36	53	79	99
24510	Mobile homes, n.s.k.[60] 1977	196.4	(X)	(X)	(X)	(X)
	1972	19.8	(X)	(X)	(X)	(X)
2452-	Prefabricated wood buildings[61] 1977	1,863.8	23	36	49	65
	1972	993.7	32	40	52	68
24521	Components for stationary buildings (not sold as complete units)[61] 1977	232.2	31	44	66	94
	1972	116.3	39	51	73	96
24522	Precut packages for stationary buildings (sold as complete units)[61] 1977	362.9	43	59	79	96
	1972	152.9	53	64	83	99
24523	Stationary buildings sold as complete units and shipped in panel form two-dimensional)[61] 1977	652.7	54	65	81	97
	1972	452.5	49	62	77	94
24524	Stationary buildings shipped in three-dimensional assemblies[61] 1977	365.1	45	58	79	99+
	1972	241.2	(S)	(S)	(S)	(S)
24520	Prefabricated wood buildings, n.s.k. 1977	250.9	(X)	(X)	(X)	(X)
	1972	30.7	(X)	(X)	(X)	(X)
2491-	Wood preserving 1977	892.2	31	40	56	74
	1972	461.3	35	44	60	78
	1967	327.5	33	43	61	82
	1963	240.3	32	42	62	82
	1958	201.3	31	42	63	85
24912	Treated wood poles, piles, and posts (1972 product class code 24911, part) 1977	305.5	34	48	70	90
24913	Other created wood products (1972 product class code 24911, part) 1977	418.3	42	53	69	88
	1972 product class code 24911, Wood owned and treated by same establishment 1972	394.3	36	47	65	85
	1967	284.5	33	43	63	86
	1963	209.1	32	43	63	85
24919	Contract wood preserving 1977	68.6	53	66	86	99
	1972	29.1	71	81	94	100
	1967	28.7	57	70	87	98
	1963	25.9	46	61	82	97
24910	Wood preserving, n.s.k. 1977	99.8	(X)	(X)	(X)	(X)
	1972	38.0	(X)	(X)	(X)	(X)
	1967	14.3	(X)	(X)	(X)	(X)
	1963	5.3	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 24, LUMBER AND WOOD PRODUCTS--Con.				
2492-	Particleboard....1977..	476.5	45	65	92	100
	1972..	292.5	45	68	91	100
	1967..	89.1	45	66	92	100
	1963..	54.9	42	62	92	100
24921	Particleboard, platen type (mat-formed) (1972 product class code 24920, part)....1977..	466.0	47	68	94	100
24922	Particleboard, extruded type (1972 product class code 24920, part)...1977..	(D)	(D)	(D)	(D)	(D)
24920	Particleboard, n.s.k. (1972 product class code 24920, part).....1977.	(D)	(X)	(X)	(X)	(X)
	1972 product class 24920, Particleboard....1972..	292.5	45	68	91	100
	1967..	89.1	45	66	92	100
	1963..	54.9	42	62	92	100
2499-	Wood products, n.e.c.[62]....1977..	2,488.7	18	25	36	49
	1972..	1,480.4	16	22	32	44
24991	Mirror and picture frames....1977..	314.6	41	54	71	87
	1972..	173.0	37	49	67	85
	1967..	115.7	32	46	66	86
	1963..	82.2	29	43	61	79
	1958..	57.3	24	34	52	71
24994	Cork products....1977..	32.8	71	93	99+	100
	1972..	19.0	63	85	99	100
	1967..	20.5	46	63	85	100
	1963..	25.6	58	68	88	100
24996	Fabricated hardboard products, made from hardboard produced at the same establishment[63]....1977..	508.7	63	85	99	100
	1972..	260.4	53	77	98	100
	1967..	159.1	67	83	100	(X)
	1963..	131.4	76	88	100	(X)
24997	Medium density fiberboard (MDF) (1972 product class code 24996, part)....1977..	84.2	53	88	99+	100
24998	Hardboard products, made from purchased hardboard (1972 product class code 24995, part)....1977..	171.3	47	60	81	96
24999	Miscellaneous wood products, n.e.c. (1972 product class code 24995, part)....1977..	1,005.9	10	17	30	48
	1972 product class code 24995, Wood products, n.e.c....1972..	700.5	17	22	34	50
	1967..	464.8	13	19	30	45
	1963..	340.8	6	11	22	36
24990	Wood products, n.e.c., n.s.k....1977..	372.0	(X)	(X)	(X)	(X)
	1972..	327.5	(X)	(X)	(X)	(X)
	1967..	145.2	(X)	(X)	(X)	(X)
	1963..	64.0	(X)	(X)	(X)	(X)
		MAJOR GROUP 25, FURNITURE AND FIXTURES				
2511-	Wood household furniture[64]....1977..	3,890.7	14	22	37	54
	1972..	2,716.8	14	22	39	56
25112	Wood living room, library, family room, and den furniture, except sewing machine cabinets[65]....1977..	859.8	15	25	46	69
	1972..	614.4	17	27	47	67
	1967..	395.4	18	25	39	59
	1963..	315.4	14	22	36	54
	1958..	222.4	12	19	31	50
25113	Wood dining room and kitchen furniture, except cabinets....1977..	962.3	23	36	59	81
	1972..	603.8	19	33	58	79
	1967..	375.7	21	34	54	73
	1963..	272.3	17	30	48	67
25115	Wood bedroom furniture....1977..	1,290.3	21	34	56	80
	1972..	1,029.2	21	33	55	79
	1967..	694.7	20	29	47	71
	1963..	578.2	19	28	44	65
	1958..	457.2	17	26	41	60
25116	Infants' and children's wood furniture....1977..	118.8	44	70	94	100
	1972..	82.5	36	57	84	99+
	1967..	44.5	40	57	80	99
	1963..	43.5	28	49	74	96
	1958..	46.9	30	46	69	90

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 25, FURNITURE AND FIXTURES--Con.				
2511-	Wood household furniture--Con.					
25117	Wood outdoor furniture and unpainted unassembled wood furniture....1977..	185.8	37	55	75	93
	1972..	107.9	46	66	82	96
	1967..	63.8	53	66	82	97
	1963..	51.2	41	51	67	85
25110	Wood household furniture, n.s.k....1977..	473.7	(X)	(X)	(X)	(X)
	1972..	279.1	(X)	(X)	(X)	(X)
	1967..	217.4	(X)	(X)	(X)	(X)
	1963..	90.2	(X)	(X)	(X)	(X)
25120	Upholstered wood household furniture[66]....1977..	2,735.7	14	23	34	49
	1972..	1,990.5	14	22	34	49
	1967..	1,215.5	12	18	28	41
	1963..	959.0	12	17	25	38
2514-	Metal household furniture....1977..	1,231.2	13	22	47	61
	1972..	859.3	14	23	41	65
	1967..	587.8	12	21	35	56
	1963..	507.7	12	18	31	53
	1958..	484.0	12	19	33	52
25141	Metal household, dining, and dinette furniture....1977..	319.1	39	55	80	98
	1972..	245.6	38	57	82	98
	1967..	163.1	32	50	77	96
	1963..	141.2	27	43	70	90
	1958..	143.0	29	46	67	87
25142	Metal kitchen furniture....1977..	73.4	52	74	96	100
	1972..	71.4	33	51	80	99+
	1967..	56.5	31	48	73	98
	1963..	62.8	29	45	70	94
	1958..	89.7	33	46	68	89
25143	Metal porch, lawn, outdoor, and casual furniture....1977..	275.9	33	51	81	99
	1972..	177.1	34	51	79	98
	1967..	109.7	32	50	76	98
	1963..	101.3	24	41	66	93
	1958..	91.4	24	40	67	91
25144	Other metal household furniture....1977..	445.5	18	31	57	87
	1972..	311.4	20	33	58	82
	1967..	208.0	21	32	55	82
	1963..	184.0	23	32	51	76
25140	Metal household furniture, n.s.k....1977..	117.3	(X)	(X)	(X)	(X)
	1972..	53.8	(X)	(X)	(X)	(X)
	1967..	50.5	(X)	(X)	(X)	(X)
	1963..	18.5	(X)	(X)	(X)	(X)
2515-	Mattresses and bedsprings....1977..	1,481.5	18	28	39	54
	1972..	1,073.8	22	28	40	54
	1967..	709.6	25	31	40	53
	1963..	608.7	23	28	36	50
25151	Innerspring mattresses, other than crib size....1977..	492.6	29	38	51	70
	1972..	333.9	30	37	51	67
	1967..	240.2	31	37	48	65
	1963..	234.1	26	31	41	57
25152	Other mattresses, including crib mattresses....1977..	108.3	43	52	66	83
	1972..	78.0	30	41	60	80
	1967..	57.6	34	44	59	77
	1963..	50.2	26	33	46	62
25153	Bedsprings....1977..	360.6	30	43	56	74
	1972..	275.1	30	39	54	71
	1967..	177.9	35	41	54	71
	1963..	157.3	31	37	47	63
25154	Convertible sofas....1977..	302.6	22	36	58	77
	1972..	208.6	33	47	66	83
	1967..	103.1	40	50	66	82
	1963..	82.3	39	48	63	80
	1958..	76.3	36	46	61	75

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 25, FURNITURE AND FIXTURES--Con.				
2515-	Mattresses and bedsprings--Con.					
25157	Other dual purpose sleep furniture, (1972 product classes 25155 and 25156)....1977..	31.8	43	59	82	97
	1972 product class 25155, Jackknife sofa beds and chair beds....1972..	33.8	38	56	78	96
	1967..	34.9	32	43	61	84
	1963..	38.8	19	30	48	72
	1972 product class 25156, Studio couches....1972..	22.6	70	83	95	100
	1967..	15.0	63	80	93	100
	1963..	17.6	46	61	80	93
	1958..	17.3	41	50	68	84
25150	Mattresses and bedsprings, n.s.k....1977..	185.6	(X)	(X)	(X)	(X)
	1972..	121.9	(X)	(X)	(X)	(X)
	1967..	80.9	(X)	(X)	(X)	(X)
	1963..	28.4	(X)	(X)	(X)	(X)
25170	Wood television, radio, stereo, and sewing machine cabinets[6,7]....1977..	312.8	47	73	88	97
	1972..	288.0	34	57	81	95
25190	Household furniture, n.e.c....1977..	281.8	27	38	61	82
	1972..	190.5	14	25	46	74
	1967..	79.0	27	38	60	86
	1963..	46.9	18	30	55	85
	1958..	35.3	23	36	57	80
25210	Wood office furniture....1977..	562.2	25	36	55	76
	1972..	259.0	23	34	54	73
	1967..	158.1	25	41	63	82
	1963..	100.4	27	41	64	86
	1958..	70.7	22	38	63	83
2522-	Metal office furniture....1977..	1,353.0	47	56	72	88
	1972..	781.7	37	49	70	88
	1967..	586.1	32	45	69	88
	1963..	358.1	29	45	69	88
	1958..	273.3	33	49	73	89
25221	Metal office seating, including upholstered....1977..	388.1	50	67	89	99+
	1972..	193.1	51	71	91	99+
	1967..	133.6	51	67	87	100
	1963..	73.6	48	67	88	99
	1958..	53.5	48	65	91	99
25222	Metal office desks....1977..	230.7	59	72	92	100
	1972..	153.7	56	75	94	100
	1967..	150.6	47	65	89	100
	1963..	88.3	44	64	88	97
	1958..	66.3	49	71	92	100
25223	Metal office filing cabinets and cases....1977..	467.0	40	56	79	97
	1972..	298.1	36	55	80	98
	1967..	200.2	33	50	78	95
	1963..	143.2	31	51	77	97
	1958..	107.3	36	58	84	97
25224	Other metal office furniture, including tables, stands, etc....1977..	233.7	56	67	86	98
	1972..	107.8	37	52	74	93
	1967..	86.6	35	48	71	93
	1963..	50.3	28	45	69	92
	1958..	34.2	30	46	70	94
25220	Metal office furniture, n.s.k....1977..	33.5	(X)	(X)	(X)	(X)
	1972..	29.0	(X)	(X)	(X)	(X)
	1967..	14.8	(X)	(X)	(X)	(X)
	1963..	2.7	(X)	(X)	(X)	(X)
2531-	Public building and related furniture....1977..	724.7	17	26	45	65
	1972..	485.2	18	26	40	59
	1967..	389.7	18	30	46	64
	1963..	263.3	21	32	45	62
	1958..	218.9	24	34	47	65
25311	School furniture, except stone and concrete....1977..	185.4	30	48	71	92
	1972..	181.2	21	36	59	84
	1967..	158.5	26	40	60	81
	1963..	118.0	32	46	62	82

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 25, FURNITURE AND FIXTURES--Con.				
2531-	Public building and related furniture--Con.					
25312	Public building and related furniture, except school furniture.....1977..	479.5	20	33	54	75
	1972..	268.3	22	31	49	72
	1967..	209.5	27	39	56	76
	1963..	134.2	21	31	49	72
25310	Public building and related furniture, n.s.k.....1977..	59.8	(X)	(X)	(X)	(X)
	1972..	35.4	(X)	(X)	(X)	(X)
	1967..	21.5	(X)	(X)	(X)	(X)
	1963..	11.1	(X)	(X)	(X)	(X)
2541-	Wood partitions and fixtures[68].....1977..	1,070.8	7	11	21	33
	1972..	772.1	5	9	19	33
	1967..	484.5	6	10	18	33
	1963..	384.5	4	7	14	25
25411	Wood partitions, shelving, and lockers[68].....1977..	135.6	33	45	69	91
	1972..	77.0	31	47	75	94
25412	Plastic laminated fix' re tops[68].....1977..	204.2	17	24	37	56
	1972..	141.8	16	25	41	61
25413	Wood fixtures for stores, banks, offices, and other miscellaneous fixtures[68].....1977..	561.1	10	18	33	52
	1972..	354.0	10	18	33	53
25410	Wood partitions and fixtures, n.s.k.....1977..	169.9	(X)	(X)	(X)	(X)
	1972..	199.3	10	15	26	39
2542-	Metal partitions and fixtures[69].....1977..	1,215.8	13	21	37	57
	1972..	713.1	13	22	39	59
	1967..	512.2	19	27	43	64
	1963..	367.6	19	26	41	61
25421	Metal partitions[69].....1977..	96.7	45	61	86	100
	1972..	79.3	49	64	88	99+
25422	Metal shelving and lockers[69].....1977..	349.4	31	46	71	92
	1972..	230.5	31	49	74	94
25423	Metal storage racks and accessories[69].....1977..	275.6	32	46	68	91
	1972..	95.2	33	51	77	97
25424	Metal fixtures for stores, banks, offices and miscellaneous fixtures[69].....1977..	391.0	21	33	56	78
	1972..	217.3	24	38	61	81
25420	Metal partitions and fixtures, n.s.k.....1977..	103.1	(X)	(X)	(X)	(X)
	1972..	90.8	(X)	(X)	(X)	(X)
2591-	Drapery hardware and blinds and shades.....1977..	615.3	42	62	79	8[illegible]
	1972..	311.4	47	63	76	8[illegible]
	1967..	207.0	39	55	72	81
	1963..	170.8	34	49	68	77
25913	Window shades and accessories (1972 product class 25911, part).....1977..	140.3	72	83	91	98
25914	Venetian blinds (1972 product class 25912, part).....1977..	89.6	68	78	89	97
25915	Other shades and blinds, n.e.c. and drapery hardware, (1972 product classes 25911, part and 25912, part).....1977..	329.7	68	78	89	97
	1972 product class 25911, Window shades and accessories.....1972..	226.9	65	86	94	99
	1967..	141.4	53	76	92	98
	1963..	108.9	48	70	87	93
	1972 product class 25912, Venetion blinds.....1972..	43.6	48	66	83	97
	1967..	35.0	49	62	78	93
	1963..	50.4	33	47	60	72
25910	Drapery hardware and blinds and shades, n.s.k.....1977..	55.7	(X)	(X)	(X)	(X)
	1972..	40.9	(X)	(X)	(X)	(X)
	1967..	30.6	(X)	(X)	(X)	(X)
	1963..	11.5	(X)	(X)	(X)	(X)
25990	Furniture and fixtures, n.e.c.....1977..	687.4	12	18	31	51
	1972..	379.1	12	19	34	53
	1967..	193.8	15	23	38	59
	1963..	138.0	13	22	37	57

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS				
2611-	Pulp mills....1977..	2,466.4	36	57	84	99+
	1972..	1,132.4	43	61	85	99
	1967..	904.8	37	56	83	99
	1963..	726.0	38	59	83	98
	1958..	567.7	37	57	82	99
26111	Special alpha and dissolving woodpulp....1977..	570.5	(D)	100	(X)	(X)
	1972..	304.7	(D)	100	(X)	(X)
	1967..	227.2	80	(D)	100	(X)
	1963..	210.0	83	(D)	100	(X)
	1958..	134.3	(D)	100	(X)	(X)
26112	Other pulp, including pulpmill byproducts, except tall oil....1977..	1,894.8	30	52	81	99+
	1972..	826.0	39	55	83	99
	1967..	673.8	32	50	81	99
	1963..	515.8	34	53	79	98
	1958..	433.4	34	48	78	98
26110	Pulp mills, n.s.k....1977..	1.1	(X)	(X)	(X)	(X)
	1972..	1.7	(X)	(X)	(X)	(X)
	1967..	3.8	(X)	(X)	(X)	(X)
	1963..	0.1	(X)	(X)	(X)	(X)
2621-	Paper mills products, except building paper....1977..	12,438.2	24	40	69	90
	1972..	6,183.7	25	40	65	86
	1967..	4,739.5	26	41	64	85
	1963..	3,724.0	26	40	61	83
	1958..	3,044.6	25	39	58	78
26211	Newsprint....1977..	989.3	47	77	100	(X)
	1972..	506.0	49	78	100	(X)
	1967..	321.8	52	81	(D)	100
	1963..	270.8	57	88	100	(X)
	1958..	214.8	62	93	100	(X)
26212	Uncoated groundwood paper....1977..	539.0	70	96	99+	100
	1972..	232.7	63	88	99+	100
	1967..	192.6	53	78	99	100
	1963..	165.6	50	75	99	100
	1958..	143.8	47	70	99	100
26213	Clay coated printing and converting paper....1977..	2,260.9	37	65	98	100
	1972..	1,026.2	36	64	96	100
	1967..	818.1	38	66	98	100
	1963..	498.6	44	75	99	99+
	1958..	362.5	52	83	100	(X)
	1954..	252.6	55	83	100	(X)
26214	Uncoated free sheet (1972 product class 26214 and 26216, part)....1977..	3,352.7	31	52	79	99+
	1972 product class 26214, Book paper uncoated....1972..	760.6	30	47	82	100
	1967..	583.4	27	46	80	99+
	1963..	500.1	29	49	77	99+
	1958..	426.3	35	56	86	99+
26215	Bleached bristols (excluding cotton fiber index and bogus)....1977..	474.3	60	83	99+	100
	1972..	243.5	68	87	99	100
	1967..	210.6	67	82	99	100
26216	Cotton fiber paper and thin paper (1972 product class 26216, part)...1977..	496.1	60	79	98	100
	1972 product class 26216, Writing and related papers....1972..	1,200.3	32	49	72	95
	1967..	934.9	34	49	72	95
26217	Unbleached kraft packaging and industrial coverting paper....1977..	1,098.6	41	63	96	100
	1972..	602.8	40	61	92	100
	1967..	503.1	39	61	92	100
26218	Packaging and industrial converting paper except unbleached kraft....1977..	560.6	47	67	95	100
	1972..	370.2	37	54	90	100
	1967..	283.8	38	58	88	100
26219	Special industrial paper....1977..	550.7	39	59	88	100
	1972..	272.0	36	57	85	99+
	1967..	193.2	31	49	81	99+
26210	Tissue paper and other machine-creped paper....1977..	2,115.9	58	80	92	99+
	1972..	946.0	56	77	92	99
	1967..	692.8	53	74	90	99+
	1963..	547.4	56	72	88	99
	1958..	440.1	57	69	83	94
	1954..	352.7	54	64	80	(NA)
26210	Paper mill products, except building paper, n.s.k....1977..	(7)	(X)	(X)	(X)	(X)
	1972..	13.1	(X)	(X)	(X)	(X)
	1967..	5.2	(X)	(X)	(X)	(X)
	1963..	2.7	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.				
2631-	. Paperboard mill products	1977.. 6,434.7	26	40	67	92
		1972.. 3,657.5	26	41	67	92
		1967.. 2,673.1	24	39	62	89
		1963.. 2,184.7	25	39	63	86
		1958.. 1,697.7	27	39	61	85
26311	Unbleached kraft packaging and industrial coverting paperboard	1977.. 2,697.2	31	51	86	100
		1972.. 1,562.2	37	58	88	100
		1967.. 974.8	35	54	90	100
26312	Bleached packaging and industrial converting paperboard	1977.. 1,364.6	48	73	(D)	100
		1972.. 696.3	42	67	99	100
		1967.. 522.6	41	66	97	100
26313	Semichemical paperboard	1977.. 748.9	32	55	85	100
		1972.. 415.3	33	52	86	100
		1967.. 294.9	40	60	96	100
26314	Recycled paperboard[71]	1977.. 1,562.7	26	40	69	92
		1972.. 929.5	29	44	70	91
	1967 product class 26314, Combination paperboard: Shipping containerboard[71]	1967.. 175.6	42	59	84	100
	1967 product class 26315, Combination paperboard: Bending[71]	1967.. 369.7	36	54	79	98
	1967 product class 26316, Combination paperboard: Nonbending[71]	1967.. 119.2	26	44	79	100
	1967 product class 26317, Special combination packaging and industrial converting paperboard[71]	1967.. 145.9	49	67	90	100
26318	Wet machine board	1977.. 59.3	75	96	100	(X)
		1972.. 46.6	71	89	100	(X)
		1967.. 36.4	63	84	100	(X)
		1963.. 37.3	54	76	98	100
		1958.. 28.9	48	72	97	100
26310	Paperboard mill products, n.s.k	1977.. 2.0	(X)	(X)	(X)	(X)
		1972.. 7.5	(X)	(X)	(X)	(X)
		1967.. 34.0	(X)	(X)	(X)	(X)
		1963.. 1.5	(X)	(X)	(X)	(X)
2641-	Paper coating and glazing	1977.. 3,043.2	28	40	57	76
		1972.. 1,653.1	26	37	56	77
		1967.. 1,354.6	29	40	58	78
		1963.. 1,170.7	30	42	59	79
		1958.. 812.2	26	40	58	79
26411	Printing paper coated at establishments other than where the paper was produced	1977.. 172.0	56	72	95	100
		1972.. 114.8	56	70	91	100
		1967.. 125.3	61	81	94	100
		1963.. 147.9	56	86	99	100
		1958.. 96.0	58	85	98	(NA)
		1954.. 82.5	50	79	98	(NA)
26412	Oiled, waxed, and wax-laminated paper, plain or printed	1977.. 256.3	47	65	88	99+
		1972.. 153.3	43	63	87	99+
		1967.. 189.4	48	69	90	99
		1963.. 213.3	47	68	88	99
		1958.. 240.3	51	71	91	99
		1954.. 208.8	42	61	85	(NA)
26413	Gummed products	1977.. 187.6	38	62	89	100
		1972.. 139.2	30	53	92	99+
		1967.. 125.6	36	59	91	99+
		1963.. 98.2	32	55	89	99+
		1958.. 78.4	36	61	92	99
		1954.. 66.4	35	63	92	(NA)
26414	Pressure sensitive tape	1977.. 1,177.7	56	69	89	96
		1972.. 574.5	59	74	90	98
		1967.. 438.3	68	81	94	99
		1963.. 311.7	65	76	92	99
		1958.. 183.4	76	88	97	99
		1954.. 148.9	(D)	95	98	(NA)
26417	Laminated or coated rolls and sheets, for packaging uses, except waxed[72]	1977.. 697.1	32	49	71	91
		1972.. 351.9	35	52	80	98

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.				
2641-	Paper coating and glazing--Con.					
26418	Other coated and processed paper, except for packaging uses and except waxed[7,2] 1977	421.1	58	72	89	99+
	1972	268.1	40	55	80	98
26410	Paper coating and glazing, n.s.k. 1977	131.3	(X)	(X)	(X)	(X)
	1972	51.3	(X)	(X)	(X)	(X)
	1967	27.7	(X)	(X)	(X)	(X)
	1963	7.6	(X)	(X)	(X)	(X)
	1958	2.3	(X)	(X)	(X)	(X)
26420	Envelopes, all types and materials (excluding stationery envelopes) 1977	980.6	26	40	62	82
	1972	587.7	27	41	62	81
	1967	443.4	28	40	59	81
	1963	330.7	26	37	55	79
	1958	246.9	27	37	54	77
	1954	197.3	27	35	51	(NA)
2643-	Bags, except textile bags 1977	3,304.1	24	37	55	72
	1972	1,826.4	21	36	58	74
	1967	1,292.7	22	35	56	73
	1963	976.9	23	35	55	73
	1958	857.2	28	43	62	79
26431	Grocers' and variety bags (paper), and wardrobe, shopping and other bags 1977	801.6	35	58	91	100
	1972	531.2	33	56	89	99+
	1967	362.8	36	56	87	99+
	1963	254.1	33	55	83	99
	1958	240.0	47	67	92	99
26432	Specialty bags and liners 1977	1,615.7	29	40	55	72
	1972	816.6	31	41	56	72
	1967	571.4	20	31	49	67
	1963	416.1	18	28	47	67
	1958	304.5	21	36	57	74
	1954	206.3	26	40	59	(NA)
26433	Shipping sacks and multiwall bags 1977	672.6	46	63	87	99+
	1972	408.4	43	58	85	99+
	1967	316.4	48	65	87	99+
	1963	288.6	46	65	87	99+
	1958	312.7	50	64	84	47
	1954	255.0	57	69	89	(NA)
26430	Bags, except textile bags, n.s.k. 1977	214.3	(X)	(X)	(X)	(X)
	1972	88.2	(X)	(X)	(X)	(X)
	1967	42.1	(X)	(X)	(X)	(X)
	1963	18.1	(X)	(X)	(X)	(X)
2645-	Die-cut paper and board 1977	1,034.3	35	46	61	78
	1972	646.6	37	47	61	80
	1967	547.6	30	40	55	75
	1963	380.1	30	39	56	74
	1958	264.9	34	43	59	76
26451	Office supplies (filing accessories) and miscellaneous products 1977	484.9	30	46	66	87
	1972	343.6	38	50	70	89
	1967	346.6	32	43	62	85
	1963	297.8	37	48	66	83
	1958	207.9	43	52	69	61
26452	Pasted, lined, laminated, or surface-coated paperboard 1977	438.4	70	82	93	99+
	1972	271.3	62	71	86	98
	1967	167.7	55	65	83	98
26450	Die-cut paper and board, n.s.k. 1977	111.0	(X)	(X)	(X)	(X)
	1972	31.7	(X)	(X)	(X)	(X)
	1967	33.3	(X)	(X)	(X)	(X)
	1963	9.2	(X)	(X)	(X)	(X)
2646-	Pressed and molded pulp goods 1977	239.6	86	93	99	100
	1972	161.6	75	89	98	100
	1967	142.7	71	86	96	100
	1963	112.0	70	85	94	99+
	1958	80.4	67	87	96	99
	1954	45.2	76	92	99	(NA)
26461	Bituminous fiber pipe, sewer and drainage, conduit and fittings--molded pulp or papier-mache 1977	(D)	(D)	(X)	(X)	(X)
	1972	21.3	100	(X)	(X)	(X)
	1967	22.6	(D)	100	(X)	(X)
	1963	23.0	90	100	(X)	(X)
	1958	29.0	92	100	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.				
2646-	Pressed and molded pulp goods--Con.					
26462	Other pressed and molded pulp goods....1977..	225.9	92	98	100	(X)
	1972..	136.3	88	95	100	(X)
	1967..	118.3	86	92	99	100
	1963..	89.1	83	89	97	100
	1958..	50.9	85	90	98	100
26460	Pressed and molded pulp goods, n.s.k....1977..	(D)	(X)	(X)	(X)	(X)
	1972..	4.0	(X)	(X)	(X)	(X)
	1967..	1.8	(X)	(X)	(X)	(X)
2647-	Sanitary paper products....1977..	4,562.6	65	84	97	99+
	1972..	1,981.9	65	82	94	99
	1967..	1,234.4	61	78	91	98
	1963..	925.4	59	75	90	98
	1958..	689.3	(15)	(15)	(15)	(15)
26471	Sanitary napkins and tampons....1977..	588.1	97	(D)	100	(X)
	1972..	281.1	91	(D)	100	(X)
	1967..	182.1	95	(D)	100	(X)
	1963..	142.0	(D)	(D)	100	(X)
	1958..	116.1	97	(D)	100	(X)
	1954..	76.1	98	100	(X)	(X)
26472	Sanitary tissue health products[73]....1977..	3,948.3	70	87	97	100
	1972..	1,692.7	70	85	95	99+
	1967..	1,040.6	64	81	92	99
	1963..	783.4	61	77	90	98
	1958..	573.2	61	75	90	98
	1954..	427.4	37	57	83	(NA)
26470	Sanitary paper products, n.s.k....1977..	25.6	(X)	(X)	(X)	(X)
	1972..	8.1	(X)	(X)	(X)	(X)
	1967..	11.7	(X)	(X)	(X)	(X)
2648-	Stationery products (1967 product class 26491)[74]....1977..	630.5	28	42	62	82
	1972..	422.6	26	38	56	73
	1967..	256.7	33	44	65	87
	1963..	202.1	30	42	63	86
	1958..	151.2	28	42	65	88
	1954..	106.5	31	43	64	(NA)
26481	Stationery[65]....1977..	141.2	34	50	74	91
	1972..	118.1	38	54	78	95
26482	Tablets and related products[74]....1977..	425.5	40	54	79	97
	1972..	220.7	41	56	79	98
26480	Stationery products, n.s.k.[74]....1977..	63.8	(X)	(X)	(X)	(X)
	1972..	83.8	(X)	(X)	(X)	(X)
2649-	Converted paper products, n.e.c.[75]....1977..	1,748.8	12	19	34	53
	1972..	665.1	14	24	42	64
26492	Wrapping products (gift wrap, etc.)....1977..	251.5	55	75	92	100
	1972..	181.2	52	68	89	99+
	1967..	109.4	35	59	84	99
	1963..	88.2	34	54	86	99
	1958..	87.2	36	56	83	97
26493	Wallpaper (1967 product class 26440)....1977..	306.5	45	63	87	100
	1972..	83.0	49	63	84	97
	1967..	46.2	39	56	79	98
	1963..	33.6	32	48	75	97
	1958..	35.6	41	57	82	98
	1954..	39.6	40	57	79	(NA)
26495	Other converted paper and board products....1977..	948.1	13	21	38	61
	1972..	394.3	15	25	46	68
	1967..	283.8	33	42	56	75
	1963..	270.1	22	34	56	75
	1958..	226.8	22	36	56	73
26490	Converted paper products, n.s.k....1977..	242.7	(X)	(X)	(X)	(X)
	1972..	6.6	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.				
26510	Bending paperboard packaging and packaging components, including die-cut, nonfolded packaging items, for products except liquid, moist, oily, or perishable foods....1977..	2,393.4	20	32	52	71
	1972..	1,360.0	20	32	49	68
	1967..	1,116.2	21	33	51	68
	1963..	1,026.0	21	34	51	67
	1958..	815.4	21	31	49	66
	1954..	625.4	19	31	50	(NA)
26520	Setup paperboard boxes....1977..	377.7	11	18	34	53
	1972..	342.6	10	16	29	46
	1967..	291.8	11	18	29	45
	1963..	232.3	10	18	28	44
	1958..	225.9	10	16	26	42
	1954..	220.3	9	13	21	(NA)
26530	Corrugated and solid fiber boxes, including pallets....1977..	7,182.8	19	34	59	75
	1972..	4,196.9	19	33	58	76
	1967..	2,893.2	18	33	61	78
	1963..	2,136.2	19	36	62	79
	1958..	1,627.6	21	36	55	73
2654-	Sanitary food containers....1977..	1,964.9	43	62	81	92
	1972..	1,388.0	41	58	80	90
	1967..	1,105.8	45	62	82	93
	1963..	854.7	54	72	88	97
	1958..	642.5	56	75	90	97
26541	Milk and other beverage cartons....1977..	480.0	92	99+	100	(X)
	1972..	331.5	79	97	100	(X)
	1967..	278.9	79	96	100	(X)
	1963..	284.8	81	(D)	100	(X)
	1958..	199.3	89	(D)	100	(X)
26542	Cups and liquid-tight paperboard containers....1977..	594.1	81	90	99	100
	1972..	443.7	77	91	99	100
	1967..	384.5	76	93	99	100
	1963..	300.0	75	92	99	100
	1958..	230.5	79	93	99	100
26543	Other sanitary food containers, boards, and trays....1977..	842.2	35	49	72	90
	1972..	591.5	28	41	63	83
	1967..	430.8	37	48	70	87
	1963..	268.3	49	62	81	95
	1958..	212.7	55	69	82	96
26540	Sanitary food containers, n.s.k....1977..	48.6	(X)	(X)	(X)	(X)
	1972..	21.3	(X)	(X)	(X)	(X)
	1967..	11.6	(X)	(X)	(X)	(X)
	1963..	1.6	(X)	(X)	(X)	(X)
2655-	Fiber cans, drums, and similar products....1977..	1,040.4	53	71	83	92
	1972..	620.0	52	67	80	90
	1967..	425.4	49	69	82	92
	1963..	302.1	51	71	82	91
	1958..	189.2	45	63	77	89
26551	Paperboard fiber drums with metal, wood, or paperboard ends....1977..	223.8	92	98	100	(X)
	1972..	136.9	(D)	94	(D)	100
	1967..	93.4	(D)	98	100	(X)
	1963..	62.0	(D)	(D)	100	(X)
	1958..	55.3	(D)	(D)	94	99
26552	Fiber cans, tubes, and similar fiber products....1977..	782.6	58	72	84	95
	1972..	465.7	53	67	81	93
	1967..	322.0	51	67	82	94
	1963..	236.9	51	71	82	92
	1958..	133.9	43	60	75	91
26550	Fiber cans, drums, and similar products, n.s.k....1977..	34.0	(X)	(X)	(X)	(X)
	1972..	17.5	(X)	(X)	(X)	(X)
	1967..	10.1	(X)	(X)	(X)	(X)
	1963..	3.2	(X)	(X)	(X)	(X)
2661-	Building paper and board mills....1977..	514.3	45	70	99	100
	1972..	401.9	47	66	95	99+
	1967..	317.9	46	67	94	99+
	1963..	299.5	42	62	93	99+
	1958..	295.3	39	59	(NA)	(NA)
26611	Insulating board....1977..	222.2	59	84	100	(X)
	1972..	219.7	58	78	100	(X)
	1967..	177.3	59	82	(D)	100
	1963..	171.3	49	75	(D)	(D)
	1958..	169.8	53	76	98	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 26, PAPER AND ALLIED PRODUCTS--Con.				
2661-	Building paper and board mills--Con.					
26612	Construction paper....1977..	291.8	59	88	100	(X)
	1972..	175.6	51	78	99+	100
	1967..	135.3	48	74	98	100
	1963..	126.7	45	71	97	100
	1958..	121.1	39	63	86	95
	1954..	121.1	41	66	92	(NA)
26610	Building paper and board mills, n.s.k....1977..	.3	(X)	(X)	(X)	(X)
	1972..	6.6	(X)	(X)	(X)	(X)
	1967..	5.3	(X)	(X)	(X)	(X)
	1963..	1.5	(X)	(X)	(X)	(X)
	1958..	4.3	(X)	(X)	(X)	(X)
		MAJOR GROUP 27, PRINTING AND PUBLISHING				
2711-	Newspapers....1977..	12,468.1	20	32	46	63
	1972..	7,901.1	17	29	44	61
	1967..	5,549.8	16	25	40	56
	1963..	4,254.7	15	22	36	53
	1958..	3,458.3	18	25	36	53
27111	Daily and Sunday newspapers, receipts from subscriptions and sales...1977..	2,561.1	24	38	55	73
	1972..	1,745.5	20	33	51	70
	1967..	1,309.1	19	29	47	64
	1963..	1,064.4	20	28	43	61
	1958..	916.7	25	32	46	63
27112	Daily and Sunday newspapers, receipts from advertising....1977..	8,140.5	23	36	53	73
	1972..	5,207.9	20	32	49	69
	1967..	3,652.5	18	28	45	64
	1963..	2,727.5	15	24	39	58
	1958..	2,208.7	18	26	39	57
27113	Weekly and other newspapers, receipts from subscriptions and sales...1977..	240.6	35	43	51	61
	1972..	106.9	(S)	(S)	(S)	(S)
	1967..	78.2	26	33	41	54
	1963..	82.9	18	22	29	38
	1958..	62.6	11	14	20	28
27114	Weekly and other newspapers, receipts from advertising....1977..	734.5	6	11	22	35
	1972..	386.5	5	10	20	34
	1967..	243.2	5	10	18	30
	1963..	296.0	6	8	13	20
	1958..	235.2	3	5	9	16
27110	Newspapers, n.s.k....1977..	791.4	(X)	(X)	(X)	(X)
	1972..	454.5	(X)	(X)	(X)	(X)
	1967..	266.8	(X)	(X)	(X)	(X)
	1963..	83.9	(X)	(X)	(X)	(X)
	1958..	35.2	(X)	(X)	(X)	(X)
2721-	Periodicals....1977..	5,528.8	20	31	49	64
	1972..	3,187.0	22	33	50	65
	1967..	2,668.2	23	36	53	68
	1963..	2,035.5	26	39	56	69
	1958..	1,578.4	31	40	54	67
27211	Farm periodicals, receipts from subscriptions, sales, and advertising (1972 product classes 27211 and 27212)....1977..	107.5	46	67	85	98
	1972 product class 27211, Farm periodicals, receipts from subscriptions and sales....1972..	14.2	38	55	81	99+
	1967..	11.3	41	63	85	99+
	1963..	8.5	50	68	90	99+
	1958..	11.3	44	59	78	97
	1972 product class 27212, Farm periodicals, receipts from advertising....1972..	61.7	39	61	84	99+
	1967..	45.7	43	59	81	99
	1963..	45.6	48	65	87	99+
	1958..	55.4	43	59	80	97
27213	Business publications and professional journals, receipts from subscriptions and sales....1977..	464.2	27	38	58	77
	1972..	262.2	31	40	59	77
	1967..	149.6	31	41	58	77
	1963..	122.7	23	30	44	62
	1958..	86.3	([12])	([12])	([12])	([12])

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2721-	Periodicals--Con.					
27214	Business publications and professional journals, receipts from advertising....1977..	850.2	28	40	56	73
	1972..	648.0	26	36	52	71
	1967..	524.9	34	45	59	73
	1963..	412.7	28	37	49	65
	1958..	294.1	(12)	(12)	(12)	(12)
27215	General and consumer periodicals, receipts from subscriptions and sales....1977..	1,685.7	33	49	72	87
	1972..	828.8	36	56	79	90
	1967..	593.5	37	55	80	92
	1963..	456.7	38	56	80	93
	1958..	343.1	(12)	(12)	(12)	(12)
27216	General and consumer periodicals, receipts from advertising....1977..	1,595.5	32	50	80	93
	1972..	889.0	40	60	84	94
	1967..	879.5	48	67	90	97
	1963..	710.6	53	72	92	97
	1958..	543.9	59	73	91	98
27217	Other periodicals, except shopping news, directories, or catalogs, n.e.c., receipts from subscriptions, sales, and advertising....1977..	250.7	(S)	(S)	(S)	(S)
	1972..	282.1	28	45	65	84
	1967..	284.2	30	44	65	84
	1963..	230.2	35	46	64	81
	1958..	265.4	(12)	(12)	(12)	(12)
27210	Periodicals, n.s.k....1977..	575.0	(X)	(X)	(X)	(X)
	1972..	201.1	(X)	(X)	(X)	(X)
	1967..	179.5	(X)	(X)	(X)	(X)
	1963..	48.5	(X)	(X)	(X)	(X)
	1958..	39.6	(X)	(X)	(X)	(X)
2731-	Book publishing....1977..	5,007.7	16	29	54	73
	1972..	2,915.4	16	27	52	75
	1967..	2,255.3	16	27	52	75
	1963..	1,547.8	18	29	52	73
	1958..	1,010.7	16	26	45	65
	1954..	665.4	18	28	47	(NA)
27311	Textbooks, including teachers' editions....1977..	1,408.7	35	57	80	95
	1972..	809.6	33	54	80	95
	1967..	733.6	29	50	79	94
	1963..	471.1	32	54	81	94
	1958..	281.7	33	50	76	93
27313	Technical, scientific, and professional books....1977..	684.1	40	55	75	89
	1972..	403.0	39	57	76	92
	1967..	240.2	38	54	74	91
	1963..	156.3	32	49	68	87
	1958..	116.0	27	43	71	91
27314	Religious books....1977..	236.3	26	42	68	91
	1972..	131.2	36	51	76	97
	1967..	110.4	27	46	74	96
	1963..	81.1	22	37	65	89
	1958..	58.6	30	45	70	90
27315	General books (trade, etc.)....1977..	1,895.6	31	48	76	92
	1972..	1,006.7	29	47	74	92
	1967..	657.7	28	46	70	91
	1963..	458.2	30	46	59	89
	1958..	274.7	39	53	72	90
27317	General reference books[76]....1977..	305.4	62	74	92	99
	1972..	235.2	71	82	94	99+
	1967..	216.3	81	91	(D)	100
	1963..	207.3	87	96	100	(X)
	1958..	163.6	(12)	(12)	(12)	(12)
27318	Other books, excluding pamphlets[77]....1977..	110.4	49	64	87	98
	1972..	125.4	54	65	85	99
27319	Pamphlets (5 to 48 pages)[77]....1977..	49.1	54	74	89	99
	1972..	48.7	62	73	87	99
	1967 product class 27316, Other books and pamphlets[77]....1967..	200.1	48	61	78	92
	1963..	154.8	37	48	68	85
	1958..	96.0	(10)	(10)	(10)	(10)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2731-	Book publishing--Con.					
27310	Book publishing, n.s.k.					
	1977	318.1	(X)	(X)	(X)	(X)
	1972	155.6	(X)	(X)	(X)	(X)
	1967	97.0	(X)	(X)	(X)	(X)
	1963	18.9	(X)	(X)	(X)	(X)
	1958	20.2	(X)	(X)	(X)	(X)
2732-	Book printing					
	1977	1,830.6	21	29	42	55
	1972	1,050.0	19	27	44	57
	1967	900.3	15	23	38	53
	1963	607.0	14	23	37	51
	1958	422.9	15	22	34	48
	1954	304.9	15	24	37	(NA)
27321	Books, printing only, lithographic[7,8]					
	1977	173.0	16	26	43	63
	1972	111.5	17	29	50	75
	1967	601.0	19	29	41	55
	1963	344.2	19	26	37	52
	1958	167.6	20	26	38	54
27322	Books, printing and binding, lithographic[7,8]					
	1977	980.0	35	48	65	79
	1972	469.9	38	51	69	84
27328	Books, printing only or printing and binding, other than lithographic (1972 product classes 27325 and 27326)					
	1977	158.5	60	76	85	93
	1972 product class 27325, Books, printing only, other than lithographic					
	1972	20.6	36	53	80	98
	1972 product class 27326, Books, printing and binding, other than lithographic					
	1972	115.1	61	79	91	97
27329	Pamphlets, workbooks, and tests, printing only or printing and binding (1972 product classes 27323, 27324, and 27327)					
	1977	358.6	11	18	29	44
	1972 product class 27323, Pamphlets, workbooks, standardized and objective tests, printing only, lithographic[7,8]					
	1972	68.3	24	32	46	64
	1972 product class 27324, Pamphlets, workbooks standardized and objective tests, printing and binding, lithographic[7,8]					
	1972	129.5	27	35	49	64
	1972 product class 27327, Pamphlets, workbooks, standardized and objective tests, printing only or printing and binding, other than lithographic					
	1972	25.7	29	44	60	78
27320	Book printing, n.s.k.					
	1977	160.5	(X)	(X)	(X)	(X)
	1972	109.4	(X)	(X)	(X)	(X)
	1967	45.0	(X)	(X)	(X)	(X)
	1963	21.1	(X)	(X)	(X)	(X)
	1958	6.9	(X)	(X)	(X)	(X)
2741-	Miscellaneous publishing					
	1977	1,935.1	23	32	47	60
	1972	1,058.3	29	42	55	64
	1967	608.6	27	44	61	72
	1963	413.4	29	42	57	68
	1958	297.9	(12)	(12)	(12)	(12)
	1954	231.1	28	39	52	(NA)
27411	Catalogs and directories, publishing					
	1977	456.9	55	68	82	92
	1972	244.1	63	75	86	94
	1967	184.6	61	75	85	94
	1963	133.0	56	69	78	87
	1958	93.6	58	68	80	90
27412	Business service publications					
	1977	416.7	64	78	88	95
	1972	241.9	65	77	90	99
	1967	123.0	69	84	93	99+
	1963	101.6	65	81	93	99+
	1958	64.3	(12)	(12)	(12)	(12)
27413	Other miscellaneous publishing[16]					
	1977	727.0	25	38	56	70
	1972	401.1	39	49	61	74
	1967	231.8	43	55	70	84
27410	Miscellaneous publishing, n.s.k.					
	1977	334.5	(X)	(X)	(X)	(X)
	1972	171.2	(X)	(X)	(X)	(X)
	1967	69.2	(X)	(X)	(X)	(X)
	1963	20.6	(X)	(X)	(X)	(X)
	1958	8.1	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2751-	Commercial printing, letterpress[79] 1977	4,620.6	9	13	20	28
	1972	3,405.3	9	13	19	28
	1967	3,265.0	12	17	24	33
	1963	2,711.4	12	17	25	34
	1958	2,454.7	(12)	(12)	(12)	(12)
27511	Magazine and periodical printing, letterpress 1977	499.7	60	85	93	97
	1972	424.3	59	71	82	91
	1967	512.7	42	55	70	82
	1963	574.0	40	52	70	81
	1958	452.7	36	48	64	(NA)
27512	Labels and printed rolls and sheets for packaging purposes, letterpress 1977	746.9	17	26	40	61
	1972	502.4	20	28	44	63
	1967	390.2	16	25	40	59
	1963	296.9	15	23	40	60
	1958	263.1	13	20	34	(NA)
27513	Catalog and directory printing, letterpress 1977	197.7	72	83	88	93
	1972	134.3	53	74	85	91
	1967	171.3	40	54	66	74
	1963	148.7	40	55	69	76
	1958	139.9	37	49	66	(NA)
27514	Financial and legal printing, letterpress 1977	208.4	29	43	64	81
	1972	190.1	33	45	65	80
	1967	152.9	19	28	42	60
	1963	111.3	15	25	37	53
	1958	76.8	20	30	43	(NA)
27515	Advertising printing, letterpress 1977	299.8	24	33	47	60
	1972	268.7	14	20	34	48
	1967	345.7	7	11	18	29
	1963	276.4	8	12	20	31
	1958	348.7	6	10	17	(NA)
27516	Other general job printing, letterpress 1977	721.4	12	19	31	45
	1972	522.7	15	20	28	40
	1967	527.7	7	10	16	25
	1963	717.1	4	7	12	19
	1958	643.2	4	7	12	(NA)
27519	Screen process printing, except textiles 1977	314.7	10	17	32	52
	1972	172.1	15	21	34	56
	1967	93.3	13	20	35	57
	1963	69.2	13	20	33	51
	1958	53.2	12	17	29	50
27510	Commercial printing, letterpress, n.s.k. 1977	1,632.0	(X)	(X)	(X)	(X)
	1972	1,190.7	(X)	(X)	(X)	(X)
	1967	640.8	(X)	(X)	(X)	(X)
	1963	213.1	(X)	(X)	(X)	(X)
	1958	231.6	(X)	(X)	(X)	(X)
2752-	Commercial printing, lithographic[80] 1977	8,980.2	6	10	16	25
	1972	4,919.8	5	8	15	24
	1967	3,132.9	10	13	20	28
	1963	2,025.2	5	9	15	23
	1958	1,366.2	(12)	(12)	(12)	(12)
27521	Magazine and periodical printing, lithographic 1977	1,287.5	22	32	49	67
	1972	631.6	22	32	50	68
	1967	296.1	15	25	46	65
	1963	138.5	18	25	41	62
	1958	66.2	(12)	(12)	(12)	(12)
27522	Labels and printed rolls and sheets for packaging purposes, lithographic 1977	391.3	22	34	51	68
	1972	280.3	24	37	57	73
	1967	186.9	28	38	55	71
	1963	147.3	25	35	51	68
	1958	123.4	26	38	56	76
27523	Catalog and directory printing, lithographic 1977	838.3	20	30	44	60
	1972	464.1	19	27	41	57
	1967	267.7	19	25	38	54
	1963	165.3	18	24	35	49
	1958	75.6	19	26	39	54

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2751-	Commercial printing, letterpress[79]--Con.					
27524	Financial and legal printing, lithographic....1977..	471.6	26	37	49	63
	1972..	271.1	25	35	48	62
	1967..	137.7	24	33	48	65
	1963..	108.9	24	31	46	62
	1958..	50.0	38	47	61	75
27525	Advertising printing, lithographic....1977..	2,407.7	7	11	18	29
	1972..	1,554.1	6	10	16	26
	1967..	967.6	6	9	16	28
	1963..	721.6	6	9	16	26
	1958..	577.3	6	9	16	27
27526	Other general job printing, lithographic[16]....1977..	2,178.1	14	20	28	38
	1972..	967.8	8	12	20	32
	1967..	705.6	35	39	46	56
27520	Commercial printing, lithographic, n.s.k....1977..	1,405.7	(X)	(X)	(X)	(X)
	1972..	750.8	(X)	(X)	(X)	(X)
	1967..	420.1	(X)	(X)	(X)	(X)
	1963..	96.3	(X)	(X)	(X)	(X)
	1958..	33.2	(X)	(X)	(X)	(X)
27530	Engraving and plate printing, excluding photoengraving....1977..	288.7	31	40	51	65
	1972..	205.0	23	28	38	52
	1967..	151.3	16	21	31	46
	1963..	111.2	23	29	40	53
	1958..	93.7	25	30	40	53
	1954..	70.4	20	26	36	(NA)
2754-	Commercial printing, gravure[81]....1977..	1,166.3	36	50	71	85
	1972..	759.1	37	53	74	90
27541	Magazine and periodical printing, gravure (1972 product class 27541, part)....1977..	275.5	61	87	100	(X)
27543	Catalog and directory printing, gravure (1972 product class 27541, part)....1977..	233.5	(D)	99+	100	(X)
	1972 product class 27541, Publication printing, gravure....1972..	355.7	60	83	98	99+
	1967..	216.3	63	88	98	99+
	1963..	158.9	64	86	96	99
	1958..	126.1	62	86	99	(NA)
27542	Labels and printed rolls and sheets for packaging purposes, gravure....1977..	276.2	44	61	89	99+
	1972..	189.9	50	71	91	99+
27545	Advertising printing, gravure....1977..	143.2	78	91	98	99+
	1972..	100.9	68	81	94	99+
27544	Financial and legal printing, gravure (1972 product class 27544, part)....1977..	([82])	(NA)	(NA)	(NA)	(NA)
27546	Other general job printing, gravure (1972 product class 27544, part)....1977..	[82]91.5	61	74	91	99+
	1972 product class 27544, Other commercial printing, gravure....1972..	46.8	71	84	96	100
27547	Gravure plates and cylinders....1977..	58.0	38	58	93	100
	1972..	33.7	50	71	94	100
27540	Commercial printing, gravure, n.s.k....1977..	88.4	(X)	(X)	(X)	(X)
	1972..	32.1	(X)	(X)	(X)	(X)
2761-	Manifold business forms....1977..	2,702.6	39	47	61	75
	1972..	1,381.9	43	51	63	75
	1967..	895.8	45	54	66	78
	1963..	598.4	46	52	65	76
	1958..	374.0	([75])	([75])	([75])	([75])
27612	Unit-set forms....1977..	885.3	32	42	54	67
	1972..	514.2	35	44	57	70
	1967..	347.4	35	46	59	74
	1963..	258.0	32	43	57	71
	1958..	159.6	38	46	58	73
27613	Manifold books, including sales and pegboard accounting systems....1977..	129.5	54	78	91	97
	1972..	51.5	55	71	89	95
	1967..	44.2	60	78	91	97
	1963..	39.6	58	76	91	98
	1958..	45.2	([83])	([83])	([83])	([83])

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2761-	Manifold business forms--Con.					
27615	Custom continuous forms, with or without carbon, marginally punched or not marginally punched[84] 1977	896.0	50	62	77	91
	1972	553.6	52	61	75	88
27617	Stock continuous forms[84] 1977	622.2	48	62	84	96
	1972	204.9	66	75	86	96
	1967 product class 27611, Continuous business forms[84] 1967	480.2	57	67	78	90
	1963	291.1	60	69	79	89
	1958	169.2	67	74	84	92
27610	Manifold business forms, n.s.k 1977	169.7	(X)	(X)	(X)	(X)
	1972	57.8	(X)	(X)	(X)	(X)
	1967	24.0	(X)	(X)	(X)	(X)
	1963	9.8	(X)	(X)	(X)	(X)
2771-	Greeting card publishing 1977	765.2	70	78	88	95
	1972	574.6	64	74	84	93
	1967	441.4	62	73	82	91
	1963	310.2	53	67	79	90
	1958	276.6	43	59	72	85
	1954	217.5	37	51	66	(NA)
27711	Greeting cards, publishers' sales 1977	694.3	77	86	96	100
	1972	501.9	71	82	93	99
	1967	381.4	70	82	91	99
	1963	262.8	60	76	87	97
	1958	234.0	48	64	79	93
	1954	185.0	44	60	76	(NA)
27712	Greeting cards, printed for publication by others 1977	39.6	44	64	87	98
	1972	48.9	43	57	79	97
	1967	44.0	29	45	73	95
	1963	39.9	38	49	70	91
	1958	37.9	40	53	70	87
	1954	31.0	27	38	60	(NA)
27710	Greeting card publishing, n.s.k 1977	31.3	(X)	(X)	(X)	(X)
	1972	23.8	(X)	(X)	(X)	(X)
	1967	16.0	(X)	(X)	(X)	(X)
	1963	7.5	(X)	(X)	(X)	(X)
	1958	4.7	(X)	(X)	(X)	(X)
2782-	Blankbooks and looseleaf binders 1977	1,039.5	38	49	65	79
	1972	566.2	37	48	60	75
	1967	362.3	32	41	56	73
	1963	252.0	31	40	52	70
	1958	213.6	26	38	49	64
27821	Blankbook making 1977	605.7	58	68	84	96
	1972	320.1	51	60	77	91
	1967	186.8	43	54	71	88
	1963	124.3	38	46	61	82
	1958	118.5	25	35	51	67
27822	Looseleaf binders and devices 1977	346.3	32	45	63	82
	1972	209.9	34	46	64	82
	1967	153.8	29	42	65	84
	1963	119.6	31	45	67	85
	1958	95.2	36	48	66	84
	1954	70.5	27	42	63	(NA)
27820	Blankbooks and looseleaf binders, n.s.k 1977	87.5	(X)	(X)	(X)	(X)
	1972	36.2	(X)	(X)	(X)	(X)
	1967	21.7	(X)	(X)	(X)	(X)
	1963	8.1	(X)	(X)	(X)	(X)
2789-	Bookbinding and related work 1977	508.0	10	17	29	44
	1972	362.6	11	18	29	46
	1967	337.5	12	19	31	47
	1963	243.2	11	18	28	44
	1958	191.0	10	15	26	42
27891	Edition, library, and other hard cover bookbinding 1977	172.3	24	38	62	85
	1972	142.0	26	38	59	82
	1967	167.4	23	37	60	80
	1963	109.3	25	37	58	78
	1958	83.3	23	35	57	76

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 27, PRINTING AND PUBLISHING--Con.				
2789-	Bookbinding and related work--Con.					
27892	Other book and pamphlet binding and related binding work....1977..	253.3	14	19	32	51
	1972..	164.8	15	23	37	58
	1967..	135.4	8	14	28	50
	1963..	117.6	9	15	26	43
	1958..	95.8	7	13	24	41
27890	Bookbinding and related work, n.s.k....1977..	82.4	(X)	(X)	(X)	(X)
	1972..	55.7	(X)	(X)	(X)	(X)
	1967..	34.7	(X)	(X)	(X)	(X)
	1963..	16.3	(X)	(X)	(X)	(X)
	1958..	11.9	(X)	(X)	(X)	(X)
27910	Typesetting....1977..	781.5	5	8	15	26
	1972..	508.7	5	9	16	29
	1967..	362.1	6	9	17	29
	1963..	249.6	5	9	16	29
	1958..	175.5	4	8	16	30
	1954..	132.1	4	8	16	(NA)
27930	Photoengraving plates made for others....1977..	223.5	12	21	38	55
	1972..	221.1	9	15	26	43
	1967..	237.1	8	14	24	39
	1963..	214.7	8	13	22	36
	1958..	208.5	7	12	23	35
	1954..	176.1	6	10	19	(NA)
27940	Electrotyping and stereotyping duplicate plates made for others..1977..	15.6	41	58	78	97
	1972..	35.5	33	45	66	90
	1967..	61.4	29	40	58	81
	1963..	71.9	28	36	53	75
	1958..	81.5	26	32	45	65
	1954..	84.4	21	29	43	(NA)
2795-	Lithographic platemaking services (1967 product class 27527)[85]...1977..	630.7	14	19	28	42
	1972..	263.0	17	24	35	52
	1967..	151.2	34	43	57	74
	1963..	129.5	26	31	42	57
	1958..	68.0	11	18	29	47
27951	Lithographic plates[85]....1977..	183.6	34	45	61	77
	1972..	112.4	33	43	59	75
27952	Lithographic platemaking services[85]....1977..	403.3	10	14	25	42
	1972..	131.6	13	19	33	56
27950	Lithographic platemaking services, n.s.k.[85]....1977..	43.8	(X)	(X)	(X)	(X)
	1972..	19.0	(X)	(X)	(X)	(X)
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS				
2812-	Alkalies and chlorine....1977..	1,786.7	44	72	96	99+
	1972..	805.7	54	79	97	99+
	1967..	623.0	53	81	96	100
	1963..	526.5	56	84	98	100
	1958..	425.4	61	88	99	100
	1954..	362.7	63	88	99	(NA)
28121	Chlorine, compressed or liquefied....1977..	520.0	49	71	99	100
	1972..	210.2	46	73	97	100
	1967..	190.8	52	79	99	100
	1963..	164.0	51	79	99	100
	1958..	117.4	52	82	99	100
	1954..	87.2	54	82	99	(NA)
28122	Sodium carbonate (soda ash)....1977..	189.1	(D)	100	(X)	(X)
	1972..	147.6	(D)	99+	100	(X)
	1967..	140.9	(D)	(D)	100	(X)
	1963..	123.6	(D)	100	(X)	(X)
	1958..	113.3	(D)	100	(X)	(X)
	1954..	109.1	(D)	100	(X)	(X)
28123	Sodium hydroxide (caustic soda)....1977..	997.0	50	72	98	100
	1972..	410.9	55	78	98	100
	1967..	254.9	51	81	99	100
	1963..	209.7	51	81	99	100
	1958..	177.3	55	85	(D)	100
	1954..	148.8	57	87	99	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2812-	Alkalies and chlorine--Con.					
28124	Other alkalies....1977..	73.9	75	99	100	(X)
	1972..	33.7	71	96	100	(X)
	1967..	35.2	70	90	100	(X)
	1963..	27.6	70	(D)	100	(X)
	1958..	17.5	77	96	100	(X)
	1954..	17.6	86	99	100	(X)
28120	Alkalies and chlorine, n.s.k....1977..	6.7	(X)	(X)	(X)	(X)
	1972..	3.3	(X)	(X)	(X)	(X)
	1967..	1.3	(X)	(X)	(X)	(X)
	1963..	1.5	(X)	(X)	(X)	(X)
2813-	Industrial gases....1977..	1,199.1	65	81	90	96
	1972..	659.1	67	80	92	97
	1967..	543.4	65	79	90	96
	1963..	389.6	71	83	92	97
	1958..	262.6	78	84	91	96
	1954..	195.4	77	83	90	(NA)
28132	Acetylene....1977..	127.9	65	85	97	100
	1972..	96.0	77	89	98	100
	1967..	83.2	80	89	96	100
	1963..	93.5	87	92	97	99+
	1958..	89.4	(D)	93	97	99
	1954..	64.6	90	93	97	(NA)
28133	Carbon dioxide....1977..	103.0	75	84	96	100
	1972..	45.7	75	86	98	100
	1967..	48.0	73	86	96	100
	1963..	49.9	78	89	98	100
	1958..	43.0	80	89	98	100
	1954..	43.4	80	90	99	(NA)
28135	Nitrogen (including lower purity) (1972 product class 28134, part)...1977..	278.7	80	98	99+	100
28136	Oxygen (including lower purity) (1972 product class 28134, part).....1977..	375.1	81	95	99+	100
28137	Other elemental compressed and liquefied gases (1972 product class 28134, part)....1977..	268.0	64	75	91	99+
	1972 product class 28134, Elemental gases and compressed and liquefied gases, n.e.c....1972..	487.2	70	85	97	99+
	1967..	390.8	69	82	96	99+
	1963..	244.6	73	83	94	99
	1958..	130.2	73	82	90	97
28130	Industrial gases, n.s.k....1977..	46.4	(X)	(X)	(X)	(X)
	1972..	30.3	(X)	(X)	(X)	(X)
	1967..	21.4	(X)	(X)	(X)	(X)
	1963..	1.7	(X)	(X)	(X)	(X)
2816-	Inorganic pigments....1977..	1,339.2	52	71	89	98
	1972..	757.5	52	71	89	97
	1967..	560.8	58	74	92	99
	1963..	480.4	66	79	93	99
	1958..	412.0	67	80	93	99
28161	Titanium pigments....1977..	627.1	81	(D)	100	(X)
	1972..	355.6	80	99+	100	(X)
	1967..	298.4	88	99+	100	(X)
	1963..	277.3	(D)	100	(X)	(X)
	1958..	231.9	(D)	100	(X)	(X)
28162	Other white opaque pigments....1977..	204.8	67	85	(D)	100
	1972..	100.0	69	90	99+	100
	1967..	65.4	65	91	100	(X)
	1963..	50.4	64	90	(D)	100
	1958..	54.4	64	88	99	100
28163	Chrome colors and other inorganic pigments....1977..	485.0	47	65	90	99+
	1972..	283.2	47	64	87	99+
	1967..	189.3	49	68	91	99+
	1963..	151.8	45	62	85	98
	1958..	125.1	47	64	86	98
28160	Inorganic pigments, n.s.k....1977..	22.3	(X)	(X)	(X)	(X)
	1972..	18.8	(X)	(X)	(X)	(X)
	1967..	7.6	(X)	(X)	(X)	(X)
	1963..	0.9	(X)	(X)	(X)	(X)
	1958..	0.6	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2819-	Industrial inorganic chemicals, n.e.c.[86] 1977	6,920.3	23	39	64	83
	1972	2,989.1	27	46	70	86
28193	Sulfuric acid 1977	427.1	52	66	84	99+
	1972	245.4	55	73	90	99+
	1967	250.6	54	72	88	99+
	1963	193.9	60	75	90	99+
	1958	169.9	58	76	90	99
	1954	161.2	(D)	78	92	(NA)
28194	Inorganic acids, except nitric, sulfuric, and phosphoric[86] 1977	364.4	61	80	95	100
	1972	160.5	56	71	93	99+
28195	Aluminum oxide, except natural alumina 1977	827.3	(D)	100	(X)	(X)
	1972	388.6	99	99+	100	(X)
	1967	[87]529.6	85	95	99	(X)
	1963	[87]422.4	85	95	99	(X)
	1958	[87]284.6	88	96	99	(X)
	1954	[87]234.8	89	96	99	(X)
28196	Other aluminum compounds[87] 1977	312.3	69	88	99	100
	1972	175.5	71	92	100	(X)
28197	Potassium and sodium compounds, except bleaches, alkalies, and alums 1977	1,102.8	48	69	89	99
	1972	503.1	51	73	90	99+
	1967	455.7	46	66	86	99+
	1963	513.3	43	67	94	99+
28198	Inorganic chemical catalytic preparations 1977	398.1	49	70	97	100
	1972	172.8	38	63	93	100
	1967	123.1	46	72	96	100
	1963	75.2	50	70	97	100
	1958	56.2	61	78	99	100
28199	Other inorganic chemicals, n.e.c.[88] 1977	3,375.3	25	41	65	87
	1972	1,320.8	27	43	66	88
	1967	1,035.5	29	44	70	90
	1963	825.8	29	44	68	88
28190	Industrial inorganic chemicals, n.s.k 1977	112.8	(X)	(X)	(X)	(X)
	1972	22.5	(X)	(X)	(X)	(X)
	1967	38.9	(X)	(X)	(X)	(X)
	1963	11.1	(X)	(X)	(X)	(X)
2821-	Plastics materials and resins[89] 1977	12,181.1	24	38	61	87
	1972	4,484.3	25	38	62	87
28213	Thermoplastic resins and plastics materials[90] 1977	9,897.7	25	41	67	92
	1972	3,571.4	29	44	70	92
	1967	1,924.8	36	52	80	97
	1963	1,302.0	43	59	83	98
28214	Thermosetting resins and plastics materials[90] 1977	2,225.7	29	45	72	92
	1972	905.0	29	46	74	93
	1967	544.8	29	48	74	94
	1963	420.0	41	60	80	96
	1967 product class 28216, Synthetic resins for protective coatings[83] 1967	286.6	50	64	83	98
	1963	272.2	53	69	84	100
28210	Plastics materials and resins, n.s.k 1977	56.7	(X)	(X)	(X)	(X)
	1972	4.7	(X)	(X)	(X)	(X)
	1967	39.4	(X)	(X)	(X)	(X)
	1963	8.7	(X)	(X)	(X)	(X)
	1958	1.4	(X)	(X)	(X)	(X)
28220	Synthetic rubber (vulcanizable elastomers) 1977	2,354.1	56	78	96	99+
	1972	1,288.6	54	73	95	99+
	1967	1,004.9	49	70	98	100
	1963	862.3	52	73	99	100
	1958	603.9	54	75	(D)	100
	1954	392.2	52	79	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
28233	Rayon and acetate fiber (1972 product classes 28231, 28232, and 28230) 1977	851.1	(D)	100	(X)	(X)
	1972	684.7	84	99+	100	(X)
	1967	681.1	79	99	100	(X)
	1963	648.9	79	(D)	100	(X)
	1958	582.9	71	(D)	(D)	(X)
	1972 product class 28231, Acetate yarn 1972	295.3	100	(X)	(X)	(X)
	1967	339.7	(D)	100	(X)	(X)
	1963	250.3	100	(X)	(X)	(X)
	1958	210.7	100	(X)	(X)	(X)
	1954	196.0	100	(X)	(X)	(X)
	1972 product class 28232, Rayon yarn, viscose and cuprammonium processes 1972	387.8	(D)	100	(X)	(X)
	1967	340.5	89	100	(X)	(X)
	1963	398.6	85	(D)	100	(X)
	1958	372.3	78	(D)	100	(X)
	1954	444.8	79	(D)	100	(X)
	1972 product class 28230, Cellulosic manmade fibers, n.s.k. 1972	1.5	(X)	(X)	(X)	(X)
	1967	0.9	(X)	(X)	(X)	(X)
2824-	Organic fibers, noncellulosic[91] 1977	5,471.5	76	90	99	100
	1972	2,949.1	73	87	98	100
	1967	1,974.1	82	93	99+	100
	1963	1,368.9	(D)	96	99+	100
	1958	748.3	(D)	(D)	100	(X)
	1954	561.6	(D)	(D)	100	(X)
28241	Nylon fibers, except producer textured 1977	1,962.9	90	99	100	(X)
	1972	1,251.8	80	95	100	(X)
	1967	1,068.4	91	99	100	(X)
	1963	896.1	(D)	(D)	100	(X)
28243	Acrylic and modacrylic fibers, except textured (1972 product class 28242, part) 1977	495.8	(D)	100	(X)	(X)
28244	Polyester fibers, except producer textured (1972 product class 28242, part) 1977	1,938.6	90	99	100	(X)
28245	Other noncellulosic manmade fibers, except producer (1972 product class 28242, part) 1977	178.2	82	96	100	(X)
28246	Producer textured manmade fibers, group filament (See also product class 22825) 1977	890.6	65	89	100	(X)
	1972 product class 28242, Other noncellulosic syntheic organic fibers 1972	1,694.1	76	89	99	100
	1967	905.3	83	94	(D)	100
	1963	472.7	86	95	99+	100
28240	Organic fibers, noncellulosic, n.s.k. 1977	5.4	(X)	(X)	(X)	(X)
	1972	3.2	(X)	(X)	(X)	(X)
	1967	0.4	(X)	(X)	(X)	(X)
2831-	Biological products 1977	1,067.5	33	48	72	90
	1972	495.2	32	54	82	96
	1967	220.6	33	53	85	97
	1963	167.3	37	58	87	97
	1958	119.5	46	66	85	96
	1954	79.9	37	52	79	(NA)
28311	Blood and blood derivatives, for human use 1977	243.2	74	95	100	(X)
	1972	126.0	67	92	(D)	100
	1967	35.9	74	91	100	(X)
28312	Vaccines, toxoids and antigens, for human use[16] 1977	99.4	90	(D)	100	(X)
	1972	70.5	84	98	100	(X)
	1967	36.6	66	92	100	(X)
28313	Antitoxins, antivenins, and similar derivatives, for human use[16] 1977	26.6	78	93	100	(X)
	1972	18.3	69	98	100	(X)
	1967	12.7	82	99	100	(X)
28314	Diagnostic substances and other biologics, for human use[16 92] 1977	448.9	41	60	86	99+
	1972	192.5	54	75	94	99+
	1967	81.9	58	84	98	100
28315	Biological preparations for veterinary use[92] 1977	121.1	42	65	95	100
	1972	74.0	44	71	96	100
	1967	47.9	37	58	91	100
	1963	40.7	43	63	90	99+
	1958	35.5	48	64	88	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2831-	Biological products--Con.					
28316	Biological products for industrial and other uses[92] 1977	46.6	50	78	98	100
28310	Biological products, n.s.k. 1977	81.8	(X)	(X)	(X)	(X)
	1972	13.8	(X)	(X)	(X)	(X)
	1967	5.7	(X)	(X)	(X)	(X)
	1963	1.3	(X)	(X)	(X)	(X)
	1958	0.9	(X)	(X)	(X)	(X)
2833-	Medicinals and botanicals 1977	2,205.9	57	72	83	92
	1972	795.7	49	62	82	95
	1967	593.8	52	66	82	94
	1963	434.0	51	64	82	94
	1958	391.1	53	64	82	93
	1954	282.1	51	66	82	(NA)
28331	Synthetic organic medicinal chemicals, in bulk 1977	1,787.8	67	84	95	99+
	1972	635.6	57	73	90	99
	1967	503.7	61	74	89	99
	1963	367.8	59	72	89	98
28332	Other medicinal chemicals and botanical products, in bulk, n.e.c. 1977	313.7	34	53	78	98
	1972	146.1	46	70	90	99+
	1967	80.1	41	60	84	98
	1963	64.7	31	50	85	98
28330	Medicinals and botanicals, n.s.k. 1977	104.4	(X)	(X)	(X)	(X)
	1972	13.9	(X)	(X)	(X)	(X)
	1967	10.0	(X)	(X)	(X)	(X)
	1963	1.5	(X)	(X)	(X)	(X)
	1958	2.9	(X)	(X)	(X)	(X)
2834-	Pharmaceutical preparations 1977	9,639.5	25	41	70	89
	1972	6,295.7	25	43	73	89
	1967	4,139.7	24	40	70	89
	1963	3,000.2	22	37	71	88
	1958	2,344.6	25	43	71	86
	1954	1,584.7	25	43	66	(NA)
28341	Pharmaceutical preparations affecting neoplasms, endocrine systems and metabolic diseases, for human use[93] 1977	905.3	49	70	95	99+
	1972	615.4	48	70	95	99+
	1967	420.2	49	70	93	99
	1963	259.1	53	74	92	98
28342	Pharmaceutical preparations acting on the central nervous sytem and the sense organs, for human use[93] 1977	2,254.4	45	64	87	98
	1972	1,634.4	43	63	88	98
	1967	1,137.1	39	64	84	97
	1963	755.8	44	65	83	96
28343	Pharmaceutical preparations acting on the cardiovascular system, for human use[93] 1977	748.4	64	78	93	99+
	1972	382.7	57	76	92	99
	1967	207.5	46	64	87	98
	1963	143.6	52	67	86	97
28344	Pharmaceutical preparations acting on the respiratory system, for human use[93] 1977	871.4	44	66	87	99
	1972	579.2	48	70	90	98
	1967	361.4	41	62	87	96
	1963	283.1	39	58	80	94
28345	Pharmaceutical preparations acting on the digestive or the genito-urinary systems, for human use[93] 1977	1,080.3	29	48	80	97
	1972	763.8	35	53	80	96
	1967	552.1	29	48	74	95
	1963	402.8	30	50	72	92
28346	Pharmaceutical preparations acting on the skin, for human use[93] 1977	613.1	36	57	78	94
	1972	348.3	35	56	77	93
	1967	229.1	35	51	76	93
	1963	160.3	33	47	70	89
28347	Vitamin, nutrient, and hematinic preparations, for human use[93] 1977	1,315.4	38	55	77	94
	1972	699.2	27	44	69	90
	1967	378.4	31	50	74	91
	1963	340.8	28	49	74	89

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2834-	Pharmaceutical preparations--Con.					
28348	Pharmaceutical preparations affecting parasitic and infective diseases, for human use[93] 1977	1,292.6	44	66	92	99+
	1972	945.8	45	67	93	99
	1967	664.5	41	67	94	99
	1963	520.1	47	72	95	98
28349	Pharmaceutical preparations for veterinary use 1977	353.3	40	56	87	99+
	1972	240.3	39	55	84	99
	1967	135.4	34	54	82	98
	1963	110.4	37	56	79	94
	1958	87.7	45	63	82	96
28340	Pharmaceutical preparations, n.s.k 1977	205.3	(X)	(X)	(X)	(X)
	1972	86.4	(X)	(X)	(X)	(X)
	1967	54.1	(X)	(X)	(X)	(X)
	1963	24.3	(X)	(X)	(X)	(X)
	1958	49.7	(X)	(X)	(X)	(X)
2841-	Soap and other detergents 1977	4,999.6	58	67	77	86
	1972	2,861.6	62	70	79	87
	1967	2,200.8	64	73	82	88
	1963	1,780.7	68	76	83	90
	1958	1,463.8	68	75	85	91
28411	Soap and detergents, nonhousehold[94] 1977	1,005.8	33	47	67	82
	1972	649.0	31	44	63	79
28412	Household detergents[94] 1977	2,817.2	80	88	96	99+
	1972	1,646.0	84	90	97	99+
28413	Soaps, except specialty cleaners, household 1977	707.0	77	88	98	100
	1972	412.0	72	87	96	99
	1967	332.0	77	90	96	99
	1963	296.0	79	91	96	99
28414	Glycerin 1977	101.0	74	90	(D)	100
	1972	50.4	75	92	99+	100
	1967	48.1	71	88	99	100
	1963	38.5	68	88	98	100
	1958	[95]70.4	70	89	98	(D)
	1954	[95]75.8	71	87	97	(NA)
28410	Soap and other detergents, n.s.k 1977	368.6	(X)	(X)	(X)	(X)
	1972	104.2	(X)	(X)	(X)	(X)
	1967	73.2	(X)	(X)	(X)	(X)
	1963	17.6	(X)	(X)	(X)	(X)
	1958	6.8	(X)	(X)	(X)	(X)
2842-	Polishes and sanitation goods[96] 1977	2,668.5	34	48	60	72
	1972	1,714.5	35	47	58	72
28422	Household bleaches[97] 1977	353.8	86	90	97	99+
	1972	211.0	75	82	92	99+
28423	Specialty cleaning and sanitation products 1977	1,478.2	38	54	70	84
	1972	904.5	36	55	69	86
	1967	528.0	32	49	67	84
	1963	331.7	32	46	60	76
	1958	181.5	29	40	58	73
28424	Polishing preparations and related products 1977	505.7	44	56	71	86
	1972	390.0	47	59	76	88
	1967	324.5	47	59	74	87
	1963	278.8	49	57	69	82
	1958	240.3	44	51	63	78
	1954	225.6	37	47	62	(NA)
28420	Polishes and sanitation goods, n.s.k 1977	330.8	(X)	(X)	(X)	(X)
	1972	209.0	(X)	(X)	(X)	(X)
	1967	94.9	(X)	(X)	(X)	(X)
	1963	26.5	(X)	(X)	(X)	(X)
	1958	28.6	(X)	(X)	(X)	(X)
28430	Surface active agents, finishes, and assistants 1977	1,341.0	20	34	59	81
	1972	580.6	19	33	56	80
	1967	403.2	20	35	54	76
	1963	283.6	25	40	59	80
	1958	209.8	26	42	63	83

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2844-	Toilet preparations....1977..	6,393.5	37	51	70	87
	1972..	4,244.5	37	50	73	88
	1967..	2,794.2	36	50	68	86
	1963..	1,858.6	33	50	70	87
	1958..	1,126.0	29	43	67	84
28441	Shaving preparations....1977..	268.2	47	73	97	99+
	1972..	250.4	57	77	96	99+
	1967..	178.7	46	71	93	99
	1963..	111.1	45	73	94	99
	1958..	74.9	58	80	96	99
28442	Perfumes, toilet water, and colognes....1977..	1,096.8	54	69	89	99
	1972..	674.6	48	61	85	97
	1967..	394.9	48	62	83	96
	1963..	208.6	44	58	80	93
	1958..	103.4	34	50	77	92
	1954..	77.0	38	56	79	(NA)
28443	Hair preparations (including shampoos)....1977..	1,474.9	50	67	88	97
	1972..	1,065.0	46	63	86	96
	1967..	771.6	48	66	87	97
	1963..	592.7	42	62	83	95
	1958..	315.8	39	57	79	92
	1954..	220.4	51	65	80	(NA)
28444	Dentifrices, including mouthwashes, gargles, and rinses....1977..	659.6	87	97	99+	100
	1972..	484.6	79	95	99	99+
	1967..	323.1	75	90	98	99+
	1963..	228.4	83	94	99	99+
	1958..	197.8	75	93	98	99
	1954..	130.8	78	89	97	(NA)
28445	Other cosmetics and toilet preparations....1977..	2,597.4	39	56	79	95
	1972..	1,674.0	45	61	82	96
	1967..	1,045.7	41	55	78	94
	1963..	698.2	42	55	77	92
	1958..	418.4	36	53	77	92
28440	Toilet preparations, n.s.k....1977..	296.6	(X)	(X)	(X)	(X)
	1972..	96.0	(X)	(X)	(X)	(X)
	1967..	80.2	(X)	(X)	(X)	(X)
	1963..	19.6	(X)	(X)	(X)	(X)
	1958..	15.6	(X)	(X)	(X)	(X)
2851-	Paints and allied products[5]....1977..	6,123.0	23	35	51	65
	1972..	3,505.8	22	33	49	64
	1967..	2,703.8	23	35	46	59
	1963..	2,298.3	24	34	47	58
	1958..	1,753.9	25	34	47	58
	1954..	1,152.0	27	37	50	(NA)
28511	Architectural coatings (including lacquers)[9a]....1977..	2,234.0	26	39	61	76
28512	Product finishes for original equipment manufacturers (including lacquers)[9a]....1977..	1,957.2	30	47	69	83
28513	Special purpose coatings (including transportation after market and including lacquers)[9a]....1977..	727.8	43	56	72	88
	1972 product class 28511, Exterior oil-type trade sales paint products[9a]....1972..	469.8	25	37	55	74
	1967..	329.7	22	33	50	68
	1963..	394.2	26	38	56	69
	1972 product class 28512, Exterior water-type trade sales paint products, including tinting bases[9a]....1972..	222.1	35	49	69	83
	1967..	129.5	40	55	71	85
	1963..	82.3	26	37	58	77
	1972 product class 28513, Interior oil-type trade sales paint products[9a]....1972..	323.1	29	41	62	79
	1967..	268.2	25	36	56	73
	1963..	290.6	21	33	53	69
	1972 product class 28514, Interior water-type trade sales paint products, including tinting bases[9a]....1972..	432.5	36	51	68	83
	1967..	291.9	39	51	66	81
	1963..	250.7	34	48	64	77
	1972 product class 28515, Trade sales lacquers[9a]....1972..	76.3	70	78	92	99+
	1967..	43.6	72	82	93	99
	1963..	43.8	66	77	88	97

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2851-	Paints and allied products--Con.					
	1972 product class 28516, Industrial product finishes, except lacquers[98] 1972	932.2	26	43	64	81
	1967	718.5	28	45	61	77
	1963	624.9	27	43	58	72
	1972 product class 28517, Industrial lacquers, including acrylics[98] 1972	236.8	42	59	75	89
	1967	181.3	45	61	76	87
	1963	184.2	40	54	68	82
28518	Putty and allied products[99] 1977	140.4	43	58	77	93
	1972	136.4	50	59	77	93
28519	Miscellaneous paint products 1977	532.5	33	47	68	86
	1972	351.5	35	48	68	86
	1967	235.6	38	48	66	82
	1963	190.2	32	42	59	76
28510	Paints and allied products, n.s.k. 1977	531.1	(X)	(X)	(X)	(X)
	1972	325.1	(X)	(X)	(X)	(X)
	1967	338.9	(X)	(X)	(X)	(X)
	1963	109.1	(X)	(X)	(X)	(X)
2861-	Gum and wood chemicals 1977	436.1	46	59	76	92
	1972	300.0	49	64	78	92
	1967	205.1	51	63	76	89
	1963	197.0	44	54	69	86
	1958	151.2	(NA)	(NA)	(NA)	(NA)
28611	Softwood distillation products 1977	123.0	91	97	(D)	100
	1972	94.0	90	97	100	(X)
	1967	81.4	85	93	100	(X)
	1963	82.4	(D)	91	99	100
	1958	79.7	80	92	98	99
	1954	61.8	83	94	99	(NA)
28612	Other gum and wood chemicals 1977	289.0	41	53	76	96
	1972	196.3	36	54	76	95
	1967	111.6	36	50	69	70
	1963	111.4	25	38	60	85
	1958	71.5	27	41	67	88
28610	Gum and wood chemicals, n.s.k. 1977	24.1	(X)	(X)	(X)	(X)
	1972	9.7	(X)	(X)	(X)	(X)
	1967	12.2	(X)	(X)	(X)	(X)
	1963	3.2	(X)	(X)	(X)	(X)
2865-	Cyclic crudes and intermediates 1977	5,514.3	36	51	72	91
	1972	2,349.1	35	51	74	93
	1967	1,654.2	40	54	74	93
	1963	1,195.2	44	61	(NA)	(NA)
28651	Cyclic intermediates 1977	4,130.4	44	59	81	98
	1972	1,554.2	43	62	84	97
	1967	1,066.1	47	63	83	97
	1963	758.6	53	68	87	98
	1958	531.5	52	72	90	99
	1954	466.6	55	81	94	(NA)
28652	Synthetic organic dyes 1977	722.1	43	63	93	100
	1972	474.1	45	66	92	100
	1967	325.6	45	68	94	100
	1963	243.1	48	69	92	99+
	1958	175.5	56	75	92	(D)
	1954	156.3	64	80	94	(D)
28653	Synthetic organic pigments, lakes, and toners 1977	414.5	48	71	94	100
	1972	224.7	51	73	95	100
	1967	162.2	49	74	97	100
	1963	111.7	51	73	94	100
	1958	80.2	50	74	96	100
	1954	68.4	53	76	95	(NA)
28655	Cyclic (coal tar) crudes[100] 1977	204.9	97	99	100	(X)
	1972	81.0	92	99	100	(X)
	1967	87.6	95	99	100	(X)
	1963	79.3	95	99	100	(X)
	1958	105.3	89	96	(D)	100
	1954	87.4	89	95	99	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2865-	Cyclic crudes and intermediates--Con.					
28650	Cyclic crudes and intermediates, n.s.k. 1977	42.4	(X)	(X)	(X)	(X)
	1972	15.1	(X)	(X)	(X)	(X)
	1967	12.7	(X)	(X)	(X)	(X)
	1963	2.5	(X)	(X)	(X)	(X)
	1958	1.2	(X)	(X)	(X)	(X)
2869-	Industrial organic chemicals, n.e.c.[5] 1977	19,377.6	32	49	68	86
	1972	7,468.8	37	52	70	87
	1967	5,539.4	39	54	71	87
	1963	4,200.6	42	55	74	89
	1958	2,787.3	47	61	80	91
28693	Synthetic organic chemicals, n.e.c., except bulk surface active agents 1977	1,600.5	31	46	75	96
	1972	712.6	38	54	78	96
	1967	585.6	38	54	81	97
	1963	418.9	34	51	78	96
	1958	291.4	34	53	77	96
28694	Pesticides and other organic agricultural chemicals (not formulations) 1977	1,474.0	65	80	93	99+
	1972	495.1	57	79	97	100
	1967	308.2	57	75	93	99+
	1963	223.4	54	77	95	99+
	1958	96.2	52	74	96	(D)
	1954	96.9	43	70	94	(NA)
28695	Ethyl alcohol and other industrial organic chemicals, n.e.c.[101] 1977	645.9	27	45	71	92
	1972	273.4	28	43	69	92
	1967	239.4	30	46	73	93
	1963	192.3	32	48	69	90
	1958	121.4	42	62	80	94
28696	Miscellaneous end-use chemicals and chemical products, excluding urea[102] 1977	2,070.5	41	62	90	99
28697	Miscellaneous cyclic and acyclic chemicals and chemical products[102] 1977	13,424.7	39	55	75	93
	1972 product class 28691, Miscellaneous cyclic chemical products[102] 1972	468.1	33	48	75	96
	1967	315.1	31	45	70	94
	1963	200.5	29	34	71	94
	1958	143.3	39	60	85	99
	1954	86.0	44	66	88	(NA)
	1972 product class 28692, Miscellaneous acyclic chemicals and chemical products, excluding urea[102] 1972	5,446.6	43	58	79	94
	1967	4,052.2	47	62	82	95
	1963	3,153.9	51	65	84	96
	1958	2,126.6	59	72	90	98
	1954	1,569.2	64	77	92	(NA)
28690	Industrial organic chemicals, n.e.c., n.s.k. (1967 product class 28180) 1977	162.1	(X)	(X)	(X)	(X)
	1972	73.0	(X)	(X)	(X)	(X)
	1967	38.7	(X)	(X)	(X)	(X)
	1963	11.6	(X)	(X)	(X)	(X)
	1958	8.4	(X)	(X)	(X)	(X)
2873-	Nitrogenous fertilizers[103] 1977	2,811.5	28	45	72	96
	1972	928.2	26	43	71	96
28731	Synthetic ammonia, nitric acid, and ammonium compounds 1977	2,300.8	27	45	74	98
	1972	759.5	26	43	71	97
	1967	827.3	29	46	68	94
	1963	587.8	38	55	80	99
28732	Urea 1977	447.6	48	70	97	100
	1972	158.2	45	64	97	100
28733	Fertilizer materials of organic origin 1977	29.5	41	70	98	100
	1972	(S)	(S)	(S)	(S)	(S)
28730	Nitrogenous fertilizers, n.s.k. 1977	33.6	(X)	(X)	(X)	(X)
	1972	(D)	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2874-	Phosphatic fertilizers[104] 1977	2,552.6	33	54	89	99+
	1972	1,051.4	26	45	80	99
28741	Phosphoric acid[105] 1977	510.2	49	72	99+	100
	1972	177.5	53	80	99+	100
28742	Superphosphate and other phosphatic fertilizer materials 1977	1,609.1	45	67	97	100
	1972	419.7	38	61	93	99+
	1967	542.0	39	60	91	99+
	1963	321.5	44	64	90	99
	1958	153.6	47	68	92	99
	1954	131.3	50	70	88	(NA)
28744	Mixed fertilizers, produced from one or more materials made in same plant (1972 product class 28743)[106] 1977	429.3	53	80	98	429
	1972	443.0	42	62	91	100
	1967	435.9	35	61	85	99
28740	Phosphatic fertilizers, n.s.k. 1977	3.9	(X)	(X)	(X)	(X)
	1972	11.3	(X)	(X)	(X)	(X)
28754	Mixed fertilizers, made from purchased materials (1972 product class 28752) 1977	1,480.9	21	36	58	75
	1972	652.6	24	37	57	73
	1967	588.2	21	37	54	71
2879-	Agricultural chemicals, n.e.c.[107] [108] 1977	2,704.0	37	57	76	87
	1972	1,195.9	34	51	73	85
	1967	834.3	39	56	77	88
	1963	488.7	27	47	67	85
	1958	347.6	30	48	([10])	([10])
28795	Insecticidal preparations, agricultural, garden, and health service use (1972 product class 28791)[108] 1977	828.2	45	67	87	98
	1972	361.0	48	67	87	98
28796	Herbicidal preparations, agricultural, garden, and health service use (1972 product class 28792)[108] 1977	1,177.1	65	84	96	99+
	1972	432.0	77	89	98	99+
28797	Fungicidal preparations, agricultural, garden and health service use[108] 1977	196.9	70	85	97	99+
28798	Fungicidal preparations, agricultural, garden, health service use, n.e.c.[108] 1977	119.9	47	66	91	99+
	1972 product class 28793, Agricultural chemicals, n.e.c.[108] 1972	85.6	49	67	89	99
28799	Household pesticidal preparations (1972 product class 28794)[108] 1977	227.8	56	71	89	99
	1972	183.8	52	70	85	97
	1967	129.9	45	60	80	94
	1963	110.8	36	55	72	87
	1958	85.9	28	41	61	81
	1954	60.6	31	42	62	(NA)
28790	Agricultural chemicals, n.e.c., n.s.k. 1977	154.1	(X)	(X)	(X)	(X)
	1972	133.5	(X)	(X)	(X)	(X)
2891-	Adhesives and sealants[109] 1977	1,873.1	22	33	48	67
	1972	956.9	16	27	45	68
28913	Natural base glues and adhesives[110] 1977	166.4	43	60	83	98
	1972	118.6	38	55	81	99
28914	Synthetic resin and rubber adhesives, including all types of bonding and laminating adhesives[111] 1977	1,221.8	27	38	57	77
	1972	675.1	20	32	50	76
28915	Caulking compounds and sealants[112] 1977	364.4	36	53	74	93
	1972	122.9	51	69	88	99
28910	Adhesives and sealants, n.s.k. 1977	120.5	(X)	(X)	(X)	(X)
	1972	40.3	(X)	(X)	(X)	(X)
28921	Explosives 1977	426.1	64	82	96	100
	1972	240.0	69	84	98	100
	1967	248.5	69	86	98	100
	1963	181.0	70	87	99	100
	1958	169.7	73	90	98	100
	1954	183.7	79	89	99	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 28, CHEMICALS AND ALLIED PRODUCTS--Con.				
2893-	Printing ink	1977.. 904.0	42	56	72	87
		1972.. 498.0	37	52	72	87
		1967.. 342.6	46	60	75	88
		1963.. 258.2	45	58	74	87
		1958.. 211.5	53	64	76	89
		1954.. 172.4	51	61	74	(NA)
28931	Letterpress inks (black and color)	1977.. 105.9	57	74	91	99+
		1972.. 109.7	42	71	88	98
28932	Lithographic and offset inks (black and color)	1977.. 303.2	45	60	81	97
		1972.. 151.7	39	55	80	96
28933	Gravure inks	1977.. 190.7	71	88	99+	100
		1972i. 82.1	60	86	99	100
28934	Flexographic inks	1977.. 157.1	50	71	92	100
		1972.. 73.4	63	79	96	100
28935	Printing inks, n.e.c	1977.. 60.6	51	74	94	100
		1972.. 35.3	47	68	93	100
28930	Printing inks, n.s.k	1977.. 86.5	(X)	(X)	(X)	(X)
		1972.. 45.9	(X)	(X)	(X)	(X)
28950	Carbon black (channel and furnace process only)	1977.. 466.2	70	100	(X)	(X)
		1972.. 227.1	74	99	100	(X)
		1967.. 167.8	72	(D)	100	(X)
		1963.. 149.4	72	(D)	100	(X)
		1958.. 118.9	75	100	(X)	(X)
2899-	Chemical preparations, n.e.c.[113]	1977.. 4,243.8	14	23	37	55
		1972.. 2,199.5	12	21	35	53
		1967.. 1,431.7	15	22	36	55
		1963.. 998.6	14	22	35	54
		1958.. 738.1	19	26	([12])	([12])
28991	Salt	1977.. 246.2	74	95	100	(X)
		1972.. 129.8	70	89	100	(X)
		1967.. 111.6	75	90	(D)	100
		1963.. 98.4	77	89	99	100
		1958.. 86.5	81	91	99	100
		1954.. 71.6	83	93	99	(NA)
28992	Fatty acids	1977.. 353.2	56	79	99+	100
		1972.. 155.3	50	73	98	100
		1967.. 111.2	45	68	97	100
		1963.. 88.1	49	70	98	100
		1958.. 67.6	46	68	99	100
		1954.. 52.3	(D)	69	98	(NA)
28994	Gelatin, except ready-to-eat desserts	1977.. 175.3	58	83	100	(X)
		1972.. 68.2	76	95	100	(X)
		1967.. 66.2	71	91	100	(X)
		1963.. 55.4	62	84	99+	100
		1958.. 52.0	66	86	99	100
		1954.. 43.9	69	87	(D)	(NA)
28995	Essential oils, fireworks, sizes, and other chemical preparations, n.e.c.[113]	1977.. 3,109.0	19	28	44	62
		1972.. 1,612.4	16	26	42	62
		1967.. 1,084.3	18	25	42	62
		1963.. 770.9	16	24	38	56
		1958.. 557.2	20	28	([12])	([12])
28990	Chemical preparations, n.e.c., n.s.k	1977.. 360.1	(X)	(X)	(X)	(X)
		1972.. 233.8	(X)	(X)	(X)	(X)
		1967.. 124.5	(X)	(X)	(X)	(X)
		1963.. 41.2	(X)	(X)	(X)	(X)
		1958.. 26.8	(X)	(X)	(X)	(X)
		MAJOR GROUP 29, PETROLEUM AND COAL PRODUCTS				
2911-	Petroleum refinery products	1977.. 88,589.5	30	53	81	94
		1972.. 24,772.8	31	56	84	96
		1967.. 19,248.5	32	57	84	96
		1963.. 15,557.7	32	55	81	95
		1958.. 13,889.4	31	54	81	93
29111	Gasoline[16]	1977.. 41,840.4	30	53	84	98
		1972.. 13,029.6	31	55	86	98
		1967.. 9,844.2	33	58	87	98

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 29, PETROLEUM AND COAL PRODUCTS--Con.				
2911-	Petroleum refinery products--Con.					
29112	Jet fuel[16] 1977	5,358.9	54	69	89	99
	1972	1,371.6	52	74	92	99
	1967	1,100.4	45	63	86	98
29113	Kerosene[16] 1977	892.9	37	59	94	99+
	1972	372.4	43	64	93	99+
	1967	430.5	34	54	89	99+
29114	Light fuel oil 1977	17,509.4	35	56	83	97
	1972	4,407.7	33	58	87	98
	1967	3,305.7	34	58	85	98
	1963	2,896.3	36	59	83	96
	1958	2,490.9	35	59	83	96
	1954	2,064.3	36	59	85	(NA)
29115	Heavy fuel oil 1977	6,793.9	41	58	79	94
	1972	1,107.2	41	60	83	96
	1967	566.1	38	61	83	96
	1963	621.8	35	55	82	96
	1958	817.2	32	56	83	94
	1954	787.8	34	57	84	(NA)
29116	Liquefied refinery gases, including other aliphatics (feed stock and other uses)[16] 1977	4,500.8	49	64	88	99+
	1972	1,152.9	38	57	89	99+
	1967	1,135.7	39	59	86	99+
29117	Lubricating oils and greases, made in refineries. (See also code 29920.)[16] 1977	[4]1,718.9	45	69	98	100
	1972	[4]894.8	39	64	98	100
	1967	[4]883.6	43	65	96	99+
29118	Unfinished oils and lubricating oil base stock 1977	2,887.8	52	69	93	99+
	1972	733.7	55	79	98	100
	1967	613.2	56	76	96	99+
	1963	526.2	51	78	94	99+
	1958	440.9	46	74	94	99
	1954	294.9	39	69	93	(NA)
29119	Asphalt 1977	2,216.7	54	67	85	98
	1972	671.5	43	62	84	98
	1967	424.2	41	58	82	98
	1963	360.5	43	58	81	98
	1958	284.6	39	56	77	96
	1954	221.7	45	63	83	(NA)
29110	Other finished petroleum products, including waxes 1977	4,869.8	32	53	83	98
	1972	1,031.4	28	48	79	96
	1967	944.9	36	52	77	96
29510	Paving mixtures and blocks 1977	1,518.6	17	23	34	50
	1972	893.4	14	21	34	50
	1967	529.6	14	21	34	50
	1963	402.9	14	20	32	46
	1958	265.9	10	16	29	47
	1954	120.7	14	23	37	(NA)
2952-	Asphalt felts and coatings 1977	1,828.6	45	70	86	96
	1972	901.2	48	73	86	96
	1967	519.4	37	63	82	95
	1963	459.5	35	62	81	93
	1958	408.1	35	60	82	95
	1954	388.2	39	65	85	(NA)
29521	Asphalt and tar saturated felts and boards for nonbuilding use 1977	99.5	66	90	100	(X)
	1972	33.2	68	86	100	(X)
	1967	27.5	60	83	(D)	100
	1963	21.1	48	75	95	100
	1958	21.5	49	66	93	100
29522	Roofing asphalts and pitches, coatings, and cements 1977	263.4	52	66	88	99+
	1972	155.3	51	67	85	98
	1967	101.4	45	60	82	98
	1963	94.4	45	58	81	97
	1958	67.9	42	55	78	96
	1954	41.9	34	51	75	(NA)
29523	Asphalt and tar roofing and siding products 1977	1,405.3	55	81	97	100
	1972	690.6	57	83	97	100
	1967	375.2	49	78	95	100
	1963	338.6	45	74	92	99+
	1958	313.6	43	71	91	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 29, PETROLEUM AND COAL PRODUCTS--Con.				
2952-	Asphalt felts and coatings--Con.					
29520	Asphalt felts and coatings, n.s.k. 1977	60.5	(X)	(X)	(X)	(X)
	1972	22.1	(X)	(X)	(X)	(X)
	1967	15.3	(X)	(X)	(X)	(X)
	1963	5.4	(X)	(X)	(X)	(X)
	1958	5.1	(X)	(X)	(X)	(X)
29920	Lubricating oils and greases, not made in refineries. (See also product class 29117.) 1977	1,514.4	26	38	54	73
	1972	642.0	30	42	57	73
	1967	443.4	37	49	67	83
	1963	425.6	36	46	63	78
	1958	244.5	27	39	59	77
29990	Petroleum and coal products, n.e.c. 1977	494.6	60	77	91	99+
	1972	140.8	67	83	93	100
	1967	79.6	76	85	96	100
	1963	69.3	65	78	93	99+
	1958	67.0	(X)	(X)	(X)	(X)
		MAJOR GROUP 30, RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS				
3011-	Tires and inner tubes 1977	8,127.6	71	89	97	99+
	1972	4,891.4	73	89	97	99+
	1967	3,133.5	71	88	97	99
	1963	2,419.8	72	88	97	99
	1958	2,145.3	71	86	97	99
30111	Passenger car pneumatic tires (casings) 1977	4,571.1	76	94	100	(X)
	1972	2,860.0	77	93	100	(X)
	1967	1,713.6	75	93	100	(X)
	1963	1,285.9	75	93	100	(X)
	1958	1,076.8	74	90	100	(X)
30112	Trucks and bus pneumatic tires 1977	2,276.6	81	96	100	(X)
	1972	1,282.1	80	95	100	(X)
	1967	829.4	75	93	100	(X)
	1963	659.5	75	93	100	(X)
	1958	602.0	72	90	100	(X)
30113	Other pneumatic tires and all solid tires 1977	660.5	74	85	98	100
	1972	381.1	70	87	98	100
	1967	274.5	72	87	98	100
	1963	186.8	75	88	98	100
	1958	185.5	78	92	99	100
30114	Inner tubes, all 1977	230.5	57	(D)	100	(X)
	1972	146.9	63	87	100	(X)
	1967	112.9	64	90	100	(X)
	1963	95.1	66	89	100	(X)
	1958	100.2	64	83	100	(X)
30115	Tread rubber, tire sundries, and repair materials 1977	368.7	46	63	91	100
	1972	217.1	47	62	86	99+
	1967	198.3	43	62	86	99+
	1963	192.5	47	63	83	97
	1958	180.9	47	62	82	98
	1954	108.0	46	62	81	(NA)
30110	Tires and inner tubes, n.s.k.[16] 1977	20.2	(X)	(X)	(X)	(X)
	1972	4.2	(X)	(X)	(X)	(X)
	1967	4.9	(X)	(X)	(X)	(X)
30210	Rubber and plastics footwear (1972 product classes 30211, 30212, and 30210)[114] 1977	404.8	53	70	95	99+
	1972	496.5	56	68	85	99
	1972 product class 30211, Rubber and plastics protective footwear (1977 product class 30210, part)[114] 1972	80.1	50	76	98	100
	1972 product class 30212, Rubber and plastics shoes, slippers, other footwear, n.e.c. (1977 product class 30210, part)[114] 1972	406.2	64	74	91	100
	1972 product class 30210, Rubber and plastics footwear, n.s.k. (1977 product class 30210, part) 1972	10.2	(X)	(X)	(X)	(X)
30310	Reclaimed rubber 1977	61.5	74	92	99+	100
	1972	47.7	74	92	99	100
	1967	47.3	73	97	99	100
	1963	55.2	73	97	99+	100
	1958	47.6	66	90	(D)	100
	1954	44.5	66	90	99	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 30, RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS--Con.				
3041-	Rubber and plastics hose and belting[115] 1977	1,541.2	51	68	83	95
	1972	899.5	48	68	86	97
30411	Rubber and plastics belts and belting, flat[115] 1977	260.9	63	77	97	100
	1972	159.6	54	73	93	100
30412	Other rubber and plastics belts and belting[115] 1977	348.2	93	99	100	(X)
	1972	204.0	86	96	100	(X)
30413	Rubber hose, mandrel made and all hydraulic[115] 1977	253.4	53	84	99+	100
	1972	143.5	62	87	99	100
30414	Rubber hose, long length nonhydraulic[115] 1977	164.9	53	83	100	(X)
	1972	84.8	77	(D)	100	(X)
30415	Rubber and plastics garden hose[115] 1977	113.3	67	94	100	(X)
	1972	56.3	67	94	100	(X)
30416	All other rubber and plastics hose, n.e.c.[115] 1977	387.4	44	61	83	99
	1972	237.1	45	66	88	99+
30410	Rubber and plastics hose and belting, n.s.k. 1977	13.1	(X)	(X)	(X)	(X)
	1972	14.2	(X)	(X)	(X)	(X)
3069-	Fabricated rubber products, n.e.c.[116] 1977	4,223.2	15	23	36	52
	1972	2,538.1	15	23	37	54
30693	Sponge and foam rubber goods 1977	584.3	47	65	83	97
	1972	350.9	53	72	88	98
	1967	276.7	53	75	92	99
	1963	226.4	53	71	88	96
	1958	200.8	47	69	89	97
30694	Rubber floor and wall covering 1977	170.6	45	63	93	100
	1972	98.3	47	68	96	100
	1967	70.7	40	62	94	100
	1963	93.2	35	56	85	100
	1958	99.4	34	55	82	99
30696	Rubber shoe products, elastomer resin 1977	225.1	40	60	88	100
	1972	154.7	57	75	97	100
	1967	126.1	55	73	98	100
	1963	136.2	45	64	93	100
	1958	134.9	43	65	88	99
	1954	113.1	45	65	89	(NA)
30697	Rubber druggist and medical sundries 1977	232.0	50	74	97	100
	1972	116.9	44	70	96	100
	1967	84.1	46	70	96	100
	1963	79.2	43	66	93	100
	1958	57.0	43	71	95	99
	1954	46.8	41	66	90	(NA)
30699	Rubber compounds or mixtures (1972 product class 30698, part) 1977	246.1	61	78	94	(D)
3069A	Molded rubber mechanical parts (1972 product class 30695, part) 1977	1,305.9	24	36	51	72
3069B	Extruded lathe cut rubber mechanical goods (1972 product class 30695, part) 1977	259.8	25	43	71	94
3069C	Industrial rubber products, n.e.c. (1972 product classes 30695, part and 30698, part) 1977	262.0	32	46	70	90
3069D	Rubber coated fabrics and rubber clothing (1972 product class 30698, part) 1977	178.6	33	53	78	99
3069E	Other rubber goods (1972 product classes 30695, part and 30698, part) 1977	455.9	32	46	69	91
	1972 product class 30695, Mechanical rubber goods, n.e.c. (1977 product classes 3069A, 3069B, 3069C, and 3069E)[117] 1972	1,146.4	19	29	47	69
	1972 product class 30698, Other rubber goods, n.e.c. (1977 product classes 30699, 3069D, and 3069E)[118] 1972	530.9	22	35	57	80
	1967	538.1	25	36	54	73
	1963	451.0	25	37	53	71
	1958	392.3	23	35	47	65
30690	Fabricated rubber products, n.e.c., n.s.k. 1977	302.9	(X)	(X)	(X)	(X)
	1972	140.4	(X)	(X)	(X)	(X)
	1967	102.1	(X)	(X)	(X)	(X)
	1963	42.4	(X)	(X)	(X)	(X)
	1958	21.6	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 30, RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS--Con.				
3079-	Miscellaneous plastics products[119] 1977	23,878.7	7	11	19	31
	1972	11,077.7	8	13	23	35
30791	Unsupported plastics film, sheets, rods, and tubes 1977	3,978.0	21	30	45	64
	1972	2,068.4	18	27	44	62
	1967	1,225.4	25	38	(NA)	(NA)
	1963	688.5	28	41	(NA)	(NA)
30793	Laminated plastics sheets, rods, and tubes 1977	1,112.0	33	51	75	91
	1972	568.1	37	52	73	91
	1967	352.8	39	52	73	92
	1963	244.1	42	57	78	94
	1958	162.9	43	58	(12)	(12)
	1954	102.4	(12)	(12)	(12)	(12)
30796	Plastics building and construction products 1977	120 2,695.9	15	25	40	60
	1972	1,111.8	23	31	46	65
	1967	426.7	26	35	55	77
	1963	283.8	29	38	54	74
30798	Regenerated cellulosic products, except rayon (1967 product class 28212) 1977	389.2	82	89	95	99+
	1972	426.9	78	89	96	99+
	1967	326.9	88	99	100	(X)
	1963	327.6	94	(D)	100	(X)
	1958	302.0	95	(D)	100	(X)
	1954	217.0	(D)	100	(X)	(X)
30799	Custom compounded purchased resins plastics (1967 product class 28217) 1977	699.6	24	37	55	77
	1972	227.2	32	50	69	87
	1967	236.0	26	36	59	82
	1963	184.6	32	43	60	81
3079A	Other plastics and resin materials, n.e.c. (1972 product class 30790, part) 1977	424.5	24	33	52	71
3079B	Plastics furniture components and furnishings 1972 product class 30792, part) 1977	1,032.7	31	47	66	81
3079C	Plastics packaging products (1972 product classes 30792, part and 30794, part) 1977	2,729.5	21	31	45	62
	1972 product class 30792, Foamed plastics products (1977 product classes 3079B and 3079C) 1972	877.4	25	38	63	83
	1967	492.8	27	41	62	81
	1963	261.2	27	43	65	83
	1958	54.0	42	57	83	99
	1972 product class 30794, Packaging and shipping containers (1977 product class 3079C) 1972	1,262.4	20	33	52	69
	1967	774.5	26	37	54	72
	1963	441.8	34	44	59	75
3079D	Plastics transportation products (1972 product class 30795, part) 1977	2,384.5	22	32	47	65
3079E	Plastics electrical and electronic products (1977 product class 30795, part) 1977	1,305.3	9	15	28	47
3079F	Plastics industrial machinery products (1977 product class 30795, part) 1977	620.1	11	18	31	51
	1972 product class 30795, Industrial plastics products, except belting, packing and seals (1977 product classes 3079D, 3079E and 3079F)[121] 1972	1,819.6	9	14	25	41
	1967	1,263.7	8	12	22	36
	1963	832.8	7	12	21	35
3079G	Plastics dinnerware, tableware, and kitchenware (1972 product class 30797, part) 1977	608.8	49	61	78	95
3079H	Other plastics products, n.e.c. (1972 product classes 30797, part and 30790, part) 1977	2,941.1	12	18	28	43
	1972 product class 30797, Plastics dinnerware, tableware, and kitchenware (1977 product classes 3079G and 3079H) 1972	377.3	42	50	67	86
	1967	205.2	37	51	71	89
	1963	147.6	33	46	68	88
30790	Miscellaneous plastics products, n.s.k.[119] 1977	122 2,957.5	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 31, LEATHER AND LEATHER PRODUCTS				
3111-	Leather tanning and finishing....1977..	1,380.1	17	28	52	76
	1972..	1,025.3	17	29	48	71
	1967..	846.2	20	31	49	70
	[32]1963..	734.9	19	30	47	69
	[33]1963..	[30]635.8	20	32	([30])	([30])
	1958..	[30]634.2	20	32	([30])	([30])
	1954..	618.2	20	30	48	(NA)
31111	Finished cattle hide and kip hide leathers....1977..	1,005.4	22	36	62	87
	1972..	684.0	19	33	59	85
	1967..	495.7	21	35	62	88
	1963..	397.4	23	39	65	89
	1958..	411.3	21	37	62	85
	1954..	383.1	24	37	63	(NA)
31112	Finished calf and whole kip leathers....1977..	25.6	96	(D)	100	(X)
	1972..	35.1	92	100	100	(X)
	1967..	35.6	78	96	100	(X)
	1963..	51.9	60	94	100	(X)
	1958..	62.6	64	89	99	100
	1954..	63.6	58	85	99	(NA)
31113	Finished sheep and lamb leathers....1977..	88.1	55	75	98	100
	1972..	54.7	51	73	98	100
	1967..	60.9	54	70	94	100
	1963..	69.7	48	62	87	99
	1958..	56.7	44	58	81	99
	1954..	62.2	38	50	72	(NA)
31114	Other finished leathers, n.e.c....1977..	35.9	49	68	93	100
	1972..	47.9	52	73	98	100
	1967..	75.3	57	73	94	100
	1963..	69.4	46	66	92	100
	1958..	69.2	40	60	88	99
	1954..	85.4	37	54	79	(NA)
31115	Rough, russet, and crust leather (not finished in this establishment)....1977..	47.7	49	75	100	(X)
	1972..	51.8	41	73	99	100
	1967..	30.5	46	72	94	100
	1963..	23.5	46	72	94	100
	1958..	26.7	54	72	93	99
	1954..	23.9	39	54	83	(NA)
31119	Contract and commission receipts for tanning and finishing leather owned by others....1977..	109.4	37	55	77	95
	1972..	87.0	28	40	61	86
	1967..	113.1	28	42	62	85
	1963..	99.1	24	35	54	77
31110	Leather tanning and finishing, n.s.k....1977..	68.0	(X)	(X)	(X)	(X)
	1972..	64.8	(X)	(X)	(X)	(X)
	1967..	35.1	(X)	(X)	(X)	(X)
	1963..	23.9	(X)	(X)	(X)	(X)
	1958..	7.6	(X)	(X)	(X)	(X)
31310	Boot and shoe cut stock and findings....1977..	255.1	21	32	52	80
	1972..	200.9	19	28	49	73
	1967..	254.3	19	26	43	62
	1963..	216.0	18	24	36	56
	1958..	239.0	18	28	39	56
	1954..	242.9	22	32	44	(NA)
31420	House slippers[31]....1977..	190.2	44	62	84	98
	1972..	159.4	37	53	75	93
	1967..	162.3	22	33	58	85
	1963..	127.6	18	29	49	76
	1958..	115.7	16	26	49	73
	1954..	92.2	17	29	48	(NA)
3143-	Men's footwear, except athletic (1967 industry 3141, part)[123]....1977..	1,592.1	32	45	72	94
	1972..	1,181.4	36	50	74	93
31433	Men's work shoes (1967 product class 31412)[31]....1977..	421.7	37	62	90	100
	1972..	309.4	38	62	89	100
	1967..	315.0	33	53	84	99
	1963..	174.9	39	64	89	99
	1958..	146.9	42	64	87	99
	1954..	110.0	49	68	86	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 31, LEATHER AND LEATHER PRODUCTS--Con.				
3143-	Men's footwear, except athletic (1967 industry 3141, part)--Con.					
31434	Men's dress and casual boots, except work (1967 product class 31411, part)[124] 1977	271.0	43	62	87	100
	1972	154.1	49	67	94	100
31435	Men's dress and casual shoes, except athletic (1972 product classes 31431 and 31432)[125] 1977	872.5	43	60	86	99
	1972 product class 31431, Men's dress shoes (1977 product class 31435, part)[125] 1972	616.9	50	68	88	100
	1972 product class 31432, Men's casual shoes (1977 product class 31435, part)[125] 1972	97.2	47	62	83	99
31430	Men's footwear, except athletic, n.s.k. 1977	26.9	(X)	(X)	(X)	(X)
	1972	3.8	(X)	(X)	(X)	(X)
3144-	Women's footwear, except athletic (1967 industry 3141, part)[123] 1977	1,386.8	30	39	55	77
	1972	1,305.6	34	42	56	75
31445	Women's boots, ankle height and higher 1977	232.2	34	53	82	99
	1972	102.6	45	60	85	100
31446	Women's sandals (1972 product class 31441, part)[126] 1977	102.8	40	58	86	100
31447	Women's casual shoes, except sandals (1972 product classes 31441, part, 31442, part, and 31443, part)[126] 1977	524.6	35	47	72	94
	1972 product class 31441, Women's shoes, flats (1977 product classes 31446 and 31447, part)[126] 1972	195.1	27	40	66	94
31448	Women's dress shoes (1972 product classes 31442, part, 31443, part, and 31444)[126] 1977	480.6	42	56	76	98
	1972 product class 31442, Women's shoes, low heel (1977 product classes 31447, part and 31448, part)[126] 1972	562.9	41	51	69	90
	1972 product class 31443, Women's shoes medium heel (1977 product classes 31447, part and 31448, part)[126] 1972	350.8	46	56	75	95
	1972 product class 31444, Women's shoes, high heel (1977 product class 31448)[126] 1972	45.7	46	66	93	100
31440	Women's footwear, except athletic, n.s.k. 1977	46.7	(X)	(X)	(X)	(X)
	1972	48.5	(X)	(X)	(X)	(X)
	1967 product class 31414, Women's dress, work, and play shoes[127] 1967	1,249.1	27	33	47	66
	1963	1,065.5	24	30	43	62
	1958	996.4	24	32	43	59
3149-	Footwear, except rubber, n.e.c. (1967 industry 3141, part)[123] 1977	568.0	22	36	61	86
	1972	478.7	26	39	61	82
31491	Youths' and boys' shoes[31] (1967 product class 31413) 1977	98.3	38	62	89	100
	1972	103.7	33	53	79	99
	1967	100.1	37	53	77	99
	1963	82.2	39	54	77	96
	1958	81.8	44	58	77	94
31493	Infants' and babies' shoes[31] (1967 product class 31416) 1977	80.9	37	55	83	(D)
	1972	78.9	45	61	81	98
	1967	69.6	38	52	74	95
	1963	73.1	36	50	71	91
	1958	76.2	32	45	62	84
	1954	71.0	38	50	65	(NA)
31495	Misses' shoes, except athletic (1972 product class 31492, part)[128] 1977	90.9	30	51	84	100
31496	Children's shoes, except athletic (1972 product class 31492, part)[128] 1977	114.0	36	54	81	99
	1972 product class 31492, Misses' and children's shoes (1977 product classes 31495, part and 31496, part)[128] 1972	206.5	34	51	75	96
	1967	186.7	32	46	68	91
	1963	189.9	30	43	61	84
	1958	192.3	28	38	55	77
31497	All other footwear, except rubber and slippers (1972 product class 31494)[129] 1977	151.3	45	62	87	99
	1972	86.3	40	58	86	100
	1967	40.4	35	50	77	100
	1963	54.4	30	47	72	94
	1958	47.2	30	42	67	89

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 31, LEATHER AND LEATHER PRODUCTS--Con.				
3149-	Footwear, except rubber, n.e.c. (1967 industry 3141, part)--Con.					
31490	Footwear, except rubber, n.e.c., n.s.k.....1977..	32.6	(X)	(X)	(X)	(X)
	1972..	3.3	(X)	(X)	(X)	(X)
31510	Dress and work gloves and mittens, all leather[31].....1977..	121.9	33	44	66	92
	1972..	80.0	34	47	69	92
	1967..	73.3	25	38	58	84
	1963..	61.9	20	30	52	80
	1958..	49.3	21	30	50	77
31610	Suitcases, briefcases, bags, and musical instrument cases.....1977..	585.3	41	51	66	82
	1972..	321.9	38	47	62	79
	1967..	320.1	34	44	59	76
	1963..	204.8	30	38	53	70
	1958..	180.5	26	34	47	64
31710	Women's and children's handbags and purses.....1977..	436.2	15	25	43	67
	1972..	344.4	14	22	37	59
	1967..	312.1	10	17	31	51
	1963..	266.1	10	16	30	50
	1958..	214.1	9	15	27	48
	1954..	180.3	7	13	25	(NA)
31720	Personal leather goods, except handbags and purses.....1977..	369.2	40	50	65	82
	1972..	235.9	36	45	63	81
	1967..	178.9	33	44	58	75
	1963..	154.3	30	42	56	73
	1958..	134.7	22	34	51	69
31990	Saddlery, harness and whips, and other leather products, n.e.c...1977..	237.4	13	24	43	63
	1972..	146.0	15	23	39	59
	1967..	89.9	16	26	41	63
	1963..	67.1	18	26	40	60
	1958..	61.2	14	21	35	55
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS				
3211-32313	Flat glass[130].....1977..	1,817.6	82	93	(NA)	(NA)
	1972..	1,248.3	83	94	(NA)	(NA)
	1967..	810.9	85	94	(NA)	(NA)
	1963..	733.1	87	95	(NA)	(NA)
	1958..	547.0	90	96	(NA)	(NA)
32115	Sheet (window), plate, and float glass (1972 product classes 32111 and 32112.).....1977..	742.8	89	(D)	100	(X)
	1972 Product class 32111, Sheet (window), glass (1977 product class 32115, part).....1972..	157.3	100	(X)	(X)	(X)
	1967..	133.2	97	(D)	100	(X)
	1963..	141.5	(D)	(D)	100	(X)
	1958..	92.3	95	(D)	100	(X)
	1954..	99.1	(D)	100	(X)	(X)
	1972 Product class 32112, Plate and float glass (1977 product class 32115, part).....1972..	361.8	91	(D)	100	(X)
	1967..	183.3	(D)	100	(X)	(X)
32113	Laminated glass, made from glass produced in the same establishment. (See also product class 32313.).....1977..	(4)	(4)	(4)	(4)	(4)
	1972..	(4)	(4)	(4)	(4)	(4)
	1967..	(4)	(4)	(4)	(4)	(4)
	1963..	(4)	(4)	(4)	(4)	(4)
	1958..	(4)	(4)	(4)	(4)	(4)
32114	Other flat glass made from glass produced in the same establishment..1977..	360.6	89	98	100	(X)
	1972..	193.6	91	100	(X)	(X)
	1967..	130.2	84	97	100	(X)
32110	Flat glass, n.s.k.....1977..	7.0	(X)	(X)	(X)	(X)
	1972..	1.3	(X)	(X)	(X)	(X)
	1967..	2.6	(X)	(X)	(X)	(X)
32210	Glass containers.....1977..	3,618.0	54	75	98	100
	1972..	2,085.2	56	77	98	100
	1967..	1,331.0	60	75	94	100
	1963..	982.4	56	72	92	100
	1958..	841.6	59	74	93	100
	1954..	628.9	63	78	92	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
3229-	Pressed and blown glass, n.e.c. 1977	2,100.7	61	78	91	97
	1972	1,262.8	65	80	92	98
	1967	880.4	70	83	93	98
	1963	615.1	68	81	92	99
	1958	448.0	65	78	89	97
	1954	417.0	66	75	86	(NA)
32291	Table, kitchen, art, and novelty glassware (handmade and machine-made) 1977	743.0	77	91	99	100
	1972	432.9	74	88	98	100
	1967	266.9	70	86	98	100
	1963	220.3	72	86	97	100
	1958	149.0	62	78	95	100
32292	Lighting and electronic glassware 1977	526.8	79	92	98	100
	1972	394.6	83	91	98	100
	1967	328.9	92	96	99	100
	1963	210.3	85	91	98	100
32293	Glass fiber (textile type fiber) 1977	514.0	94	99	100	(X)
	1972	253.4	95	99	100	(X)
	1967	138.1	93	98	100	(X)
	1963	91.6	95	99+	100	(X)
	1958	59.7	96	98	100	(X)
32294	Other pressed and blown glassware 1977	266.9	75	89	99	100
	1972	166.6	80	90	100	(X)
	1967	137.5	(D)	92	99	100
	1963	92.5	(D)	93	99	100
32290	Pressed and blown glass, n.e.c., n.s.k. 1977	50.0	(X)	(X)	(X)	(X)
	1972	15.3	(X)	(X)	(X)	(X)
	1967	9.0	(X)	(X)	(X)	(X)
	1963	0.4	(X)	(X)	(X)	(X)
3231-	Products of purchased glass[131] 1977	1,643.3	24	32	44	60
	1972	973.1	22	31	50	63
	1967	567.4	25	32	45	60
	1963	412.0	19	26	39	(NA)
	1958	279.3	21	29	43	62
	1954	239.8	(D)	(D)	(D)	(D)
32313	Laminated glass, made of purchased glass. (See product class 32113.) 1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
32315	Mirrors 1977	409.4	22	36	60	86
	1972	250.1	24	41	64	86
	1967	160.0	21	36	60	82
	1963	123.4	21	32	56	80
	1958	88.0	27	40	61	83
	1954	68.9	23	34	57	(NA)
32317	Pressed and blown glassware, made from glass purchased or transferred from other establishments (1972 product class 32316, part) 1977	298.1	46	58	76	93
32318	Other glass products, made from glass purchased or transferred from other establishments (1972 product class 32316, part) 1977	758.1	43	54	69	84
	1972 product class 32316, Other glass products made of purchased glass (1977 product classes 32317 and 32318.) 1972	627.6	40	53	65	80
	1967	352.1	38	46	58	73
	1963	275.2	28	36	47	61
	1958	157.1	30	37	52	69
	1954	170.9	45	51	63	(NA)
32310	Products of purchased glass, n.s.k. 1977	177.6	(X)	(X)	(X)	(X)
	1972	95.4	(X)	(X)	(X)	(X)
	1967	55.3	(X)	(X)	(X)	(X)
	1963	13.4	(X)	(X)	(X)	(X)
	1958	34.2	(X)	(X)	(X)	(X)
32410	Cement, hydraulic (including cost of shipping containers) 1977	2,971.0	24	41	75	99
	1972	1,758.2	26	47	79	99+
	1967	1,221.7	28	48	81	99+
	1963	1,163.0	29	49	82	99+
	1958	1,062.8	32	50	78	98
	1954	807.3	31	48	73	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
3251-	Brick and structural clay tile....1977..	715.3	23	33	49	70
	1972..	471.3	18	27	43	64
	1967..	343.9	14	22	36	57
	1963..	308.1	12	20	34	54
	1958..	268.9	13	20	33	49
	1954..	242.9	13	20	33	(NA)
32511	Brick, except ceramic glazed and refractory....1977..	671.8	24	35	52	74
	1972..	431.4	19	29	45	66
	1967..	298.1	16	24	39	59
	1963..	263.6	13	20	33	53
	1958..	212.7	12	18	29	47
32512	Glazed brick and structural hollow tile....1977..	11.8	86	98	100	(X)
	1972..	18.5	60	82	98	100
	1967..	29.3	55	74	93	99+
	1963..	35.9	56	75	91	99
	1958..	43.2	54	73	88	98
32510	Brick and structural clay tile, n.s.k....1977..	31.7	(X)	(X)	(X)	(X)
	1972..	21.5	(X)	(X)	(X)	(X)
	1967..	16.5	(X)	(X)	(X)	(X)
	1963..	8.7	(X)	(X)	(X)	(X)
	1958..	12.9	(X)	(X)	(X)	(X)
32530	Clay floor and wall tile, including quarry tile....1977..	222.4	57	74	94	99+
	1972..	157.9	54	69	89	99+
	1967..	134.8	55	75	93	99+
	1963..	143.4	50	66	86	99
	1958..	124.2	42	60	83	98
32550	Clay refractories....1977..	540.1	46	63	84	96
	1972..	298.9	48	64	87	98
	1967..	235.3	43	61	83	97
	1963..	180.7	42	60	82	97
	1958..	158.2	44	60	80	94
3259-	Structural clay products, n.e.c....1977..	204.3	36	57	81	95
	1972..	169.3	39	66	87	98
	1967..	137.1	29	48	77	94
	1963..	141.4	34	53	76	92
	1958..	132.3	27	43	67	87
32591	Vitrified clay sewer pipe and fittings....1977..	133.6	45	73	100	(X)
	1972..	134.7	46	78	99	100
	1967..	93.0	41	65	96	100
	1963..	98.2	45	69	93	100
	1958..	86.9	38	59	84	100
	1954..	70.9	35	53	77	(NA)
32592	Structural clay products, n.e.c....1977..	63.0	26	43	(D)	99+
	1972..	28.8	28	45	76	99
	1967..	39.7	32	44	68	92
	1963..	39.9	30	41	61	87
	1958..	45.4	27	41	57	81
32590	Structural clay products, n.e.c., n.s.k....1977..	7.7	(X)	(X)	(X)	(X)
	1972..	5.8	(X)	(X)	(X)	(X)
	1967..	4.4	(X)	(X)	(X)	(X)
	1963..	3.3	(X)	(X)	(X)	(X)
32610	Vitreous and semivitreous plumbing fixtures, accessories, and fittings....1977..	367.8	59	79	97	99+
	1972..	248.4	58	79	97	100
	1967..	148.9	61	81	98	100
	1963..	143.8	56	76	97	100
	1958..	130.5	54	75	95	100
	1954..	116.6	65	83	98	(NA)
32620	Vitreous china and porcelain table and kitchen articles (feldspar and bone)....1977..	140.9	66	92	99+	100
	1972..	81.9	69	89	99	100
	1967..	69.6	66	85	97	100
	1963..	51.9	62	82	99	100
	1958..	46.9	58	77	98	100
32630	Earthenware (semivitreous) table and kitchen articles....1977..	90.8	52	78	99	100
	1972..	58.0	54	87	100	(X)
	1967..	46.7	51	82	99	100
	1963..	58.2	52	80	99	100
	1958..	53.5	40	66	96	100
	1954..	70.8	34	55	86	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
32640	Porcelain, steatite, and other ceramic electrical products....1977..	378.9	37	54	78	97
	1972..	257.2	44	68	85	98
	1967..	188.6	45	67	87	99
	1963..	121.5	43	64	85	98
	1958..	91.1	43	63	85	99
	1954..	83.9	48	69	88	(NA)
32690	Pottery products, n.e.c., including china decorating for the trade....1977..	240.8	20	31	47	67
	1972..	148.7	17	30	52	73
	1967..	96.0	17	28	48	71
	1963..	81.4	18	27	47	67
	1958..	75.0	12	19	34	55
32710	Concrete block and brick....1977..	1,005.1	4	6	12	22
	1972..	795.7	5	8	14	24
	1967..	502.1	4	7	12	21
	1963..	472.4	5	7	12	20
	1958..	379.1	3	5	10	19
	1954..	341.9	3	5	10	(NA)
3272-	Concrete products, n.e.c....1977..	2,596.1	9	15	24	35
	1972..	1,864.3	10	14	23	35
	1967..	1,147.5	11	17	27	38
	1963..	861.9	17	23	30	40
	1958..	662.1	18	23	30	39
32721	Concrete pipe....1977..	843.8	27	40	58	73
	1972..	566.3	27	39	57	71
	1967..	400.5	29	43	57	71
	1963..	369.3	34	47	58	71
	1958..	294.8	35	46	59	72
	1954..	184.3	32	42	55	(NA)
32722	Precast concrete products....1977..	772.6	8	14	24	37
	1972..	536.8	7	12	21	35
	1967..	341.5	8	13	23	38
	1963..	297.3	10	12	20	31
32723	Prestressed concrete products....1977..	423.6	15	25	43	68
	1972..	414.1	14	25	42	65
	1967..	217.7	16	24	37	61
	1963..	140.9	13	21	38	62
32720	Concrete products, n.e.c., n.s.k....1977..	556.1	(X)	(X)	(X)	(X)
	1972..	347.0	(X)	(X)	(X)	(X)
	1967..	187.8	(X)	(X)	(X)	(X)
	1963..	54.4	(X)	(X)	(X)	(X)
	1958..	80.3	(X)	(X)	(X)	(X)
32730	Ready-mixed concrete....1977..	5,679.9	4	8	14	22
	1972..	3,556.6	5	9	16	24
	1967..	2,330.5	5	9	15	23
	1963..	1,970.7	4	7	13	21
	1958..	1,468.6	2	3	6	11
32740	Lime (including cost of shipping containers)....1977..	473.5	34	49	77	99
	1972..	223.5	36	52	79	99
	1967..	163.5	33	51	77	98
	1963..	136.9	35	53	78	98
	1958..	109.0	36	53	76	95
	1954..	93.9	34	54	79	(NA)
3275-	Gypsum products....1977..	932.1	78	90	98	99+
	1972..	583.1	79	92	99	99+
	1967..	362.4	78	92	99	99+
	1963..	405.1	82	96	99	99+
	1958..	344.2	86	95	99	99+
	1954..	273.5	89	97	99	(NA)
32751	Gypsum building materials....1977..	864.9	80	91	99	100
	1972..	538.4	80	93	100	(X)
	1967..	339.1	79	93	99	100
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)
	1958..	333.0	87	97	99	100
32752	Other gypsum products....1977..	54.0	(D)	100	(X)	(X)
	1972..	40.4	88	99	100	(X)
	1967..	19.4	92	98	100	(X)
	1963..	(NA)	(NA)	(NA)	(NA)	(NA)
	1958..	6.6	90	98	100	(X)
32750	Gypsum products, n.s.k....1977..	13.1	(X)	(X)	(X)	(X)
	1972..	4.3	(X)	(X)	(X)	(X)
	1967..	3.9	(X)	(X)	(X)	(X)
	1963..	3.4	(X)	(X)	(X)	(X)
	1958..	4.6	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
3281-	Cut stone and stone products....1977..	385.5	14	19	29	42
	1972..	286.8	18	23	34	47
	1967..	211.4	16	24	35	50
	1963..	190.9	20	26	38	51
	1958..	191.1	14	20	(NA)	(NA)
	1954..	166.8	12	19	28	(NA)
32811	Cut granite and granite products....1977..	164.4	30	39	53	73
	1972..	123.3	36	46	62	80
	1967..	75.9	31	43	57	75
	1963..	87.8	30	39	52	69
	1958..	87.9	22	29	40	56
	1954..	67.5	17	23	35	(NA)
32812	Cut limestone and limestone products....1977..	53.3	22	36	59	88
	1972..	27.9	37	51	75	98
	1967..	27.3	26	38	60	89
	1963..	29.1	24	35	58	84
	1958..	35.1	19	30	52	80
	1954..	40.0	28	37	56	(NA)
32813	Cut marble and other cut stone products....1977..	83.6	28	41	58	79
	1972..	44.2	33	45	67	90
	1967..	53.8	34	44	63	81
	1963..	63.6	34	42	56	75
	1958..	55.7	26	36	52	70
32810	Cut stone and stone products, n.s.k....1977..	84.2	(X)	(X)	(X)	(X)
	1972..	91.3	(X)	(X)	(X)	(X)
	1967..	54.5	(X)	(X)	(X)	(X)
	1963..	10.4	(X)	(X)	(X)	(X)
	1958..	12.3	(X)	(X)	(X)	(X)
3291-	Abrasive products....1977..	1,721.8	53	60	73	85
	1972..	892.3	50	60	75	87
	1967..	734.2	48	57	71	84
	1963..	572.2	49	59	71	84
32911	Nonmetallic artificial (synthetic) sized grains, and flour abrasives (including graded products only)....1977..	350.1	69	86	98	100
	1972..	140.3	73	89	99	100
	1967..	101.5	76	92	99	100
	1963..	74.3	76	92	99	100
32912	Nonmetallic bonded abrasive products, including diamond abrasives....1977..	447.8	49	65	82	95
	1972..	309.3	52	66	82	93
	1967..	308.8	48	59	77	90
	1963..	247.3	49	58	74	88
	1958..	164.4	54	65	80	92
32913	Nonmetallic coated abrasive products and buffing wheels, polishing wheels and laps....1977..	627.8	85	91	96	100
	1972..	292.5	82	90	97	100
	1967..	225.4	77	84	94	99+
	1963..	176.3	77	84	94	99+
	1958..	127.4	73	81	92	99
32914	Metal abrasives, including scouring pads....1977..	176.8	54	77	98	100
	1972..	107.4	59	79	98	100
	1967..	75.0	64	79	95	100
	1963..	63.2	68	80	96	100
	1958..	54.7	65	77	94	99+
	1954..	45.9	57	69	90	(NA)
32910	Abrasive products, n.s.k....1977..	119.2	(X)	(X)	(X)	(X)
	1972..	42.8	(X)	(X)	(X)	(X)
	1967..	23.5	(X)	(X)	(X)	(X)
	1963..	11.1	(X)	(X)	(X)	(X)
	1958..	14.5	(X)	(X)	(X)	(X)
3292-	Asbestos products[132]....1977..	960.1	47	65	89	98
	1972..	744.2	48	69	88	98
	1967..	564.6	51	72	91	99
	1963..	506.1	54	74	93	99
	1958..	419.7	53	68	90	98
	1954..	[133]323.1	51	67	90	(NA)
32922	Asbestos friction materials....1977..	271.7	62	85	99+	100
	1972..	209.5	74	90	100	(X)
	1967..	144.4	71	89	(D)	100
	1963..	117.7	68	87	(D)	100
	1958..	89.8	63	86	99	100
	1954..	73.9	68	91	99	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
3292-	Asbestos products--Con.					
32928	Asphalt and vinyl asbestos floor tile (1972 product classes 32925 and 32926)....1977..	232.1	(D)	100	(X)	(X)
	1972 product class 32925, Asphalt floor title (1977 product class 32928, part)....1972..	9.1	87	(D)	100	(X)
	1967..	25.0	78	(D)	100	(X)
	1963..	59.2	79	(D)	100	(X)
	1958..	77.3	81	98	100	(X)
	1972 product clss 32926, Vinyl asbestos floor tile (1977 product class 32928, part)....1972..	200.9	79	(D)	100	(X)
	1967..	153.5	72	(D)	100	(X)
	1963..	131.1	69	(D)	100	(X)
	1958..	66.6	78	99	100	(X)
32929	Asbestos textiles, asbestos insulation and other asbestos and asbestos-cement products (1972 product classes 32924 and 32927).....1977..	429.1	72	87	98	100
	1972 product class 32924, asbestos-cement shingles and clapboard (1977 product class 32929, part)....1972..	20.8	89	(D)	100	(X)
	1967..	24.0	88	100	(X)	(X)
	1963..	34.7	78	(D)	100	(X)
	1958..	49.2	([12])	([12])	100	(X)
	1954..	53.3	74	95	100	(X)
	1972 product class 32927, Asbestos textiles, asbestos insulation, and other asbestos-cement products (1977 product class 32929, part)[133]....1972..	298.6	67	79	96	99+
	1967..	214.1	72	85	97	99+
	1963..	162.2	79	89	97	99+
	1958..	131.8	80	90	98	100
32920	Asbestos products, n.s.k....1977..	27.0	(X)	(X)	(X)	(X)
	1972..	5.3	(X)	(X)	(X)	(X)
	1967..	3.6	(X)	(X)	(X)	(X)
	1963..	1.1	(X)	(X)	(X)	(X)
	1958..	5.0	(X)	(X)	(X)	(X)
3293-	Gaskets, packing and sealing devices[134]....1977..	1,254.8	24	36	55	73
	1972..	714.3	22	37	54	72
	1967..	340.5	22	31	49	73
32932	Gaskets and gasketing materials....1977..	501.0	21	32	53	77
	1972..	265.1	27	38	60	82
	1967..	248.7	22	33	55	80
	1963..	199.7	25	38	59	80
	1958..	143.3	27	41	64	84
	1954..	112.8	32	47	69	(NA)
32933	Packing and sealing devices[134]....1977..	695.1	41	58	78	93
	1972..	402.8	38	54	72	90
32930	Gaskets, packing and sealing devices, n.s.k....1977..	58.7	(X)	(X)	(X)	(X)
	1972..	46.3	(X)	(X)	(X)	(X)
	1967..	28.6	(X)	(X)	(X)	(X)
	1963..	11.3	(X)	(X)	(X)	(X)
	1958..	8.5	(X)	(X)	(X)	(X)
32950	Minerals and earths, ground or otherwise treated....1977..	911.0	26	40	62	79
	1972..	389.1	25	34	52	71
	1967..	270.7	26	34	50	71
	1963..	203.1	24	36	53	72
	1958..	218.1	([135])	([135])	([135])	([135])
3296-	Mineral wool....1977..	1,684.0	72	83	94	99
	1972..	738.6	72	86	96	99+
	1967..	425.0	70	82	94	99
	1963..	356.0	68	82	94	99
	1958..	236.4	([135])	([135])	([135])	([135])
32963	Mineral wool for structural insulation, made from fiber produced in the same establishment. (1972 product class 32961, part)....1977..	907.9	90	98	100	(X)
32965	Mineral wool for structural insulation, made from fiber purchased or transferred from other establishments. (1972 product class 32961 part)....1977..	191.0	76	89	99	100
	1972 product class 32961, Mineral wool for structural insulation (1977 product classes 32963, part and 32965, part)....1972..	364.3	88	97	100	(X)
	1967..	119.8	85	93	99	100
	1963..	107.7	77	88	98	100
	1958..	71.8	([135])	([135])	([135])	([135])

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 32, STONE, CLAY, AND GLASS PRODUCTS--Con.				
3296-	Mineral wool--Con.					
32964	Mineral wool for industrial and equipment insulation, made from fiber produced in the same establishment. (1972 product class 32962, part.) 1977	457.0	86	93	100	(X)
32966	Mineral wool for industrial and equipment insulation, made from fiber purchased or transferred from other establishments. (1972 product class 32962 part) 1977	111.9	48	73	96	100
	1972 Product class 32962, Mineral wool for industrial and equipment insulation (1977 product classes 32964, part and 32966, part) 1972	366.1	64	84	98	100
	1967	292.4	71	86	97	100
	1963	240.8	73	89	98	100
	1958	142.0	(135)	(135)	(135)	(135)
32960	Mineral wool, n.s.k. 1977	16.0	(X)	(X)	(X)	(X)
	1972	8.1	(X)	(X)	(X)	(X)
	1967	12.9	(X)	(X)	(X)	(X)
	1963	7.5	(X)	(X)	(X)	(X)
	1958	5.7	(X)	(X)	(X)	(X)
32970	Nonclay refractories, except dead-burned magnesia 1977	734.0	44	63	88	98
	1972	372.1	41	61	88	99
	1967	302.6	40	58	87	99
	1963	256.8	47	63	89	99+
	1958	185.2	57	73	91	99
32990	Other nonmetallic mineral products, n.e.c. 1977	391.1	38	49	65	77
	1972	169.7	30	39	55	70
	1967	87.5	31	44	62	79
	1963	83.0	29	42	61	80
	1958	53.7	21	33	52	72
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES				
3312-	Blast furnace and steel mill products 1977	[24]39,368.0	([24])	([24])	([24])	([24])
	1972	[24]22,123.2	([24])	([24])	([24])	([24])
	1967	[24]20,869.1	([24])	([24])	([24])	([24])
	1963	[24]17,361.7	([24])	([24])	([24])	([24])
33121	Coke oven and blast furnace products. (See also product group 3313-.) 1977	[136]3,032.2	54	68	93	100
	1972	[136]1,497.3	56	73	94	100
	1967	[136]1,256.4	55	74	92	99+
	1963	[136]1,298.0	60	76	93	99+
	1958	[136]1,150.3	54	69	90	99
33122	Steel ingot and semifinished shapes 1977	4,039.3	58	75	92	99+
	1972	2,502.9	58	79	96	99+
	1967	2,526.5	67	83	96	100
	1963	2,030.1	70	84	97	100
	1958	1,846.9	71	85	96	99
33123	Hot-rolled sheet and strip tin-mill products 1977	11,057.8	62	84	99+	100
	1972	6,510.7	54	77	98	100
	1967	4,533.3	56	75	99	100
	1963	3,895.5	55	76	99	100
	1958	3,169.3	56	78	99	100
33124	Hot-rolled bars, plates, and structural shapes 1977	9,140.9	59	70	84	97
	1972	5,612.8	59	70	85	98
	1967	4,456.4	62	74	88	99
	1963	3,607.8	63	74	89	99
	1958	2,879.7	64	76	89	99
33125	Steel wire (produced in steel mills). (See also product class 33155.) 1977	[4]606.3	55	79	(D)	100
	1972	[4]397.6	56	81	99	100
	1967	[4]377.6	46	70	98	100
	1963	[4]361.8	45	68	98	100
	1958	[4]350.2	53	72	99	100
33126	Steel pipe and tube (produced in steel mills). (See also product class 33176.) 1977	[4]3,000.4	61	87	99+	100
	1972	[4]1,501.0	54	81	99	100
	1967	[4]1,554.1	55	82	94	100
	1963	[4]1,137.5	61	(D)	100	(X)
	1958	[4]993.3	65	85	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3312-	Blast furnace and steel mill products--Con.					
33127	Cold rolled steel sheet and strip (produced in steel mills). (See also product class 33167.) 1977	[4]6,953.9	50	77	(D)	100
	1972	[4]3,278.6	45	72	99	100
	1967	[4]2,607.0	42	69	99	100
	1963	[4]2,447.8	46	73	99	100
	1958	[4]1,838.4	46	72	98	100
33128	Cold finished steel bars and bar shapes (produced in steel mills). (See also product class 33168.) 1977	[4]421.9	58	84	100	(X)
	1972	[4]268.7	67	87	100	(X)
	1967	[4]256.6	61	81	100	(X)
	1963	[4]199.4	55	77	(D)	100
	1958	[4]130.6	58	80	100	(X)
3312A	Seamless rolled ring forgings, ferrous (See also product class 34627.) (1972 product class 33129, part) 1977	93.6	100	(X)	(X)	(X)
3312B	Open die or smith forgings, hammer or press (See also product class 34628.) (1972 product class 33129, part) 1977	288.9	71	95	100	(X)
3312C	Other steel mill products, except wire products (1972 product class 33129, part) 1977	561.1	93	99	100	(X)
	1972 product class 33129, Press and hammer steel forgings (produced in steel mills). (See also product class 34629.) 1972	[4]266.0	64	88	(D)	100
	(1977 product clases 3312A, 3312B, and 3312C) 1967	[4]208.6	63	90	100	(X)
	1963	[4]120.7	70	94	100	(X)
	1958	[4]119.5	78	98	100	(X)
33120	Other steel mill products, except wire products 1977	171.7	(X)	(X)	(X)	(X)
	1972	287.7	(X)	(X)	(X)	(X)
	1967	324.8	(X)	(X)	(X)	(X)
	1963	200.2	(X)	(X)	(X)	(X)
	1958	198.5	(X)	(X)	(X)	(X)
	1954	241.6	(X)	(X)	(X)	(X)
3313-	Electrometallurgical products. (See also product class 33121.) 1977	[136]944.1	64	78	98	100
	1972	[136]539.4	72	89	99+	100
	1967	[136]420.4	71	87	99+	100
	1963	[136]342.6	70	89	99+	100
	1958	[136]374.1	67	86	99	100
33131	Ferromanganese 1977	159.1	83	99	100	(X)
	1972	(D)	(D)	(D)	(D)	(D)
	1967	(D)	(D)	(D)	(D)	(D)
	1963	(D)	(D)	(D)	(D)	(D)
33132	Ferrochromium 1977	163.5	91	(D)	100	(X)
	1972	116.6	90	(D)	100	(X)
	1967	104.5	(D)	100	(X)	(X)
	1963	85.3	87	99+	100	(X)
33133	Ferrosilicon 1977	327.4	83	95	100	(X)
	1972	180.8	83	95	100	(X)
	1967	102.9	92	100	(X)	(X)
	1963	78.0	87	(D)	100	(X)
33134	Other ferroalloys produced in electric furnaces 1977	290.2	61	91	(D)	100
	1972	(D)	(D)	(D)	(D)	(D)
	1967	(D)	(D)	(D)	(D)	(D)
	1963	(D)	(D)	(D)	(D)	(D)
33130	Electrometallurgical products, n.s.k 1977	3.9	(X)	(X)	(X)	(X)
3315-	Steel wire and related products 1977	[24]2,608.4	([24])	([24])	([24])	([24])
	1972	[24]1,520.8	([24])	([24])	([24])	([24])
	1967	[24]1,061.6	([24])	([24])	([24])	([24])
	1963	[24]796.5	([24])	([24])	([24])	([24])
33151	Noninsulated ferrous wire rope, cable, and strand. (See also product class 34961.) 1977	[4]439.1	40	61	91	(D)
	1972	[4]273.3	44	64	90	100
	1967	[4]164.2	65	85	99+	100
	1963	[4]100.9	72	94	100	(X)
	1958	[4]94.1	71	92	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3315-	Steel wire and related products--Con.					
33152	Steel nails and spikes. (See also product class 34967.)	1977.. 359.0	47	71	95	100
		1972.. 253.0	44	65	88	100
		1967.. 158.8	34	54	80	92
		1963.. 153.1	33	51	80	98
		1958.. 159.4	41	59	81	96
33155	Steel wire. (See also product class 33125.)	1977.. [4]729.8	36	50	73	95
		1972.. [4]328.7	37	53	81	99
		1967.. [4]300.5	38	53	81	99+
		1963.. [4]257.6	40	54	79	99
		1958.. [4]214.6	47	60	86	99
33156	Fencing and fence gates. (See also product class 34996.)	1977.. [4]280.3	46	72	97	100
		1972.. [4]176.8	40	64	94	100
		1967.. [4]75.8	50	72	99	100
		1963.. [4]58.3	51	74	99+	100
		1958.. [4]48.0	64	88	100	(X)
33157	Ferrous wire cloth and other woven wire products. (See also product class 34964.)	1977.. [4]84.5	66	94	100	(X)
		1972.. [4]53.6	58	88	100	(X)
		1967.. [4]35.4	58	87	100	(X)
		1963.. [4]24.3	64	96	100	(X)
		1958.. [4]25.9	66	92	100	(X)
33159	Other fabricated ferrous wire products. (See also product class 34969 for 1972 and prior years, and product class 34968 for 1977)	1977.. [4]639.5	29	48	76	97
		1972.. [4]390.0	26	47	76	97
		1967.. [4]293.7	33	52	77	96
		1963.. [4]181.6	45	66	89	99
		1958.. [4]143.2	55	79	99	100
33150	Steel wire and related products, n.s.k.	1977.. 76.2	(X)	(X)	(X)	(X)
		1972.. 45.4	(X)	(X)	(X)	(X)
		1967.. 33.2	(X)	(X)	(X)	(X)
		1963.. 20.7	(X)	(X)	(X)	(X)
		1958.. 6.1	(X)	(X)	(X)	(X)
3316-	Cold finishing of steel shapes	1977.. [4]2,562.8	37	55	80	97
		1972.. [4]1,571.8	36	52	79	98
		1967.. [4]945.6	35	51	73	95
		1963.. [4]685.3	38	56	80	98
		1958.. [4]461.5	39	60	83	(NA)
33167	Cold rolled steel sheet and strip. (See also product class 33127.)	1977.. [4]1,628.5	48	69	92	100
		1972.. [4]988.5	48	68	92	100
		1967.. [4]554.9	41	57	85	100
		1963.. [4]408.5	44	64	91	100
		1958.. [4]253.2	49	70	95	100
33168	Cold finished steel bars and bar shapes. (See also product class 33128.)	1977.. [4]909.2	50	72	94	100
		1972.. [4]558.9	48	69	95	100
		1967.. [4]372.6	64	78	97	100
		1963.. [4]273.4	70	82	98	100
		1958.. [4]208.3	70	81	98	100
33160	Cold finishing of steel shapes, n.s.k.	1977.. 25.1	(X)	(X)	(X)	(X)
		1972.. 24.5	(X)	(X)	(X)	(X)
		1967.. 18.3	(X)	(X)	(X)	(X)
		1963.. 3.5	(X)	(X)	(X)	(X)
33176	Steel pipe and tube. (See also product class 33126.)	1977.. [4]2,620.3	24	37	65	88
		1972.. [4]1,257.5	23	38	66	90
		1967.. [4]1,075.0	24	38	67	89
		1963.. [4]750.0	25	41	66	90
		1958.. [4]730.3	36	54	78	94
3321-	Gray iron castings[137]	1977.. 7,835.2	34	43	59	73
		1972.. 4,032.6	34	42	57	70
		1967.. 2,740.4	26	35	49	63
		1963.. 2,046.3	26	35	51	65
		1958.. 1,527.9	22	31	46	61
		1954.. 1,513.5	25	33	45	(NA)
3321A	Cast iron pressure pipe and fittings, ductile (1972 product class 33215, part)	1977.. 497.6	84	97	99+	100
3321B	Other ductile iron castings, n.e.c. (1972 product class 33215, part)	1977.. 1,125.6	53	62	76	88
	1972 product class 33215, Ductile iron castings (1977 product classes 3321A and 3321B)[126]	1972.. 605.5	51	65	82	92

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3321-	Gray iron castings--Con.					
33216	Molds and stools for heavy steel ingots (1967 product class 33211)...1977..	551.4	82	98	100	(X)
	1972..	312.0	72	93	99	100
	1967..	242.9	74	95	100	(X)
	1963..	187.8	82	97	100	(X)
	1958..	147.7	81	94	99	100
33217	Cast iron pressure pipe and fittings, gray iron[138].....1977..	177.7	46	74	95	100
	1972..	245.4	62	90	99	100
33218	Cast iron soil pipe and fittings gray iron (1967 product class 33213).....1977..	200.3	74	90	99+	100
	1972..	220.2	76	91	100	(X)
	1967..	156.0	69	86	99	100
	1963..	152.1	62	78	94	100
	1958..	119.8	39	60	85	100
33219	Other gray iron castings, n.e.c.[138].....1977..	5,081.9	42	51	60	73
	1972..	2,543.7	39	47	56	68
	1967 product class 33212, Cast iron pressure pipe and fittings.....1967..	263.2	69	90	99	100
	1963..	230.7	69	92	99	100
	1958..	196.1	69	87	98	100
	1967 product class 33214, All other gray iron castings.....1967..	1,960.8	32	39	49	61
	1963..	1,432.8	32	39	50	61
	1958..	995.1	30	36	46	58
	(1967 product classes 33212 and 33214 are reclassified as product classes 33215, 33216, and 33219 in 1972)					
33210	Gray iron castings, n.s.k.....1977..	200.8	(X)	(X)	(X)	(X)
	1972..	105.8	(X)	(X)	(X)	(X)
	1967..	117.5	(X)	(X)	(X)	(X)
	1963..	43.0	(X)	(X)	(X)	(X)
	1958..	69.2	(X)	(X)	(X)	(X)
3322-	Malleable iron foundries.....1977..	669.5	54	68	84	99
	1972..	484.8	51	62	79	96
	1967..	417.2	43	52	71	93
	1963..	313.6	45	54	72	92
	1958..	203.3	37	51	69	91
	1954..	204.9	42	53	70	(NA)
33221	Standard malleable iron castings[139].....1977..	453.0	44	61	81	99+
	1972..	345.8	44	56	76	98
33222	Pearlitic malleable iron castings[139].....1977..	208.7	85	92	99	100
	1972..	129.3	80	89	98	100
33220	Malleable iron castings, n.s.k.....1977..	7.8	(X)	(X)	(X)	(X)
	1972..	9.7	(X)	(X)	(X)	(X)
33240	Steel investment castings (1967 product class 33231).....1977..	434.1	50	59	76	93
	1972..	237.7	55	65	83	97
	1967..	167.6	42	54	76	97
3325-	Steel castings, n.e.c.....1977..	2,205.8	26	36	52	73
	1972..	1,052.8	22	32	51	73
33252	Carbon steel castings, except investment (1967 product class 33232)..1977..	1,250.9	35	45	64	87
	1972..	541.0	30	41	61	84
	1967..	619.0	27	39	60	83
33254	High alloy steel castings, except investment.....1977..	367.0	38	50	70	90
	1972..	127.8	26	40	68	94
33255	Other alloy steel castings, except investment.....1977..	521.0	34	51	75	95
	1972..	349.3	27	41	69	91
	1967 product class 33233, Other alloy steel castings (1972 product classes 33254 and 33255).....1967..	390.0	24	36	59	84
33250	Steel castings, n.e.c., n.s.k.....1977..	66.9	(X)	(X)	(X)	(X)
	1972..	34.7	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3331-	Primary copper	3,254.6	84	(D)	100	(X)
	1972	2,338.8	83	99	100	(X)
	1967	1,018.5	(NA)	(NA)	(NA)	(NA)
	1963	1,049.9	(NA)	(NA)	(NA)	(NA)
	1958	682.1	(NA)	(NA)	(NA)	(NA)
33311	Copper smelter products	1,566.2	91	(D)	100	(X)
	1972	1,360.8	87	(D)	100	(X)
	1967	547.6	89	99+	100	(X)
	1963	628.5	89	(D)	100	(X)
	1958	361.6	95	99	100	(X)
	1954	369.4	94	(D)	100	(X)
33312	Refined primary copper. (See also product class 33412.)	1,687.9	77	(D)	100	(X)
	1972	4977.9	82	100	(X)	(X)
	1967	4453.6	79	(D)	100	(X)
	1963	4421.4	84	(D)	100	(X)
	1958	4320.5	90	(D)	100	(X)
33310	Primary copper, n.s.k	0.5	(X)	(X)	(X)	(X)
	1972	0.1	(X)	(X)	(X)	(X)
	1967	17.3	(X)	(X)	(X)	(X)
3332-	Primary lead	530.6	(D)	100	(X)	(X)
	1972	(D)	(D)	(D)	(D)	(D)
	1967	(D)	(D)	(D)	(D)	(D)
	1963	(D)	(D)	(D)	(D)	(D)
	1958	(D)	(D)	(D)	(D)	(D)
33321	Lead smelter products	(D)	(D)	(D)	(D)	(D)
	1972	(D)	(D)	(D)	(D)	(D)
	1967	(D)	(D)	(D)	(D)	(D)
	1963	(D)	(D)	(D)	(D)	(D)
	1958	(D)	(D)	(D)	(D)	(D)
33323	Refined primary lead. (See also product class 33413.)	(D)	(D)	(D)	(D)	(D)
	1972	4179.4	93	99+	100	(X)
	1967	4123.3	76	(D)	100	(X)
	1963	474.5	100	(X)	(X)	(X)
	1958	4104.8	(D)	100	(X)	(X)
3333-	Primary zinc	366.3	79	(D)	100	(X)
	1972	326.6	68	96	100	(X)
	1967	285.5	(NA)	(NA)	(NA)	(NA)
	1963	265.1	(NA)	(NA)	(NA)	(NA)
	1958	232.5	(NA)	(NA)	(NA)	(NA)
33331	Zinc residues and other zinc smelter products	39.9	88	98	100	(X)
	1972	36.9	84	98	100	(X)
	1967	23.8	76	97	100	(X)
	1963	34.8	85	98	100	(X)
	1958	25.8	86	98	100	(X)
	1954	20.5	91	97	100	(X)
33334	Refined primary zinc and zinc-based alloys (See also product class 33414.)	326.4	(D)	100	(X)	(X)
	1972	4289.7	69	(D)	100	(X)
	1967	4261.7	61	92	100	(X)
	1963	4230.3	58	90	100	(X)
3334-	Primary aluminum	4,291.4	76	93	100	(X)
	1972	41,754.6	80	94	100	(X)
	1967	41,963.5	91	100	(X)	(X)
	1963	41,069.6	93	(D)	100	(X)
	1958	4810.9	82	90	(NA)	(NA)
33347	Primary aluminum ingot, except billet. (See also product classes 33417 and 33553.)	3,721.5	79	94	100	(X)
	1972	41,509.7	81	95	100	(X)
	1967	41,324.1	91	100	(X)	(X)
	1963	4946.8	93	(D)	100	(X)
33348	Aluminum extrusion billet. (See also product classes 33418 and 33554.)	570.0	60	(D)	100	(X)
	1972	4244.8	75	(D)	100	(X)
	1967	4211.4	84	100	(X)	(X)
	1963	4122.8	(D)	100	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3339-	Primary nonferrous metals, n.e.c.					
	1977	1,431.9	60	76	95	99+
	1972	759.4	58	73	91	99
	1967	422.1	(NA)	(NA)	(NA)	(NA)
	1963	439.4	(NA)	(NA)	(NA)	(NA)
	1958	(NA)	(NA)	(NA)	(NA)	(NA)
33395	Refined precious metals and precious alloys. (See also product class 33415.)					
	1977	4464.8	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
33397	Other primary nonferrous metals. (See also product class 33416.)					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
33390	Primary nonferrous metals, n.e.c., n.s.k.					
	1977	27.1	(X)	(X)	(X)	(X)
	1967	8.3	(X)	(X)	(X)	(X)
	1963	(X)	(X)	(X)	(X)	(X)
	1958	0.1	(X)	(X)	(X)	(X)
3341-	Secondary nonferrous metals					
	1977	3,194.9	23	36	54	74
	1972	1,826.1	23	35	58	78
	1967	1,243.3	(NA)	(NA)	(NA)	(NA)
	1963	1,190.3	(NA)	(NA)	(NA)	(NA)
	1958	(NA)	(NA)	(NA)	(NA)	(NA)
33412	Secondary copper and copper-base alloys. (See also product class 33312.)					
	1977	4616.6	47	69	94	100
	1972	4510.9	39	62	88	100
	1967	4364.8	40	60	84	99+
	1963	4247.2	42	62	85	99
	1958	4159.2	45	60	84	100
33413	Secondary lead and lead-base and tin-base alloys. (See also product class 33323.)					
	1977	4680.3	51	68	89	99+
	1972	4275.8	61	75	90	99+
	1967	4235.6	51	60	76	99+
	1963	4201.9	55	66	82	95
	1958	4176.1	(D)	64	79	93
33414	Secondary zinc and zinc-base alloys					
	1977	144.7	53	75	96	100
	1972	4114.6	48	67	93	100
	1967	453.6	48	68	95	100
	1963	443.4	50	68	91	99
33415	Secondary precious metals and their alloys. (See also product class 33395.)					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
33416	Other secondary nonferrous metals and alloys. (See also product class 33397.)					
	1977	(4)	(4)	(4)	(4)	(4)
	1972	(4)	(4)	(4)	(4)	(4)
	1967	(4)	(4)	(4)	(4)	(4)
	1963	(4)	(4)	(4)	(4)	(4)
	1958	(4)	(4)	(4)	(4)	(4)
33417	Secondary aluminum ingot, except billet. (See also product classes 33347 and 33553.)					
	1977	978.3	52	67	83	99
	1972	4341.0	50	69	89	99+
	1967	4302.9	44	64	88	99+
	1963	4238.9	44	62	85	99
33418	Secondary aluminum extrusion billet. (See also product classes 33348 and 33554.)					
	1977	112.4	80	(D)	100	(X)
	1972	428.7	80	(D)	100	(X)
	1967	439.3	72	97	100	(X)
	1963	413.9	85	99	100	(X)
33410	Secondary nonferrous metals, n.s.k.					
	1977	251.0	(X)	(X)	(X)	(X)
	1972	167.7	(X)	(X)	(X)	(X)
	1967	75.1	(X)	(X)	(X)	(X)
	1963	24.2	(X)	(X)	(X)	(X)
	1958	22.2	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3351-	Copper rolling and drawing....1977..	3,456.4	34	57	83	97
	1972..	2,812.5	41	60	82	96
	1967..	2,216.8	40	61	84	97
	1963..	1,544.5	45	65	86	98
	1958..	1,034.4	46	66	85	98
33511	Copper and copper-base alloy wire (bare and tinned) for purposes other than electrical transmission....1977..	170.7	54	81	99	100
	1972..	140.9	43	70	96	100
	1967..	95.6	43	67	95	100
	1963..	73.2	50	71	94	100
	1958..	47.8	48	72	94	100
33513	Copper and copper-base alloy rods, bars, and shapes....1977..	1,411.6	52	70	96	100
	1972..	1,170.9	52	71	95	100
33514	Copper and copper-base alloy sheet, strip, and plate....1977..	937.3	60	79	98	100
	1972..	705.9	64	82	99	100
33515	Copper and copper-base alloy pipe and tube....1977..	895.5	49	77	98	100
	1972..	764.0	43	72	94	100
	1967 product class 33512, Rolled drawn, and extruded copper and copper-base alloy mill products (1972 product classes 33513, 33514, and 33515)....1967..	2,105.1	41	62	85	98
	1963..	1,471.4	47	66	87	99
	1958..	986.6	47	67	86	99
	1954..	1,123.5	52	71	89	(NA)
33510	Copper rolling and drawing, n.s.k....1977..	41.3	(X)	(X)	(X)	(X)
	1972..	30.0	(X)	(X)	(X)	(X)
	1967..	16.1	(X)	(X)	(X)	(X)
3353-	Aluminum sheet, plate, and foil[14o]....1977..	5,358.8	73	90	99+	100
	1972..	2,227.7	70	86	99	100
33531	Aluminum plate....1977..	247.3	87	(D)	100	(X)
	1972..	89.4	91	(D)	100	(X)
33532	Aluminum sheet and strip....1977..	4,569.6	75	91	100	(X)
	1972..	1,902.5	71	88	100	(X)
	1967 product class 33522, Aluminum plate and sheet, including foil stock, (1972 product classes 33531 and 33532)....1967..	1,249.4	78	90	99+	100
	1963..	850.5	80	94	99+	100
	1958..	646.1	89	94	99	99+
	1954..	420.3	93	98	99	(NA)
33533	Plain aluminum foil (under .006 inch) (See 1967 product class 33523.)....1977..	476.6	74	95	100	(X)
	1972..	215.1	70	93	100	(X)
	1967..	184.6	80	96	100	(X)
	1963..	129.4	77	95	100	(X)
	1958..	140.5	80	(D)	(X)	(X)
33534	Aluminum welded tube. (See 1967 product class 33526.)....1977..	61.6	76	100	(X)	(X)
	1972..	34.3	82	100	(X)	(X)
33530	Aluminum sheet, plate, and foil, n.s.k....1977..	3.7	(X)	(X)	(X)	(X)
3354-	Aluminum extruded products[12e]....1977..	1,928.2	37	54	73	91
	1972..	1,020.7	36	51	72	89
33541	Extruded aluminum rods, bars, and other shapes (See 1967 product class 33525)....1977..	1,541.9	37	56	76	94
	1972..	781.4	35	52	74	93
	1967..	565.7	45	54	73	92
	1963..	397.3	38	47	66	90
	1958..	272.1	53	64	79	97
33542	Aluminum extruded and drawn tubes....1977..	333.0	59	76	95	100
	1972..	212.3	55	73	92	100
	1967 product class 33526, Aluminum tube and other rolled, drawn or extruded mill products (1972 product classes 33534 and 33542)..1967..	172.2	67	78	94	100
	1963..	139.2	62	75	90	99+
	1958..	89.6	66	82	96	100
33540	Aluminum extruded products, n.s.k....1977..	53.3	(X)	(X)	(X)	(X)
	1972..	26.9	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3355-	Aluminum rolling and drawing, n.e.c.[140] 1977	1,367.5	81	93	99+	100
	1972	[4]524.6	82	(D)	100	(X)
33551	Aluminum and aluminum-base alloy wire (1967 product class 33521). (See also product class 33571.) 1977	[4]124.1	84	99	100	(X)
	1972	[4]61.1	87	100	(X)	(X)
	1967	[4]75.0	83	(D)	100	(X)
	1963	[4]56.9	87	(D)	100	(X)
33552	Rolled aluminum rods, bars, and structural shapes (1967 product class 33524) 1977	530.0	88	99+	100	(X)
	1972	295.8	87	99	100	(X)
	1967	257.6	83	98	100	(X)
	1963	145.2	96	(D)	100	(X)
	1958	110.5	93	99	100	(X)
33553	Rolled aluminum ingot, except extrusion billet (1967 product class 33527). (See also product classes 33347 and 33417.) 1977	(D)	(D)	(D)	(D)	(X)
	1972	[4]121.1	(D)	(D)	(D)	(D)
	1967	[4]55.4	(D)	(D)	100	(X)
	1963	[4]49.0	(D)	99	100	(X)
33554	Rolled aluminum extrusion billet (1967 product class 33528). (See also product classes 33348 and 33418.) 1977	(D)	(D)	(D)	(D)	(X)
	1972	[4]46.6	(D)	(D)	(D)	(D)
	1967	[4]30.4	93	(D)	100	(X)
	1963	[4]48.7	88	98	100	(X)
33550	Aluminum rolling and drawing, n.e.c., n.s.k. 1977	3.9	(X)	(X)	(X)	(X)
3356-	Nonferrous rolling and drawing, n.e.c. 1977	2,552.2	43	56	77	92
	1972	1,091.2	42	55	77	93
	1967	971.5	47	61	78	95
	1963	597.4	47	60	77	93
33561	Nickel and nickel-base alloy mill shapes[141] 1977	r873.2	r86	r97	r(D)	r100
	1972	r381.8	r85	r95	r(D)	r100
33562	Titanium mill shapes[141] 1977	250.7	82	96	100	(X)
	1972	120.4	77	95	100	(X)
33563	Precious metal mill shapes[141] 1977	686.9	79	92	100	(X)
	1972	364.1	88	97	100	(X)
33569	Other nonferrous metal mill shapes. (See also product class 33573.)[141] 1977	[142]662.1	27	43	73	97
	1972	[142]248.8	37	55	80	99
33560	Nonferrous rolling and drawing, n.e.c., n.s.k. 1977	78.8	(X)	(X)	(X)	(X)
	1972	87.4	(X)	(X)	(X)	(X)
3357-	Nonferrous wire drawing and insulating 1977	[4]6,460.3	37	52	74	89
	1972	[4]4,208.2	40	56	77	91
	1967	[4]3,389.6	38	54	75	91
	1963	[4]2,000.4	42	60	77	90
	1958	[4]1,481.0	38	54	72	89
33571	Aluminum and aluminum-base alloy wire and cable. (See also product class 33551.) 1977	[4]263.4	64	87	(D)	100
	1972	[4]155.2	64	85	99	100
	1967	[4]176.9	67	92	99+	100
	1963	[4]71.0	80	95	99+	100
	1958	[4]54.0	(D)	94	99	100
33572	Copper and copper-base alloy wire 1977	553.2	51	73	94	100
	1972	353.4	56	80	96	100
	1967	372.8	68	82	96	100
	1963	245.0	67	81	95	100
	1958	159.8	65	82	96	100
33573	Other bare nonferrous metal wire. (See product class 33569.) 1977	[142]117.9	r82	r93	100	(X)
	1972	[142]76.5	r58	r77	98	100
	1967	[142]40.5	69	86	99+	100
	1963	[130]33.2	67	83	99	100
3357A	Electronic wire and cable (1977 product class 33574, part) 1977	478.9	26	40	67	92
3357B	Telephone and telegraph wire and cable 1977	1,600.2	(D)	95	99	100
	1972 product class 33574, part, Communication wire and cable (1977 product classes 3357A and 3357B) 1972	317.2	73	84	94	99
	1967	909.1	64	74	88	99
	1963	581.8	73	80	91	99
	1958	365.4	74	80	90	99
	1954	248.4	76	81	91	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3357-	Nonferrous wire drawing and insulating--Con.					
33575	Nonferrous wire cloth and other woven wire products. (See also product class 34965.) 1977	[4]38.1	78	(D)	100	(X)
	1972	[4]44.3	57	90	100	(X)
	1967	[4]21.8	60	(D)	100	(X)
	1963	[4]21.2	65	(D)	100	(X)
33576	Apparatus wire and cordage and flexible cord sets. (See also product class 36996.) 1977	[4]447.8	50	73	92	(D)
	1972	[4]266.7	56	76	94	100
	1967	[4]184.2	46	72	95	100
	1963	[4]101.7	37	57	88	(D)
	1958	[4]66.2	37	56	89	99
33577	Magnet wire 1977	754.4	72	90	99	100
	1972	532.9	62	87	99	100
	1967	449.6	59	88	99	100
	1963	258.3	60	84	99	100
	1958	183.4	52	77	96	100
33578	Power wire and cable 1977	705.9	40	59	90	100
	1972	490.0	45	65	91	100
	1967	424.0	47	67	95	100
	1963	218.8	44	66	93	100
	1958	194.8	45	68	93	100
3357C	Control and signal and cable (1972 product class 33579, part) 1977	128.2	36	56	92	100
3357D	Building wire and cable (1972 product class 33579, part) 1977	890.2	37	58	89	100
3357E	Other insulating wire and cable, including automotive 1977	431.7	38	56	85	99+
	1972 product class 33579, part, Other insulated wire and cable, n.e.c. (1977 product classes 3357C, 3357D, and 3357E) 1972	942.2	31	49	77	98
	1967	745.9	34	54	80	99
	1963	454.1	35	53	79	97
	1958	404.5	29	48	78	97
33570	Nonferrous wire drawing and insulating, n.s.k. 1977	50.3	(X)	(X)	(X)	(X)
	1972	46.8	(X)	(X)	(X)	(X)
	1967	50.4	(X)	(X)	(X)	(X)
	1963	15.4	(X)	(X)	(X)	(X)
	1958	10.2	(X)	(X)	(X)	(X)
3361-	Aluminum castings 1977	[137]2,294.2	23	29	40	55
	1972	[137]1,172.2	22	28	39	53
	1967	[137]885.9	23	30	39	51
	1963	[137]607.0	30	37	45	56
	1958	[137]399.6	19	25	37	51
33611	Aluminum and aluminum-base alloy die castings[143] 1977	1,086.8	29	39	54	74
	1972	532.6	39	50	67	83
33612	Other aluminum and aluminum-base alloy castings[143] 1977	1,055.0	26	34	49	67
	1972	509.7	17	25	39	58
33610	Aluminum and aluminum-base alloy castings, n.s.k. 1977	152.5	(X)	(X)	(X)	(X)
	1972	129.9	(X)	(X)	(X)	(X)
33620	Copper and copper-base alloy castings 1977	[137]615.6	14	22	34	52
	1972	[137]467.2	14	22	34	52
	1967	[137]432.3	15	24	38	55
	1963	[137]299.8	17	25	40	55
	1958	[137]222.8	18	25	37	51
3369-	Nonferrous castings 1977	[137]878.1	19	26	41	60
	1972	[137]602.2	24	32	46	64
	1967	[137]551.3	28	37	50	66
	1963	[137]306.5	20	27	41	59
	1958	[137]233.2	20	30	46	64
33691	Zinc and zinc-base alloy castings 1977	609.9	21	30	49	70
	1972	401.7	26	37	55	76
	1967	323.3	34	43	60	78
33692	Magnesium and magnesium-base alloy castings 1977	83.3	40	58	85	99+
	1972	41.3	44	64	89	100
33693	Other nonferrous castings 1977	138.8	52	66	88	99
	1972	94.8	68	81	94	99+
	1967 product class 33699, Nonferrous castings, n.e.c. (1972 product classes 33692 and 33693) 1967	178.5	47	55	74	90

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 33, PRIMARY METAL INDUSTRIES--Con.				
3369-	Nonferrous Castings--Con.					
33690	Nonferrous castings, n.e.c., n.s.k. 1977	46.1	(X)	(X)	(X)	(X)
	1972	64.3	(X)	(X)	(X)	(X)
	1967	49.5	(X)	(X)	(X)	(X)
33980	Metal heat treating (1967 product class 33996)[144] 1977	[145]704.1	(NA)	(NA)	(NA)	(NA)
	1972	[145]462.9	(NA)	(NA)	(NA)	(NA)
	1967	[145]274.9	(NA)	(NA)	(NA)	(NA)
	1963	[145]140.3	(NA)	(NA)	(NA)	(NA)
	1958	[145]85.3	(NA)	(NA)	(NA)	(NA)
3399-	Primary metal products, n.e.c.[144] 1977	967.5	25	39	58	76
	1972	432.5	28	42	64	84
33991	Metal powders, paste, and flakes 1977	702.2	34	52	76	94
	1972	329.3	31	50	75	93
	1967	227.9	38	57	81	96
	1963	106.8	32	54	80	96
	1958	55.1	39	57	85	99
	1954	70.1	30	45	71	(NA)
33992	Primary metal products, n.e.c. 1977	144.7	r29	r43	r74	r99
	1972	r63.0	r29	r47	r75	r98
	1967	43.1	29	47	78	98
	1963	11.2	40	56	85	100
	1958	2.1	59	90	100	(X)
33990	Primary metal products, n.e.c., n.s.k. 1977	120.6	(X)	(X)	(X)	(X)
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS				
3411-	Metal cans 1977	7,414.7	56	71	89	98
	1972	4,224.4	66	79	91	98
	1967	2,585.7	70	82	93	99
	1963	2,002.2	73	84	94	99
	1958	[146]1,762.3	80	89	97	99
	1954	[146]1,340.6	80	89	96	(NA)
34113	Steel cans, tin plate (1972 product class 34111, part) 1977	4,852.7	62	79	92	99
34114	Aluminum cans (1972 product class 34112, part) 1977	1,620.4	55	79	99+	100
34115	Metal can lids, ends, parts, shipped separately (1972 product classes 34111, part and 34112, part) 1977	895.4	67	83	96	100
	1972 product class 34111, Steel cans and tinware end products 1972	[147]4,202.3	(NA)	(NA)	(NA)	(NA)
	1972 product class 34112, Aluminum cans 1972					
34110	Metal cans, n.s.k. 1977	46.2	(X)	(X)	(X)	(X)
	1972	22.1	(X)	(X)	(X)	(X)
3412-	Metal barrels, drums, and pails (1967 product group 3491-) 1977	948.2	34	46	68	92
	1972	509.4	36	47	68	94
	1967	378.2	37	51	72	93
	1963	317.9	41	55	74	94
	1958	259.0	45	58	79	97
34121	Steel pails (12-gallon capacity and under) (1967 product class 34911) 1977	272.9	36	55	87	100
	1972	153.0	31	51	86	100
	1967	111.6	33	55	86	100
	1963	87.2	35	61	90	100
	1958	80.2	37	64	92	100
	1954	54.8	43	63	93	(NA)
34122	Steel shipping barrels and drums (over 12-gallon capacity) (1967 product class 34912) 1977	548.4	43	59	83	(D)
	1972	292.1	46	60	86	100
	1967	212.6	47	63	88	100
	1963	191.5	52	67	88	100
	1958	162.4	55	70	91	(D)
	1954	143.9	56	72	93	(NA)
34123	All other metal barrels (1967 product class 34913) 1977	84.0	65	88	100	(X)
	1972	52.1	54	81	99	100
	1967	45.5	61	78	99	100
	1963	35.9	56	78	96	100
	1958	14.7	50	78	100	(X)
34120	Metal barrels, drums, and pails, n.s.k. (1967 product class 34910) 1977	43.0	(X)	(X)	(X)	(X)
	1972	12.2	(X)	(X)	(X)	(X)
	1967	8.5	(X)	(X)	(X)	(X)
	1963	3.3	(X)	(X)	(X)	(X)
	1958	1.6	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3421-	Cutlery	1977.. 666.9	50	62	79	95
		1972.. 403.7	52	63	78	94
		1967.. 308.9	60	70	82	94
		1963.. 254.3	66	74	83	94
		1958.. 162.2	54	64	77	91
		1954.. 153.3	48	57	73	(NA)
34211	Cutlery, scissors, shears, trimmers, and snips	1977.. 344.7	28	42	70	97
		1972.. 183.2	29	44	69	94
		1967.. 121.0	30	44	71	94
		1963.. 90.5	29	42	66	90
		1958.. 77.3	30	41	65	89
		1954.. 85.4	24	36	60	(NA)
34212	Razor blades and razors, except electric	1977.. 307.4	99	(D)	100	(X)
		1972.. 207.2	97	99	100	(X)
		1967.. 177.1	(D)	(D)	100	(X)
		1963.. 159.4	(D)	(D)	100	(X)
		1958.. 80.7	(D)	(D)	100	(X)
		1954.. 67.8	97	99	100	(X)
34210	Cutlery, n.s.k.	1977.. 14.8	(X)	(X)	(X)	(X)
		1972.. 13.4	(X)	(X)	(X)	(X)
		1967.. 10.8	(X)	(X)	(X)	(X)
		1963.. 4.4	(X)	(X)	(X)	(X)
		1958.. 4.1	(X)	(X)	(X)	(X)
3423-	Hand and edge tools, n.e.c.	1977.. 2,066.1	22	34	51	70
		1972.. 1,110.6	21	35	53	71
		1967.. 775.1	15	28	48	67
		1963.. 536.1	17	29	47	65
		1958.. 434.2	17	29	42	59
34231	Mechanics' hand service tools	1977.. 1,070.2	31	44	68	88
		1972.. 597.8	33	44	65	86
		1967.. 391.5	26	40	63	84
		1963.. 252.4	27	40	60	80
		1958.. 188.5	25	35	53	76
		1954.. 168.8	25	37	57	(NA)
34232	Edge tools, hand operated	1977.. 327.6	23	37	61	84
		1972.. 160.1	33	50	70	89
		1967.. 127.8	25	37	59	81
		1963.. 106.2	27	39	61	81
		1958.. 90.6	20	32	52	72
		1954.. 73.7	18	32	53	(NA)
34233	Files, rasps, and file accessories and other hand tools	1977.. 524.3	49	64	79	93
		1972.. 274.7	48	66	80	92
		1967.. 190.5	41	62	79	93
		1963.. 156.0	39	57	74	89
		1958.. 142.0	39	56	72	87
34230	Hand and edge tools, n.e.c., n.s.k.	1977.. 144.0	(X)	(X)	(X)	(X)
		1972.. 77.9	(X)	(X)	(X)	(X)
		1967.. 65.3	(X)	(X)	(X)	(X)
		1963.. 21.4	(X)	(X)	(X)	(X)
		1958.. 13.1	(X)	(X)	(X)	(X)
34250	Handsaws, saw blades, and saw accessories	1977.. 369.3	39	55	79	94
		1972.. 205.5	38	58	81	95
		1967.. 138.0	41	58	81	96
		1963.. 85.0	40	59	85	98
		1958.. 75.6	43	61	85	97
		1954.. 64.5	44	60	84	(NA)
3429-	Hardware, n.e.c.	1977.. 5,082.5	37	43	54	70
		1972.. 3,095.6	35	42	55	70
		1967.. 2,188.2	36	43	55	67
		1963.. 1,622.9	37	43	54	67
		1958.. 1,224.1	29	35	47	61
		1954.. 1,053.7	33	40	51	(NA)
34292	Furniture hardware, excluding cabinet hardware	1977.. 279.9	40	60	83	98
		1972.. 205.0	38	54	79	97
		1967.. 120.9	48	65	82	97
		1963.. 95.3	45	60	77	93
		1958.. 77.4	43	61	80	93
		1954.. 60.2	54	76	89	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3429-	Hardware, n.e.c.--Con.					
34293	Vacuum and insulated bottles, jugs, and chests....1977..	107.0	96	(D)	100	(X)
	1972..	85.4	93	98	100	(X)
	1967..	55.9	89	95	100	(X)
	1963..	48.0	80	93	100	(X)
	1958..	41.1	79	94	100	(X)
	1954..	27.9	83	98	100	(X)
34294	Builders' hardware....1977..	1,418.9	26	40	62	82
	1972..	928.4	29	44	63	82
	1967..	593.4	34	45	62	80
	1963..	465.8	26	39	58	77
	1958..	387.1	24	38	56	75
	1954..	323.5	24	36	54	(NA)
34296	Motor vehicle hardware....1977..	2,220.0	(D)	87	95	99
	1972..	1,180.3	(D)	89	95	99+
34297	Other transportation equipment hardware, except motor vehicle hardware....1977..	155.4	25	40	66	91
	1972..	175.6	27	40	63	86
	1967 product class 34291, Transportation equipment hardware (1972 product classes 34296 and 34297)....1967..	985.1	(D)	76	85	94
	1963..	778.5	(D)	77	85	94
	1958..	472.2	62	69	81	94
	1954..	441.0	71	77	87	(NA)
34298	Other hardware, n.e.c. (1967 product class 34295)....1977..	648.5	22	31	49	73
	1972..	392.2	23	33	52	74
	1967..	335.7	18	28	47	69
	1963..	237.2	13	21	39	63
	1958..	215.2	15	24	39	62
	1954..	191.3	14	24	41	(NA)
34290	Hardware, n.e.c., n.s.k....1977..	252.9	(X)	(X)	(X)	(X)
	1972..	128.4	(X)	(X)	(X)	(X)
	1967..	97.2	(X)	(X)	(X)	(X)
	1963..	38.1	(X)	(X)	(X)	(X)
	1958..	31.1	(X)	(X)	(X)	(X)
34310	Metal plumbing fixtures....1977..	392.3	50	64	83	97
	1972..	311.5	45	62	81	97
	1967..	213.1	43	59	80	95
	1963..	203.3	46	63	86	97
	1958..	180.0	53	70	90	97
	1954..	207.2	52	75	91	(NA)
34320	Plumbing fixture fittings and trim (brass goods)....1977..	1,109.1	30	46	67	88
	1972..	676.6	23	39	61	85
	1967..	404.6	27	40	62	84
	1963..	329.6	27	37	55	77
	1958..	259.5	30	41	57	78
3433-	Heating equipment, except electric[148]....1977..	1,396.7	12	20	36	58
	1972..	904.6	16	25	43	65
34333	Cast-iron heating boilers, radiators, and convectors, except parts...1977..	187.8	50	73	96	100
	1972..	156.6	49	69	96	100
	1967..	133.4	46	64	90	99+
	1963..	138.9	43	59	84	99
	1958..	121.5	47	61	85	(NA)
34334	Domestic heating stoves (except electric), except parts....1977..	174.7	r51	r67	r91	100
	1972..	70.4	r48	r72	r99	100
	1967..	50.1	41	64	96	100
	1963..	79.1	35	57	85	99+
	1958..	69.8	34	51	79	98
	1954..	70.1	30	45	71	(NA)
34335	Steel heating boilers (15 p.s.i. and under), except parts....1977..	73.3	47	72	98	100
	1972..	68.7	45	63	88	100
	1967..	67.0	44	61	86	100
	1963..	70.3	37	53	79	99
	1958..	62.8	40	56	79	99
	1954..	53.2	33	51	72	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3433-	Heating equipment, except electric--Con.					
34337	Other heating equipment, except electric (1967 product classes 34331 and 34336)[149] 1977	790.4	15	25	47	74
	1972	541.6	25	34	53	74
	1967 product class 34331, Oil burners, residential and industrial (sold separately), except parts 1967	35.2	36	54	82	99
	1963	42.0	30	50	78	97
	1958	46.6	31	49	74	94
	1967 product class 34336, Other heating equipment, except electric, including parts for nonelectric heating equipment 1967	379.7	27	36	53	74
	1963	317.3	18	27	42	63
	1958	268.0	23	33	51	68
34330	Heating equipment, except electric, n.s.k. 1977	170.5	(X)	(X)	(X)	(X)
	1972	67.3	(X)	(X)	(X)	(X)
	1967	73.6	(X)	(X)	(X)	(X)
	1963	41.2	(X)	(X)	(X)	(X)
	1958	35.7	(X)	(X)	(X)	(X)
3441-	Fabricated structural metal 1977	4,860.9	12	16	24	35
	1972	3,304.4	11	15	23	35
	1967	2,561.5	15	19	27	38
	1963	1,604.0	17	21	29	40
	1958	1,602.1	22	26	34	46
34411	Fabricated structural metal for buildings 1977	2,578.5	8	13	22	36
	1972	1,934.7	11	17	27	42
	1967	1,430.3	13	18	27	40
	1963	984.0	13	18	26	39
	1958	930.4	19	23	33	46
34412	Fabricated structural metal for bridges 1977	280.2	19	31	60	87
	1972	391.2	29	41	60	82
	1967	312.2	32	42	60	80
	1963	224.9	40	47	60	79
	1958	279.6	45	52	65	83
34413	Other fabricated structural metal 1977	1,474.1	33	41	53	68
	1972	597.6	19	28	44	65
	1967	550.6	28	38	54	70
	1963	287.2	28	38	51	69
	1958	262.0	31	40	56	74
34410	Fabricated structural metal, n.s.k. 1977	528.0	(X)	(X)	(X)	(X)
	1972	380.9	(X)	(X)	(X)	(X)
	1967	268.4	(X)	(X)	(X)	(X)
	1963	107.8	(X)	(X)	(X)	(X)
	1958	130.1	(X)	(X)	(X)	(X)
3442-	Metal doors, sash, and trim 1977	2,974.1	8	14	28	46
	1972	1,901.3	11	17	30	47
	1967	1,301.5	9	14	24	39
	1963	1,106.7	7	12	20	34
	1958	951.9	8	13	23	38
34421	Metal doors and frames (except storm doors) 1977	1,089.3	16	26	43	64
	1972	687.1	16	27	44	65
	1967	345.7	15	23	40	62
	1963	289.6	13	20	36	60
	1958	192.4	16	25	43	63
	1954	149.8	20	31	47	(NA)
34422	Metal window sash and frames (except storm sash) 1977	801.9	14	25	42	65
	1972	511.2	22	32	50	72
	1967	257.5	22	30	47	67
	1963	308.8	14	23	40	62
	1958	285.3	20	33	56	78
	1954	206.2	26	38	61	(NA)
34423	Metal molding and trim and store fronts 1977	191.1	35	48	72	92
	1972	146.9	26	42	73	96
	1967	145.0	41	55	80	97
	1963	116.8	38	51	72	91
	1958	97.3	31	44	66	88
	1954	68.1	32	48	66	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3442-	Metal doors, sash, and trim--Con.					
34424	Metal combination screen and storm sash and doors....1977..	401.7	20	31	51	71
	1972..	228.0	24	33	49	68
	1967..	198.2	17	29	48	68
	1963..	221.4	15	23	37	55
	1958..	231.5	11	19	36	52
	1954..	169.8	12	20	36	(NA)
34425	Metal window and door screens (except combination), and metal weatherstrip....1977..	152.4	38	53	71	88
	1972..	95.4	39	52	72	92
	1967..	61.5	33	47	68	89
	1963..	56.7	23	34	54	77
	1958..	64.6	20	30	51	77
34420	Metal doors, sash, and trim, n.s.k....1977..	337.7	(X)	(X)	(X)	(X)
	1972..	232.6	(X)	(X)	(X)	(X)
	1967..	293.3	(X)	(X)	(X)	(X)
	1963..	113.5	(X)	(X)	(X)	(X)
	1958..	80.6	(X)	(X)	(X)	(X)
3443-	Fabricated platework (boiler shops)....1977..	6,641.2	22	30	40	52
	1972..	3,264.3	27	34	45	57
	1967..	2,589.4	26	32	44	56
	1963..	1,580.8	23	30	43	56
	1958..	1,614.0	29	38	50	64
34431	Heat exchangers and steam condensers (1972 product class 34431, part)....1977..	900.5	23	37	62	86
34433	Steel power boilers, parts, and attachments (over 15 p.s.i. steam working pressure) (1972 product class 34433, part)....1977..	960.3	79	88	95	99+
34436	Nuclear reactor steam supply systems (1972 product classes 34431, part and 34433, part.)....1977..	695.4	71	86	98	100
	1972 product class 34431, Heat exchangers and steam condensers (1977 product class 34431, and 34436, part)....1972..	447.1	31	46	72	90
	1967..	343.5	26	38	64	91
	1963..	160.5	24	38	66	91
	1958..	187.2	29	47	74	92
	1972 product class 34433, Steel power boilers, parts, and attachments (over 15 p.s.i. steam working pressure) (1977 product class 34433, and 34436, part)....1972..	728.5	83	90	96	99
	1967..	521.7	77	89	96	99
	1963..	340.7	79	88	96	99
	1958..	409.5	86	92	97	99
	1954..	264.8	78	86	94	(NA)
34432	Fabricated steel plate, including stacks and weldments....1977..	1,095.5	15	23	39	59
	1972..	616.0	17	25	38	56
	1967..	517.9	24	35	48	62
	1963..	374.2	27	38	52	64
34434	Gas cylinders....1977..	173.3	60	82	99	100
	1972..	93.4	54	80	99	100
	1967..	72.2	59	80	99	100
	1963..	46.3	62	79	96	100
34435	Metal tanks, complete at factory (standard line, pressure)....1977..	298.5	28	46	73	94
	1972..	174.9	34	47	71	93
	1967..	120.2	35	48	69	90
	1963..	104.4	22	34	56	81
34437	Metal tanks, complete at factory (standard line, nonpressure)....1977..	486.2	13	22	41	64
	1972..	255.0	13	21	37	60
	1967..	177.3	14	24	41	61
	1963..	145.6	17	25	37	54
34438	Metal tanks and vessels, custom fabricated at the factory....1977..	770.6	24	36	56	74
	1972..	380.3	22	35	53	71
	1967..	464.8	33	47	65	80
	1963..	197.1	24	37	52	72
34439	Metal tanks and vessels, custom fabricated and field erected....1977..	663.2	48	61	82	96
	1972..	369.4	58	72	86	96
	1967..	176.1	47	57	73	90
	1963..	123.3	71	78	88	97
34430	Fabricated platework (boiler shops), n.s.k....1977..	597.7	(X)	(X)	(X)	(X)
	1972..	199.8	(X)	(X)	(X)	(X)
	1967..	195.7	(X)	(X)	(X)	(X)
	1963..	88.6	(X)	(X)	(X)	(X)
	1958..	70.1	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3444-	Sheet metalwork					
	1977	4,607.5	10	16	26	37
	1972	2,650.0	11	17	26	38
	1967	1,687.1	9	15	22	34
	1963	1,324.7	10	15	23	33
	1958	1,008.5	12	16	24	34
	1954	727.6	17	24	31	(NA)
34442	Culverts, flumes, and irrigation pipes					
	1977	371.2	42	56	76	92
	1972	241.8	43	56	72	89
	1967	169.9	38	49	70	90
	1963	137.5	43	54	72	89
	1958	126.9	57	66	78	93
34444	Metal roofing and roof drainage equipment					
	1977	597.7	25	39	62	84
	1972	422.3	34	46	69	90
34445	Metal flooring and siding					
	1977	775.8	36	56	77	94
	1972	301.8	38	58	83	97
	1967 product class 34441, Sheet metal roofing and siding, and roof drainage equipment (1972 product classes 34444 and 34445)					
	1967	408.5	32	46	68	85
	1963	306.2	33	48	70	86
	1958	185.8	30	47	68	87
34446	Other sheet metalwork (1967 product class 34443)					
	1977	2,121.1	6	11	21	36
	1972	1,187.9	6	10	21	37
	1967	722.9	6	11	23	40
	1963	731.8	5	8	15	28
	1958	485.9	6	10	19	31
34440	Sheet metalwork, n.s.k					
	1977	741.4	(X)	(X)	(X)	(X)
	1972	496.2	(X)	(X)	(X)	(X)
	1967	385.7	(X)	(X)	(X)	(X)
	1963	149.2	(X)	(X)	(X)	(X)
	1958	209.9	(X)	(X)	(X)	(X)
34460	Architectural and ornamental metalwork (except curtain wall and other exterior panels)					
	1977	950.9	14	22	36	52
	1972	589.4	11	17	28	42
	1967	504.9	18	27	40	55
	1963	306.2	7	13	24	40
	1958	332.9	8	12	23	37
3448-	Prefabricated metal buildings[150]					
	1977	1,656.0	22	33	56	76
	1972	584.9	32	50	69	86
34481	Prefabricated metal industrial and commercial buildings					
	1977	912.2	34	51	75	93
	1972	265.0	55	68	90	99
34482	Other prefabricated and portable metal buildings and parts					
	1977	630.2	29	45	66	87
	1972	311.4	34	50	71	89
	1967 product class 34492, Prefabricated and portable metal buildings and parts (1972 product classes 34481 and 34482)					
	1967	378.0	31	44	65	87
	1963	224.5	37	48	65	84
	1958	195.1	43	55	72	90
	1954	116.0	40	53	73	(NA)
34480	Prefabricated metal buildings, n.s.k					
	1977	113.6	(X)	(X)	(X)	(X)
	1972	8.4	(X)	(X)	(X)	(X)
3449-	Miscellaneous metalwork[150]					
	1977	1,332.9	28	44	60	76
	1972	992.4	27	38	54	72
34494	Fabricated concrete reinforcing bar and bar joists					
	1977	900.1	40	55	72	86
	1972	583.3	45	57	75	91
34495	Other miscellaneous metal building materials and curtain wall					
	1977	359.2	39	58	79	96
	1972	273.4	33	48	71	91
	1967 product class 34493, Miscellaneous metal building materials and curtain wall (1972 product classes 34494 and 34495)					
	1967	615.9	32	43	62	80
	1963	506.5	31	41	57	76
	1958	407.5	28	38	57	76
	1954	240.4	35	47	63	(NA)
34490	Miscellaneous metalwork, n.s.k					
	1977	73.6	(X)	(X)	(X)	(X)
	1972	135.7	(X)	(X)	(X)	(X)
	1967	122.6	(X)	(X)	(X)	(X)
	1963	62.3	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3451-	Screw machine products....1977..	1,771.4	7	10	17	28
	1972..	1,083.9	5	8	15	26
	1967..	1,036.1	6	9	16	28
	1963..	599.5	6	9	16	27
	1958..	428.8	7	10	18	29
	1954..	424.8	12	17	25	(NA)
34511	Automotive screw machine products[151]....1977..	598.4	20	28	41	61
	1972..	245.7	20	28	42	63
34512	Other screw machine products[151]....1977..	958.6	5	9	18	31
	1972..	638.8	4	8	17	31
34510	Screw machine products, n.s.k....1977..	214.4	(X)	(X)	(X)	(X)
	1972..	199.5	(X)	(X)	(X)	(X)
3452-	Bolts, nuts, rivets, and washers....1977..	3,130.3	13	23	39	61
	1972..	1,972.3	15	25	42	66
	1967..	1,613.1	17	26	45	67
	1963..	1,175.2	17	27	47	67
	1958..	859.4	17	28	46	66
	1954..	706.4	16	26	45	(NA)
34524	Externally threaded fasteners, except aircraft....1977..	1,451.2	15	26	50	75
	1972..	969.6	19	31	53	77
34525	Internally threaded fasteners, except aircraft....1977..	412.6	31	48	76	95
	1972..	247.9	29	44	72	96
34526	Nonthreaded fasteners, except aircraft....1977..	517.2	21	32	57	84
	1972..	351.8	24	43	67	89
34527	Aircraft aerospace fasteners....1977..	237.9	46	68	91	99+
	1972..	157.7	49	75	92	99+
	1967 product class 34521, Bolts, nuts, and other standard industrial fasteners....1967..	983.9	18	30	50	72
	1963..	843.0	19	30	51	72
	1958..	669.6	19	30	48	70
	1954..	568.7	19	30	48	(NA)
	1967 product class 34522, Special industrial fasteners....1967..	361.5	25	42	74	94
	1963..	241.5	23	40	70	92
	(1967 product classes 34521 and 34522 were reclassified as product classes 34524, 34525, 34526, and 34527 in 1972)					
34528	Other formed parts (1967 product class 34523)....1977..	284.6	35	56	79	96
	1972..	136.3	31	51	72	91
	1967..	195.9	32	51	72	90
	1963..	76.7	38	50	71	93
34520	Bolts, nuts, rivets, and washers, n.s.k....1977..	226.8	(X)	(X)	(X)	(X)
	1972..	109.0	(X)	(X)	(X)	(X)
	1967..	71.8	(X)	(X)	(X)	(X)
	1963..	14.5	(X)	(X)	(X)	(X)
	1958..	10.5	(X)	(X)	(X)	(X)
3462-	Iron and steel forgings (1967 product group 3391-)....1977..	[137]2,966.7	21	32	49	72
	1972..	[137]1,572.6	30	41	57	77
	1967..	[137]1,550.7	26	37	53	73
	1963..	[137]954.9	28	39	55	75
	1958..	[137]663.2	14	40	61	87
34625	Hot impression die impact, press, and upset ferrous forgings (1972 product class 34621, part)....1977..	2,155.4	28	40	59	82
34626	Cold impression die impact, press, and upset ferrous forgings (1972 product class 34621, part)....1977..	215.7	80	94	100	(X)
	1972 product class 34621, Drop, upset and press steel forgings (closed die) (1977 product classes 34625 and 34626)....1972..	1,275.1	31	44	62	85
	1967..	1,048.5	28	39	59	83
	1963..	764.8	32	42	60	84
	1958..	535.3	27	37	58	60
	1954..	513.9	25	38	61	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3462-	Bolts, nuts, rivets, and washers, n.s.k.--Con.					
34627	Seamless rolled ring ferrous forgings (1972 product class 34629, part)....1977..	113.8	52	74	(D)	100
34628	Open-die or smith ferrous forgings (hammer or press) (1972 product class 34629, part)....1977..	384.7	36	51	75	97
	1972 product class 34629, open-die or smith forgings (open frame, hammer, or press) (1977 product classes 34627 and 34628)....1972..	4258.5	39	51	76	96
	1967..	4254.3	28	39	64	92
	1963..	4173.7	34	45	65	90
	1958..	4115.2	25	37	61	85
34620	Iron and steel forgings, n.s.k. (1967 product class 33910)....1977..	97.1	(X)	(X)	(X)	(X)
	1972..	39.0	(X)	(X)	(X)	(X)
	1967..	39.3	(X)	(X)	(X)	(X)
	1963..	16.4	(X)	(X)	(X)	(X)
	1958..	12.7	(X)	(X)	(X)	(X)
3463-	Nonferrous forgings (1967 product group 3392-)....1977..	540.4	61	77	90	99
	1972..	280.7	51	69	87	99
	1967..	348.1	54	73	89	99
	1963..	198.4	56	78	91	99
	1958..	132.0	70	82	95	99+
	1954..	112.4	63	76	93	(NA)
34635	Hot impression die impact nonferrous forgings....1977..	468.1	65	82	95	100
34636	Cold impression die impact nonferrous forgings....1977..	8.5	88	(D)	100	(X)
34637	Seamless rolled ring nonferrous forgings....1977..	15.9	95	(D)	100	(X)
34638	Open-die or smith nonferrous forgings....1977..	36.8	74	90	100	(X)
	1972 product class 34631, Aluminum and aluminum base alloy forgings.1972..	136.7	76	84	97	100
	1972 product class 34632, Other nonferrous forgings (except aluminum)....1972..	139.0	53	72	94	100
	1972 product classes 34631 and 34632 were reclassified as product classes 34635, 34636, 34637, and 34638).					
34630	Nonferrous forgings, n.s.k....1977..	11.1	(X)	(X)	(X)	(X)
	1972..	5.0	(X)	(X)	(X)	(X)
34650	Job stampings, automotive (1967 product class 34613)[152]....1977..	9,599.8	67	71	77	84
	1972..	5,150.4	70	73	79	(D)
	1967..	3,178.2	69	73	80	87
	1963..	2,548.0	([142])	([142])	([142])	([142])
3466-	Crowns and closures[152]....1977..	581.0	46	68	94	99+
	1972..	345.3	48	64	88	99+
34661	Metal commercial closures and metal home canning closures (except crowns) (1967 product class 34616)....1977..	470.7	57	76	95	100
	1972..	277.1	56	72	92	100
	1967..	204.6	54	73	95	100
	1963..	147.9	60	76	97	100
	1958..	131.1	58	78	96	100
	1954..	94.9	59	77	96	(NA)
34662	Metal crowns (1967 product class 34617)....1977..	104.8	90	(D)	100	(X)
	1972..	68.2	62	96	100	(X)
	1967..	85.4	76	93	100	(X)
	1963..	82.0	84	98	100	(X)
	1958..	80.8	74	97	100	(X)
	1954..	78.4	81	98	100	(X)
34660	Crowns and closures, n.s.k....1977..	5.6	(X)	(X)	(X)	(X)
3469-	Metal stampings, n.e.c.[152]....1977..	4,554.5	9	14	23	35
	1972..	2,571.1	8	13	21	34
34692	Job stampings, except automotive (1967 product class 34612)....1977..	2,199.3	12	16	25	38
	1972..	1,274.5	11	17	27	41
	1967..	1,076.9	9	15	25	40
	1963..	756.7	9	13	22	36
	1958..	576.2	8	14	25	41
	1954..	510.4	8	14	25	(NA)
34694	Stamped and spun utensils, cooking and kitchen, aluminum (1967 product class 34614)....1977..	330.1	49	71	93	99+
	1972..	205.1	56	84	96	99+
	1967..	148.2	69	87	96	99+
	1963..	95.7	71	88	97	99+
	1958..	110.7	79	89	97	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3469-	Metal stampings, n.e.c.--Con.					
34695	Stamped and spun utensils, cooking and kitchen, except aluminum (1967 product class 34615) 1977	385.4	46	73	92	99
	1972	184.4	51	76	94	99
	1967	141.6	44	66	84	96
	1963	134.3	43	60	82	95
	1958	113.5	48	63	81	95
34699	Other stamped and pressed metal end products (1967 product classes 34611 and 34618) 1977	1,073.0	21	28	40	57
	1972	573.4	9	15	27	48
	1967 product class 34611, Vitreous enamelled products 1967	66.9	40	60	88	99+
	1963	70.1	35	53	84	99+
	1958	72.5	28	42	73	96
	1967 product class 34618, Other stamped and pressed metal end products 1967	377.3	12	20	35	56
	1963	250.7	12	21	39	61
	1958	223.3	12	20	35	58
34690	Metal stampings, n.e.c., n.s.k. 1977	566.7	(X)	(X)	(X)	(X)
	1972	333.7	(X)	(X)	(X)	(X)
	1967	246.1	(X)	(X)	(X)	(X)
	1963	98.1	(X)	(X)	(X)	(X)
	1958	89.0	(X)	(X)	(X)	(X)
34710	Electroplating, plating, and polishing 1977	[145]1,775.1	(NA)	(NA)	(NA)	(NA)
	1972	[145]1,008.9	(NA)	(NA)	(NA)	(NA)
	1967	[145]756.1	(NA)	(NA)	(NA)	(NA)
	1963	[145]501.9	(NA)	(NA)	(NA)	(NA)
	1958	[145]349.7	(NA)	(NA)	(NA)	(NA)
34790	Coating, engraving, and allied services, n.e.c 1977	[145]1,520.5	(NA)	(NA)	(NA)	(NA)
	1972	[145]637.1	(NA)	(NA)	(NA)	(NA)
	1967	[145]404.3	(NA)	(NA)	(NA)	(NA)
	1963	[145]286.5	(NA)	(NA)	(NA)	(NA)
	1958	[145]184.0	(NA)	(NA)	(NA)	(NA)
34820	Small arms ammunition, 30mm. and under (or 1.18 inches and under) (1967 product class 19610)[153] 1977	403.9	75	91	98	99+
	1972	306.4	88	94	98	99+
3483-	Ammunition, except for small arms, n.e.c. (1967 product group 1929-)[153] 1977	575.9	51	69	88	99+
	1972	991.2	39	57	80	97
34831	Artillery ammunition over 30mm. (or over 1.18 inches) (1967 product class 19291) 1977	338.3	(NA)	(NA)	(NA)	(NA)
	1972	481.2	(NA)	(NA)	(NA)	(NA)
34832	Receipts for ammunition loading and assembly over 30mm. (1967 product class 19292) 1977					
	1972					
34833	Ammunition, except for small arms, n.e.c. (1967 product class 19293) 1977	229.5	76	86	90	100
	1972	506.1	54	70	93	100
34830	Ammunition, except for small arms, n.e.c., n.s.k. (1967 product class 19290) 1977	8.1	(X)	(X)	(X)	(X)
	1972	3.9	(X)	(X)	(X)	(X)
3484-	Small arms (1967 product group 1951-)[153] 1977	662.6	56	77	94	98
	1972	334.2	54	74	95	99
34841	Machine guns, 30mm. and under (or 1.18 inches and under) (1967 product class 19511)[154] 1977	647.5	58	79	96	99+
34842	Small arms, 30mm. and under (or 1.18 inches and under) (1967 product class 19512)[154] 1972	326.0	(NA)	(NA)	(NA)	(NA)
34840	Small arms, n.s.k. (1967 product class 19510) 1977	15.1	(X)	(X)	(X)	(X)
	1972	8.1	(X)	(X)	(X)	(X)
3489-	Ordnance and accessories, n.e.c. (1967 product groups 1911- and 1999-)[153] 1977	483.3	39	57	75	94
	1972	333.8	40	56	78	95
34891	Guns, howitzers mortars, and related equipment, over 33mm. (or over 1.18 inches) (1967 product class 19110) 1977	57.0	78	93	100	(X)
	1972	44.3	93	98	99	100
34892	Ordnance and accessories, n.e.c. (1967 product class 19990) 1977	414.0	41	58	77	97
	1972	281.3	44	58	81	97
34890	Ordnance and accessories, n.e.c., n.s.k. 1977	12.3	(X)	(X)	(X)	(X)
	1972	8.2	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3493-	Steel springs, except wire					
	1977	571.0	45	63	83	94
	1972	361.9	39	58	78	94
	1967	264.0	34	50	75	92
	1963	205.2	43	67	85	96
	1958	133.1	44	64	83	95
	1954	129.6	43	67	86	(NA)
34931	Hot formed springs[155]					
	1977	454.2	55	71	93	100
	1972	279.2	49	69	91	(D)
34932	Cold formed springs[155]					
	1977	94.3	64	82	94	100
	1972	56.9	61	75	92	99+
34930	Steel springs, except wire, n.s.k					
	1977	22.2	(X)	(X)	(X)	(X)
	1972	25.8	(X)	(X)	(X)	(X)
3494	Valves and pipe fittings					
	1977	5,403.0	11	18	34	56
	1972	2,879.8	11	20	37	59
	1967	2,102.8	11	21	38	59
	1963	1,525.4	13	22	37	58
	1958	1,193.0	17	24	41	59
34942	Valves for power transfer (pneumatic and hydraulic)					
	1977	535.3	23	39	65	91
	1972	316.9	27	44	71	93
	1967	229.5	34	45	67	92
34943	Other metal valves for piping systems and equipment (except plumbing and heating valves)					
	1977	2,113.4	16	28	51	78
	1972	1,002.2	24	38	61	83
	1967	820.3	26	39	61	83
34944	Plumbing and heating valves and specialities (except plumbers' brass goods)					
	1977	206.6	42	60	85	(D)
	1972	139.3	31	46	77	98
	1967	101.2	33	48	71	94
34945	Metal fittings, flanges, and unions for piping systems					
	1977	1,018.8	26	41	68	89
	1972	599.3	27	46	70	91
	1967	484.7	35	52	77	94
34946	Fittings and assemblies for tubing and hose (except plumbers' brass goods)					
	1977	482.3	52	70	87	99
	1972	193.4	60	77	93	99+
	1967	55.1	77	86	99	100
34947	Automatic regulating and control valves (1972 product class 34941, part)					
	1977	696.1	38	53	73	93
34948	Solenoid valves (1972 product class 34941, part)					
	1977	114.8	65	82	97	100
	1972 product class 34941, Automatic regulating and control valves (1977 product classes 34947 and 34948)					
	1972	535.8	29	41	60	82
	1967	312.3	44	57	75	92
34940	Valves and pipe fittings, n.s.k					
	1977	235.7	(X)	(X)	(X)	(X)
	1972	92.9	(X)	(X)	(X)	(X)
	1967	99.9	(X)	(X)	(X)	(X)
3495-	Wire springs[156]					
	1977	933.0	29	40	57	75
	1972	567.3	26	37	57	78
34952	Precision mechanical springs (1967 product class 34812)					
	1977	392.0	26	38	56	79
	1972	250.4	22	35	57	78
	1967	211.0	29	41	61	81
	1963	150.0	35	46	71	91
	1958	109.0	35	46	65	87
34953	Other wire springs (1967 product class 34813)					
	1977	500.1	48	61	81	95
	1972	313.1	40	60	84	97
	1967	254.1	36	53	73	90
	1963	239.5	36	54	69	86
	1958	187.8	36	52	69	87
34950	Wire springs, n.s.k					
	1977	40.9	(X)	(X)	(X)	(X)
	1972	3.6	(X)	(X)	(X)	(X)
3496-	Miscellaneous fabricated wire products[156]					
	1977	1,440.0	9	15	28	45
	1972	943.4	8	14	26	42
34961	Noninsulated ferrous wire rope, cable, etc. (1967 product class 34811)					
	1977	171.4	29	41	66	89
	1972	4 96.4	36	50	73	93
	1967	4 81.8	57	78	96	100
	1963	4 88.6	55	74	94	100
	1958	4 69.3	58	77	97	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con				
3496-	Miscellaneous fabricated wire products--Con.					
34964	Ferrous wire cloth and other ferrous woven wire products (1967 class 34814) 1977	137.7	42	60	83	99
	1972	[4]75.3	38	53	78	99
	1967	51.0	49	64	89	99
	1963	48.0	37	54	79	96
34965	Nonferrous wire cloth and other woven wire products (1967 product class 34815) 1977	66.1	48	69	94	100
	1972	[4]49.6	54	76	93	100
	1967	53.8	50	68	92	100
	1963	48.8	45	65	90	99+
34966	Fencing and fence gates (1967 product class 34816) 1977	131.3	62	73	91	99+
	1972	[4]73.5	61	75	90	99+
	1967	51.2	54	68	80	98
	1963	57.2	56	65	83	96
	1958	55.3	52	62	78	93
34967	Steel nails and spikes (1972 product class 34969, part) 1977	88.1	84	94	100	(X)
34968	Other fabricated wire products (1972 product class 34968, part) 1977	626.0	16	25	42	63
	1972 product class 34969, Other fabricated wire products (1977 product classes 34967 and 34968) 1972	[4]457.5	12	22	37	57
	1967	373.7	14	21	37	56
	1963	320.0	13	19	34	54
	1958	262.5	13	19	32	50
34960	Miscellaneous fabricated wire products, n.s.k. (1967 product class 34810) 1977	219.5	(X)	(X)	(X)	(X)
	1972	191.2	(X)	(X)	(X)	(X)
	1967	143.9	(X)	(X)	(X)	(X)
	1963	60.0	(X)	(X)	(X)	(X)
	1958	38.1	(X)	(X)	(X)	(X)
3497-	Metal foil and leaf 1977	1,089.5	43	58	78	95
	1972	497.2	41	57	78	96
	1967	385.6	42	58	78	95
	1963	308.7	50	67	85	87
	1958	145.5	42	59	80	95
34971	Converted unmounted aluminum foil packaging products, not laminated to other materials[157] 1977	386.7	81	93	100	(X)
	1972	194.1	81	95	100	(X)
34972	Laminated aluminum foil roll and sheets for flexible packaging uses[157] 1977	496.9	41	57	84	99
	1972	218.8	33	53	83	99
34973	Converted aluminum foil for nonpackaging applications and foil and leaf[157] 1977	184.3	45	67	95	100
	1972	61.2	55	81	100	(X)
34970	Metal foil and leaf, n.s.k. 1977	21.6	(X)	(X)	(X)	(X)
	1972	23.0	(X)	(X)	(X)	(X)
34980	Fabricated pipe and fittings 1977	1,698.1	16	27	46	65
	1972	670.4	19	30	50	70
	1967	486.3	15	25	44	67
	1963	286.5	14	26	44	66
	1958	265.4	19	30	49	70
	1954	214.1	21	33	53	(NA)
3499-	Fabricated metal products, n.e.c.[158] 1977	3,390.3	12	17	26	38
	1972	2,149.8	16	24	34	46
34991	Safes and vaults (1967 product class 34920) 1977	181.6	74	86	98	100
	1972	147.2	89	95	99	(X)
	1967	79.5	(D)	92	99	100
	1963	59.3	(D)	91	98	100
	1958	45.1	87	92	99	100
	1954	34.0	86	93	99	(NA)
34992	Collapsible tubes (1967 product class 34960) 1977	106.5	64	87	100	(X)
	1972	49.3	70	96	100	(X)
	1967	50.9	57	91	100	(X)
	1963	44.2	55	90	100	(X)
	1958	37.2	53	85	100	(X)
	1954	34.1	50	82	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 34, FABRICATED METAL PRODUCTS--Con.				
3499-	Fabricated metal products, n.e.c.--Con.					
34993	Flat metal strapping	1977.. 272.6	92	97	99	100
		1972.. 167.8	85	97	99+	100
34994	All other fabricated metal products, except flat metal strapping, n.e.c.	1977.. 2,300.0	11	16	26	41
		1972.. 1,403.0	18	25	35	51
34990	Fabricated metal products, n.e.c., n.s.k.	1977.. 529.7	(X)	(X)	(X)	(X)
		1972.. 382.6	(X)	(X)	(X)	(X)
	1967 product class 34990, Fabricated metal products, n.e.c. (1972 product classes 34993, 34994, and 34990)	1967.. 1,172.9	16	24	35	50
		1963.. 753.4	16	22	32	46
		1958.. 443.7	23	30	42	54
		1954.. 364.8	21	29	40	(NA)
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL				
3511-	Turbines and turbine generator sets	1977.. 2,813.1	80	88	98	99+
		1972.. 2,079.7	(D)	93	98	100
		1967.. 1,059.3	78	91	99	99+
		1963.. 589.1	83	92	99	100
		1958.. 754.0	86	94	99	100
35111	Steam, gas, and hydraulic turbine generator set units and parts	1977.. 1,369.2	(D)	98	100	100
		1972.. 1,521.6	(D)	(D)	100	100
		1967.. 714.5	95	99	100	(X)
		1963.. (D)	(D)	(D)	100	(X)
		1958.. 489.5	99	(D)	100	(X)
		1954.. 317.3	97	100	(X)	(X)
35112	Steam, gas, and hydraulic turbines and parts	1977.. 1,415.4	74	86	99	100
		1972.. 541.5	73	87	98	100
		1967.. 344.7	63	81	98	100
		1963.. (D)	(D)	(D)	(D)	100
		1958.. 264.5	65	83	98	100
35110	Turbines and turbine generator sets, n.s.k.	1977.. 28.5	(X)	(X)	(X)	(X)
		1972.. 16.6	(X)	(X)	(X)	(X)
3519-	Internal combustion engines, n.e.c.	1977.. 7,548.0	51	70	88	97
		1972.. 3,353.4	48	69	89	97
		1967.. 2,187.6	45	64	86	98
		1963.. 1,423.9	46	66	86	98
		1958.. 1,132.0	45	63	86	98
35191	Gasoline engines, under 11 horsepower, except outboard, aircraft, automobile, truck, bus, and tank[16]	1977.. (159)	(159)	(159)	(159)	(159)
		1972.. 326.8	(D)	100	100	100
		1967.. 215.5	90	99+	100	(X)
35192	Gasoline engines, 11 horsepower and over, except outboard, aircraft, automobile, truck, bus, and tank[16]	1977.. 159892.9	15972	15992	159 99+	159100
		1972.. 164.0	59	81	99	100
		1967.. 171.4	50	76	99+	100
35193	Diesel, semidiesel, and dual fuel engines, except automotive[16]	1977.. 1,587.4	80	94	99+	100
		1972.. 604.0	80	89	100	100
		1967.. 447.9	81	94	100	(X)
35194	Diesel, semidiesel, and dual fuel engines (automotives)[16]	1977.. 1,322.2	93	100	100	100
		1972.. 634.6	96	99+	100	(X)
		1967.. 233.2	97	100	(X)	(X)
35195, 35197	Outboard motors and tank and converted internal combustion engines[16]	1977.. 813.7	83	96	(D)	100
		1972.. 425.9	85	97	100	100
		1967.. 267.1	74	89	100	(X)
35196	Gas engines (except turbines)	1977.. 31.9	95	(D)	(D)	(X)
		1972.. 35.2	77	94	100	(X)
		1967.. 22.6	91	99+	100	(X)
		1963.. 22.1	62	94	100	(X)
		1958.. 17.7	68	94	100	(X)
35199	Parts and accessories for internal combustion engines, except aircraft, gasoline, automotive, and gas turbines	1977.. 2,846.9	52	69	85	98
		1972.. 1,144.9	51	65	85	98
		1967.. 816.0	45	64	85	99
		1963.. 480.6	45	59	83	98
		1958.. 379.4	47	63	86	98
		1954.. 289.9	39	63	82	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3519-	Internal combustion engines, n.e.c.--Con.					
359190	Internal combustion engines, n.e.c., n.s.k.....1977..	52.9	(X)	(X)	(X)	(X)
	1972..	18.0	(X)	(X)	(X)	(X)
	1967..	13.9	(X)	(X)	(X)	(X)
	1963..	2.9	(X)	(X)	(X)	(X)
	1958..	1.3	(X)	(X)	(X)	(X)
3523-	Farm machinery and equipment (1967 industry 3522, part)[160].....1977..	9,548.9	46	60	68	76
	1972..	4,143.5	46	59	67	75
	1967 industry 3522, Farm machinery (1972 industries 3523 and 3524).1967..	4,077.3	45	56	67	76
	1963..	2,542.1	42	55	65	75
	1958..	2,172.9	44	58	68	77
35231	Wheel tractors and attachments (except contractors' off-highway type, lawn and garden tractors, and motor tillers) (1967 product class 35221)[161].....1977..	2,637.0	80	99	(D)	(D)
	1972..	1,215.2	81	98	100	(X)
	1967..	1,040.2	75	98	99+	100
	1963..	808.4	72	95	98	99+
	1958..	687.1	72	96	99	99+
35232	Farm dairy machines, sprayers and dusters, farm elevators, and farm blowers (1967 product class 35222, part)[162].....1977..	306.4	34	50	72	93
	1972..	157.8	27	39	60	86
	1967 product class 35222, Farm dairy machines, sprayers and dusters, farm elevators, farm blowers, garden tractors, and motor tillers (1972 product classes 35232 and 35242)[16 161 162].....1967..	339.8	34	53	74	89
35233	Planting, seeding, and fertilizing machinery (1967 product class 35223)[161].....1977..	466.5	50	60	79	94
	1972..	172.0	43	56	76	93
	1967..	183.0	48	58	74	90
	1963..	115.7	48	61	80	93
	1958..	96.0	63	76	89	97
	1954..	93.6	52	66	80	(NA)
35234	Harrows, rollers, pulverizers, stalk cutters, and similar equipment (1967 product class 35224, part).....1977..	392.2	36	52	75	94
	1972..	191.8	36	51	74	92
35235	Harvesting machinery, except hay and straw harvesting (1967 product class 35225)[161].....1977..	1,463.3	79	87	94	99
	1972..	580.4	71	81	92	98
	1967..	580.7	67	82	91	98
	1963..	395.3	69	80	91	98
	1958..	321.4	70	81	92	98
	1954..	252.6	66	82	94	(NA)
35236	Haying machinery (1967 product class 35226)[161].....1977..	414.9	81	93	98	100
	1972..	184.1	82	89	97	100
	1967..	148.8	78	88	98	100
	1963..	133.8	74	86	96	99+
	1958..	182.5	72	84	97	99
	1954..	147.9	73	87	96	(NA)
35237	Plows (1967 product class 35224, part).....1977..	199.0	69	78	92	99
	1972..	85.4	70	81	93	100
	1967 product class 35224, Plows, listers, harrows, rollers, pulverizers, stalk cutters and similar equipment (1972 product classes 35234 and 35237)[161].....1977..	281.1	50	63	78	92
	1963..	192.8	50	64	78	92
	1958..	160.6	54	65	79	92
35238	Farm machinery and equipment, n.e.c. (1967 product class 35228)[16 161 163].....1977..	1,228.0	19	28	45	66
	1972..	610.8	15	24	39	60
	1967..	403.9	18	28	46	68
35239	Parts for farm machinery and equipment, sold separately (1967 product class 35229, part).....1977..	1,609.5	50	63	74	85
	1972..	741.4	51	63	76	89
	1967 product class 35229, Parts for farm machinery and equipment for sale separately (1972 product classes 35239 and 35249)[161 164].1967..	554.7	46	58	72	85
3523A	Commercial turf and grounds mowing equipment, including parts and attachments[165].....1977..	107.4	67	84	98	100
3523B	Commercial turf and grounds care equipment, except mowing equipment, including parts and attachments[165].....1977..	172.9	(D)	91	98	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3523-	Farm machinery and equipment--Con.					
35230	Farm machinery and equipment, n.s.k. (1967 product class 35220, part)[166] 1977	551.8	(X)	(X)	(X)	(X)
	1972	204.6	(X)	(X)	(X)	(X)
	1967 product class 35220, Farm machinery, n.s.k. (1972 product classes 35230 and 35240)[166] 1967	156.7	(X)	(X)	(X)	(X)
	1963	71.5	(X)	(X)	(X)	(X)
	1958	34.7	(X)	(X)	(X)	(X)
3524-	Lawn and garden equipment (1967 industry 3522, part) 1977	1,747.2	28	48	78	94
	1972	1,143.4	28	45	72	92
35241	Consumer nonriding lawn, garden, and snow equipment (1972 product classes 35242, part and 35247, part) 1977	841.2	36	56	87	98
35243	Parts and attachments for consumer nonriding lawn, garden, and snow equipment (1972 product class 35249, part) 1977	103.2	50	70	90	99+
35244	Consumer riding lawn, and garden, and snow equipment (1972 product classes 35242, part and 35247, part) 1977	577.4	43	70	98	100
35245	Parts and attachments for consumer riding, lawn, garden, and snow equipment (1972 product class 35249, part) 1977	199.3	45	65	88	(D)
	1972 product class 35242, Garden tractors and motor tillers (1977 product classes 35241, part and 35244, part)[150] 1972	321.1	47	70	95	100
	1972 product class 35247, Lawnmowers and snow blowers (1977 product classes 35241, part and 35244, part)[149] 1972	550.2	34	53	79	96
	1967	388.5	33	52	80	95
	1963	268.7	33	48	71	92
	1958	239.8	25	41	67	92
	1954	138.4	28	49	76	(NA)
	1972 product class 35249, Parts for lawn and garden equipment, for sale separately (1977 product classes 35243 and 35245)[163] [164] 1972	269.6	64	73	89	99
35240	Lawn and garden equipment, n.s.k. (1967 product class 35220, part)[166] 1977	26.1	(X)	(X)	(X)	(X)
	1972	2.5	(X)	(X)	(X)	(X)
3531-	Construction machinery 1977	11,569.9	47	58	74	84
	1972	5,653.6	41	53	70	84
	1967	3,766.6	40	50	70	83
	1963	2,624.2	42	53	69	82
	1958	1,996.3	41	52	67	81
35311	Wheel tractors, contractors' off-highway type, (2- and 4-wheel), rubber-tired dozers, and self-propelled wheeled log skidders 1977	453.6	75	88	99+	100
	1972	251.5	76	94	100	(X)
	1967	132.2	72	95	100	(X)
	1963	102.7	76	95	100	(X)
	1958	90.0	82	97	99	100
	1954	46.8	85	99	100	(X)
35312	Tracklaying type tractors, 20 net engine horsepower rating and over, except parts and attachments 1977	1,164.6	88	98	100	(X)
	1972	564.0	91	99	100	(X)
	1967	389.9	93	99+	100	(X)
	1963	317.4	94	(D)	100	(X)
	1958	287.3	92	99	100	(X)
	1954	267.9	97	(D)	100	(X)
35313	Parts and attachments for tracklaying tractors, contractors' off-highway wheel tractors, and tractor shovel loaders 1977	1,818.0	76	88	96	99+
	1972	865.7	70	85	95	100
	1967	604.2	72	84	96	99+
	1963	[167]395.6	([167])	([167])	([167])	([167])
35314	Power cranes, draglines, and shovels (excavators), including surface mining equipment, parts, and attachments, but not including equipment for mounting on tractors 1977	2,260.5	43	70	96	99+
	1972	914.2	43	72	90	98
	1967	656.5	45	71	92	99
	1963	464.8	44	69	92	99
	1958	361.1	40	62	89	99
	1954	268.7	44	70	93	(NA)
35316	Mixers, pavers, and related equipment, excluding parts 1977	304.8	36	56	80	98
	1972	252.0	39	56	77	96
	1967	162.3	40	56	78	95
	1963	132.0	37	53	75	93
	1958	101.9	31	48	73	94
	1954	71.0	34	53	78	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3531-	Construction machinery--Con.					
35317	Tractor shovel loaders, excluding parts and attachments....1977..	1,537.2	74	91	99+	100
	1972..	810.7	75	91	(D)	(D)
	1967..	411.6	76	94	100	(X)
	1963..	[167]295.3	([167])	([167])	([167])	([167])
35318	Scrapers, graders, rollers, and off-highway trucks and coal haulers, trailers, wagons, and construction machinery for mounting on tractors and other prime movers, excluding parts....1977..	1,723.8	58	73	89	99
	1972..	964.8	48	60	82	97
	1967..	711.4	48	64	87	98
	1963..	480.0	45	63	86	97
	1958..	326.0	48	66	84	96
35319	Other construction machinery and equipment, including other parts[5]...1977..	2,002.2	30	38	53	72
	1972..	913.0	22	35	53	72
	1967..	613.9	21	30	46	70
	1963..	403.5	13	21	36	62
	1958..	368.1	17	30	50	73
35310	Construction machinery, n.s.k....1977..	305.1	(X)	(X)	(X)	(X)
	1972..	117.7	(X)	(X)	(X)	(X)
	1967..	84.5	(X)	(X)	(X)	(X)
	1963..	33.2	(X)	(X)	(X)	(X)
	1958..	32.0	(X)	(X)	(X)	(X)
3532-	Mining machinery....1977..	1,785.6	37	48	66	83
	1972..	729.8	36	48	63	80
	1967..	521.5	30	42	60	80
	1963..	336.2	28	40	59	81
	1958..	275.3	26	37	56	78
35325	Underground mining machinery (1972 product class 35321, part)....1977..	432.1	64	81	95	(D)
35326	Mineral beneficiation machinery (1972 product class 35321, part)....1977..	100.9	47	68	97	100
	1972 product class 35321, Underground mining and mineral beneficiation machinery and equipment (1977 product classes 35325 and 35326)....1972..	168.5	57	72	89	99
	1967..	101.4	50	66	87	99+
	1963..	73.6	47	61	86	99+
	1958..	64.7	51	65	86	97
	1954..	61.5	53	70	89	(NA)
35327	Crushing, pulverizing, and screening machinery....1977..	181.9	41	62	89	100
	1972..	101.3	46	61	83	100
	1967..	78.5	38	55	83	99+
	1963..	58.0	48	64	87	99+
	1958..	67.8	31	51	80	98
35328	All other complete mining machinery and equipment, including all rock drills....1977..	120.5	60	78	96	100
	1972..	93.5	65	76	91	100
	1967..	50.1	40	65	92	100
	1963..	39.3	54	72	90	(D)
35329	Parts and attachments for mining machinery and equipment....1977..	841.4	39	53	74	93
	1972..	331.1	39	56	74	93
	1967..	257.2	37	53	75	94
	1963..	158.0	33	47	70	91
35320	Mining machinery, n.s.k....1977..	108.8	(X)	(X)	(X)	(X)
	1972..	35.4	(X)	(X)	(X)	(X)
	1967..	34.3	(X)	(X)	(X)	(X)
	1963..	7.3	(X)	(X)	(X)	(X)
3533-	Oil field machinery....1977..	3,219.4	30	43	63	84
	1972..	980.0	26	40	59	85
	1967..	660.7	24	38	57	80
	1963..	572.7	27	39	58	78
	1958..	496.1	30	42	60	80
	1954..	468.7	35	46	63	(NA)
35331	Rotary oil and gas field drilling machinery and equipment....1977..	1,221.4	53	69	87	99
	1972..	348.2	56	70	89	100
	1967..	243.5	50	64	84	97
	1963..	217.2	54	65	83	97
	1958..	222.0	59	71	87	98

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3533-	Oil field machinery--Con.					
35332	Other oil and gas field drilling machinery and equipment.....1977..	208.3	44	62	89	100
	1972..	87.0	50	74	95	100
	1967..	43.5	42	63	88	100
	1963..	38.8	45	64	91	(D)
	1958..	43.4	62	80	96	100
35333	Oil and gas field production machinery and equipment, except pumps, including water well.....1977..	1,110.5	43	59	78	95
	1972..	376.5	40	54	78	96
	1967..	260.5	35	50	79	97
	1963..	261.5	30	42	66	87
	1958..	175.5	26	41	68	92
35334	Other oil and gas field machinery and tools, except pumps, including water well.....1977..	520.6	46	66	92	100
	1972..	113.6	37	59	90	100
	1967..	65.4	49	68	94	100
	1963..	43.3	41	58	86	99+
	1958..	40.7	39	55	73	90
35330	Oil field machinery, n.s.k.....1977..	158.6	(X)	(X)	(X)	(X)
	1972..	54.7	(X)	(X)	(X)	(X)
	1967..	47.9	(X)	(X)	(X)	(X)
	1963..	11.9	(X)	(X)	(X)	(X)
	1958..	14.6	(X)	(X)	(X)	(X)
35340	Elevators and moving stairways.....1977..	435.1	51	64	77	91
	1972..	412.2	52	66	80	92
	1967..	295.9	58	68	80	94
	1963..	248.2	55	67	81	93
	1958..	165.3	57	65	78	91
	1954..	128.1	56	65	77	(NA)
3535-	Conveyors and conveying equipment.....1977..	1,684.6	15	24	39	58
	1972..	825.6	19	28	44	63
	1967..	655.4	24	34	50	67
	1963..	414.9	23	33	51	69
	1958..	333.9	25	34	51	70
35353	Unit handling conveyors and conveying systems, except hoists and farm elevators (1972 product class 35351, part).....1977..	586.5	21	35	56	80
35354	Part, attachments, and accessories for unit handling conveyors and conveying, systems (sold separately) (1972 product class 35352, part).....1977..	73.1	35	57	85	99+
35355	Bulk material handling conveyors and conveying systems, except hoists and farm elevators (1972 product class 35351, part).....1977..	640.2	22	34	56	77
35356	Parts, attachments, and accessories for bulk material handling conveyors and conveying systems (sold separately) (1972 product class 35352, part).....1977..	204.4	30	52	83	98
	1972 product class 35351, Conveyors and conveying equipment (except hoists and farm elevators) (1977 product classes 35353 and 35355).....1972..	658.8	20	30	47	69
	1967..	478.9	22	30	49	70
	1963..	306.2	20	31	51	72
	1958..	248.0	24	35	54	77
	1972 product class 35352, Parts, attachments, and accessories for conveyors and conveying equipment (1977 product classes 35354 and 35356).....1972..	107.1	30	49	72	94
	1967..	118.6	47	63	82	95
	1963..	88.0	46	59	79	93
	1958..	72.0	40	50	69	84
	1954..	61.3	52	61	78	(NA)
35350	Conveyors and conveying equipment, n.s.k.....1977..	180.4	(X)	(X)	(X)	(X)
	1972..	59.7	(X)	(X)	(X)	(X)
	1967..	57.9	(X)	(X)	(X)	(X)
	1963..	20.7	(X)	(X)	(X)	(X)
	1958..	13.9	(X)	(X)	(X)	(X)
3536-	Hoists, cranes, and monorails.....1977..	901.3	21	32	54	75
	1972..	446.0	22	34	58	80
	1967..	385.3	31	45	65	85
	1963..	224.2	27	40	66	87
	1958..	165.5	33	50	72	91
35361	Hoists.....1977..	404.1	23	41	65	89
	1972..	167.4	28	46	71	91
	1967..	144.9	28	46	73	93
	1963..	105.0	24	43	71	91
	1958..	59.4	28	46	73	93

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3536-	Hoists, cranes, and monorails--Con.					
35362	Overhead traveling cranes and monorail systems[168] 1977	426.8	38	52	75	94
	1972	253.5	33	50	75	94
	1967	215.1	47	67	86	99
	1963	115.7	43	65	89	99+
	1958	106.1	46	71	90	99
	1954	104.0	47	67	87	(NA)
35360	Hoists, cranes, and monorails, n.s.k. 1977	70.4	(X)	(X)	(X)	(X)
	1972	25.1	(X)	(X)	(X)	(X)
	1967	25.3	(X)	(X)	(X)	(X)
	1963	3.5	(X)	(X)	(X)	(X)
3537-	Industrial trucks and tractors 1977	1,799.9	46	59	72	81
	1972	1,004.8	46	61	73	83
	1967 product class 35370, Industrial trucks and tractors (1972 product classes 35371, 35372, and 35370)[168] 1967	780.7	45	58	71	83
	1963	458.7	49	61	72	83
	1958	276.7	49	61	72	83
	1954	254.8	45	57	71	(NA)
35371	Industrial trucks, tractors, and mobile straddle carriers and cranes 1977	1,233.8	54	69	82	93
	1972	729.5	52	69	81	93
35372	Parts and attachments for industrial trucks, tractors, and mobile straddle carriers and cranes 1977	378.2	42	64	81	96
	1972	171.4	56	75	92	100
35370	Industrial trucks and tractors, n.s.k. 1977	187.9	(X)	(X)	(X)	(X)
	1972	103.9	(X)	(X)	(X)	(X)
3541-	Machine tools, metal cutting types 1977	2,560.5	21	34	54	73
	1972	1,258.5	20	31	52	71
	1967	1,907.8	21	32	51	73
	1963	925.3	21	30	49	69
	1958	592.5	20	29	48	69
	1954	1,002.0	18	27	49	(NA)
35411	Boring machines 1977	93.5	50	72	94	100
	1972	58.7	43	66	87	98
	1967	127.8	52	68	90	98
	1963	66.3	56	76	94	99
	1958	52.8	45	72	95	100
	1954	114.4	51	73	92	(NA)
35412	Drilling machines 1977	108.9	45	58	79	98
	1972	73.7	33	48	71	94
	1967	128.5	42	57	80	96
	1963	55.3	30	45	69	94
	1958	30.9	43	58	82	98
	1954	86.1	36	56	87	(NA)
35413	Gear cutting machines 1977	67.1	79	92	(D)	100
	1972	56.7	(D)	94	99	100
	1967	67.1	80	95	100	(X)
	1963	40.9	83	95	99+	100
	1958	23.5	77	94	(D)	100
	1954	48.1	69	90	99	(NA)
35414	Grinding and polishing machines (excluding gear tooth grinding, lapping, polishing, and buffing machines) 1977	288.3	41	53	74	93
	1972	168.6	40	50	65	82
	1967	270.2	37	51	69	83
	1963	144.2	44	56	72	90
	1958	91.4	43	56	72	90
	1954	154.3	43	59	79	(NA)
35415	Lathes 1977	455.9	39	61	89	99+
	1972	197.6	38	56	86	98
	1967	360.5	37	58	87	99
	1963	163.4	41	60	88	98
	1958	98.6	36	53	84	99
	1954	206.9	38	63	89	(NA)
35416	Milling machines 1977	167.8	74	86	96	100
	1972	86.6	62	73	87	96
	1967	258.2	65	83	93	99
	1963	112.7	62	75	89	97
	1958	89.4	64	80	93	99
	1954	122.5	65	77	92	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3541-	Machine tools, metal cutting types--Con.					
35417	Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.) (1972 product class 35418, part) 1977	647.3	35	54	81	96
35418	Machine tools designed primarily for home workshops, laboratories, garages (metalworking and primarily metalworking only) (1972 product class 35418, part) 1977	66.3	49	61	82	100
	1972 product class 35418, Other machine tools (including those primarily designed for home workshops, laboratories, etc.) (1977 product classes 35417 and 35418) 1972	303.1	26	47	71	88
	1967	371.9	25	42	69	85
	1963	152.4	21	36	58	77
	1958	98.3	24	38	61	80
35419	Parts for metal cutting type machine tools, sold separetly, and rebuilt machine tools 1977	502.1	24	35	57	83
	1972	242.1	28	39	62	83
	1967	241.0	35	47	63	84
	1963	165.5	26	37	57	80
	1958	88.7	24	36	57	81
35410	Machine tools, metal cutting types, n.s.k. 1977	163.3	(X)	(X)	(X)	(X)
	1972	71.4	(X)	(X)	(X)	(X)
	1967	82.5	(X)	(X)	(X)	(X)
	1963	24.4	(X)	(X)	(X)	(X)
	1958	18.9	(X)	(X)	(X)	(X)
3542-	Machine tools, metal forming types 1977	1,114.7	18	30	50	70
	1972	670.1	17	31	50	69
	1967	676.6	21	35	55	73
	1963	444.8	20	34	52	70
	1958	289.5	20	34	52	70
35421	Punching, shearing, bending, and forming machines 1977	280.1	34	52	79	95
	1972	153.4	24	38	63	88
	1967	130.9	31	47	70	89
	1963	92.5	27	42	64	86
	1958	68.4	21	33	62	86
35422	Metalworking presses, including forging and manual presses 1977	282.6	43	60	79	97
	1972	183.2	41	59	79	97
	1967	261.3	46	64	80	97
	1963	141.7	45	61	77	94
	1958	79.1	41	61	80	95
	1954	217.4	45	65	86	(NA)
35423	Other metal forming machine tools, including forging machines 1977	171.7	40	56	80	99
	1972	149.0	34	49	71	93
	1967	122.9	39	56	77	94
	1963	71.7	35	55	81	93
	1958	60.8	48	59	74	92
35424	Metal forming machine tool parts and rebuilt metal forming machine tools 1977	295.5	25	40	60	84
	1972	161.5	28	42	65	85
	1967	125.7	28	41	61	86
	1963	118.2	35	45	60	80
	1958	78.2	27	39	60	80
35420	Machine tools, metal forming types, n.s.k. 1977	85.0	(X)	(X)	(X)	(X)
	1972	23.0	(X)	(X)	(X)	(X)
	1967	35.6	(X)	(X)	(X)	(X)
	1963	20.7	(X)	(X)	(X)	(X)
	1958	3.0	(X)	(X)	(X)	(X)
3544-	Special dies, tools, jigs, and fixtures 1977	4,450.2	16	18	22	28
	1972	2,713.5	14	17	21	27
	1967	2,520.2	16	18	22	28
	1963	1,608.1	17	19	23	30
	1958	1,320.4	20	23	27	34
35441	Special dies and tools, die sets, jigs, and fixtures 1977	2,578.0	26	30	35	43
	1972	1,520.1	24	27	33	41
	1967	1,719.8	23	26	31	38
	1963	[169] 1,161.2	([169])	([169])	([169])	([169])
35442	Industrial molds (including mold bases) 1977	1,040.0	10	14	21	32
	1972	640.3	11	14	23	35
	1967	446.2	9	13	21	33
	1963	[169] 311.1	([169])	([169])	([169])	([169])

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3544-	Special dies, tools, jigs, and fixtures--Con.					
35440	Special dies, tools, jigs and fixtures, n.s.k. 1977	832.2	(X)	(X)	(X)	(X)
	1972	553.1	(X)	(X)	(X)	(X)
	1967	354.2	(X)	(X)	(X)	(X)
	1963	135.9	(X)	(X)	(X)	(X)
3545-	Machine tool accessories 1977	2,238.9	16	26	40	56
	1972	1,151.4	16	27	41	58
	1967	1,222.4	15	26	41	58
	1963	731.7	14	24	39	57
	1958	470.2	16	25	41	57
	1954	541.0	11	20	36	(NA)
35451	Small cutting tools for machine tools and metalworking machinery 1977	1,376.4	22	35	53	71
	1972	738.0	23	36	54	71
	1967	770.9	23	37	54	71
	1963	464.4	21	34	50	68
	1958	301.2	23	36	50	68
	1954	291.0	19	33	49	(NA)
35452	Precision measuring tools 1977	208.2	46	57	74	91
	1972	94.7	52	64	83	96
	1967	130.8	43	58	76	92
	1963	88.0	39	53	72	90
	1958	60.9	43	57	73	89
	1954	110.0	32	47	61	(NA)
35453	Other attachments and accessories for machine tools and metalworking machinery 1977	430.9	21	34	54	74
	1972	218.8	17	30	52	76
	1967	239.5	19	30	51	75
	1963	152.6	17	29	49	72
	1958	96.2	17	31	51	74
	1954	140.0	15	25	45	(NA)
35450	Machine tool accessories, n.s.k. 1977	223.5	(X)	(X)	(X)	(X)
	1972	99.9	(X)	(X)	(X)	(X)
	1967	81.2	(X)	(X)	(X)	(X)
	1963	26.7	(X)	(X)	(X)	(X)
	1958	11.9	(X)	(X)	(X)	(X)
3546-	Power driven hand tools (1967 industry 3548, part)[170] [171] 1977	1,496.5	51	70	91	98
	1972	622.9	41	65	88	97
	1967 industry 3548, Metalworking, n.e.c. (1972 industries 3546, 3547, and 3549) 1967	1,028.0	23	38	59	78
	1963	701.9	25	40	61	79
	1958	580.2	31	43	63	79
35461	Power driven hand tools, electric, including battery powered product class 35482, part) 1977	748.7	71	86	98	100
	1972	386.9	61	84	98	100
35462	Power driven hand tools, pneumatic, powder actuated, and hydraulic (1967 product class 35482, part)[172] 1977	371.1	46	70	94	100
	1972	217.9	51	69	92	100
	1967 product class 35482, Power-driven handtools, including parts and attachments (1972 product classes 35461 and 35462) 1967	436.0	47	67	89	97
	1963	319.9	43	64	87	97
	1958	210.6	39	59	82	97
	1954	170.5	40	59	82	(NA)
35463	Power driven hand tools, engine (internal combustion) driven[172] 1977	347.1	90	99	100	(X)
35460	Power driven hand tools, n.s.k. (1967 product class 35480, part)[173] 1977	29.6	(X)	(X)	(X)	(X)
	1972	18.1	(X)	(X)	(X)	(X)
3547-	Rolling mill machinery (1967 industry 3548, part)[170] 1977	361.0	54	70	87	98
	1972	247.9	63	80	90	99
35471	Hot rolling mill machinery, except tube rolling (1967 product class 35481, part) 1977	147.0	77	95	100	(X)
	1972	134.7	86	96	(D)	(D)
35472	Cold rolling mill machinery (1967 product class 35481, part) 1977	74.9	71	91	100	(X)
	1972	52.4	73	90	100	(X)
35473	Other rolling mill machinery, including tube mill machinery (1967 product class 35481, part) 1977	120.8	54	72	96	100
	1972	55.6	57	71	91	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3547-	Rolling mill machinery (1967 industry 3548, part)--Con.					
35470	Rolling mill machinery, n.s.k. (1967 product class 35480, part)[173]...1977..	18.3	(X)	(X)	(X)	(X)
	1972..	5.2	(X)	(X)	(X)	(X)
	1967 product class 35481, Rolling mill machinery and equipment (1972 product classes 35471, 35472, and 35473).....1967..	330.3	55	76	93	99
	1963..	222.2	60	75	92	99
	1958..	252.2	67	80	92	99
	1954..	143.5	58	77	93	(NA)
3549-	Metalworking machinery, n.e.c. (1967 industry 3548, part)[170].....1977..	908.9	15	24	42	61
	1972..	411.3	17	28	45	67
35492	Assembly machines (1972 product class 35495, part).....1977..	128.4	43	62	86	99+
35493	Welding and cutting apparatus, except electric (1967 product class 35483).....1977..	213.7	60	77	92	99+
	1972..	93.7	63	80	95	100
	1967..	69.6	57	74	95	100
	1963..	54.6	66	80	96	100
	1958..	38.1	68	79	94	99
	1954..	26.8	74	85	94	(NA)
35494	Automotive maintenance equipment (1967 product class 35484).....1977..	188.0	44	68	92	99+
	1972..	111.1	43	61	87	100
	1967..	58.1	39	62	88	100
	1963..	47.7	38	58	80	98
	1958..	44.2	34	56	80	98
	1954..	44.1	43	58	81	(NA)
35495	Other metalworking machinery (1972 product class 35495, part).....1977..	294.9	20	31	51	77
	1972 product class 35495, Other metalworking machinery (1977 product classes 35492 and 35495.).....1972..	154.5	24	36	57	80
	1967..	86.2	35	49	76	96
	1963..	36.6	30	47	70	91
	1958..	17.6	50	68	96	100
35490	Metalworking machinery, n.e.c., n.s.k. (1967 product class 35480, part)[173].....1977..	84.0	(X)	(X)	(X)	(X)
	1972..	52.0	(X)	(X)	(X)	(X)
3551-	Food products machinery.....1977..	1,576.2	15	23	38	56
	1972..	867.2	17	24	37	56
	1967..	689.9	16	24	38	57
	1963..	517.3	15	23	38	56
	1958..	399.8	12	20	36	54
	1954..	371.4	16	25	41	(NA)
35511	Dairy and milk products plant machinery and equipment, except bottling and packaging machinery[174].....1977..	128.5	62	74	91	99+
	1972..	57.4	57	72	93	100
35512	Commercial food products machinery, except wrapping machines[175].....1977..	357.2	31	42	62	84
	1972..	185.0	33	41	59	83
	1967..	146.4	38	46	63	85
	1963..	117.6	36	44	60	81
	1958..	101.0	28	39	55	76
35513	Industrial food products machinery (except packing and bottling machinery) and parts and attachments[176].....1977..	452.0	24	37	57	81
	1972..	296.2	23	33	53	76
35514	Packing, packaging, and bottling machinery [174 175 176].....1977..	491.0	28	41	64	88
	1972..	232.1	31	42	68	91
35510	Food products machinery, n.s.k.....1977..	147.5	(X)	(X)	(X)	(X)
	1972..	96.5	(X)	(X)	(X)	(X)
	1967..	74.7	(X)	(X)	(X)	(X)
	1963..	27.6	(X)	(X)	(X)	(X)
	1958..	23.5	(X)	(X)	(X)	(X)
3552-	Textile machinery.....1977..	857.1	22	34	50	67
	1972..	738.1	29	43	59	74
	1967..	652.6	32	47	63	77
	1963..	499.1	34	50	65	78
	1958..	322.2	33	45	59	74
	1954..	304.1	31	44	59	(NA)
35521	Textile machinery.....1977..	361.6	22	35	59	83
	1972..	373.8	34	53	71	88
	1967..	348.8	38	57	76	89
	1963..	252.6	39	57	75	91
	1958..	143.7	35	48	67	86
	1954..	143.3	34	49	67	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3552-	Textiles machinery--Con.					
35522	Parts and attachments for textile machinery....1977..	405.2	34	47	62	78
	1972..	305.7	33	47	66	82
	1967..	267.4	34	47	67	83
	1963..	232.1	37	49	66	80
	1958..	168.7	38	49	63	78
	1954..	160.7	32	44	58	(NA)
35520	Textile machinery, n.s.k....1977..	90.3	(X)	(X)	(X)	(X)
	1972..	58.6	(X)	(X)	(X)	(X)
	1967..	36.4	(X)	(X)	(X)	(X)
	1963..	14.4	(X)	(X)	(X)	(X)
	1958..	9.8	(X)	(X)	(X)	(X)
3553-	Woodworking machinery[171]....1977..	547.3	35	46	60	79
	1972..	441.6	38	50	67	83
	1967..	274.4	33	45	62	81
	1963..	220.8	31	43	59	77
	1958..	174.5	33	45	61	79
	1954..	163.4	30	44	62	(NA)
35531	Woodworking machinery (except home workshop), including parts and attachments[171]....1977..	334.6	24	37	59	86
	1972..	372.5	39	50	68	86
	1967..	231.2	37	46	64	85
	1963..	186.0	35	45	60	79
	1958..	145.1	37	48	63	81
	1954..	136.2	33	45	62	(NA)
35532	Woodworking machinery for home workshop (except power driven hand tools), including parts and attachments....1977..	143.6	98	(D)	100	(X)
	1972..	51.5	90	97	100	(X)
	1967..	29.1	82	93	100	(X)
	1963..	29.0	71	87	98	100
	1958..	25.7	63	84	96	99
	1954..	27.2	67	79	92	(NA)
35530	Woodworking machinery, n.s.k....1977..	69.2	(X)	(X)	(X)	(X)
	1972..	17.6	(X)	(X)	(X)	(X)
	1967..	14.1	(X)	(X)	(X)	(X)
	1963..	5.8	(X)	(X)	(X)	(X)
	1958..	3.7	(X)	(X)	(X)	(X)
35540	Paper industries machinery and parts and attachments....1979..	698.3	38	49	65	83
	1972..	381.4	31	43	59	80
	1967..	515.1	40	48	65	84
	1963..	347.6	44	53	70	87
	1958..	280.1	46	55	70	97
	1954..	174.7	33	42	61	(NA)
3555-	Printing trades machinery....1977..	1,287.3	37	45	60	78
	1972..	736.6	36	44	59	76
	1967..	656.0	43	52	67	82
	1963..	403.2	39	47	62	79
	1958..	270.7	37	48	63	79
	1954..	228.8	33	49	65	(NA)
35551	Printing presses, lithographic....1977..	290.9	70	83	96	100
	1972..	156.0	71	85	97	100
35552	Printing presses, other than lithographic....1977..	121.3	45	62	87	99+
	1972..	90.2	51	72	91	100
	1967 product class 35551, Printing presses (1972 product classes 35551 and 35552)....1967..	263.6	65	79	94	99+
	1963..	137.6	63	75	92	99+
	1958..	94.2	64	80	97	100
35553	Typesetting machinery and equipment....1977..	252.8	76	90	(D)	100
	1972..	104.1	72	89	100	(X)
35554	Bindery equipment (1967 product class 35552, part)....1977..	36.8	78	88	(D)	100
	1972..	33.5	75	91	100	(X)
35555	Printing trades machinery, n.e.c. (1967 product class 35552, part)...1977..	494.8	21	33	56	78
	1972..	303.5	26	37	58	80
	1967 product class 35552, Other printing trades machinery, including parts and attachments (1972 product classes 35553, 35554, and 35555)....1967..	354.3	37	48	64	83
	1963..	243.8	33	43	61	79
	1958..	153.0	35	45	63	82

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3555-	Printing trades machinery--Con.					
35550	Printing trades machinery, n.s.k.....1977..	90.7	(X)	(X)	(X)	(X)
	1972..	49.3	(X)	(X)	(X)	(X)
	1967..	38.1	(X)	(X)	(X)	(X)
	1963..	21.8	(X)	(X)	(X)	(X)
	1958..	23.4	(X)	(X)	(X)	(X)
3559-	Special industry machinery, n.e.c.....1977..	3,465.2	11	17	27	46
	1972..	2,367.1	16	22	34	51
	1967..	1,670.3	11	17	29	47
	1963..	988.4	10	16	30	47
	1958..	726.2	10	16	28	46
35591	Chemical manufacturing industries machinery.....1977..	436.7	42	60	78	93
	1972..	212.5	29	44	64	87
	1967..	284.5	23	35	59	83
	1963..	152.4	28	42	66	86
	1958..	118.5	21	33	56	81
	1954..	102.8	25	40	64	(NA)
35592	Foundry machinery and equipment, excluding patterns and molds.....1977..	319.2	40	55	77	93
	1972..	132.3	56	70	86	99
	1967..	143.9	45	59	81	97
	1963..	89.6	41	55	79	95
	1958..	52.6	47	61	80	96
	1954..	62.5	35	55	77	(NA)
35593	Plastics-working machinery and equipment, excluding patterns and molds.....1977..	669.6	37	53	74	90
	1972..	434.1	31	47	72	90
	1967..	247.6	25	39	66	89
	1963..	137.1	28	45	71	89
	1958..	50.8	35	54	75	93
	1954..	37.6	31	47	73	(NA)
35594	Rubber-working machinery and equipment, excluding tire molds.....1977..	158.1	49	63	84	99
	1972..	137.3	53	69	88	99
	1967..	116.6	53	73	89	99
	1963..	76.8	51	72	88	98
	1958..	53.9	55	70	85	97
	1954..	52.5	61	73	87	(NA)
35595	Other special industry machinery and equipment.....1977..	1,565.3	12	20	36	55
	1972..	1,281.4	26	33	47	64
	1967..	778.6	21	29	44	63
	1963..	500.2	19	27	41	58
	1958..	414.7	17	26	41	59
35590	Special industry machinery, n.e.c., n.s.k.....1977..	316.3	(X)	(X)	(X)	(X)
	1972..	169.5	(X)	(X)	(X)	(X)
	1967..	99.0	(X)	(X)	(X)	(X)
	1963..	32.3	(X)	(X)	(X)	(X)
	1958..	35.7	(X)	(X)	(X)	(X)
3561-	Pumps and pumping equipment (1967 industry 3561, part)[177].....1977..	3,522.8	17	27	46	71
	1972..	1,632.9	14	24	44	69
	1967 industry 3561, Pumps and compressors (1972 industries 3561 3563).....1967..	1,947.5	24	34	52	68
	1963..	1,249.2	23	34	51	69
	1958..	1,014.8	25	36	54	72
	1954..	867.4	22	34	51	(NA)
35611	Industrial pumps, except hydraulic fluid power pumps.....1977..	1,386.7	34	37	60	84
	1972..	611.9	22	35	57	81
	1967..	436.9	23	34	53	80
	1963..	321.9	23	35	55	79
35612	Hydraulic fluid power pumps and motors[178].....1977..	488.9	47	66	88	99+
	1972..	261.6	44	61	85	98
	1967 product class 35612, Hydraulic fluid power pumps and motors and vacuum pumps[178].....1967..	218.6	48	64	85	98
	1963..	134.9	51	69	89	99
35613	Domestic water systems and pumps, including pump jacks and cylinders.1977..	223.8	45	67	92	100
	1972..	151.1	41	63	89	100
	1967..	140.3	34	56	84	99+
	1963..	83.7	42	64	92	99
	1958..	67.7	([12])	([12])	([12])	([12])
	1954..	80.0	33	56	84	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3561-	Pumps and pumping equipment (1967 industry 3561, part)--Con.					
35615	Pumps and pumping equipment, n.e.c. (1967 product class 35615, part)[179] 1977	395.7	29	45	68	91
	1972	186.4	26	41	67	87
	1967 product class 35615, Pumps and compressors, n.e.c., except refrigeration compressors (1972 product classes 35615 and 35635) 1967	197.5	33	44	66	87
	1963	148.0	31	45	64	83
	1958	123.9	27	42	64	86
35616	Parts and attachments for pumps and pumping equipment (1967 product class 35616, part)[180] 1977	861.6	23	36	60	86
	1972	346.5	21	32	56	85
	1967 product class 35616, Parts and attachments for pumps and compressors (1972 product classes 35616 and 35632) 1967	383.6	33	47	66	86
	1963	250.1	29	39	59	81
	1958	180.2	37	50	68	85
	1954	145.0	34	47	65	(NA)
35610	Pumps and pumping equipment, n.s.k.[181] 1977	166.1	(X)	(X)	(X)	(X)
	1972	75.4	(X)	(X)	(X)	(X)
	1967	69.6	(X)	(X)	(X)	(X)
	1963	18.4	(X)	(X)	(X)	(X)
	1958	11.8	(X)	(X)	(X)	(X)
3562-	Ball and roller bearings 1977	2,444.5	56	76	86	99
	1972	1,418.7	53	72	88	98
	1967	1,292.2	54	74	89	99
	1963	961.0	57	76	91	98
	1958	636.8	56	76	91	99
	1954	533.8	59	78	91	(NA)
35621	Ball bearings, complete 1977	749.9	56	74	94	100
	1972	474.2	57	72	93	100
	1967	472.7	61	78	97	100
	1963	384.1	63	79	97	100
	1958	289.1	66	81	98	100
	1954	213.7	71	85	98	(NA)
35622	Taper roller bearings, complete 1977	748.6	91	98	100	(X)
	1972	420.0	91	(D)	100	(X)
	1967	367.7	92	99	100	(X)
	1963	[182]294.2	([182])	([182])	([182])	([182])
35623	Roller bearings except taper, complete 1977	472.9	66	80	96	100
	1972	280.9	65	78	94	100
	1967	225.0	67	83	97	100
	1963	[182]152.1	([182])	([182])	([182])	([182])
35624	Mounted bearings, except plain 1977	213.1	65	90	(D)	100
	1972	100.9	70	96	100	(X)
	1967	96.0	64	94	100	(X)
	1963	62.1	71	95	100	(X)
	1958	35.0	72	98	100	(X)
	1954	24.4	68	96	100	(X)
35629	Parts and components for ball and roller bearings, including balls and rollers, sold separately 1977	243.1	68	79	95	100
	1972	138.2	66	79	97	100
	1967	118.7	58	77	95	100
	1963	65.0	56	74	93	100
	1958	41.1	55	74	96	100
	1954	45.1	61	78	94	(NA)
35620	Ball and roller bearings, n.s.k. 1977	16.8	(X)	(X)	(X)	(X)
	1972	4.5	(X)	(X)	(X)	(X)
	1967	12.1	(X)	(X)	(X)	(X)
	1963	3.3	(X)	(X)	(X)	(X)
	1958	2.3	(X)	(X)	(X)	(X)
3563-	Air and gas compressors[177] 1977	1,923.4	40	57	79	92
	1972	722.7	42	62	84	94
35631	Air and gas compressors and vacuum pumps[178] 1977	1,290.3	41	62	83	95
	1972	480.8	47	66	86	97
	1967 product class 35614, Air and gas compressors, except refrigeration compressors 1967	501.0	58	75	89	99
	1963	292.3	60	76	90	99
	1958	260.2	([12])	([12])	([12])	([12])
	1954	220.2	56	73	91	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3563-	Air and gas compressors--Con.					
35632	Parts for air and gas compressors and vacuum pumps (1967 product class 35616, part)[180] 1977	384.1	67	83	96	100
	1972	148.4	52	78	95	100
35635	Industrial spraying equipment (1967 product class 35615, part)[179] 1977	221.6	92	88	99	100
	1972	93.5	86	91	100	(X)
35630	Air and gas compressors, n.s.k.[181] 1977	27.4	(X)	(X)	(X)	(X)
3564-	Blowers and fans 1977	1,422.3	15	25	44	68
	1972	682.0	16	28	48	72
	1967	499.1	17	29	50	75
	1963	299.4	20	32	54	78
	1958	252.9	23	35	55	75
	1954	274.0	23	38	57	(NA)
35643	Centrifugal fans and blowers (1967 product class 35641, part) 1977	354.1	36	53	79	98
	1972	181.0	33	49	81	99
35644	Propeller and axial fans, and power roof ventilators (1967 product class 35641, part) 1977	303.3	26	43	76	98
	1972	159.9	23	39	68	91
	1967 product class 35641, Industrial fans and blowers (1972 product classes 35643 and 35644) 1967	294.9	22	37	64	91
	1963	191.2	23	38	65	89
	1958	170.6	27	40	64	86
35645	Air purification equipment for environmental systems (1967 product class 35642, part) 1977	260.7	32	48	73	94
	1972	121.3	36	52	78	97
35646	Air purification equipment for industrial gases (1967 product class 35642, part) 1977	381.7	42	64	89	99
	1972	198.0	48	66	84	98
	1967 product class 35642, Dust collection, air purification equipment, and air washers (1972 product classes 35645 and 35646) 1967	182.5	35	49	73	91
	1963	95.0	41	57	81	96
	1958	70.1	43	55	79	98
35640	Blowers and fans, n.s.k. 1977	122.5	(X)	(X)	(X)	(X)
	1972	21.8	(X)	(X)	(X)	(X)
	1967	21.7	(X)	(X)	(X)	(X)
	1963	13.2	(X)	(X)	(X)	(X)
	1958	12.2	(X)	(X)	(X)	(X)
35650	Industrial patterns, except shoe patterns 1977	411.9	8	12	20	33
	1972	234.4	6	10	19	32
	1967	233.7	8	12	21	34
	1963	159.9	8	12	21	33
	1958	121.3	6	10	17	28
	1954	127.6	14	19	28	(NA)
35660	Speed changers, drives, and gears (1967 product class 35662)[183] 1977	1,199.7	26	39	62	79
	1972	[187]593.0	25	38	60	79
	1967	506.4	24	40	63	81
	1963	333.3	22	38	59	79
	1958	234.2	23	35	56	78
	1954	218.2	20	34	58	(NA)
3567-	Industrial furnaces and ovens 1977	707.1	22	33	52	71
	1972	341.1	23	36	59	77
	1967	415.9	25	39	58	79
	1963	237.7	23	34	53	76
	1958	184.8	29	38	53	75
35671	Electric industrial furnaces and ovens 1977	140.3	31	47	75	100
	1972	67.5	44	59	84	99
	1967	90.8	36	53	82	98
	1963	44.7	49	65	86	99
	1958	35.7	31	49	77	96
35672	Fuel-fired industrial furnaces and ovens 1977	144.4	44	58	85	(D)
	1972	97.2	43	59	81	98
	1967	155.7	45	58	81	97
	1963	76.6	41	57	82	97
	1958	75.5	52	63	84	97

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3567-	Industrial furnaces and ovens--Con.					
35674	Induction and dielectric heating equipment (1972 product class 35673, part) 1977	133.4	44	61	85	99+
35675	Industrial electrical heating equipment, n.e.c. (1972 product class 35673, part) 1977	204.1	45	59	81	98
	1972 product class 35673, High frequency induction and dielectric heating equipment and parts, attachments, and components (1977 product classes 35674 and 35675) 1972	147.0	40	55	76	93
	1967	149.0	30	45	69	91
	1963	109.9	22	34	58	84
	1958	67.7	18	29	56	85
35670	Industrial furnaces and ovens, n.s.k. 1977	84.9	(X)	(X)	(X)	(X)
	1972	29.4	(X)	(X)	(X)	(X)
	1967	20.3	(X)	(X)	(X)	(X)
	1963	6.5	(X)	(X)	(X)	(X)
	1958	6.1	(X)	(X)	(X)	(X)
3568-	Power transmission equipment, n.e.c. (1967 industry 3566, part)[183] 1977	1,710.9	29	45	67	87
	1972	975.0	32	51	71	86
	1967 industry 3566, Power transmission equipment[183] 1967	1,283.4	19	34	54	70
	1963	883.4	19	32	51	70
	1958	622.7	21	32	52	70
35681	Plain bearings and bushings (1967 product class 35661) 1977	275.1	34	50	78	98
	1972	121.0	28	43	72	98
	1967	109.5	26	44	71	95
	1963	87.9	38	56	79	96
	1958	67.0	51	67	88	99
35683	Power transmission equipment, n.e.c. (1967 product class 35663) 1977	1,419.1	34	52	77	93
	1972	854.0	35	57	78	92
	1967	604.5	34	53	75	90
	1963	449.5	35	53	72	89
	1958	310.4	36	53	73	89
	1954	235.0	34	47	65	(NA)
35680	Power transmission equipment, n.e.c., n.s.k., (1967 product class 35660, part) 1977	16.6	(X)	(X)	(X)	(X)
	1972	([184])	(X)	(X)	(X)	(X)
	1967	62.9	(X)	(X)	(X)	(X)
3569-	General industrial machinery, n.e.c 1977	2,689.4	8	13	23	38
	1972	1,132.8	7	13	26	44
	1967 product class 35690, General industrial machinery, n.e.c. (1972 product classes 35691, 35692, 35693, and 35690) 1967	899.8	9	16	28	46
	1963	664.3	12	20	33	49
	1958	467.4	15	24	39	58
35691	Packing and packaging machinery, n.e.c 1977	440.5	24	34	51	75
	1972	177.4	25	39	58	82
35692	Filters and strainers 1977	630.0	30	42	61	83
	1972	275.4	29	44	64	87
35699	All other general industrial machinery, n.e.c 1977	1,311.6	11	17	31	51
	1972	535.5	12	20	37	62
35690	General industrial machinery, n.e.c., n.s.k 1977	307.3	(X)	(X)	(X)	(X)
	1972	144.5	(X)	(X)	(X)	(X)
3573-	Electronic computing equipment[16] 1977	12,673.2	45	57	71	85
	1972	6,108.0	59	70	84	94
	1967	4,048.8	(NA)	(NA)	(NA)	(NA)
35731	Electronic computers 1977	3,546.9	49	67	88	97
	1972	1,884.3	75	86	94	99
35732	Peripheral equipment for electronic computers 1977	6,087.9	44	55	73	89
	1972	2,745.3	52	64	83	94
	1967 product class 35731, Electronic computing equipment, except parts and attachments (1972 product classes 35731 and 35732) 1967	3,123.9	72	90	98	99+
35734	Parts for electronic computers and peripheral equipment, produced by complete machine manufacturers (1972 product class 35733, part) 1977	2,414.2	63	76	93	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3573-	Electronic computing equipment--Con.					
35735	Parts for electronic computer and peripheral equipment, produced by other than complete machine manufacturers (1972 product class 35733, part)....1977..	419.6	25	38	62	88
	1972 product class 35733, Parts and attachments for electronic computing equipment (1977 product classes 35734 and 35735)[16].....1972..	1,403.2	63	73	86	94
	1967..	906.4	73	79	91	98
35730	Electronic computing equipment, n.s.k.[16].....1977..	204.6	(X)	(X)	(X)	(X)
	1972..	75.2	(X)	(X)	(X)	(X)
	1967..	18.5	(X)	(X)	(X)	(X)
3574-	Calculating and accounting machines[16].....1977..	836.2	59	78	94	99+
	1972..	694.3	63	78	94	99
	1967..	630.8	74	85	92	98
35741	Adding and calculating machines, except electronic.....1977..	(185)	(185)	(185)	(185)	(185)
	1972..	(186)	(186)	(186)	(186)	(186)
35742	Electronic calculating machines.....1977..	369.5	88	97	100	(X)
	1972..	225.8	68	97	100	(X)
35743	Accounting machines and cash registers.....1977..	185402.8	18569	18585	18598	185100
	1972..	(186)	(186)	(186)	(186)	(186)
	1967 product class 35741, Calculating and accounting machines, including cash registers, except parts and attachments (1972 product classes 35741, 35742, and 35743)[16].....1967..	464.3	78	90	99	100
35745	Parts and attachments for adding, calculating, accounting machines, and cash registers (1967 product class 35793)[16].....1977..	59.0	52	84	100	(X)
	1972..	186457.4	18678	18689	18696	186100
	1967..	131.7	90	96	99+	100
35740	Calculating and accounting machines, n.s.k.[16].....1977..	4.8	(X)	(X)	(X)	(X)
	1972..	11.0	(X)	(X)	(X)	(X)
	1967..	34.8	(X)	(X)	(X)	(X)
35760	Scales and balances, except laboratory.....1977..	328.9	52	67	85	97
	1972..	182.1	51	66	84	97
	1967..	131.4	54	69	88	99
	1963..	90.0	52	68	86	98
	1958..	71.0	45	67	85	98
3579-	Office machines, n.e.c., and typewriters.....1977..	2,020.3	56	70	84	94
	1972..	1,046.9	59	71	85	94
	1967 industry 3579, Office machines, n.e.c.....1967..	417.7	46	60	77	93
	1963..	275.8	47	59	74	90
	1958..	213.9	46	56	72	89
	1954..	159.2	45	58	76	(NA)
35793	Duplicating machines (1967 product class 35791, part).....1977..	199.7	88	98	100	(X)
	1972..	83.6	87	95	100	(X)
35794	Dictating, transcribing, and recording machines (1967 product class 35791, part).....1977..	(187)	(187)	(187)	(187)	(187)
	1972..	(187)	(187)	(187)	(187)	(187)
35795	Mailing, letter handling, and addressing machines (1967 product class 35791, part).....1977..	235.3	68	86	99+	100
	1972..	128.6	77	89	100	(X)
35796	Office machines, n.e.c. (1967 product class 35791, part).....1977..	187302.2	18736	18752	18780	187 99+
	1972..	187254.7	18739	18760	18785	18798
	1967 product class 35791, Addressing, dictating, duplicating, and other office and store machines, n.e.c., except parts and attachments (1972 product classes 35793, 35794, 35795, and 35796).1967..	333.1	48	62	81	97
35797	Typewriters, including coded media, parts, and attachments (1967 product class 35720).....1977..	1,101.9	87	95	99+	100
	1972..	(188)	(188)	(188)	(188)	(188)
	1967..	508.1	81	98	99+	100
	1963..	265.5	79	98	(D)	100
	1958..	188.6	79	99	100	(X)
	1954..	141.7	78	98	99	(NA)
35798	Parts and attachments for addressing, dictating, duplicating, and other office and store machines, n.e.c. (1967 product class 35792)[16].....1977..	143.3	48	72	92	100
	1972..	188562.0	18884	18890	18897	188100
	1967..	65.8	60	80	94	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3579-	Office machines, n.e.c., and typewriters--Con.					
35790	Office machines, n.e.c., n.s.k.[16] 1977	38.0	(X)	(X)	(X)	(X)
	1972	18.0	(X)	(X)	(X)	(X)
	1967	18.8	(X)	(X)	(X)	(X)
3581-	Automatic merchandising machines 1977	396.2	44	65	90	98
	1972	306.3	50	68	88	96
	1967	261.2	61	73	87	96
	1963	206.6	58	68	80	93
	1958	130.9	43	57	75	91
35811	Automatic merchandising machines 1977	294.9	48	72	97	100
	1972	231.5	57	79	95	100
	1967	198.3	69	83	94	99+
	1963	164.3	65	77	88	97
35812	Coin-operated mechanisms and parts for automatic merchandising machines 1977	84.3	76	87	99	100
	1972	61.1	57	86	98	100
	1967	45.5	65	77	94	100
	1963	32.8	54	73	93	99+
35810	Automatic merchandising machines, n.s.k. 1977	17.0	(X)	(X)	(X)	(X)
	1972	13.7	(X)	(X)	(X)	(X)
	1967	17.4	(X)	(X)	(X)	(X)
	1963	9.5	(X)	(X)	(X)	(X)
35820	Commercial laundry equipment[189] 1977	233.6	51	61	80	96
	1972	185.3	43	57	77	94
3585-	Refrigeration and heating equipment[190] 1977	8,501.7	33	45	65	81
	1972	[24]6,232.1	([24])	([24])	([24])	([24])
	1967	[24]3,469.0	([24])	([24])	([24])	([24])
	1963	[24]2,104.6	([24])	([24])	([24])	([24])
35851	Heat transfer equipment, except room and unitary air-conditioners and dehumidifiers 1977	2,251.2	50	65	80	94
	1972	1,680.5	45	58	78	95
	1967 product class 35851, Heat transfer equipment, except room and unitary air-conditioners (1967 product class 35851, part)[16] 1967	959.8	37	53	76	92
35852	Unitary air-conditioners (1967 product class 35852, part)[16] 1977	1,673.0	47	68	91	99+
	1972	1,070.6	48	69	90	99+
	1967 product class 35852, Air-conditioners, room and unitary[16] 1967	1,068.1	44	66	91	99+
35853	Commercial refrigeration equipment 1977	759.4	26	39	60	84
	1972	482.3	29	41	60	81
	1967	341.5	21	31	54	80
	1963	253.7	21	34	56	77
35854	Compressors and compressor units, all refrigerants 1977	1,580.3	76	94	99	100
	1972	1,065.4	72	94	99	100
	1967	494.5	78	91	99	100
	1963	269.4	77	90	99	100
35855	Condensing units, all refrigerants 1977	175.6	55	74	93	100
	1972	146.8	48	66	92	100
	1967	73.3	63	78	96	100
	1963	73.5	52	70	95	100
	1958	70.3	69	72	93	100
35856	Room air-conditioners and dehumidifiers (1967 product class 35851, part and 35852, part)[191] 1977	720.4	60	82	98	100
	1972	670.6	54	75	97	100
35857	Other refrigeration and air-conditioning equipment, including soda fountain and beer dispensing equipment 1977	712.2	40	51	70	89
	1972	570.3	44	55	73	91
	1967	443.6	21	35	63	84
	1963	302.5	18	30	53	75
35858	Warm air furnaces (except floor and wall) and parts and attachments[190] 1977	378.4	35	56	85	99+
	1972	384.2	34	56	88	99
	1967 product class 34332, Warm air furnaces, except floor and wall and parts[190] 1967	215.5	30	51	81	99
	1963	205.0	36	49	75	97
	1958	232.5	30	45	69	89
	1954	222.5	28	43	64	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3585-	Refrigeration and heating equipment--Con.					
35850	Refrigeration and heating equipment, n.s.k. 1977	251.3	(X)	(X)	(X)	(X)
	1972	152.4	(X)	(X)	(X)	(X)
	1967	88.2	(X)	(X)	(X)	(X)
	1963	46.7	(X)	(X)	(X)	(X)
	1958	31.4	(X)	(X)	(X)	(X)
35860	Measuring and dispensing pumps 1977	265.6	38	57	88	99
	1972	183.4	38	60	86	99
	1967	139.3	42	64	90	99+
	1963	121.0	37	61	91	99
	1958	86.2	52	73	96	99
	1954	80.8	50	76	96	(NA)
3589-	Service industry machines, n.e.c. 1977	1,687.6	11	20	36	55
	1972	864.4	11	20	36	57
	1967	539.8	13	22	38	60
	1963	341.5	14	23	37	57
	1958	222.0	14	23	(NA)	(NA)
35891	Commercial cooking and food warming equipment 1977	386.0	31	46	71	93
	1972	217.0	27	44	69	90
	1967	158.2	24	40	64	90
	1963	107.0	23	35	59	86
35892	Service industry machines and parts 1977	1,059.2	17	28	45	65
	1972	496.5	18	29	49	73
	1967	305.3	20	33	54	79
	1963	196.7	23	35	53	75
35893	Commercial and industrial vacuum cleaners, including parts and attachments 1977	109.4	51	67	89	99+
	1972	62.7	49	67	92	100
	1967	26.0	45	71	98	100
	1963	19.0	40	62	93	100
	1958	12.7	43	66	96	100
35890	Service industry machines, n.e.c., n.s.k. 1977	132.9	(X)	(X)	(X)	(X)
	1972	88.2	(X)	(X)	(X)	(X)
	1967	50.3	(X)	(X)	(X)	(X)
	1963	18.9	(X)	(X)	(X)	(X)
3592-	Carburetors, pistons, rings, and valves (1967 product class 35991) 1977	1,298.5	49	71	91	97
	1972	791.9	47	71	90	97
	1967 product class 35991, Carburetors (new), pistons and piston rings, and valves (1972 industry 3592) 1967	499.9	39	62	88	97
35921	Carburetors, new and rebuilt (1967 product class 35991, part) 1977	642.0	86	95	99+	100
	1972	353.3	83	95	99	100
35922	Pistons and piston rings (1967 product class 35991, part) 1977	372.2	54	82	97	100
	1972	229.3	51	79	96	100
35923	Valves, intake and exhaust (1967 product class 35991, part) 1977	257.5	88	95	98	100
	1972	196.6	85	93	98	100
35920	Carburetors, pistons, rings, and valves, n.s.k. (1967 product class 35991, part) 1977	26.9	(X)	(X)	(X)	(X)
	1972	12.7	(X)	(X)	(X)	(X)
3599-	Machinery, except electrical, n.e.c. (1967 industry 3599, part) 1977	6,441.0	2	3	6	10
	1972	3,363.3	2	3	6	11
	1967 industry 3599, Miscellaneous machinery, except electrical (1972 industries 3592 and 3599) 1967	3,286.1	6	10	17	24
	1963	1,685.5	9	15	25	33
	1958	1,117.7	8	14	23	34
	1954	778.9	9	15	25	(NA)
35992	Pneumatic and hydraulic cylinders (1967 product class 35992, part) 1977	456.1	25	37	58	85
	1972	189.2	27	40	67	92
35994	Miscellaneous machinery products (1967 product class 35992, part) 1977	676.9	12	20	35	52
	1972	442.5	12	17	31	49
	1967 product class 35992, All other machine shop products, including flexible metal hose and tubing and metal bellows (1972 product classes 35992 and 35994) [5]1967	863.0	11	17	26	40
35995	Receipts for machine shop job work (1967 product class 35993)[16] 1977	3,338.1	2	3	5	10
	1972	1,425.8	3	4	7	13
	1967	1,080.0	3	5	9	16

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 35, MACHINERY, EXCEPT ELECTRICAL--Con.				
3599-	Machinery, except electrical, n.e.c. (1967 industry 3599, part)--Con.					
35990	Machinery, except electrical, n.e.c., n.s.k. 1977	1,969.9	(X)	(X)	(X)	(X)
	1972	1,305.8	(X)	(X)	(X)	(X)
	1967 product class 35990, Miscellaneous machinery, except electrical, n.s.k.[16] 1967	843.2	(X)	(X)	(X)	(X)
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT				
3612-	Transformers 1977	2,117.8	55	70	85	94
	1972	1,436.7	58	74	89	96
	1967	1,133.6	64	78	92	97
	1963	692.2	65	78	90	97
	1958	638.3	71	83	92	97
36122	Power and distribution transformers, except parts 1977	1,320.9	70	82	96	(D)
	1972	914.2	67	86	97	(D)
	1967	790.3	71	88	98	99+
	1963	434.5	76	90	98	99+
	1958	421.7	80	94	99	100
	1954	441.1	85	97	99	(NA)
36124	Fluorescent lamp ballasts (1967 product class 36121, part) 1977	210.7	94	(D)	100	(X)
	1972	160.6	96	(D)	100	(X)
36125	Specialty transformers (except fluorescent lamp ballasts) 1977	342.8	49	70	90	99
	1972	225.6	53	68	84	97
	1967 product class 36121, Natural-draft dry-type transformers (specialty transformers) (1972 product classes 36124 and 36125)[5] 1967	207.7	74	87	96	99+
	1963	163.0	69	80	91	99
	1958	130.0	65	79	89	98
	1954	109.6	57	69	81	(NA)
36127	Power regulators, boosters, reactors, other transformers, and transformer parts (1967 product class 36123) 1977	168.1	64	79	96	100
	1972	111.4	80	91	98	100
	1967	120.6	79	90	99	100
	1963	90.3	66	81	93	99+
	1958	81.0	81	87	94	99
	1954	78.3	79	86	93	(NA)
36120	Transformers, n.s.k. 1977	75.3	(X)	(X)	(X)	(X)
	1972	24.9	(X)	(X)	(X)	(X)
	1967	14.9	(X)	(X)	(X)	(X)
	1963	4.4	(X)	(X)	(X)	(X)
	1958	5.6	(X)	(X)	(X)	(X)
3613-	Switchgear and switchboard apparatus 1977	3,298.4	47	61	75	85
	1972	2,055.5	50	64	76	86
	1967	1,598.7	48	62	74	86
	1963	1,008.5	48	61	74	85
	1958	891.4	53	65	76	86
36131	Switchgear, except ducts and control relays[16] 1977	841.4	50	65	80	93
	1972	583.8	55	73	86	96
	1967	455.7	52	67	86	96
36132	Power circuit breakers, all voltages[16] 1977	261.2	91	95	99	100
	1972	183.2	86	94	99+	100
	1967	209.8	81	95	99+	100
36133	Low voltage panelboards and distribution boards and other switching and interrupting devices 750 volts and under 1977	878.2	57	74	88	95
	1972	536.9	60	68	79	88
	1967	378.0	57	69	79	89
	1963	304.2	46	61	75	87
	1958	224.2	43	55	71	87
36134	Fuses and fuse equipment, under 2,300 volts (except power distribution cut-outs) 1977	201.6	83	94	99+	100
	1972	101.1	83	94	99+	100
	1967	69.2	80	91	99+	100
	1963	41.9	78	89	99	100
	1958	30.7	75	86	98	100
	1954	26.8	63	79	94	(NA)
36135	Molded case circuit breakers, 750 volts and under[16] 1977	492.0	73	87	99+	100
	1972	285.5	72	93	99+	100
	1967	170.2	66	91	99+	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3613-	Switchgear and switchboard apparatus--Con.					
36136	Duct, including plug-in units and accessories, 750 volts and under[16] 1977	88.5	71	90	99+	100
	1972	71.6	67	90	99+	100
	1967	62.8	79	93	99+	100
36137	Relays, control circuits[16] 1977	356.3	36	51	80	99
	1972	224.9	40	57	83	98
	1967	193.7	46	66	90	99+
36130	Switchgear and switchboard apparatus, n.s.k. 1977	179.3	(X)	(X)	(X)	(X)
	1972	68.1	(X)	(X)	(X)	(X)
	1967	59.3	(X)	(X)	(X)	(X)
	1963	16.3	(X)	(X)	(X)	(X)
	1958	15.6	(X)	(X)	(X)	(X)
3621-	Motors and generators 1977	4,976.2	39	53	70	84
	1972	2,626.6	45	57	73	86
	1967	2,319.0	44	56	69	85
	1963	1,578.2	47	56	69	85
	1958	1,291.4	48	57	71	85
	1954	1,338.5	48	56	70	(NA)
36211	Fractional horsepower motors 1977	1,956.3	46	59	79	94
	1972	1,144.0	47	60	79	93
	1967	842.5	45	57	74	93
	1963	620.3	46	57	77	94
	1958	435.8	51	61	77	97
36212	Integral horsepower motors and generators, except for land transportation equipment 1977	1,163.0	52	70	93	99+
	1972	561.4	59	75	92	99+
	1967	569.5	53	78	92	99+
	1963	380.2	57	73	88	99
	1958	430.5	60	74	90	99
	1954	410.6	61	77	92	(NA)
36213	Land transportation motors, generators, and control equipment and parts 1977	205.7	78	92	99	100
	1972	106.3	79	92	100	(X)
	1967	133.4	85	95	99+	100
	1963	89.8	83	93	99+	100
	1958	52.4	88	93	99	100
	1954	81.4	80	90	98	(NA)
36214	Prime mover generator sets, except steam or hydraulic turbine 1977	643.9	56	76	94	100
	1972	247.3	59	74	96	100
	1967	232.7	49	75	95	100
	1963	104.6	45	65	88	100
	1958	73.9	50	70	94	100
	1954	96.3	35	55	87	(NA)
36217	Motor-generator sets and other rotating equipment, including hermetics (fractional) (1967 product class 36215, part) 1977	274.5	60	73	94	100
	1972	219.0	77	88	97	100
36218	Motor-generator sets and other rotating equipment, including hermetics (integral) (1967 product class 36215, part) 1977	288.1	64	77	95	100
	1972	122.9	76	92	99	100
	1967	345.6	51	69	87	99+
	1963	246.2	52	67	86	98
	1958	164.1	57	69	87	98
36219	Parts and supplies for motors, generators, and motor-generator sets, except for land transportation equipment (1967 product class 36216) 1977	354.0	45	63	84	97
	1972	188.6	39	62	85	98
	1967	158.8	41	57	81	97
	1963	127.6	38	51	73	92
	1958	108.9	46	56	74	90
	1954	88.8	34	49	75	(NA)
36210	Motors and generators, n.s.k. 1977	90.7	(X)	(X)	(X)	(X)
	1972	36.5	(X)	(X)	(X)	(X)
	1967	36.6	(X)	(X)	(X)	(X)
	1963	9.4	(X)	(X)	(X)	(X)
	1958	25.9	(X)	(X)	(X)	(X)
36220	General industry power circuit devices and controls and parts 1977	2,429.1	39	51	63	75
	1972	1,295.4	40	51	65	78
	1967	1,071.4	44	56	68	81
	1963	633.3	49	62	74	84
	1958	447.3	54	68	80	90

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3623-	Welding apparatus, electric....1977..	1,035.0	48	62	78	92
	1972..	573.7	38	54	71	90
	1967..	432.9	36	50	73	89
	1963..	324.9	36	51	74	92
	1958..	233.2	37	50	74	92
	1954..	160.0	37	50	73	(NA)
36231	Arc welding machines, components, and accessories, except electrodes.1977..	407.8	66	78	92	99+
	1972..	218.5	56	66	85	99
	1967..	140.7	61	77	90	99+
	1963..	104.5	61	72	89	99
	1958..	65.8	54	74	90	99
	1954..	36.7	59	78	94	(NA)
36232	Arc welding electrodes, metal....1977..	447.6	66	87	99	100
	1972..	220.1	61	86	99+	100
	1967..	166.3	60	85	99+	100
	1963..	148.2	51	73	99	100
	1958..	116.4	54	73	99	100
	1954..	72.3	62	79	98	(NA)
36233	Resistance welders, components, accessories, and electrodes....1977..	136.9	28	49	85	100
	1972..	114.1	29	50	82	99+
	1967..	88.0	38	53	80	99+
	1963..	68.3	35	53	80	99
	1958..	47.8	31	54	86	99
	1954..	51.1	35	60	87	(NA)
36230	Welding apparatus, electric, n.s.k....1977..	42.7	(X)	(X)	(X)	(X)
	1972..	20.9	(X)	(X)	(X)	(X)
	1967..	37.9	(X)	(X)	(X)	(X)
	1963..	3.8	(X)	(X)	(X)	(X)
	1958..	3.2	(X)	(X)	(X)	(X)
3624-	Carbon and graphite products (1967 product class 36240)....1977..	663.0	76	84	95	99+
	1972..	335.8	79	89	97	99+
	1967..	295.8	84	91	96	98
	1963..	217.8	82	89	96	99+
	1958..	156.8	84	89	96	100
	1954..	114.5	82	89	95	(NA)
36241	Electrodes (1967 product class 36240, part)....1977..	362.0	94	(D)	100	(X)
	1972..	136.9	(D)	(D)	100	(X)
36249	All other carbon and graphite products (1967 product class 36240, part)....1977..	293.1	66	78	95	100
	1972..	193.8	73	85	97	100
36240	Carbon and graphite products, n.s.k. (1967 product class 36240, part)....1977..	7.9	(X)	(X)	(X)	(X)
	1972..	5.1	(X)	(X)	(X)	(X)
3629-	Electrical industrial apparatus, n.e.c....1977..	699.6	32	44	61	81
	1972..	441.8	28	41	58	78
	1967..	398.5	35	48	67	89
	1963..	250.5	31	43	58	76
	1958..	213.1	31	43	62	80
36291	Capacitors for industrial use, except for electronic applications....1977..	154.8	78	95	100	(X)
	1972..	112.4	78	97	100	(X)
	1967..	112.5	65	85	99+	100
	1963..	51.4	85	98	(D)	(D)
	1958..	57.1	67	86	99	100
	1954..	64.2	72	88	99	(NA)
36292	Rectifying apparatus....1977..	310.2	35	52	76	98
	1972..	151.5	41	56	80	97
	1967..	131.6	48	62	82	98
	1963..	86.9	35	52	80	98
	1958..	73.1	45	62	86	98
36293	Other electrical equipment for industrial use....1977..	182.2	44	60	81	99
	1972..	146.0	32	45	69	89
	1967..	135.1	26	40	67	93
	1963..	103.1	32	43	60	81
	1958..	77.1	31	46	65	83
36290	Electrical industrial apparatus, n.e.c., n.s.k....1977..	51.9	(X)	(X)	(X)	(X)
	1972..	31.9	(X)	(X)	(X)	(X)
	1967..	19.4	(X)	(X)	(X)	(X)
	1963..	8.5	(X)	(X)	(X)	(X)
	1958..	5.8	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3631-	Household cooking equipment....1977..	1,806.5	44	66	86	98
	1972..	1,034.7	46	65	84	98
	1967..	630.1	46	64	84	97
	1963..	536.7	45	62	81	96
	1958..	433.1	42	56	75	95
36311	Electric household ranges and ovens and surface cooking unit equipment and parts, except small appliances....1977..	1,232.5	57	79	98	100
	1972..	582.8	60	80	95	100
	1967..	338.8	66	81	94	100
	1963..	282.1	70	83	95	(D)
	1958..	203.7	67	81	97	100
36313	Gas ranges, ovens, and surface cooking units (1972 product class 36312, part)....1977..	349.1	59	82	98	100
36314	Outdoor cooking equipment and household cooking equipment, n.e.c. (1972 product class 36312, part)....1977..	203.5	48	73	98	100
	1972 product class 36312, Household ovens and ranges, equipment and parts except electric (1977 product classes 36313 and 36314.).1972..	447.1	46	65	86	99
	1967..	289.1	47	66	87	99+
	1963..	253.6	44	61	81	97
	1958..	229.4	40	55	77	96
36310	Household cooking equipment, n.s.k....1977..	21.4	(X)	(X)	(X)	(X)
	1972..	4.9	(X)	(X)	(X)	(X)
	1967..	2.1	(X)	(X)	(X)	(X)
	1963..	1.1	(X)	(X)	(X)	(X)
3632-	Household refrigerators and freezers....1977..	2,005.6	82	97	99+	100
	1972..	1,419.4	75	96	99+	100
	1967..	987.6	69	89	99+	100
	1963..	831.8	73	89	99+	100
	1958..	729.2	65	85	99	100
36321	Household refrigerators, including combination refrigerator-freezers (1972 product class 36321, part)[192]....1977..	1,644.4	83	(D)	100	(X)
	1972..	1,207.8	76	97	(D)	100
	1967..	841.0	70	92	99+	100
	1963..	687.9	76	93	99+	100
	1958..	551.2	73	91	99	100
	1954..	573.1	62	83	99	(NA)
36322	Home and farm freezers (1972 product class 36322, part)[192]....1977..	296.0	83	(D)	100	(X)
	1972..	199.8	80	96	100	(X)
	1967..	142.8	70	89	100	(X)
	1963..	143.1	63	82	(D)	(D)
	1958..	178.0	58	78	99	100
	1954..	172.4	44	66	93	(NA)
36323	Parts for household refrigerators and freezers (1972 product classes 36321, part and 36322, part)[192]....1977..	61.8	(D)	100	(X)	(X)
36320	Household refrigerators and freezers, n.s.k....1977..	3.4	(X)	(X)	(X)	(X)
	1972..	11.8	(X)	(X)	(X)	(X)
	1967..	3.8	(X)	(X)	(X)	(X)
	1963..	0.8	(X)	(X)	(X)	(X)
3633-	Household laundry equipment[193]....1977..	1,697.3	83	97	99+	100
	1972..	1,287.3	76	95	99	100
	1967..	931.7	74	92	99+	100
	1963..	766.1	71	90	99	100
	1958..	719.6	67	87	97	99
	1954..	596.3	58	81	97	(NA)
36331	Household mechanical washing machines, dryers, and washer-dryer combinations....1977..	1,460.3	85	99	100	(X)
	1972..	1,138.5	79	98	100	(X)
	1967..	843.2	77	94	100	(X)
	1963..	698.8	73	93	(D)	(D)
	1958..	672.2	68	90	99	100
36333	Other household laundry equipment and parts[193]....1977..	235.9	80	91	99	100
	1972..	148.7	71	88	98	100
36330	Household laundry equipment, n.s.k....1977..	1.1	(X)	(X)	(X)	(X)
	1972..	2.7	(X)	(X)	(X)	(X)
	1967..	4.7	(X)	(X)	(X)	(X)
	1963..	0.5	(X)	(X)	(X)	(X)
	1958..	0.9	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3634-	Electric housewares and fans....1977..	2,304.0	39	53	73	90
	1972..	1,449.1	39	54	70	87
	1967..	1,065.7	44	56	73	89
	1963..	800.5	35	49	70	87
	1958..	543.8	39	53	71	87
36341	Electric fans, except industrial type....1977..	257.0	53	71	93	100
	1972..	127.7	52	71	96	100
	1967..	123.6	47	67	92	100
	1963..	102.1	44	65	91	100
	1958..	77.1	54	75	93	(D)
	1954..	88.4	46	70	92	(NA)
36345	Small household electric appliances, except fans (1972 product classes 36342 and 36343)....1977..	1,846.2	43	59	80	96
	1972 product class 36342, Electric razors and dry shavers (1977 product class 36345, part)....1972..	64.3	(D)	100	(X)	(X)
	1967..	66.2	95	(D)	100	(X)
	1963..	53.4	(D)	100	(X)	(X)
	1958..	54.1	(D)	100	(X)	(X)
	1972 product class 36343, Other small household electric appliances (1977 product class 36345, part)....1972..	1,122.7	42	60	77	93
	1967..	790.1	50	62	79	94
	1963..	553.1	41	57	76	92
	1958..	336.2	45	59	78	93
36349	Parts for small household electric appliances (1972 product class 36344)....1977..	148.4	47	65	90	100
	1972..	84.8	51	68	92	100
	1967..	64.4	59	74	91	100
	1963..	81.5	60	75	92	99
	1958..	55.9	60	80	96	100
36340	Electric housewares and fans, n.s.k....1977..	52.4	(X)	(X)	(X)	(X)
	1972..	49.6	(X)	(X)	(X)	(X)
	1967..	21.5	(X)	(X)	(X)	(X)
	1963..	10.4	(X)	(X)	(X)	(X)
	1958..	20.6	(X)	(X)	(X)	(X)
36350	Household vacuum cleaners, including parts and attachments....1977..	710.4	69	88	99	100
	1972..	438.3	66	86	98	100
	1967..	254.5	62	84	99	100
	1963..	183.1	64	84	98	100
	1958..	155.6	64	84	99	100
3636-	Sewing machines....1977..	260.4	82	89	94	99
36361	Household sewing machines (1972 product class 36360, part)....1977..	237.5	90	96	100	(X)
36362	Industrial sewing machines (1972 product class 36360, part)....1977..					
36360	Sewing machines, n.s.k. (1972 product class 36360, part)....1977..	22.9	(X)	(X)	(X)	(X)
	1972 product class 36360, Sewing machines (1977 product classes 36361, 36362, and 36360)....1972..	152.1	80	88	95	99
	1967..	116.8	80	88	96	99+
	1963..	104.7	82	91	96	99
	1958..	97.7	(D)	92	97	99
	1954..	107.5	76	89	95	(NA)
3639-	Household appliances, n.e.c....1977..	1,383.0	46	72	94	99
	1972..	816.5	45	63	90	98
	1967..	509.7	39	55	82	97
	1963..	415.7	37	51	75	92
	1958..	351.7	32	46	68	91
36391	Household water heaters, electric....1977..	222.5	78	98	100	(X)
	1972..	119.9	62	88	(D)	100
	1967..	63.4	48	69	97	100
	1963..	61.4	40	61	88	99+
	1958..	56.8	37	52	79	(D)
	1954..	48.2	39	55	78	(NA)
36392	Household water heaters, except electric....1977..	281.6	81	99	100	(X)
	1972..	179.5	67	90	99	100
	1967..	130.1	54	81	98	100
	1963..	143.3	51	69	92	99+
	1958..	163.8	42	56	83	99
	1954..	138.4	40	57	80	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3639-	Household appliances, n.e.c.--Con.					
36394	Dishwashers, disposals, trash compactors, floor waxing and polishing machines (1972 product classes 36394 and 36399, part).....1977..	721.8	73	90	99+	100
36399	Other household appliances and parts (1972 product class 36399, part).....1977..	139.8	72	87	99+	100
	1972 product class 36394, Dishwashing machines and food waste disposers (1977 product class 36394, part).....1972..	417.9	71	91	(D)	100
	1972 product class 36399, Other household appliances and parts (1977 product class 36399 and 36394, part).....1972..	86.3	50	74	98	100
36390	Household appliances, n.e.c., n.s.k.....1977..	17.3	(X)	(X)	(X)	(X)
	1972..	12.8	(X)	(X)	(X)	(X)
	1967..	18.2	(X)	(X)	(X)	(X)
	1963..	2.9	(X)	(X)	(X)	(X)
36410	Electric lamps (bulbs only), including sealed beam lamps.....1977..	1,630.2	89	94	97	99
	1972..	1,068.9	87	93	98	99+
	1967..	756.4	88	93	98	99+
	1963..	545.9	89	95	99	99+
	1958..	393.6	90	96	99	99+
	1954..	309.7	93	96	99	(NA)
36430	Current-carrying wiring devices, including lightning rods.....1977..	1,824.9	23	33	52	76
	1972..	1,213.4	26	40	57	77
	1967..	789.8	21	32	51	73
	1963..	561.8	26	38	57	75
3644-	Noncurrent-carrying wiring devices.....1977..	1,315.5	17	30	55	82
	1972..	831.2	17	31	55	82
	1967..	548.6	17	29	53	81
	1963..	439.3	18	31	56	81
	1958..	341.6	26	41	67	88
36441	Pole, line, and transmission hardware.....1977..	276.2	52	75	95	100
	1972..	222.3	53	71	93	100
	1967..	130.2	39	60	93	100
	1963..	97.9	40	67	96	100
	1958..	81.2	51	75	98	100
	1954..	70.9	49	71	93	(NA)
36442	Electrical conduit and conduit fittings.....1977..	634.4	31	47	76	98
	1972..	371.9	29	45	75	97
	1967..	306.9	26	43	74	96
	1963..	242.2	27	43	70	92
	1958..	201.3	41	59	82	95
36443	Other noncurrent-carrying wiring devices and supplies.....1977..	342.7	37	57	82	99
	1972..	216.2	34	58	83	98
	1967..	98.6	43	63	84	(NA)
	1963..	92.8	44	61	79	94
	1958..	59.1	54	69	86	98
36440	Noncurrent-carrying wiring devices, n.s.k.....1977..	62.2	(X)	(X)	(X)	(X)
	1972..	20.8	(X)	(X)	(X)	(X)
	1967..	12.8	(X)	(X)	(X)	(X)
	1963..	6.4	(X)	(X)	(X)	(X)
3645-	Residential lighting fixtures (1967 industry 3642, part).....1977..	974.6	22	30	42	58
	1972..	738.3	25	32	44	57
36451	Lighting fixtures, residential, except portable (1967 product class 36421).....1977..	461.0	35	48	67	90
	1972..	291.9	46	58	75	92
	1967..	190.5	36	53	71	(NA)
	1963..	158.8	30	47	64	82
36457	Portable residential type lighting fixtures and parts and accessories for residential lighting fixtures.....1977..	389.6	22	31	46	71
	1972..	320.8	19	29	45	66
	1967 product 36427, Residential type electric fixtures, portable[194].....1967..	176.4	17	28	45	69
	1963..	160.2	10	19	36	60
36450	Residential lighting fixtures, n.s.k.[195].....1977..	124.0	(X)	(X)	(X)	(X)
	1972..	133.9	(X)	(X)	(X)	(X)
	1967..	91.0	(X)	(X)	(X)	(X)
	1963..	44.9	(X)	(X)	(X)	(X)
	1958..	56.4	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3646-	Commercial lighting fixtures (1967 industry 3642, part).....1977..	935.0	27	40	64	83
	1972..	700.3	24	38	59	81
36462	Commercial and institutional-type electric lighting fixtures (1967 product class 36422).....1977..	653.6	31	47	69	89
	1972..	525.7	28	42	66	87
	1967..	385.4	24	35	54	78
	1963..	299.2	22	34	56	77
	1958..	168.1	17	28	51	75
36463	Industrial-type electric lighting fixtures and parts.....1977..	243.0	37	55	77	97
	1972..	162.6	26	42	68	91
	1967 product class 36423, Industrial-type electric fixtures[196].....1967..	120.6	27	48	74	(NA)
	1963..	76.1	25	43	71	89
	1958..	62.4	21	35	56	76
36460	Commercial lighting fixtures, n.s.k.[195].....1977..	38.4	(X)	(X)	(X)	(X)
	1972..	12.0	(X)	(X)	(X)	(X)
36470	Vehicular lighting equipment (1967 product class 36424)[5] [195].....1977..	646.1	69	77	89	99
	1972..	359.2	68	80	92	99+
	1967..	226.1	66	77	91	98
	1963..	157.4	71	84	96	100
	1958..	106.0	69	79	94	99
3648-	Lighting equipment, n.e.c. (1967 industry 3642, part)[195].....1977..	674.7	22	34	55	76
	1972..	487.4	24	37	64	83
36485	Outdoor lighting equipment (1967 product class 36425).....1977..	392.0	33	48	76	95
	1972..	315.9	36	55	85	97
	1967..	199.2	40	58	80	95
	1963..	134.8	40	55	80	95
	1958..	76.3	41	62	84	99
36489	Other electric and nonelectric lighting equipment and parts and accessories (1967 product class 36426, part)[197].....1977..	222.4	39	50	68	90
	1972..	164.7	35	47	67	87
	1967..	122.6	27	40	65	89
	1963..	84.7	24	33	51	75
	1958..	68.9	31	43	61	84
36480	Lighting equipment, n.e.c., n.s.k.[195].....1977..	60.3	(X)	(X)	(X)	(X)
	1972..	6.8	(X)	(X)	(X)	(X)
3651-	Radio and TV receiving sets.....1977..	4,730.6	44	60	70	90
	1972..	3,625.6	46	69	85	94
	1967..	3,568.2	50	69	85	94
	1963..	2,070.8	43	63	82	93
36511	Home, portable, and automotive radios.....1977..	811.6	75	90	99+	100
	1972..	779.2	57	76	96	100
	1967..	697.4	48	72	95	99+
	1963..	531.3	51	74	92	99+
	1958..	344.9	(NA)	(NA)	(NA)	(NA)
36512	Television receivers.....1977..	2,450.9	70	93	100	(X)
	1972..	2,148.7	66	93	100	(X)
	1967..	2,259.7	64	86	99	100
	1963..	1,092.3	58	81	99+	100
	1958..	726.6	55	81	99	100
36514	High fidelity components[16].....1977..	558.3	37	55	81	99
	1972..	363.1	36	51	78	98
	1967..	396.1	28	42	75	98
36515	Speaker (including loudspeaker systems)[16].....1977..	753.9	31	47	69	91
	1972..	251.1	26	46	75	94
	1967..	184.8	24	38	65	(NA)
36510	Radios and TV receiving sets, n.s.k.....1977..	156.1	(X)	(X)	(X)	(X)
	1972..	83.6	(X)	(X)	(X)	(X)
	1967..	30.2	(X)	(X)	(X)	(X)
	1963..	16.1	(X)	(X)	(X)	(X)
	1958..	0.6	(X)	(X)	(X)	(X)
36520	Phonograph records, record blanks, and prerecorded tapes.....1977..	1,138.7	60	75	90	96
	1972..	537.1	47	60	75	85
	1967..	271.0	58	67	80	91
	1963..	178.7	68	74	83	93
	1958..	136.2	74	81	88	97
	1954..	80.2	69	78	86	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3661-	Telephone and telegraph apparatus....1977..	7,118.1	(D)	89	93	98
	1972..	3,940.1	(D)	(D)	97	99
	1967..	2,248.2	(D)	94	98	99+
	1963..	1,538.0	(D)	(D)	99	99+
36611	Telephone switching and switchboard equipment....1977..	2,827.1	(D)	97	99+	100
	1972..	1,582.3	(D)	99+	100	(X)
	1967..	840.4	(D)	99+	100	(X)
	1963..	491.3	(D)	99+	100	(X)
	1958..	434.7	(D)	100	(X)	(X)
36612	Telephone and telegraph (wire) apparatus, equipment and components except switching and switchboard....1977..	4,174.5	(D)	87	93	99
	1972..	2,328.8	(D)	(D)	(D)	99+
	1967..	1,399.0	(D)	(D)	98	99+
	1963..	1,045.2	(D)	(D)	(D)	100
36610	Telephone and telegraph apparatus, n.s.k....1977..	117.2	(X)	(X)	(X)	(X)
	1972..	29.0	(X)	(X)	(X)	(X)
	1967..	8.8	(X)	(X)	(X)	(X)
	1963..	1.5	(X)	(X)	(X)	(X)
	1958..	7.0	(X)	(X)	(X)	(X)
3662-	Radio and TV communication equipment[16]....1977..	14,051.0	20	32	54	72
	1972..	8,382.2	19	33	56	75
	1967..	7,455.1	21	36	59	76
36621	Communication systems and equipment, except broadcast, including microwave and mobile communication equipment (1972 product classes 36621, 36626, part, 36627, part, and 36629.)....1977..	3,344.4	40	51	66	80
36622	Broadcast, studio, and related electronic equipment (1972 product class 36622, part.)....1977..	568.4	38	51	70	91
36623	Intercommunication equipment, alarm systems, and traffic control equipment....1977..	851.9	38	55	76	91
	1972..	330.9	24	38	58	81
	1967..	231.0	36	49	73	93
	1963..	165.8	35	49	72	91
	1958..	129.8	40	54	75	91
36625	Search, detection, navigation and guidance systems, and equipment (1972 product classes 36624, 26625, 36626, part, and 36628)....1977..	7,478.1	25	45	72	92
36627	Electronic systems and equipment, n.e.c. (1972 product classes 36622, part, 36626, part, and 36627, part.)....1977..	1,348.6	24	35	53	72
	1972 product class 36621, Commercial, industrial, and military communication equipment, except telephone communication equipment.1972..	1,554.4	40	53	68	81
	1967..	1,615.9	39	54	73	87
	1963..	1,016.1	38	59	77	88
	1972 product class 36622, Radio and television broadcast equipment and closed circuit systems....1972..	429.7	42	55	72	90
	1967..	344.1	53	68	82	95
	1963..	149.7	50	63	79	94
	1958..	53.8	50	63	79	93
	1972 product class 26624, Electronic navigational aids (except missile-borne and space vehicle-borne equipment)....1972..	1,073.7	46	67	88	98
	1967..	1,215.1	51	67	88	99
	1963..	1,295.3	53	72	90	99
	1972 product class 36625, Electronic search and detection apparatus, including radar, infrared and sonar....1972..	2,262.9	38	59	83	95
	1967..	1,671.2	35	50	78	95
	1963..	1,615.0	43	61	80	96
	1972 product class 36626, Electronic military, industrial and commercial equipment, n.e.c....1972..	1,472.3	27	36	53	74
	1967..	1,148.7	23	32	50	71
	1963..	724.5	17	27	49	72
	1972 product class 36627, Space satellite-borne communications systems (complete package)....1972..	124.7	82	92	99+	100
	1967..	44.6	64	93	100	(X)
	1963..	28.7	83	95	100	(X)
	1972 product class 36628, Missile-borne navigation and guidance systems and equipment....1972..	777.8	52	76	95	99+
	1967..	848.9	64	78	94	99+
	1963..	972.9	60	77	94	99
	1972 product class 36629, Microwave and mobile telephone communication equipment[16]....1972..	146.5	58	73	91	99+
	1967..	165.8	86	95	99	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3662-	Radio and TV communication equipment--Con.					
36620	Radio, TV communication equipment, n.s.k. 1977	509.7	(X)	(X)	(X)	(X)
	1972	209.3	(X)	(X)	(X)	(X)
	1967	196.9	(X)	(X)	(X)	(X)
	1963	32.0	(X)	(X)	(X)	(X)
3671-	Electron tubes, all types 1977	1,257.4	57	74	93	99
36711	Receiving type election tubes, except cathode ray (1972 product class 36710) 1977	104.0	(D)	(D)	100	(X)
	1972	189.6	90	98	99+	100
	1967	253.1	89	97	99+	100
	1963	287.9	83	98	99+	100
	1958	337.3	76	94	99	99+
	1954	288.8	79	97	100	(X)
36712	Cathode ray picture tubes (1972 product class 36720) 1977	603.5	92	98	99	99+
	1972	633.6	82	96	99	99+
	1967	756.6	84	97	99+	100
	1963	248.5	81	94	97	99
	1958	177.3	64	85	96	99
	1954	213.0	58	79	98	(NA)
36713	Transmitting and special purpose tubes (1972 product class 36730) 1977	544.6	41	61	92	100
	1972	364.7	50	70	95	99+
	1967	361.6	54	73	93	99+
	1963	286.7	44	68	92	99+
	1958	224.9	52	69	94	(D)
36710	Electron tubes, n.s.k.[198] 1977	5.3	(X)	(X)	(X)	(X)
3674-	Semiconductors and related devices 1977	4,532.3	41	60	74	87
	1972	2,362.0	53	66	78	91
	1967	1,162.0	46	62	83	96
	1963	623.3	39	59	85	97
	1958	236.7	46	64	92	99
36741	Integrated microcircuits (semiconductor networks)[16] 1977	2,697.1	46	68	88	98
	1972	1,273.9	69	79	91	98
	1967	247.5	67	83	97	100
36742	Transistors[16] 1977	462.6	66	80	94	100
	1972	409.1	70	84	97	(D)
	1967	447.0	56	77	95	100
36743	Diodes and rectifiers[16] 1977	414.9	48	68	91	100
	1972	300.8	46	62	88	99+
	1967	287.5	37	61	91	100
36749	Semiconductor devices, n.e.c., and parts for semiconductors[16] 1977	835.8	38	52	75	94
	1972	337.2	39	57	83	97
	1967	176.0	39	59	86	99+
36740	Semiconductors and related devices, n.s.k.[16] 1977	122.0	(X)	(X)	(X)	(X)
	1972	41.0	(X)	(X)	(X)	(X)
	1967	4.0	(X)	(X)	(X)	(X)
36750	Capacitors for electronic applications (1967 product class 36792) 1977	736.1	43	57	82	96
	1972	454.4	38	56	80	94
	1967	430.7	35	54	77	94
	1963	318.8	36	56	77	92
	1958	183.6	40	57	83	96
36760	Resistors for electronic applications (1967 product class 36793) 1977	583.0	38	56	83	97
	1972	438.5	40	60	83	96
	1967	442.4	38	55	78	96
	1963	312.6	39	53	77	94
	1958	146.8	43	60	84	99
36770	Coils, transformers, reactors, and chokes for electronic applications (1967 product class 36794)[199] 1977	605.8	19	29	44	64
	1972	391.8	14	25	46	70
	1967	446.5	23	33	61	80
	1963	274.4	21	30	46	66
	1958	192.0	(NA)	(NA)	(NA)	(NA)
36780	Connectors for electronic applications (1967 product class 36795, part)[199] 1977	986.0	39	54	75	92
	1972	521.1	48	66	82	95

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
36790	Electronic components, and subassemblies, n.e.c., (1967 product classes 36795, part, and 36790)....1977..	5,574.1	24	29	40	53
	1972..	3,211.8	33	39	50	62
	1967 product class 36795, Other electronic components and accessories, n.e.c., (1972 product classes 36780 and 36790, part)[199]...1967..	2,860.4	37	45	56	69
	1963..	1,496.7	17	27	42	56
	1967 product class 36790, Electronic components, n.e.c., n.s.k., (1972 product class 36790, part)[199]....1967..	240.1	(X)	(X)	(X)	(X)
	1963..	98.8	(X)	(X)	(X)	(X)
	1958..	90.2	(X)	(X)	(X)	(X)
3691-	Storage batteries....1977..	1,911.0	58	84	92	98
	1972..	950.3	58	85	93	98
	1967..	579.4	60	81	92	97
	1963..	504.5	60	78	92	97
	1958..	361.5	64	81	91	96
	1954..	336.1	65	80	90	(NA)
36913	Storage batteries, lead acid type, BCI dimensional size group 8D (1.5 cu. ft. and smaller), SLI type (1972 product classes 36911, part and 36912, part)....1977..	1,458.1	67	92	98	100
36914	Storage batteries, lead acid type, larger than BCI dimensional size group 8D, SLI type (1972 product classes 36911, part and 36912, part)....1977..	233.8	78	91	99+	100
36915	Storage batteries, except lead acid, including parts for all storage batteries (1972 product class 36912, part)....1977..	164.3	59	85	100	(X)
	1972 product class 36911, Storage batteries, starting, lighting, and ignition (SLI) type (1977 product classes 36913, part and 36914, part)....1972..	701.0	66	92	97	99+
	1967..	404.8	62	88	96	99+
	1963..	360.9	64	86	94	98
	1958..	279.0	66	86	92	98
	1954..	258.8	64	82	91	(NA)
	1972 product class 36912, Storage batteries, other than SLI type, including parts for storage batteries, all types (1977 product classes 36913, part, 36914, part and 36915)....1972..	225.7	64	80	99	100
	1967..	154.7	76	90	99+	100
	1963..	139.1	66	90	96	100
	1958..	78.5	72	93	99	100
36910	Storage batteries, n.s.k....1977..	54.8	(X)	(X)	(X)	(X)
	1972..	23.6	(X)	(X)	(X)	(X)
	1967..	19.9	(X)	(X)	(X)	(X)
	1963..	4.5	(X)	(X)	(X)	(X)
	1958..	4.0	(X)	(X)	(X)	(X)
36920	Primary batteries, dry and wet....1977..	623.9	85	96	99	100
	1972..	318.3	91	96	99	100
	1967..	327.9	85	95	99+	100
	1963..	191.6	83	91	99+	100
	1958..	135.7	84	94	99	100
	1954..	117.9	80	94	99	(NA)
3693-	X-ray, and electromedical apparatus....1977..	1,837.8	31	48	68	87
	1972 product class 36930, X-ray, and electromedical apparatus (1977 product classes 36931 and 36932)....1972..	380.1	52	70	86	98
	1967..	179.8	49	66	87	99
	1963..	108.6	49	66	85	98
	1958..	73.0	52	65	80	93
36931	Irradiation (ionizing radiation) equipment, including x-ray, beta ray, gamma ray, and nuclear (medical, dental, industrial, and scientific) (1972 product class 36930, part)....1977..	664.6	63	79	93	100
36932	Electromedical equipment, including diagnostic, therapeutic, and patient monitoring, but excluding ionizing radiation equipment (1972 product class 36930, part)....1977..	1,107.8	36	50	71	94
36930	X-ray, electromedical and electrotherapeutic apparatus, n.s.k. (1972 product class 36930, part)....1977..	65.5	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 36, ELECTRIC AND ELECTRONIC EQUIPMENT--Con.				
3694-	Engine electrical equipment....1977..	3,049.3	60	75	85	93
	1972..	1,780.7	62	75	85	93
	1967..	1,220.2	62	74	85	93
	1963..	873.9	68	77	85	94
	1958..	[15]586.9	([15])	([15])	([15])	([15])
	1954..	588.2	63	79	87	(NA)
36941	Ignition harness and cable sets....1977..	252.8	40	55	81	99+
	1972..	112.8	43	58	83	99+
	1967..	76.5	45	66	90	100
	1963..	58.9	58	78	94	100
	1958..	[15]28.8	([15])	([15])	([15])	([15])
	1954..	53.9	77	86	96	(NA)
36942	Battery charging alternators, generators and regulators....1977..	631.7	77	88	97	99+
	1972..	382.0	80	91	98	99+
	1967..	288.3	77	88	95	99+
	1963..	199.3	83	93	97	99+
	1958..	104.9	87	94	99	(D)
36943	Cranking (starting) motors....1977..	464.3	89	96	99	100
	1972..	313.6	88	96	99+	100
	1967..	221.1	89	94	98	99+
	1963..	134.7	(D)	(D)	99+	100
	1958..	82.3	97	99	(D)	(X)
36944	Spark plugs....1977..	419.6	(D)	99+	100	(X)
	1972..	290.3	99+	100	(X)	(X)
	1967..	186.4	98	99+	100	(X)
	1963..	143.8	96	99	(D)	100
	1958..	123.1	(D)	(D)	(D)	100
36945	Other complete electrical equipment for internal combustion engines..1977..	895.2	(D)	83	94	99+
	1972..	411.7	63	75	92	99+
	1967..	267.6	60	73	90	100
	1963..	217.1	60	73	89	99
	1958..	133.8	53	68	86	99
36946	Components and parts for engine electrical equipment....1977..	310.0	59	79	96	100
	1972..	225.5	62	79	95	99+
	1967..	150.6	61	77	95	100
	1963..	114.7	55	69	90	(D)
	1958..	103.3	54	70	90	(D)
36940	Engine electrical equipment, n.s.k....1977..	75.6	(X)	(X)	(X)	(X)
	1972..	44.8	(X)	(X)	(X)	(X)
	1967..	29.6	(X)	(X)	(X)	(X)
	1963..	5.4	(X)	(X)	(X)	(X)
	1958..	10.6	(X)	(X)	(X)	(X)
3699-	Electrical equipment and supplies, n.e.c....1977..	[4]878.8	24	31	45	61
	1972..	[4]560.5	26	33	45	60
	1967..	[4]322.1	35	44	58	75
	1963..	[4]233.9	43	50	64	79
	1958..	[4]183.0	45	55	67	80
36993	Electric comfort heating equipment, excluding portable and residential wall or baseboard radiant heating units, and excluding parts (1972 product class 36992, part)....1977..	87.3	47	69	93	100
36994	Other electrical equipment, n.e.c., except electric comfort heating equipment (1972 product class 36992, part)....1977..	476.7	41	52	70	86
	1972 product class 36992, Lamp bulb components and other electrical products (1977 product classes 36993 and 36994)....1972..	319.6	44	53	69	84
	1967..	192.4	50	62	77	96
	1963..	156.9	58	66	80	94
	1958..	115.8	66	76	86	97
36996	Appliance wire, cord, and flexible cord sets (manufactured from purchased materials). (See also code 33576.)....1977..	[4]132.3	29	45	70	97
	1972..	[4]94.5	36	57	86	(D)
	1967..	[4]92.6	31	45	70	96
	1963..	[4]66.0	34	48	70	94
	1958..	[4]60.9	33	45	66	88
36990	Electrical equipment and supplies, n.e.c., n.s.k....1977..	182.5	(X)	(X)	(X)	(X)
	1972..	146.4	(X)	(X)	(X)	(X)
	1967..	37.1	(X)	(X)	(X)	(X)
	1963..	10.9	(X)	(X)	(X)	(X)
	1958..	6.3	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT				
3711-	Motor vehicles and car bodies[16] 1977	72,979.1	94	99	99+	99+
	1972	41,054.3	93	99	99+	99+
	1967	25,921.6	93	98	99+	99+
37111	Passenger cars, knocked down or assembled, and chassis for sale separately 1977	47,798.9	99+	99+	100	(X)
	1972	29,246.2	99+	(D)	100	(X)
	1967	19,277.4	99	(D)	100	(X)
	1963	16,768.3	99	(D)	100	(X)
	1958	9,217.7	99	(D)	100	(X)
	1954	9,471.8	98	99	100	(X)
37112	Truck tractors, truck chassis and trucks (chassis of own manufacture) 1977	21,543.5	85	98	99+	100
	1972	9,567.8	84	97	99+	100
	1967	4,263.7	82	95	99+	100
	1963	3,376.2	81	96	99+	99+
	1958	1,933.7	78	96	99	100
	1954	1,732.1	77	93	99	(NA)
37113 37114 37115 37110	Buses (except trolley buses) and fire department vehicles (chassis of own manufacture) Combat vehicles, wheeled or tracked tactical vehicles or carriers (excluding tanks) Passenger car bodies Motor vehicles, n.s.k. 1977	3,636.7	(D)	(D)	(D)	99+
37113	Buses (except trolley buses) and fire department vehicles (chassis of own manufacture) 1972	240.9	80	93	100	(X)
	1967	179.8	82	95	100	(X)
	1963	182.5	83	92	(D)	100
	1958	99.2	84	94	99	100
37114 37115	Combat vehicles, wheeled or tracked tactical vehicles or carriers (excluding tanks)[16] and Passenger car bodies[16] 1972	1,965.7	(D)	(D)	100	(X)
	1967	2,160.1	(D)	98	99+	100
37110	Motor vehicles and car bodies, n.s.k. 1972	33.7	(X)	(X)	(X)	(X)
	1967	40.7	(X)	(X)	(X)	(X)
3713-	Truck and bus bodies[200] 1977	1,880.9	33	40	52	65
	1972	1,448.8	25	32	45	62
	1967	595.4	20	28	43	61
	1963	419.7	23	33	49	66
	1958	274.9	19	27	43	63
	1954	215.2	18	26	42	(NA)
37131	Truck, bus, and other vehicle bodies, except passenger car bodies 1977	1,326.5	45	54	68	82
	1972	622.7	16	27	47	66
37132	Complete vehicles, except passenger cars, produced on purchased chassis[200] 1977	316.7	21	36	60	85
	1972	712.1	44	55	74	91
37130	Truck and bus bodies, n.s.k. 1977	237.7	(X)	(X)	(X)	(X)
	1972	114.0	(X)	(X)	(X)	(X)
3714-	Motor vehcile parts and accessories[16] 1977	37,841.8	64	71	80	87
	1972	19,399.2	62	70	79	87
	1967	11,735.2	61	69	79	88
37141	Parts and accessories for motor vehicles, excluding kits and rebuilt parts[16] 1977	36,735.4	66	73	82	89
	1972	18,743.9	64	72	82	90
	1967	11,326.9	63	71	81	90
37143	Rebuilt engines and parts for motor vehicles, except carburetors[16] 1977	592.9	21	33	54	77
	1972	365.5	25	39	61	82
	1967	197.5	20	36	57	79
37140	Motor vehicle parts and accessories, n.s.k.[16] 1977	513.5	(X)	(X)	(X)	(X)
	1972	289.8	(X)	(X)	(X)	(X)
	1967	210.7	(X)	(X)	(X)	(X)

See footnotes at end of table

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**–Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.				
3715-	Truck trailers (1967 product class 37130).....1977..	1,807.0	44	56	69	84
	1972..	1,077.3	46	60	76	89
	1967..	702.2	48	62	82	94
	1963..	484.7	60	70	81	91
	1958..	284.0	52	63	76	91
	1954..	262.0	56	65	81	(NA)
37151	Truck trailers and chassis (16,000 pounds per axle or over) (1967 product class 37150, part).....1977..	1,680.9	47	60	74	90
	1972..	962.7	52	67	83	95
37152	Truck trailers and chassis (less than 10,000 pounds per axle) (1967 product class 37150, part).....1977..	41.3	39	56	86	100
	1972..	64.6	54	74	94	100
37150	Truck trailers, n.s.k. (1967 product class 37150, part).....1977..	84.8	(X)	(X)	(X)	(X)
	1972..	50.0	(X)	(X)	(X)	(X)
37161	Motor homes produced on purchased chassis[200].....1977..	1,494.6	39	55	71	90
3721-	Aircraft.....1977..	12,052.8	61	81	98	99+
	1972..	7,538.3	69	87	98	99+
	1967..	9,172.2	76	89	99	99+
	1963..	4,330.5	58	82	98	99+
	1958..	5,362.8	62	83	97	99
	1954..	5,546.0	55	79	97	(NA)
37211	Complete aircraft, military type.....1977..	4,579.6	75	93	100	(X)
	1972..	2,802.9	74	94	99+	100
	1967..	4,408.0	77	95	99+	100
	1963..	2,470.3	68	89	99+	100
	1958..	3,501.7	61	86	99	100
37212	Complete aircraft, personal and utility type[16].....1977..	2,034.1	63	88	99+	100
	1972..	474.2	74	93	100	(X)
37213	Complete aircraft, commercial transport type[16].....1977..	2,672.0	(D)	100	(X)	(X)
	1972..	2,787.3	97	(D)	100	(X)
37212 37213	Complete aircraft, personal and utility type; and Complete aircraft, commercial transport type[16].....1967..	3,504.9	(D)	96	(D)	100
37214	Modifications, conversions, and overhaul of previously accepted aircraft.....1977..	747.2	54	82	99	100
	1972..	373.9	63	83	99	100
	1967..	596.8	57	82	99	100
	1963..	465.5	64	90	99+	100
	1958..	298.8	70	92	99	100
37216	Other aeronautical services on aircraft.....1977..	1,988.2	78	93	99+	100
	1972..	1,067.1	77	94	99+	100
	1967..	635.2	77	94	99+	100
	1963..	668.4	78	91	99	100
	1958..	574.0	62	82	97	99
37210	Aircraft, n.s.k.....1977..	31.7	(X)	(X)	(X)	(X)
	1972..	32.9	(X)	(X)	(X)	(X)
	1967..	27.3	(X)	(X)	(X)	(X)
	1963..	7.5	(X)	(X)	(X)	(X)
3724-	Aircraft engines and engine parts (1967 industry 3722, part).....1977..	4,994.6	70	82	90	95
	1972..	3,069.7	74	83	90	96
	1967 industry 3722, Aircraft engines and engine parts[201].....1967..	4,781.7	62	78	90	96
	1963..	3,609.7	58	76	91	97
	1958..	3,325.9	56	74	89	96
	1954..	3,190.5	63	81	91	(NA)
37241	Aircraft engines for U.S. military customers (1967 product class 37221).....1977..	1,047.9	(D)	(D)	100	(X)
	1972..	437.2	96	99+	100	(X)
	1967..	1,087.6	94	98	99+	100
	1963..	644.4	97	99	99+	100
37242	Aircraft engines for other than U.S. military customers (1967 product class 37222).....1977..	937.0	84	(D)	100	(X)
	1972..	609.2	92	99+	100	(X)
	1967..	690.7	(D)	99+	100	(X)
	1963..	150.0	(D)	(D)	100	(X)
37243	Aeronautical services on aircraft engines (1967 product class 37223).1977..	660.8	83	95	99+	100
	1972..	692.0	83	96	(D)	100
	1967..	526.5	94	99+	100	(X)
	1963..	385.3	87	98	99+	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.				
3724-	Aircraft engines and engine parts (1967 industry 3722, part)--Con.					
37244	Aircraft engine parts and accessories (1967 product class 37224).....1977..	2,308.5	57	71	83	92
	1972..	1,306.7	57	72	83	93
	1967..	1,422.9	55	71	84	94
	1963..	932.1	53	68	85	95
37240	Aircraft engines and engine parts, n.s.k. (1967 product class 37220).1977..	40.4	(X)	(X)	(X)	(X)
	1972..	24.6	(X)	(X)	(X)	(X)
	1967 product class 37220 (1972 product classes 37240 and 37640)....1967..	30.9	(X)	(X)	(X)	(X)
	1963..	8.9	(X)	(X)	(X)	(X)
3728-	Aircraft equipment, n.e.c. (1967 industry 3729, part).....1977..	5,761.5	35	52	74	86
	1972..	3,433.7	30	45	70	85
	1967 industry 3729, Aircraft equipment, n.e.c.[202].....1967..	5,542.2	25	39	61	77
	1963..	3,901.0	25	38	59	77
37281	Aircraft parts and accessories, n.e.c. (1967 product class 37291)....1977..	5,328.2	36	55	77	89
	1972..	3,169.6	31	46	71	87
	1967..	4,085.4	31	43	64	80
	1963..	2,215.3	28	39	59	77
	1958..	2,860.6	(12)	(12)	(12)	(12)
	1954..	2,866.6	17	28	45	(NA)
37283	Research and development on aircraft parts (1967 product class 37293).....1977..	161.4	64	78	94	100
	1972..	99.5	75	88	98	100
	1967..	85.7	59	83	98	100
	1963..	74.5	82	90	99	100
37285	Aircraft propellers (1967 product class 37295)[203].....1977..	108.7	93	98	100	(X)
	1972..	58.3	81	98	100	(X)
	1967..	119.5	77	93	(D)	100
	1963..	109.0	87	98	99+	100
	1958..	167.0	(12)	(12)	(12)	(12)
	1954..	191.0	90	96	99	(NA)
37280	Aircraft equipment, n.e.c., n.s.k. (1967 product class 37290, part)..1977..	163.2	(X)	(X)	(X)	(X)
	1972..	110.3	(X)	(X)	(X)	(X)
	1967 product class 37290 (1972 product classes 37280 and 37690)[16]..1967..	174.4	(X)	(X)	(X)	(X)
3731-	Ship building and repairing.....1977..	6,270.3	44	59	76	88
	1972..	3,200.5	46	63	80	91
	1967..	2,357.9	42	60	78	89
	1963..	1,518.0	48	63	81	92
	1958..	1,467.4	48	66	80	91
	1954..	970.3	43	59	74	(NA)
37311	Nonpropelled ships, new construction.....1977..	491.1	39	63	87	99
	1972..	361.7	44	73	95	99+
	1967..	149.0	46	68	93	100
	1963..	82.2	48	66	92	99+
	1958..	95.3	36	61	90	99
37312	Self-propelled U.S. military ships, new construction.....1977..	2,211.7	86	96	99+	100
	1972..	1,100.0	90	97	99+	100
	1967..	973.8	68	88	99	100
	1963..	681.8	70	89	99+	100
	1958..	470.0	63	88	91	100
37313	Self-propelled nonmilitary ships, new construction.....1977..	1,917.3	41	60	81	95
	1972..	816.0	39	60	83	96
	1967..	361.8	44	59	77	92
	1963..	242.8	67	79	93	99
	1958..	441.2	77	89	95	99
37314	Repair of U.S. military ships.....1977..	718.0	41	67	90	99+
	1972..	386.5	55	74	93	99+
	1967..	423.0	48	69	90	98
	1963..	221.9	46	64	86	98
	1958..	123.8	42	55	77	96
37316	Repair of nonmilitary ships.....1977..	789.1	40	55	72	89
	1972..	484.2	49	65	77	89
	1967..	407.2	49	62	79	91
	1963..	277.4	44	56	75	89
	1958..	326.8	47	59	74	87

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.				
3731-	Ship building and repairing--Con.					
37310	Ship building and repairing, n.s.k. 1977	143.2	(X)	(X)	(X)	(X)
	1972	52.1	(X)	(X)	(X)	(X)
	1967	43.2	(X)	(X)	(X)	(X)
	1963	11.9	(X)	(X)	(X)	(X)
	1958	10.3	(X)	(X)	(X)	(X)
3732-	Boat building and repairing 1977	1,822.1	13	21	34	50
	1972	1,026.3	15	24	38	54
	1967	570.8	19	27	40	55
	1963	338.1	21	29	42	56
	1958	300.1	16	23	34	50
	1954	163.6	18	24	37	(NA)
37322	Outboard motorboats, including prefabricated kits 1977	297.7	21	33	54	79
	1972	233.8	20	33	58	84
	1967	70.2	30	49	71	90
	1963	79.6	28	42	64	87
	1958	108.4	19	29	50	77
37325	Inboard motorboats, including inboard-outdrive houseboats (1967 product class 37321, part) 1977	359.6	34	51	73	92
	1972	285.3	35	59	78	96
37326	Inboard-outdrive boats, except houseboats (1967 product class 37321, part) 1977	361.8	30	49	70	92
	1972	95.9	37	57	81	99+
	1967 product class 37321, Inboard motorboats (1972 product classes 37325 and 37326) 1967	259.0	39	53	73	90
	1963	125.9	52	64	78	93
	1958	76.1	57	68	82	92
37327	All other boats (sailboats, rowboats, canoes, etc.) (1967 product class 37323) 1977	282.1	27	43	68	87
	1972	130.5	34	53	73	89
	1967	45.6	34	50	74	91
	1963	36.5	34	49	70	90
	1958	15.5	40	52	74	94
37328	Boat repair (1967 product class 37324) 1977	173.2	14	23	41	67
	1972	74.4	14	26	46	76
	1967	82.2	18	29	50	75
	1963	42.6	17	26	44	70
	1958	55.1	17	26	40	56
37320	Boat building and repairing, n.s.k. 1977	347.8	(X)	(X)	(X)	(X)
	1972	206.4	(X)	(X)	(X)	(X)
	1967	114.0	(X)	(X)	(X)	(X)
	1963	53.5	(X)	(X)	(X)	(X)
	1958	45.1	(X)	(X)	(X)	(X)
3743-	Railroad equipment (1967 industries 3741 and 3742) 1977	4,001.9	48	62	83	95
	1972	2,275.5	55	68	89	97
	1967 industry 3741, Locomotives and parts 1967	569.0	(D)	95	99	100
	1963	378.1	92	96	99	100
	1958	355.2	92	97	99	99+
	1954	365.2	89	97	99	(NA)
	1967 industry 3742, Railroad and street cars 1967	1,374.5	53	69	90	98
	1963	871.0	52	70	89	98
	1958	528.6	54	73	91	99
	1954	468.2	58	74	94	(NA)
37431 37432	Locomotives and parts (1967 product classes 37411, 37412, and 37413). 1977 Passenger and freight train cars, new (1967 product classes 37421 and 37422) 1972	(D)	(D)	(D)	(D)	(D)
	1967 product class 37411, Locomotives, new and rebuilt, railroad road service and switching type 1967	310.3	(D)	100	(X)	(X)
	1967 product class 37412, Mining and industrial type locomotives, new and rebuilt 1967	9.6	(D)	100	(X)	(X)
	1963	8.7	90	100	(X)	(X)
	1958	14.8	97	(D)	100	(X)
	1954	14.9	81	(D)	100	(X)
	1967 product class 37413, Parts for locomotives, for sale separately 1967	248.0	(D)	(D)	99+	100
	1967 product class 37421, Passenger train cars, new 1967	6.4	(D)	100	(X)	(X)
	1963	36.5	(D)	100	(X)	(X)
	1958	11.4	(D)	100	(X)	(X)
	1967 product class 37422, Freight train cars, new 1967	1,020.1	68	86	(D)	100
	1963	523.0	77	92	99+	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.				
3743-	Railroad equipment (1967 industries 3741 and 3742)--Con.					
37433	Streetcars, parts and accessories for railroad cars and streetcars, and rebuilt passenger and freight train cars (1967 product class 37423) 1977	899.1	39	57	80	97
	1972	501.2	49	67	85	99
	1967	340.4	37	54	81	98
	1963	310.2	46	63	84	98
37430	Railroad equipment, n.s.k. 1977	47.0	(X)	(X)	(X)	(X)
	1972	23.7	(X)	(X)	(X)	(X)
	1967	8.8	(X)	(X)	(X)	(X)
3751-	Motorcycles, bicycles, and parts (1967 product class 37510, part)[204] 1977	847.3	62	77	86	92
	1972	540.8	64	78	89	95
	1967	262.6	54	73	93	99+
	1963	163.4	47	73	92	99
	1958	105.8	52	75	95	99
	1954	88.3	47	72	93	(NA)
38511	Bicycles and parts (1967 product class 37510, part) 1977	490.4	76	92	99	100
	1972	397.0	70	89	99+	100
37512	Motorcycles and parts (1967 product class 37510, part) 1977	286.1	(D)	87	94	99+
	1972	112.3	(D)	77	89	99+
37510	Motorcycles, bicycles, and parts, n.s.k. (1967 product class 37510, part) 1977	70.7	(X)	(X)	(X)	(X)
	1972	31.5	(X)	(X)	(X)	(X)
3761-	Guided missiles and space vehicles (1967 industry 1925) 1977	4,848.2	65	93	99+	100
	1972	3,705.4	59	86	99+	100
37611	Missile systems, excluding propulsion (1967 product class 19251) 1977	1,685.5	77	(D)	100	(X)
	1972	1,246.3	75	95	100	(X)
37612	Space vehicle systems, excluding propulsion (1967 product class 19252) 1977	822.1	91	(D)	100	(X)
	1972	754.8	93	(D)	100	(X)
37613	Research and development on complete missiles (1967 product class 19253) 1977	871.5	86	99	100	(X)
	1972	660.8	78	94	100	(X)
37614	Research and development on complete space vehicles (1967 product class 19254) 1977	918.1	(D)	99	100	(X)
	1972	599.8	85	97	100	(X)
37615	All other services on complete missiles and space vehicles (1967 product class 37255) 1977	549.9	73	90	(D)	100
	1972	440.2	65	93	100	(X)
37610	Guided missiles and space vehicles, n.s.k. (1967 product class 19250) 1977	1.1	(X)	(X)	(X)	(X)
	1972	3.5	(X)	(X)	(X)	(X)
3764-	Space propulsion units and parts (1967 industry 3722, part)[201] 1977	983.5	63	83	98	(D)
	1972	740.6	52	84	97	99+
37645	Complete missile or space vehicle engines (1967 product class 37225) 1977	424.0	60	93	100	(X)
	1972	434.6	71	94	100	(X)
	1967	451.7	82	99	100	(X)
	1963	582.6	82	99+	100	(X)
37646	Research and development on complete missile or space vehicle engines (1967 product class 37226) 1977	345.8	95	(D)	100	(X)
	1972	143.4	72	90	100	(X)
	1967	389.1	76	95	100	(X)
	1963	696.8	89	(D)	100	(X)
37647	All other services on complete missile or space vehicle engines (1967 product class 37227) 1977	105.0	(D)	100	(X)	(X)
	1972	115.0	(D)	100	(X)	(X)
	1967	88.4	89	100	(X)	(X)
	1963	61.7	95	99+	100	(X)
37648	Missile and space vehicle engine parts and accessories (1967 product class 37228) 1977	105.6	48	71	95	100
	1972	47.1	55	71	94	100
	1967	93.9	48	66	87	99+
	1963	147.8	48	66	86	97
37640	Space propulsion units and parts, n.s.k. (1967 product class 37220, part) 1977	3.1	(X)	(X)	(X)	(X)
	1972	0.5	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 37, TRANSPORTATION EQUIPMENT--Con.				
3769-	Space vehicle equipment, n.e.c. (1967 industry 3729, part)[202]....1977..	882.4	51	66	85	97
	1972..	833.8	52	66	87	97
37692	Missile and space vehicle parts and subassemblies, n.e.c. (1967 product class 37292).....1977..	420.0	37	55	80	97
	1972..	428.3	41	59	84	97
	1967..	674.0	36	50	70	88
	1963..	1,009.3	45	56	75	90
	1958..	509.2	57	51	96	99
37694	Research and development on missile and space vehicle parts and components, n.e.c. (1967 product class 37294).....1977..	455.2	81	89	99	100
	1972..	405.5	(D)	91	99	100
	1967..	403.2	(D)	85	96	100
	1963..	420.4	61	76	92	99+
	1958..	380.7	56	79	99	100
37690	Space vehicle equipment, n.e.c., n.s.k. (1967 product class 37290, part).....1977..	7.2	(X)	(X)	(X)	(X)
	1972..	-	(X)	(X)	(X)	(X)
3792-	Travel trailers and campers (1967 industries 3791, part and 3799, part)[205].....1977..	1,477.6	31	41	54	68
	1972..	1,270.3	20	28	41	58
37921	Recreation type trailers (1967 product class 37910, part)[206].....1977..	882.2	50	63	77	91
	1972..	620.3	39	51	69	87
37922	Camping trailers, campers, and pickup covers (1967 product classes 37910, part and 37991, part)[207].....1977..	426.2	21	35	54	74
	1972..	273.2	25	36	54	76
37920	Travel trailers and campers, n.s.k. (1967 product class 37910, part and industry 3799, part).....1977..	169.2	(X)	(X)	(X)	(X)
	1972..	376.8	(X)	(X)	(X)	(X)
37950	Tanks and tank components (1967 product class 19310).....1977..	1,015.1	76	93	98	100
	1972..	285.1	83	92	98	100
3799-	Transportation equipment, n.e.c. (1967 industries 3751, part; 3791, part; and 3799, part).....1977..	700.3	29	39	57	74
	1972..	786.5	26	38	53	71
37993	Golf carts, self-propelled (1967 product class 37510, part).....1977..	108.2	90	98	100	(X)
	1972..	54.1	90	99	100	(X)
37994	Snowmobiles, self-propelled (1967 product class 37992, part).....1977..	157.1	88	(D)	100	(X)
	1972..	203.1	85	96	(D)	100
37999	Other transportation equipment (1967 product classes 37991, part and 37992, part).....1977..	353.6	18	30	54	77
	1972..	464.6	20	29	46	70
37990	Transportation equipment, n.e.c., n.s.k. (1967 product classes 37510, part; 37910, part; and 37990, part).....1977..	81.4	(X)	(X)	(X)	(X)
	1972..	64.7	(X)	(X)	(X)	(X)
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS				
3811-	Engineering and scientific instruments.....1977..	1,849.5	19	29	47	65
	1972..	1,106.0	19	29	44	62
	1967..	1,049.0	29	38	53	69
	1963..	688.5	29	43	57	74
	1958..	758.6	33	50	64	78
38111	Aeronautical, nautical and navigational instruments.....1977..	804.6	35	54	78	95
	1972..	573.7	35	52	73	90
	1967..	585.5	55	61	77	97
	1963..	410.6	47	69	84	95
	1958..	509.9	47	72	89	98
	1954..	536.9	48	71	86	(NA)
38112	Laboratory and scientific instruments.....1977..	696.6	32	42	58	76
	1972..	335.9	20	28	44	67
	1967..	259.7	15	27	46	(NA)
	1963..	161.6	16	31	51	70
38113	Surveying and drafting instruments and laboratory furniture.....1977..	168.9	52	67	89	99+
	1972..	131.2	45	57	78	98
	1967..	139.4	49	64	85	97
	1963..	104.0	39	56	75	92

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.				
3811-	Engineering and scientific instruments--Con.					
38110	Engineering and scientific instruments, n.s.k.....1977..	179.4	(X)	(X)	(X)	(X)
	1972..	70.2	(X)	(X)	(X)	(X)
	1967..	64.6	(X)	(X)	(X)	(X)
	1963..	12.3	(X)	(X)	(X)	(X)
	1958..	19.7	(X)	(X)	(X)	(X)
38220	Automatic temperature controls.....1977..	1,106.4	54	74	86	94
	1972..	658.1	57	73	89	97
	1967..	523.6	57	71	90	98
	1963..	431.6	58	71	91	98
	1958..	319.9	68	78	94	99
	1954..	259.7	66	77	93	(NA)
38230	Process control instruments (1967 product class 38213, part)[208]..1977..	2,061.1	26	40	59	75
	1972..	794.7	27	41	63	81
3824-	Fluid meters and counting devices (1967 industry 3821, Mechanical measuring devices, part).....1977..	634.3	36	58	80	94
	1972..	328.7	51	72	91	98
38242	Integrating meters, nonelectrical type (1967 product class 38212)....1977..	344.0	50	76	94	100
	1972..	207.7	68	90	99	100
	1967..	189.2	67	88	99+	100
	1963..	163.7	72	93	99+	100
	1958..	119.4	66	88	99	100
	1954..	107.1	62	83	98	(NA)
38243	Counting devices (1967 product class 38216, part)[209].....1977..	147.0	59	75	95	100
	1972..	48.8	73	84	95	100
38244	Motor vehicle instruments, except electric (1967 product class 38214).....1977..	123.2	88	97	100	(X)
	1972..	71.4	82	90	(D)	100
	1967..	91.4	85	95	100	(X)
	1963..	95.8	85	93	98	100
	1958..	70.8	92	99	100	(X)
38240	Fluid meters and counting devices, n.s.k. (1967 industry 3821, Mechanical measuring devices, part).....1977..	20.1	(X)	(X)	(X)	(X)
	1972..	0.8	(X)	(X)	(X)	(X)
3825-	Instruments to measure electricity (1967 industry 3611)[210].....1977..	2,566.2	30	39	56	72
	1972..	1,329.7	32	42	57	71
	1967..	1,165.1	31	39	54	71
	1963..	755.6	30	41	57	73
	1958..	587.8	21	35	53	71
38251	Integrating instruments, electrical.....1977..	223.5	84	95	99+	100
	1972..	169.5	79	91	98	(D)
	1967..	101.6	76	87	99	100
	1963..	93.2	84	96	99	100
	1958..	88.8	82	91	99	99+
	1954..	73.1	93	99	99	(NA)
38252	Test equipment for testing electrical, radio, and communication circuits, and motors.....1977..	1,784.9	42	52	69	82
	1972..	869.0	45	53	66	81
	1967..	700.4	42	51	65	81
	1963..	443.4	38	47	61	78
	1958..	341.9	26	38	57	75
	1954..	190.0	17	29	50	(NA)
38253	Other electrical measuring instruments[210].....1977..	429.9	25	40	64	87
	1972..	223.4	26	44	66	86
	1967..	306.7	26	42	66	(NA)
	1963..	204.7	32	50	71	89
	1958..	140.1	43	57	78	91
38250	Instruments to measure electricity, n.s.k. (1967 product class 36110).....1977..	127.8	(X)	(X)	(X)	(X)
	1972..	67.8	(X)	(X)	(X)	(X)
	1967..	56.5	(X)	(X)	(X)	(X)
	1963..	14.2	(X)	(X)	(X)	(X)
	1958..	17.0	(X)	(X)	(X)	(X)
3829-	Measuring and controlling devices, n.e.c. (1967 industry 3821, Mechanical measuring devices, part).....1977..	1,073.1	18	26	41	58
	1972..	595.2	20	32	46	65
38291	Aircraft engine instruments, except electric (1967 product class 38211).....1977..	120.1	61	74	94	100
	1972..	74.5	61	75	95	100
	1967..	120.0	64	81	97	100
	1963..	66.4	55	73	97	100
	1958..	55.5	54	77	97	100
	1954..	80.5	42	59	87	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.				
3829-	Measuring and controlling devices, n.e.c. (1967 industry 3821, Mechanical measuring devices, part)--Con.					
38292	Physical properties testing and inspection equipment (1967 product class 38213, part)[208] 1977	276.6	19	31	51	78
	1972	106.3	25	39	64	86
38293	Commercial, meteorological, and general purpose instruments (1967 product class 38213, part)[208] 1977	226.8	34	45	62	83
	1972	103.8	50	64	84	98
38294	Nuclear radiation, detection, and monitoring instruments (1967 product class 38216, part)[209] 1977	344.2	41	61	85	99
	1972	198.2	51	63	82	98
38290	Measuring and controlling devices, n.e.c., n.s.k. (1967 industry 3821, Mechanical measuring devices, part) 1977	105.5	(X)	(X)	(X)	(X)
	1972	112.4	(X)	(X)	(X)	(X)
3832-	Optical instruments and lenses[211] 1977	1,299.7	28	39	59	77
	1972	584.7	38	49	63	77
	1967	451.9	43	55	70	85
	1963	269.5	37	49	69	86
	1958	115.5	38	55	73	87
38324	Sighting, tracking and fire-control equipment (1972 product classes 38322 and 38323) 1977	227.3	38	60	87	99
	1972 product class 38322, Sighting and fire control equipment, made from lenses, prisms, etc., produced in the same plant (1977 product class 38324, part) 1972	51.1	59	79	98	100
	1967	69.5	57	80	98	100
	1963	51.1	58	87	99	100
	1972 product class 38323, Sighting and fire control equipment, made from purchased lenses (1977 product class 38324, part) 1972	32.0	66	87	99	100
38325	Optical instruments and lenses, except ophthalmic (1972 product class 38321, part) 1977	390.0	53	60	74	89
38326	Analytical and scientific instruments (1972 product class 38321, part) 1977	604.5	40	57	79	94
	1972 product class 38321, Optical instruments and lenses, except sighting and fire control equipment (1977 product classes 38325 and 38326) 1972	444.4	48	62	74	88
38320	Optical instruments and lenses, n.s.k.[211] 1977	77.8	(X)	(X)	(X)	(X)
	1972	57.2	(X)	(X)	(X)	(X)
	1967	28.6	(X)	(X)	(X)	(X)
	1963	5.7	(X)	(X)	(X)	(X)
3841-	Surgical and medical instruments (1972 product class 38410) 1977	1,891.3	28	42	61	77
	1972	987.3	32	45	62	77
	1967	542.9	31	48	61	83
	1963	290.6	34	46	62	80
	1958	130.6	29	40	59	81
38411	Surgical and medical instruments and apparatus (1972 product class 38410, part) 1977	1,506.7	34	51	71	88
38412	Hospital furniture, excluding beds and chairs (1972 product class 38410, part) 1977	206.7	53	66	86	99+
38410	Surgical and medical instruments, n.s.k. (1972 product class 38410, part) 1977	177.9	(X)	(X)	(X)	(X)
3842-	Surgical appliances and supplies 1977	2,413.0	33	43	57	73
	1972	1,139.7	35	45	60	75
	1967	691.3	36	45	60	75
	1963	461.8	39	49	62	77
	1958	362.0	41	50	64	77
38421	Surgical, orthopedic, and prosthetic appliances and supplies 1977	1,773.0	43	54	71	86
	1972	781.9	49	61	78	90
	1967	475.0	49	61	75	87
	1963	318.2	52	63	77	87
	1958	256.6	53	62	74	87
38423	Personal industrial safety devices 1977	403.1	33	48	71	91
	1972	226.1	34	48	72	92
	1967	144.4	43	57	79	94
	1963	97.4	44	55	73	92
	1958	56.4	50	60	78	97

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.				
3842-	Surgical appliances and supplies--Con.					
38424	Electronic hearing aids	1977.. 58.1	59	87	100	(X)
		1972.. 50.0	67	90	100	100
		1967.. 40.9	60	82	97	100
		1963.. 35.3	63	85	(D)	(D)
		1958.. 39.5	64	86	98	100
		1954.. 29.0	78	93	99	(NA)
38420	Surgical appliances and supplies, n.s.k.	1977.. 178.8	(X)	(X)	(X)	(X)
		1972.. 81.7	(X)	(X)	(X)	(X)
		1967.. 31.1	(X)	(X)	(X)	(X)
		1963.. 11.0	(X)	(X)	(X)	(X)
		1958.. 9.6	(X)	(X)	(X)	(X)
38430	Dental equipment and supplies	1977.. 660.7	28	42	65	83
		1972.. 352.1	32	45	68	84
		1967.. 201.8	37	48	69	86
		1963.. 139.5	37	48	67	85
		1958.. 110.7	41	53	68	86
		1954.. 79.5	37	49	68	(NA)
3851-	Ophthalmic goods[212]	1977.. 844.3	42	53	66	81
		1972.. 480.9	50	60	73	86
		1967.. 377.5	44	53	67	81
		1963.. 244.1	45	57	74	88
		1958.. 168.0	47	58	71	85
		1954.. 136.5	47	56	72	(NA)
38511	Ophthalmic fronts and temples[16]	1977.. 154.2	41	62	93	99+
		1972.. 109.1	36	60	87	(D)
		1967.. 84.2	46	64	87	99+
38513	Ophthalmic goods, n.e.c.[16]	1977.. 259.3	63	74	92	99+
		1972.. 160.8	56	72	90	99+
		1967.. 124.3	46	59	80	97
38514	Glass ophthalmic focus lenses (1972 product class 38512, part)	1977.. 132.6	56	81	95	99+
38515	Plastic ophthalmic focus lenses (1972 product class 38512, part)	1977.. 73.8	55	77	97	100
38516	Contact lenses (1972 product class 38512, part)	1977.. 117.7	87	92	96	(D)
	1972 product class 38512, Ophthalmic focus lenses, including contact lenses (1977 product classes 38514, part, 38515, part and 38516, part)[16]	1972.. 134.4	72	83	93	99
		1967.. 134.2	65	78	90	97
38510	Ophthalmic goods, n.s.k.	1977.. 106.7	(X)	(X)	(X)	(X)
		1972.. 76.6	(X)	(X)	(X)	(X)
		1967.. 34.8	(X)	(X)	(X)	(X)
3861-	Photographic equipment supplies	1977.. 9,217.5	72	85	89	95
		1972.. 5,276.7	75	85	91	95
		1967.. 3,138.0	67	80	88	94
		1963.. 1,631.4	62	76	85	92
		1958.. 1,061.3	60	69	82	91
		1954.. 772.9	61	70	80	(NA)
38611	Still picture equipment	1977.. 925.8	66	76	89	98
		1972.. 616.4	67	77	90	98
		1967.. 484.8	53	68	86	97
		1963.. 223.6	51	66	83	83
		1958.. 179.4	48	61	81	93
		1954.. 170.7	54	64	79	(NA)
38612	Photocopying equipment[16]	1977.. [213]3,577.9	[213]87	[213]90	[213]93	[213]95
		1972.. 1,466.8	(D)	(D)	99+	100
		1967.. 620.2	(D)	(D)	(D)	100
38613	Motion picture equipment	1977.. 178.2	57	72	90	100
		1972.. 191.6	59	72	89	99
		1967.. 194.3	58	69	85	98
		1963.. 127.9	57	71	86	98
		1958.. 148.0	69	81	93	99
38614	Microfilming, blueprinting, brownprinting and whiteprinting equipment[16]	1977.. 240.2	73	86	98	100
		1972.. 137.5	80	89	98	100
		1967.. 53.6	75	94	99+	100

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 38, INSTRUMENTS AND RELATED PRODUCTS--Con.				
3861-	Photographic equipment supplies--Con.					
38615	Sensitized photographic film and plates, except X-ray	1977.. 2,587.3	94	98	99+	100
		1972.. 1,335.8	(D)	98	99+	100
	1967 product class 38615, Photographic sensitized film and plates, part	1967.. 1,084.7	96	98	99+	100
		1963.. 604.9	96	99	99+	100
		1958.. 396.0	97	99	99+	100
		1954.. 297.1	96	98	99	(NA)
38616	Sensitized photographic paper and cloth, silver halide type	1977.. (213)	(213)	(213)	(213)	(213)
		1972.. 384.0	(D)	99	100	(X)
		1967.. 238.7	89	98	100	(X)
		1963.. 191.3	83	96	100	(X)
		1958.. 124.0	84	94	100	(X)
		1954.. 78.8	85	96	100	(X)
38617	Sensitized photographic paper and cloth, except silver halide type	1977.. 443.1	57	70	90	100
		1972.. 326.4	65	82	96	100
		1967.. 193.5	70	89	98	100
		1963.. 128.1	63	77	93	100
		1958.. 82.1	62	84	95	100
		1954.. 47.3	65	77	95	(NA)
38618	Prepared photographic chemicals	1977.. 634.3	74	89	98	100
		1972.. 268.2	80	88	98	100
		1967.. 148.3	84	92	98	100
		1963.. 74.3	80	91	97	100
		1958.. 35.9	71	83	94	99
		1954.. 19.8	73	85	98	(NA)
38619	X-ray film (1967 product class 38615, part)	1977.. 515.3	99	100	(X)	(X)
		1972.. 297.6	98	100	(X)	(X)
38610	Photographic equipment and supplies, n.s.k.	1977.. (213)	(213)	(213)	(213)	(213)
		1972.. 160.7	(X)	(X)	(X)	(X)
		1967.. 119.9	(X)	(X)	(X)	(X)
		1963.. 78.4	(X)	(X)	(X)	(X)
		1958.. 38.3	(X)	(X)	(X)	(X)
3873-	Watches, clocks, and watchcases (1967 industries 3871 and 3872)[214]	1977.. 1,332.0	51	59	76	91
		1972.. 864.7	52	64	83	95
		1967.. 663.5	43	59	84	96
		1963.. 406.2	42	62	87	96
		1958.. 291.5	45	69	87	96
		1954.. 293.4	44	66	98	(NA)
38731	Clocks (1967 product class 38711)	1977.. 433.0	37	55	86	99+
		1972.. 313.6	48	64	86	99
		1967.. 276.1	45	63	89	99+
		1963.. 173.8	49	68	90	98
		1958.. 111.4	56	72	90	99
		1954.. 113.6	57	77	91	(NA)
38734	Watches with imported movements (1967 product class 38714)	1977.. 300.7	74	90	(D)	100
		1972.. 192.1	62	85	99	100
		1967.. 190.6	56	83	99+	100
		1963.. 112.8	64	90	99+	100
		1958.. 83.7	71	90	99	100
		1954.. 96.8	75	88	98	(NA)
38735	Watches with domestic movements and parts for all clocks and watches (1967 product class 38715)	1977.. 471.3	84	93	99	100
		1972.. 285.4	(D)	(D)	100	(X)
		1967.. 165.0	86	96	(D)	100
		1963.. 102.2	80	95	99	100
		1958.. 85.3	82	93	98	99
38737	Watchcases (1967 product class 38720)	1977.. 67.2	66	88	(D)	100
		1972.. 53.0	72	86	99	100
		1967.. 44.8	58	73	94	100
		1963.. 29.4	50	66	90	100
		1958.. 27.8	48	65	85	99
		1954.. 34.5	42	59	83	(NA)
38730	Watches, clocks, and watchcases, n.s.k.[214]	1977.. 59.8	(X)	(X)	(X)	(X)
		1972.. 20.7	(X)	(X)	(X)	(X)
	1967 product class 38710, Watches and clocks, n.s.k. (1972 product class 38730, part)	1967.. 31.8	(X)	(X)	(X)	(X)
		1963.. 17.3	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years** – Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES				
3911-	Jewelry, precious metal....1977..	1,907.7	13	19	30	44
	1972..	983.7	13	18	28	43
	1967..	633.2	14	20	30	42
	1963..	400.4	17	24	34	46
	1958..	287.1	17	23	34	47
	1954..	238.5	15	22	34	(NA)
39111	Jewelry made of platinum metals or karat gold....1977..	1,251.5	21	28	41	57
	1972..	657.1	17	24	37	55
	1967..	426.2	18	25	35	50
	1963..	286.3	22	28	38	51
	1958..	195.2	23	30	41	53
	1954..	155.5	19	27	39	(NA)
39112	Other jewelry made of precious metals....1977..	353.0	23	35	52	72
	1972..	180.0	22	33	53	78
	1967..	125.8	27	38	55	77
	1963..	93.7	28	38	54	74
	1958..	74.3	24	36	52	72
	1954..	72.6	27	39	54	(NA)
39110	Jewelry, precious metals, n.s.k....1977..	303.2	(X)	(X)	(X)	(X)
	1972..	146.6	(X)	(X)	(X)	(X)
	1967..	81.2	(X)	(X)	(X)	(X)
	1963..	20.4	(X)	(X)	(X)	(X)
	1958..	17.6	(X)	(X)	(X)	(X)
3914-	Silverware and plated ware....1977..	403.2	51	67	82	91
	1972..	327.9	51	68	82	93
	1967..	305.4	55	67	81	93
	1963..	211.9	54	64	79	90
	1958..	178.8	50	65	77	87
	1954..	188.1	56	69	81	(NA)
39141	Silverware, plated ware, and stainless steel ware....1977..	175.2	44	64	90	100
	1972..	152.7	40	60	78	95
	1967..	126.3	38	51	78	96
	1963..	93.9	36	50	70	89
	1958..	74.3	35	48	71	92
39142	Flatware....1977..	193.2	68	87	98	100
	1972..	165.3	65	88	99	100
	1967..	166.8	73	90	99	100
	1963..	113.2	72	90	98	100
	1958..	97.1	72	91	98	100
39140	Silverware and plated ware, n.s.k....1977..	34.7	(X)	(X)	(X)	(X)
	1972..	9.9	(X)	(X)	(X)	(X)
	1967..	12.3	(X)	(X)	(X)	(X)
	1963..	4.8	(X)	(X)	(X)	(X)
	1958..	7.4	(X)	(X)	(X)	(X)
3915-	Jewelers' materials and lapidary work....1977..	726.0	21	32	50	71
	1972..	296.7	27	37	58	79
39151	Jewelers' findings and materials (1967 product class 39120)....1977..	305.5	29	42	66	85
	1972..	163.3	25	37	56	88
	1967..	115.6	26	39	60	81
	1963..	70.5	28	42	62	81
	1958..	56.8	(NA)	(NA)	(NA)	(NA)
	1954..	68.1	38	49	63	(NA)
39152	Lapidary work and diamond cutting and polishing (1967 product class 39130)....1977..	305.6	(NA)	(NA)	(NA)	(NA)
	1972..	[145]164.4	(NA)	(NA)	(NA)	(NA)
	1967..	[145]97.6	(NA)	(NA)	(NA)	(NA)
	1963..	[145]67.7	(NA)	(NA)	(NA)	(NA)
	1958..	[145]43.3	(NA)	(NA)	(NA)	(NA)
39150	Jewelers' materials and lapidary work, n.s.k....1977..	114.9	(X)	(X)	(X)	(X)
	1972..	6.5	(X)	(X)	(X)	(X)
3931-	Musical instruments....1977..	878.9	31	52	78	90
	1972..	526.3	35	56	80	92
	1967..	401.2	36	55	77	89
	1963..	319.4	37	52	72	87
	1958..	242.1	40	53	71	87
39311	Pianos....1977..	180.6	64	90	100	(X)
	1972..	107.4	66	88	100	(X)
	1967..	91.2	62	88	100	(X)
	1963..	87.7	62	85	100	(X)
	1958..	63.7	53	76	100	(X)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.				
3931-	Musical instruments--Con.					
39312	Organs	1977.. 295.8	53	81	99	100
		1972.. 188.3	56	86	99	100
		1967.. 126.2	57	81	97	100
		1963.. 107.3	58	78	97	100
		1958.. 79.4	61	79	97	99
		1954.. 37.5	78	90	99	(NA)
39313	Piano and organ parts	1977.. 86.2	64	82	99	100
		1972.. 54.6	64	82	97	100
		1967.. 46.0	50	67	89	100
		1963.. 42.3	48	71	93	100
		1958.. 51.1	74	82	93	99
		1954.. 38.1	71	81	94	(NA)
39314	Other musical instruments and parts	1977.. 255.5	41	64	87	99
		1972.. 156.0	40	63	88	98
		1967.. 123.4	46	63	81	96
		1963.. 77.7	32	51	73	90
		1958.. 48.0	29	43	64	86
		1954.. 36.4	27	40	63	(NA)
39310	Musical instruments, n.s.k.	1977.. 60.8	(X)	(X)	(X)	(X)
		1972.. 19.9	(X)	(X)	(X)	(X)
		1967.. 14.4	(X)	(X)	(X)	(X)
		1963.. 4.4	(X)	(X)	(X)	(X)
39420	Dolls and stuffed toy animals	1977.. 508.2	47	58	74	90
		1972.. 277.9	31	42	62	83
		1967.. 217.0	27	39	60	78
		1963.. 190.4	27	37	53	69
		1958.. 161.9	14	23	39	61
		1954.. 131.9	16	26	41	(NA)
3944-	Games, toys, and children's vehicles	1977.. 2,333.2	27	39	58	77
		1972.. 1,466.5	34	45	60	76
39441	Games, except toys and hobbies	1977.. 612.0	49	65	85	97
		1972.. 280.6	51	68	89	99+
39443	Baby carriages and children's vehicles, except bicycles (1967 product class 39430)	1977.. 211.2	55	74	93	100
		1972.. 125.5	53	76	95	100
		1967.. 99.6	48	68	91	100
		1963.. 82.7	41	61	85	99
		1958.. 72.9	39	61	85	99
		1954.. 64.5	41	59	81	(NA)
39444	Toys, except games and hobbies (1967 product class 39442, part)	1977.. 1,036.0	38	53	76	92
39445	Hobbies and models (craft and structured kits and sets) (1972 product class 39442, part)	1977.. 309.3	42	63	86	99
	1972 product class 39442, Toys (1977 product classes 39444, part and 39445, part)	1972.. 928.5	39	50	67	84
39440	Games, toys, and children's vehicles, n.s.k.	1977.. 164.6	(X)	(X)	(X)	(X)
3949-	Sporting and athletic goods, n.e.c.	1977.. 2,216.9	18	26	39	54
		1972.. 1,529.0	26	34	46	61
		1967.. 836.4	24	31	42	58
		1963.. 655.5	33	39	47	60
		1958.. 519.9	34	42	51	63
		1954.. 302.7	19	28	42	(NA)
39491	Fishing tackle and equipment	1977.. 270.1	29	41	64	83
		1972.. 167.7	26	41	64	84
		1967.. 111.1	31	45	65	83
		1963.. 96.9	26	38	58	75
		1958.. 75.8	25	39	60	80
39492	Golf equipment (balls, clubs, bags, etc.)	1977.. 385.1	42	62	88	98
		1972.. 276.7	46	65	90	99
		1967.. 158.6	50	66	87	98
		1963.. [215]116.9	([215])	([215])	([215])	([215])
39494	Playground, gymnasium, and exercise equipment	1977.. 257.8	31	47	73	93
		1972.. 107.4	38	61	85	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.				
3949-	Sporting and athletic goods, n.e.c.--Con.					
39495	Other sporting and athletic goods, n.e.c. 1977	1,060.8	20	31	48	69
	1972	801.1	34	43	57	75
	1967 product class 39493, Other sporting and athletic goods (1972 product classes 39494 and 39495) 1967	470.3	26	34	50	69
	1963	[215]408.5	([215])	([215])	([215])	([215])
39490	Sporting and atheltic goods, n.e.c., n.s.k. 1977	243.4	(X)	(X)	(X)	(X)
	1972	175.3	(X)	(X)	(X)	(X)
	1967	96.4	(X)	(X)	(X)	(X)
	1963	33.2	(X)	(X)	(X)	(X)
	1958	45.4	(X)	(X)	(X)	(X)
39510	Pens, mechanical pencils, and pen points[216] 1977	562.9	45	59	76	91
	1972	311.7	46	62	79	93
	1967	210.8	41	55	73	92
	1963	177.7	43	54	71	90
	1958	147.2	45	58	74	91
	1954	118.1	55	67	80	(NA)
3952-	Lead pencils and art goods 1977	268.1	39	55	73	92
	1972	173.7	39	54	73	90
	1967	133.2	40	54	75	92
	1963	107.5	36	50	69	88
	1958	89.5	42	57	76	93
39521	Wood-cased pencils, crayons, and chalk 1977	90.6	50	68	93	100
	1972	63.2	52	71	92	100
	1967	73.6	53	72	92	100
	1963	65.3	50	69	89	99+
	1958	65.3	55	72	92	99
	1954	51.0	43	63	87	(NA)
39522	Artists' equipment 1977	163.9	59	71	90	99+
	1972	100.8	55	71	88	100
	1967	53.8	40	63	82	99
	1963	40.3	32	50	74	94
	1958	24.1	34	51	73	93
	1954	25.9	36	50	75	(NA)
39520	Lead pencils and art goods, n.s.k. 1977	13.6	(X)	(X)	(X)	(X)
	1972	9.8	(X)	(X)	(X)	(X)
	1967	5.8	(X)	(X)	(X)	(X)
	1963	1.9	(X)	(X)	(X)	(X)
39530	Hand stamps, stencils, and other marking devices[216] 1977	215.9	21	30	44	60
	1972	163.4	27	34	45	59
	1967	130.8	27	38	50	64
	1963	107.1	33	41	52	63
	1958	58.7	22	30	42	57
	1954	47.7	17	25	38	(NA)
3955-	Carbon paper and inked ribbons 1977	488.9	47	64	85	98
	1972	275.1	35	53	79	98
	1967	221.5	31	48	74	96
	1963	161.3	32	49	74	95
	1958	119.1	27	42	69	92
	1954	91.1	30	48	75	(NA)
39551	Inked ribbons, (all types) 1977	246.9	63	79	97	100
	1972	102.4	51	74	97	100
39552	Carbon paper, stencil paper, etc 1977	220.2	62	79	96	100
	1972	157.1	46	62	87	100
39550	Carbon paper and inked ribbons, n.s.k. 1977	21.8	(X)	(X)	(X)	(X)
	1972	15.6	(X)	(X)	(X)	(X)
39610	Costume jewelry and costume novelties 1977	781.5	17	26	41	58
	1972	441.4	13	21	35	53
	1967	338.2	13	21	35	53
	1963	256.7	13	20	33	50
	1958	236.3	13	19	30	45
	1954	235.2	13	20	30	(NA)
39620	Feathers, plumes, and artifical flowers 1977	160.1	34	46	64	81
	1972	101.8	27	38	56	75
	1967	86.3	18	28	46	68
	1963	59.3	13	23	40	61
	1958	59.5	12	20	36	56
	1954	48.6	9	16	33	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.				
39630	Buttons and parts....1977..	106.2	32	47	69	89
	1972..	103.0	25	40	65	85
	1967..	83.8	22	34	55	77
	1963..	81.9	22	33	52	75
	1958..	70.8	19	29	47	73
	1954..	64.0	19	28	46	(NA)
3964-	Needles, pins and fasteners....1977..	633.6	48	58	70	84
	1972..	551.9	45	56	70	85
	1967..	381.4	46	56	69	84
	1963..	315.2	36	47	63	79
	1958..	220.8	37	46	64	80
	1954..	177.0	28	41	58	(NA)
39641	Zippers and slide fasteners....1977..	295.0	71	84	95	100
	1972..	254.4	71	78	90	99
	1967..	201.5	66	74	87	98
	1963..	143.2	59	68	81	94
	1958..	87.3	64	78	91	100
39642	Needles, pins, fasteners, and similar notions....1977..	278.1	43	55	75	97
	1972..	265.7	39	54	77	96
	1967..	153.8	42	60	81	98
	1963..	155.7	35	50	73	93
	1958..	112.0	32	48	71	92
39640	Needles, pins, and fasteners, n.s.k....1977..	60.6	(X)	(X)	(X)	(X)
	1972..	31.8	(X)	(X)	(X)	(X)
	1967..	26.1	(X)	(X)	(X)	(X)
	1963..	16.3	(X)	(X)	(X)	(X)
	1958..	21.6	(X)	(X)	(X)	(X)
3991-	Brooms and brushes....1977..	620.8	15	25	46	70
	1972..	391.2	20	33	50	69
	1967..	295.1	20	31	49	68
	1963..	247.7	16	27	46	66
	1958..	208.1	15	26	43	60
	1954..	180.8	16	27	44	(NA)
39911	Brooms....1977..	83.0	30	41	63	87
	1972..	47.0	24	37	61	87
	1967..	37.5	18	30	52	79
	1963..	38.0	11	21	40	64
	1958..	33.7	11	20	37	58
	1954..	36.7	13	23	39	(NA)
39912	Paint and varnish brushes and rollers....1977..	184.5	45	62	88	99+
	1972..	112.9	45	62	87	100
	1967..	88.6	37	54	80	99+
	1963..	73.6	33	50	78	98
	1958..	60.7	31	48	72	97
	1954..	56.8	25	43	69	(NA)
39913	Other brushes....1977..	309.5	23	38	63	86
	1972..	199.0	28	42	63	85
	1967..	142.3	34	50	72	90
	1963..	126.0	30	48	68	85
	1958..	103.4	29	45	64	84
	1954..	84.7	29	48	65	(NA)
39910	Brooms and brushes, n.s.k....1977..	43.8	(X)	(X)	(X)	(X)
	1972..	32.4	(X)	(X)	(X)	(X)
	1967..	26.8	(X)	(X)	(X)	(X)
	1963..	10.1	(X)	(X)	(X)	(X)
	1958..	10.3	(X)	(X)	(X)	(X)
	1954..	2.6	(X)	(X)	(X)	(X)
3993-	Signs and advertising displays....1977..	1,606.9	6	10	16	28
	1972..	1,098.5	5	8	16	27
	1967..	800.6	5	8	16	27
	1963..	583.8	5	8	14	25
	1958..	407.9	4	7	14	24
	1954..	329.9	6	9	15	(NA)
39931	Tubing, fluorescent and incandescent bulb signs....1977..	349.8	24	36	53	66
	1972..	198.8	17	29	49	68
	1967..	176.5	17	27	46	65
	1963..	144.5	15	23	39	53
	1958..	99.7	15	21	32	45
	1954..	82.1	15	22	34	(NA)

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.				
3993-	Signs and advertising displays--Con.					
39932	Nonelectric signs and advertising displays....1977..	615.6	8	13	26	44
	1972..	454.5	11	16	28	44
	1967..	349.4	9	14	24	39
	1963..	302.3	5	10	19	32
	1958..	199.5	6	10	20	37
	1954..	178.5	6	11	21	(NA)
39933	Advertising specialties....1977..	262.5	14	22	37	58
	1972..	155.7	18	28	44	68
	1967..	115.0	16	26	43	66
	1963..	83.7	16	26	42	63
	1958..	64.4	18	26	41	64
	1954..	42.2	19	29	48	(NA)
39930	Signs and advertising displays, n.s.k....1977..	379.0	(X)	(X)	(X)	(X)
	1972..	289.5	(X)	(X)	(X)	(X)
	1967..	159.8	(X)	(X)	(X)	(X)
	1963..	53.3	(X)	(X)	(X)	(X)
	1958..	50.2	(X)	(X)	(X)	(X)
3995-	Burial caskets (1967 product group 3994-)[217]....1977..	494.8	36	47	61	74
	1972..	388.1	25	34	48	63
	1967..	288.0	18	25	40	56
	1963..	267.4	17	24	39	55
	1958..	217.7	19	26	40	54
	1954..	164.4	17	24	36	(NA)
39951	Metal caskets and coffins, lined and trimmed (adult) (1967 product class 39941)[218]....1977..	298.1	49	62	75	87
	1972..	211.2	38	48	63	79
	1967..	133.7	29	39	55	72
	1963..	123.6	24	37	54	70
	1958..	85.2	28	41	56	72
39952	Wood caskets and coffins, lined and trimmed (adult) (1967 product class 39942)[218]....1977..	85.6	34	45	64	84
	1972..	68.8	25	37	52	74
	1967..	59.8	24	33	48	69
	1963..	67.3	20	28	42	61
	1958..	70.0	23	31	42	58
39953	Other caskets and coffins, and metal vaults[219]....1977..	79.2	48	60	78	95
	1972..	67.9	43	58	76	93
39950	Burial caskets, n.s.k. (1967 product class 39940)....1977..	31.9	(X)	(X)	(X)	(X)
	1972..	40.2	(X)	(X)	(X)	(X)
	1967..	25.8	(X)	(X)	(X)	(X)
	1963..	12.4	(X)	(X)	(X)	(X)
	1958..	9.3	(X)	(X)	(X)	(X)
39960	Floor and wall coverings (1967 product classes 39961, 39962, and 39960)....1977..	561.3	88	97	(D)	100
	1972..	300.4	90	97	100	(X)
	1967..	191.6	86	97	99+	100
	1963..	168.1	85	(D)	(D)	100
	1958..	151.9	79	96	99	100
	1967 product class 39961, Linoleum....1967..	(D)	(D)	(D)	(D)	(D)
	1963..	33.7	(D)	100	(X)	(X)
	1958..	47.8	96	100	(X)	(X)
	1967 product class 39962, Asphalted-felt-base and supported plastic floor covering....1967..	(D)	(D)	(D)	(D)	(D)
	1963..	133.6	83	97	100	(X)
	1958..	102.6	79	97	100	(X)
	1967 product class 39960, Hard surface floor coverings, n.s.k....1967..	1.2	(X)	(X)	(X)	(X)
	1963..	0.7	(X)	(X)	(X)	(X)
	1958..	1.5	(X)	(X)	(X)	(X)
3999-	Manufacturing industries, n.e.c.[220]....1977..	2,589.0	14	21	32	44
	1972..	1,461.4	5	17	27	40
	1967..	922.4	8	15	27	41
	1963..	694.0	([220])	([220])	([220])	([220])
39991	Chemical fire extinguishing equipment and parts....1977..	204.9	66	88	99+	100
	1972..	126.3	66	83	99	100
	1967..	94.6	69	88	98	100
	1963..	52.3	72	89	97	100
	1958..	46.8	58	79	97	99

See footnotes at end of table.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]				
		Total (million dollars)	Percent accounted for by[3]--			
			4 largest companies	8 largest companies	20 largest companies	50 largest companies
		MAJOR GROUP 39, MISCELLANEOUS MANUFACTURING INDUSTRIES--Con.				
3999-	Manufacturing industries, n.e.c.--Con.					
39992	Coin-operated amusement machines....1977..	242.2	92	98	100	(X
	1972..	91.1	90	99	100	(X)
	1967..	47.7	92	99+	100	(X)
	1963..	30.0	83	99	100	(X)
	1958..	39.2	79	95	99	100
	1954..	47.7	79	93	99	(NA)
39993	Matches....1977..	105.5	71	91	100	(X)
	1972..	81.5	73	94	100	(X)
	1967..	66.3	72	97	100	(X)
	1963..	[221]64.8	([221])	([221])	([221])	([221])
39994	Candles....1977..	160.3	33	55	77	95
	1972..	100.8	35	54	81	98
	1967..	55.1	37	54	81	99+
	1963..	[221]43.7	([221])	([221])	([221])	([221])
39995	Lamp shades....1977..	51.4	32	49	72	94
	1972..	36.9	38	55	77	99
	1967..	27.4	33	45	68	97
	1963..	[221]35.9	([221])	([221])	([221])	([221])
39996	Furs, dressed and dyed[222]....1977..	76.2	42	58	81	99
	1972..	42.3	29	43	62	91
	1967..	39.8	37	59	90	100
	1963..	[221]43.6	([221])	([221])	([221])	([221])
39997	Umbrellas, parasols, and canes....1977..	36.0	41	64	96	100
	1972..	37.8	45	66	94	100
	1967..	40.3	35	51	79	99+
	1963..	[221]34.1	([221])	([221])	([221])	([221])
39999	Other miscellaneous fabricated products, n.e.c....1977..	1,086.3	25	35	47	63
	1972..	628.2	20	26	39	55
	1967..	390.5	14	21	33	51
	1963..	327.6	13	21	34	51
	1958..	271.2	10	18	30	44
39990	Manufacturing industries, n.e.c., n.s.k....1977..	626.1	(X)	(X)	(X)	(X)
	1972..	316.6	(X)	(X)	(X)	(X)
	1967..	160.9	(X)	(X)	(X)	(X)
	1963..	62.0	(X)	(X)	(X)	(X)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. n.s.k. Not specified by Kind. r Revised. (S) Withheld because the data did not meet publication standards. (X) Not applicable.

[1]Product classes (5-digit codes) and product groups (4-digit codes) are assigned to the industry to which they are primary. Products which are primary to 2 or more industries are split according to the industry code of the establishment producing them.

[2]Represents for each product class or group the total value shipped by all producers in all industries. The 4-digit product group represents the total shipments by all producers of the products assigned the code with the same first 4 digits. For products primary to more than one industry, only the amount produced by plants with the same industry code is included. Thus, the total value of products of meat packing plants includes all fresh meats but only those prepared meats (20116, 20117, 20118) processed in plants classified in industry 2011. It does not include such products made elsewhere (20136, 20137, 20138).

[3]Company affiliation is determined from census reports and public records. The value of shipments of products falling within each 5-digit class or 4-digit group was aggregated for plants under common ownership, and company totals derived to determine the largest producers. Thus, the same company may contribute to total value of shipments in more than one product class or group.

[4]By definition, this product class is limited to the products produced by establishments classified in the industry having the same code as the first 4 digits of the product code. Appreciable amounts are also made in the other product classes referred to in the product description. The total value of shipments and the percent accounted for by large companies shown here are based exclusively on the products primary to this industry. See table 10 for the value of such products shipped from all establishments.

[5]Comparability of this industry has changed slightly as a result of the 1972 SIC revision. The change is estimated to be less than 3 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

[6]1977 data for natural sausage casings may not be comparable to prior years data because collagen casings were included with synthetic meat and sausage casings in Industry 3079, Miscellaneous Plastics Products, for 1977.

[7]For 1972, all data were collected and published under Industry 2016, Poultry and Dressing Plants, product codes only. However, industry 2016 products are defined to include only those products processed at slaughtering plants. Industry 2017, Poultry and Egg Processing, is defined to include the same products, but processed from purchased carcasses. For 1977, comparable product classes were created for collecting products primary to both industries 2016 and 2017.

[8]For 1963, the formerly separate Industries 2022, Natural Cheese, and 2025, Processed Cheese, were combined into one Industry 2022, Natural and Processed Cheese. In the revision, individual products were redefined from the 1958 Product Class 20220, Natural Cheese, into the 1963 product classes 20221 and 20222, so that 1958 concentration ratios for these classes could not be computed.

[9]Represents value of production rather than value of shipments.

[10]Individual products primary to other industries were included in the published totals of this product class in order to avoid disclosing operations of individual companies. Percentage share of this total accounted for by large companies is not available.

[11]Establishments in Alaska and Hawaii are important producers of these products. Recomputed figures cannot be shown for the 4, 8, 20, and 50 largest companies prior to 1963 without disclosing the operations of individual companies in Alaska and Hawaii.

[12]Revised concentration ratios not available because corrections to individual records could not be identified.

[13]The data for Product Class 20370, Frozen fruits and vegetables, n.s.k., are included with Product Class 20380, Frozen Specialties, N.S.K.

[14]For 1972, product class 20373 was reclassified as product classes 20381, 20382, and 20383.

[15]The composition of this product class was redefined compared to 1958. Where possible, corrections were made to the 1958 aggregate, but concentration ratios could not be recalculated.

Footnotes are continued on next page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

[16]The composition of this product class was redefined compared to 1963. Where possible, corrections were made to the 1963 aggregate, but concentration ratios are not available for prior periods.

[17]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system.

[18]For 1977, old product classes 20481, 20482, and 20483 were reclassified as 20481. Old product class 20484 was reclassified as new 20482 and 20483. Old product class 20485 was reclassified as new 20484 and 20485. Old product class 20486 was reclassified as new 20486 and 20487. Old product classes 20487 and 20488 were reclassified as new 20488.

[19]Includes unknown amounts of pet food manufactures.

[20]For 1972, product class 20511 was reclassified as product classes 20511 and 20512.

[21]For 1977, old product classes 20651, 20652, 20653, 20654, 20655, and 20657 were reclassified as new 20652 and 20653.

[22]For 1963, the formerly separate Industries 2094, Grease and Tallow, and 2095, Animal and Marine Oil Products, Including Foots, were combined as Industry 2094, Animal and Marine Fats and Oils, Including Grease and Tallow. The 1958 value of shipments figures for industries 2094 and 2095 have been combined and the shares accounted for by the 4 and 8 largest companies recomputed on a basis comparable to 1963.

[23]For 1972, product class 20820 was reclassified as product classes 20821, 20822, 20823, 20824, and 20820. The new 4-digit product group 2082- is comparable to the old 5-digit product class 20820 and the prior years data are shown for both classes.

[24]The total value of shipments figures contain substantial duplication resulting from the fact that some of the products shipped are used as materials, parts, or components in the manufacture of other products in the same product class or product group. The effect of this duplication on the concentration ratios is unknown.

[25]The 1977 data are not directly comparable to prior years data. A total of 388 establishments were added to industry 2092 in 1977. In prior years, the additional establishments were erroneously listed in the administrative record file as nonmanufacturing locations. The impact of the additional establishments was as follows: Product class 2092- increased 24 percent, 20922 increased 224 percent, 20923 and 20924 each increased 10 percent, and 20920 increased 28 percent.

[26]For 1972, product class 20361 was reclassified as product classes 20923 and 20924.

[27]For 1963, Industry 2099, Food Preparations, N.E.C., was redefined to exclude Product Class 20995, Roasted Coffee, which was made a separate industry, 2095. Concentration ratios for industry 2099 are not available for 1958 on a revised basis.

[28]For 1972, Product Class 20999, Other Food Preparations, N.E.C., was reclassified as Product Classes 20995, Tea in Consumer Packages, and 20999, Other Food Preparations, N.E.C. Data for 1972 are not comparable to prior years data due to the revision in the SIC codes.

[29]For 1977, data are not directly comparable to prior years because reconstituted tobacco was added to the description in 1977.

[30]Ratios for the 20 and 50 largest companies are not available. The total value of shipments and ratios for the 4 and 8 largest companies have been recomputed to exclude receipts for contract and commission work.

[31]1963, value of shipments. 1958 and earlier, value of production.

[32]The 1963 ratios include receipts for contract and commission work and are comparable with the 1967 ratios.

[33]The 1963 ratios exclude receipts for contract and commission work and, therefore, are not comparable to the 1972 and 1967 ratios; however, they are comparable to the 1958 and 1954 ratios.

[34]For 1972, product class 22562 was reclassified as product classes 22571, 22572, 22573, 22574, and 22576.

[35]For 1977, old product class 22573 was reclassified as new product classes 22575 and 22577. Old product class 22576 was redesignated new 22578.

[36]For 1972, product class 22569 was reclassified as product classes 22579 and 22589.

[37]For 1972, product class 22561 was reclassified as product classes 22581, 22582, 22583, and 22584.

[38]In prior years, these data were included in product class 22824. For 1977, product class 22824 was split into product classes 22825 and 28246. See table 10 for these data.

[39]Excludes shipments by establishments producing filament yarn and classified in Industries 2823, Cellulosic Manmade Fibers, and 2824, Organic Fibers, Noncellulosic.

[40]For 1972, product class 22991 was reclassified as product classes 22971 and 22972.

[41]Includes some duplication since some nonwoven ribbons are made from purchased nonwoven fabrics.

[42]In 1958, data for bonded fiber fabrics, product class 22991, are included with textile goods, n.s.k., product class 22990. This combination was made because the data were unsatisfactorily reported due to problems associated with the product definitions.

[43]Data for 1967 are not strictly comparable with 1963 because of product misclassification. Approximately 20 to 75 percent of the 1967 shipments data for product class 23962 were included in other product classes in 1963. Revised figures for 1963 are not available.

[44]Excludes commission receipts for Schiffli machine embroidering on materials owned by others. This amounted to $13.8 million in 1967 and $21.0 million in 1963. The 1967 total included $24.9 million which was not differentiated between the value of product sales and receipts for commission work. The comparable figure for 1963 was $5.5 million.

[45]1977 data for product classes 24211, 24212, and 24218 are not completely comparable to prior years because of 1977 revision to product class structure for industry 2421. For 1977, railway crossties and mine ties were switched from 24211 to 24218, and wood siding from 24211 and 24212 to 24218.

[46]Wood chips were reclassified in 1967 from Industry 2429, Special Product Sawmills, N.E.C., to industry 2421.

[47]Comparable data are not available for prior years due to a major revision in the SIC system. This product group now includes wood frames for household furniture which previously was identified as product class 25126.

[48]Includes shipments of wood chips, which in 1967 were reclassified to product class 24215.

[49]Comparable data are not available for prior years due to a significant revision to the 1972 SIC system. For 1972, 1967 Product Class 24317, Cabinet Work to be Built In, was reclassified to Industry 2434, Wood Kitchen Cabinets.

[50]For 1972, 1967 Product Class 24316, Finished Wood Mouldings, was reclassified as product classes 24316 and 24317.

[51]For 1972, industry 2434 was formed by combining 1967 Product Classes 24317, Cabinet Work to be Built In, and 25114, Kitchen Cabinets, Wood. Comparable data are not available for 1967 and earlier years at the product group level.

[52]For 1972, 1967 Product Class 24317, Cabinet work to be Built In, was reclassified as product classes 24342 and 24343. In addition, product class 24343 was expanded to include stock-line cabinets.

[53]For 1972, industries 2435 and 2436 were formed by splitting old Industry 2432, Veneer and Plywood. Comparable data are not available for 1967 and earlier years at the product group level.

[54]For 1972, 1967 product class 24324 was reclassified as product classes 24352, 24353, and 24363.

[55]Data for 1977 are not comparable to prior years due to misclassification in reporting between interior plywood using exterior glue and exterior plywood. 1977 data reflect corrections for these categories. Revised data for years prior to 1977 are not available.

[56]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. All products now classified in industry 2439 were formerly part of old industry 2433. The balance of old industry 2433 is now classified as industry 2452.

[57]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. This product group was previously identified as product classes 24420, 24430, and 24450.

[58]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. Industry 2451 was previously a part of Product Class 37910, Trailer Coaches, under industry 3791.

[59]Comparable data for prior years are not available due to a major revision in the 1972 SIC system. All products now classified in this industry were formerly part of old Industry 2433, Prefabricated Wood Structures. The balance of old industry 2433 is now classified as 2439.

[60]Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. This product group, as now constituted, excludes pallets and skids (1967 product class 24992) and particleboard (1967 product class 24993) which were reclassified to product classes 24480 and 24920, respectively.

[61]1977 data for product class 24996 are not completely comparable to prior years because of 1977 revisions to product class structure. For 1977, medium density fiberboard (MDF) was reclassified from product class 24996 to 24997.

[62]Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. This product group, as now constituted, excludes product class 25111 and part of product class 25112 which were reclassified as 25170, and product class 25114 which was reclassified as product class 24341.

[63]Comparability of this product class has changed for 1972 due to the reclassification of sewing machine cabinets to product class 25170. The change is estimated to be approximately 11 percent of the total value of shipments.

Footnotes are continued on next page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

[66]Comparability of this product group has changed for 1972 due to the reclassification of wood frames for household furniture (1967 product class 25126) to industry 2426. The change is estimated to be less than 10 percent of the total value of shipments.

[67]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. This product class was previously classified under industry 2511 as product class 25111 and part of product class 25112.

[68]For 1972, Product Class 25410, **Wood Partitions, Shelving, Lockers, and Office and Store Fixtures** was reclassified as product classes 25411, 25412, and 25413.

[69]For 1972, Product Class 25420, **Metal Partitions, Shelving, Lockers, and Office and Store Fixtures** was reclassified as product classes 25421, 25422, 25423, and 25424.

[70]For 1977, Product Class 26210, **Tissue Paper and Other Machine-Creped Paper**, includes data from Industry 26210, Papermill Products, Except Building Paper.

[71]For 1972, the 1967 product classes 26314, 26315, 26316, and 26317 were combined and reclassified as product class 26314.

[72]Comparable data are not available for prior years due to a significant revision to the SIC system. Product classes 26417 and 26418 were formed by regrouping 1967 product classes 26415 and 26416.

[73]Comparability of this product class has changed slightly as a result of the 1972 SIC revision. This product class now includes paper disposable diapers which previously were included with nonwoven disposable diapers in industry 2399.

[74]For 1972, product class 26491 was reclassified as industry 2648 and split into product classes 26481 and 26482.

[75]Comparable data are not available for prior years due to a major revision in the SIC system. This product group now includes wallpaper (old product class 26440) and excludes stationery products (old product class 26491) which were reclassified as industry 2648.

[76]This product class was previously identified as Product Class 27312, Subscription **Reference Books, Hardbound**. Since the definition was expanded to include other reference books such as dictionaries, thesauruses, and atlases, 1972 data are not completely comparable to data for 1967 and earlier years.

[77]For 1972, product class 27316 was reclassified as product classes 27318 and 27319.

[78]For 1972, product class 27321 was reclassified as product classes 27321, 27322, 27323, and 27324.

[79]Comparability of this product group has changed slightly as a result of the 1972 SIC revision. For 1972, product classes 27417 and 27518 were reclassified as industry 2754. The change is estimated to be approximately 13 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

[80]Comparability of this product group has changed due to the reclassification of product class 27527 to industry 2795. The change is estimated to be approximately 5 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

[81]For 1972, industry 2754 was formed by combining old product classes 27517 and 27518. Comparable data are not available for 1967 and earlier years.

[82]The data for product class 27544 are included with product class 27546.

[83]Ratios not available. In the mechanical conversion to the revised product codes based on the 1957 SIC system, the products of a significant number of small establishments were not properly changed from industry 2782. Although the total shipments have been corrected, it was not feasible to correct the individual figures for small establishments.

[84]For 1972, product class 27611 was reclassified as product classes 27615 and 27617.

[85]For 1972, product class 27527 was reclassified as product classes 27951 and 27952.

[86]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of household bleaches to industry 2842; the manufacture of synthetic ammonia, nitric acid, and ammonium compounds to industry 2873; and the manufacture of phosphoric acid to industry 2874.

[87]Aluminum oxide and other aluminum compounds data are combined for 1967 and earlier years.

[88]Comparability of this product class has changed slightly as a result of the 1972 SIC revision. Calcium hypochlorite (high-test) and other industrial bleaches were transferred from old Product Class 28192, Inorganic **Industrial and Household Bleaching Compounds**, to product class 28199. The change is estimated to be less than 15 percent of the total value of shipments. 1967 and earlier years are tabulated under the old definition.

[89]Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. The 1972 revisions transferred the manufacture of unsupported plastics film, sheets, rods, and tubes; regenerated cellulosic products, except rayon; and custom compounded purchased resins to industry 3079. In addition, the production of synthetic resin adhesives from resins manufactured in the same establishment was transferred to industry 2891.

[90]Comparability of this product class has changed slightly as a result of the 1972 SIC revision. Data for synthetic resins for protective coatings (1967 product class 28216) are now included in product classes 28213 and 28214. The change is estimated to be less than 15 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

[91]Data for 1977 are not directly comparable with earlier years as a result of a 1977 SIC revision. Product class 22824 was split to form product classes 22825 and 28246.

[92]Although the content and definition of industry 2831 are the same as in 1972, 1977 totals for product classes 28314 and 28315 are not completely comparable to prior years, due to 1977 revision to product class structure for the industry. For 1977, product class 28316 was formed from parts of product classes 28314 and 28315. Amount of product class 28316 included in totals for 28314 and 28315 is not known for prior years.

[93]A major revision in the classification of products classified in industry 2834 was introduced in 1963 and, therefore, prior years data are not available at this product level.

[94]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system for this product class. The 1972 definition breaks nonhousehold soaps and detergents (28411) and household detergents (28412) into separate product classes. In 1967 and earlier years, soaps and detergents were defined by type: Alkaline, soap, and synthetic organic detergents.

[95]Data prior to 1963 include both natural and synthetic glycerine.

[96]Comparable data are not available for 1967 and earlier years at the product group level due to a major revision in the 1972 SIC system. For 1972, household insecticides and repellants, formerly product class 28421, were transferred to Industry 2879, Agricultural Chemicals, N.E.C., and household bleaches, formerly included in Industry 2819, Industrial Inorganic Chemicals, N.E.C., were reclassified to product class 28422.

[97]This product class was formerly included in the 1967 Product Class 28192, Inorganic **Industrial and Household Bleaching Compounds**. Data for 1967 and earlier years are not available.

[98]For 1977, product classes 28511, 28512, 28513, 28514, 28515, 28516, and 28517 were reclassified as 28511, 28512, and 28513 to correspond to new product definitions reported in Current Industrial Reports M-28F, Paints, Varnish, and Lacquers.

[99]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system for this product class. Caulking and sealant compounds were reclassified from product class 28518 to Product Class 28914, Synthetic Resin and Rubber Adhesives.

[100]Represents values reported by tar distillers and excludes shipments for tar, tar crudes, and pitches by establishments classified in Industry 2911, Petroleum Refining, and Industry 3312, Blast Furnaces and Steel Mills (Byproduct Coke Ovens).

[101]Excludes rubbing alcohol (primary to Industry 2834, Pharmaceutical Preparations) and antifreeze (primary to Industry 2899, Chemical Preparations, N.E.C.).

[102]Product classes 28696 and 28697 were formed by regrouping 1972 product classes 28691 and 28692, former two and latter two are comparable in total only. Change was made to maintain comparability with sections of U.S. International Trade Commission (ITC) Report "Synthetic Organic Chemicals: U.S. Production and Sales," which were similarly revised in 1976. See sections XIV and XV of 1976 ITC report for a discussion of this change.

[103]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Industry 2873, Nitrogenous Fertilizers, was formed by combining synthetic ammonia, nitric acid, and ammonium compounds (formerly classified as product class 28191); urea (formerly in product class 28182); and fertilizer materials of organic origin (formerly in product class 28712).

[104]The 1972 definition of this industry has been revised from that used in the 1967 SIC manual and a new SIC number and title were assigned. Industry 2874 was formed by combining phosphoric acid formerly classified in product class 28194, with superphosphate, other phosphatic fertilizer materials, and mixed fertilizers produced from one or more materials made in the same plant, which were formerly classified as industry 2871.

[105]Comparable data are not available for 1967 and earlier years due to a significant revision in the 1972 SIC system. Phosphoric acid was formerly classified in product class 28194.

[106]Comparability of this product class has changed as a result of the 1972 SIC revision. 1967 and earlier data are tabulated under the old definition. The production of fertilizer materials of organic origin was formerly classified with this product class under the product class 28712. The effect of this change is estimated to be less than 5 percent of the value of shipments.

[107]Comparability of this product group has changed significantly as a result of the 1972 SIC revision. Industry 2879 as now constituted includes the manufacture of household insecticides and repellants which were previously classified as product class 28421 in industry 2842. The change is estimated to be 15 percent of the total value of shipments. 1967 and earlier data are tabulated under the old definition.

Footnotes are continued on next page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

[108]Although the content and definition of this industry are the same as in 1972, the comparability of product classes for insecticidal, herbicidal, and household pesticidal preparations has changed slightly as a result of 1977 revisions. The change is estimated to be less than three percent of total value of shipments of each of these product classes. 1972 and earlier years are tabulated under the old definitions. Comparable data for fungicidal preparations are not available. 1977 product classes 28795, 28796, 28797, 28798, and 28799 replace 1972 product classes 28791, 28792, 28793, and 28794.

[109]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. This product group as now constituted includes synthetic resin adhesives from resins manufactured in the same establishment (formerly in industry 2821), caulking compounds and sealants (formerly in industry 2851), rubber cement (formerly in industry 3069), and sealants, n.e.c., (formerly in industry 2899), and excludes gelatin and sizes (now in industry 2899).

[110]Comparable data are not available for prior years due to the reclassification of this product class for 1972. Product class 28913 was formerly included in 1967 product class 28911.

[111]Comparable data are not available for prior years due to a significant revision in the 1972 SIC system. This product class includes synthetic resin adhesives (formerly product class 28215), rubber cement (formerly in product class 30698), and synthetic base adhesives (formerly in product class 28911).

[112]Comparable data are not available for prior years due to a significant revision in the 1972 SIC sytem. This product class was formerly part of product class 28518.

[113]Comparability of this product group has changed slightly as a result of the 1972 SIC revisions. Industry 2899 as now constituted includes gelatin, except ready-to-eat dessert, (formerly classified in industry 2891), sizes (formerly in industry 2891), and embalming chemicals (formerly in industry 3994), and excludes sealants, n.e.c. (now classified in industry 2891).

[114]Data for 1972 are not directly comparable to earlier data due to a significant revision in the SIC system. Plastics footwear, which was classified in product group 3079- in 1967, is now included in product group 3021-. The amount of plastics footwear in 1967, and hence the degree of change for product group 3021-, is unknown. The relationships between the 1972 SIC number and the 1967 SIC number for the product classes in this grouping are shown below:

1972 SIC	1967 SIC	1972 SIC	1967 SIC
30211	30210 pt 30798 pt	30212	30210 pt 30798 pt

[115]The rubber and plastics hose and belting product grouping is included for the first time in the census of manufactures for 1972. This product group includes all of 1967 Product Class 30691, Rubber and Plastics Belts and Belting; all of 1967 Product Class 30692, Rubber Hose and Tubing, except code 30692 81, Tubing, Except Medical and Surgical and Reinforced; part of 1967 Product Class 30795, Industrial Plastics Products; and part of 1967 Product Class 30798, Consumer and Commercial Plastics Products, N.E.C. The relationships between the 1972 SIC number and the 1967 SIC number for the product classes in this group are shown below:

1972 SIC	1967 SIC	1972 SIC	1967 SIC
30411	30691 pt 30795 pt	30415	30692 pt 30798 pt
30412	30691 pt		
30413	30692 pt		
30414	30692 pt	30416	30692 pt 30798 pt

[116]This product grouping was significantly revised for 1972, although the code number was unchanged. All of 1967 Product Class 30691, Rubber and Plastics Belts and Belting and all of 1967 Product Class 30692, Rubber Hose and Tubing, except for code 30692 81, Tubing, Except Medical and Surgical and Reinforced, are now classified in Product Group 3041-, Rubber and Plastics Hose and Belting. Tubing, except medical and surgical and reinforced, is now included in product class 30695. In addition, seals and packing (formerly product codes 30695 26, 27, and 28) are now included in product group 3293-; and latex and solvent-type cement (formerly product codes 30698 64 and 65) are now classified in product group 3291-.

[117]The individual product codes included in this class of products for 1972 differ significantly from the prior years. Products shifting into or out of this class of products represent more than 15 percent of the total shipments value at the U.S. level. (See footnote 116).

[118]The individual product codes included in this class of products for 1972 differ from the 1967 definition. Products shifting into or out of this class of products represent approximately 13 percent of the total 1967 shipments at the U.S. level. (See foonote 116).

[119]Data for 1972 are not directly comparable to earlier data due to a significant revision in the SIC system. See the Explanatory Text section of MC72(2)-30A, Rubber and Miscellaneous Plastics Products, for a list of the changes.

[120]1977 product class 30796 is not historically consistent due to the inclusion of foam construction products from old 1972 product class 30792.

[121]The individual product codes included in this class of products for 1972 differ from the 1967 definition. Products shifting into or out of this class of products represent approximately 3 percent of the total 1967 shipments at the U.S. level. (See footnote 119).

[122]1977 product class 30790 is not historically consistent since products classified in 30790 in 1972 are classified in 1977 product classes 3079A and 3079H.

[123]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, Industry 3141, Shoes, Except Rubber, was split to form new industries 3143, 3144, and 3149.

[124]For 1972, Product Class 31411, Men's Dress Shoes, Including Play Shoes, was split to form new product classes 31431, 31432, and 31434.

[125]For 1977, old product classes 31431 and 31432 were combined to form new product class 31435.

[126]For 1977, old product classes 31441, 31442, 31443, and 31444 were combined to form new product classes 31446, 31447, and 31448.

[127]For 1972, Product Class 31414, Women's Dress, Work, and Play Shoes, was split to form new product classes 31441, 31442, 31443, 31444, and 31445.

[128]For 1977, old product class 31492 was split to form new product classes 31495 and 31496.

[129]For 1977, old product class 31494 was redesignated as 31497.

[130]Includes laminated glass made in Industry 3211, Flat Glass; and laminated glass made in Industry 3231, Products of Purchased Glass, combined to avoid disclosing operations of individual companies. For 1972, no production of shipments of "laminated plate over one-fourth inch" (code 32113 31), "laminated sheet (window) glass" (code 32113 51), or "other laminated glass" (code 32113 71) were reported in industry 3211, Flat Glass. The same was true for 1967, except that a small amount of "laminated plate over 1/4 inch" (code 32113 31) was produced in Industry 3211, Flat Glass.

[131]Excludes value of laminated glass (product class 32313) which is included with industry 3211.

[132]Insulation materials containing asbestos, which were previously classified in product class 32933, are now included in product class 32927. This shift into product class 32927 represents approximately 13 percent of the total 1967 shipments at the U.S. level.

[133]Not completely comparable. In 1954, an undetermined amount of vinyl asbestos tile was included in Industry 3971, Plastics Products, N.E.C.

[134]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Molded packings and seals, except plastics (formerly classified in product class 30695); axial mechanical face seals (formerly classified in product class 35992); plastics packing and seals (formerly classified in product class 30795), and leather packings, oil and grease retainers, including seals (formerly classified in product class 31210); are included in product class 32933 for 1972. Also, insulation materials containing asbestos, which were previously classified in product class 32933, are now included in product class 32927. This shift of products represents more than 15 percent of the total value of shipments at the U.S. level.

[135]For 1963, exfoliated vermiculite was reclassified from industry 3296 to industry 3295 and roofing granules produced in conjunction with mining operations have been reclassified from industry 3295 to industry 3296. Revised concentration ratios are not available.

[136]Product class 33121 includes ferroalloys made by establishments classified in industry 3312. This value is a disclosure (D) for 1977; $42.1 million for 1972; $79.0 million for 1967; $18.0 million for 1963; and not available (NA) for 1958. The totals for product group 3313 exclude ferroalloys made in industry 3312.

[137]Excludes the value of those products produced and consumed within the same plant in the manufacture of other products. Therefore, the data are limited to the value of those products that were produced for sale in commercial markets or for transfer to other plants at the same company for use in manufacuring other products.

Footnotes are continued on next page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

[138]Comparable data are not available for 1967 and earlier years due to the fact that ductile iron castings is a separate class of products in 1972. The amount of ductile iron castings included in the 1967 totals for product classes 33212 and 33214 is unknown.

[139]For 1972, product class 33220 was reclassified as product classes 33221 and 33222.

[140]For 1972, old product group 3352- was split to form new product groups 3353-, 3354-, and 3355-.

[141]For 1972, product class 33560 was reclassified as product classes 33561, 33562, 33563, and 33569.

[142]Product class 33569 includes bare nonferrous metal wire made in industry 3356, product code 3356992. This amounts to $194.0 million for 1977; $61.4 million for 1972; $34.6 million for 1967; and not available (NA) for 1963. The total of product class 33573 excludes bare nonferrous metal wire made in industry 3356.

[143]For 1972, product class 33610 was reclassified as product classes 33611 and 33612.

[144]For 1972, old product group 3399- was split to form new product groups 3398- and 3399-.

[145]Value represents, chiefly, receipts for work done on material owned by others. The value represents only the work done by establishments classified in the industry for which the product or service is primary.

[146]Not completely comparable: 1954 figures include "metal fluid milk shipping and delivery containers" valued at $8,638,000. In 1958, these containers were included in product class 34943.

[147]The 1972 census program requested separate value figures for aluminum cans and steel cans. Review indicates that the separation was not properly reported. Accordingly, these values have been combined. For 1967 and earlier years, data on aluminum cans and steel cans were not collected separately.

[148]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Warm air furnaces (product class 34332 in 1967) and parts and attachments for warm air furnaces (code 34336 73 in 1967) have shifted to Industry 3585, Refrigeration and Heating Equipment, in 1972. This change represents greater than 15 percent of the total 1967 shipments at the U.S. level.

[149]1972 product class 34337 is not completely comparable to the sum of 1967 product classes 34331 and 34336, since code 34336 73 shifted to industry 3585 in 1972. However, this change represents approximately 3 percent of the total 1967 shipments at the U.S. level.

[150]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3449- was split into product groups 3448- and 3449-.

[151]For 1972, product class 34510 was reclassified as product classes 34511 and 34512.

[152]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3461- was split into product groups 3465-, 3466-, and 3469-.

[153]Comparable data are not available for 1967 and earlier years.

[154]For 1977 and 1972, product class 34841 is combined with product class 34842 in order to avoid disclosing operations of individual companies.

[155]For 1972, product class 34930 was reclassified as product classes 34931 and 34932.

[156]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product group 3481- was split into product groups 3495- and 3496-.

[157]For 1972, product class 34970 was reclassified as 34971, 34972, and 34973.

[158]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. For 1972, product groups 3492-, 3496-, and 3499- were combined to form product group 3499-.

[159]For 1977, product class 35191 is combined with product class 35192 to avoid disclosing operations of individual companies.

[160]For 1972, farm wagons, trucks, and other farm transportation equipment were moved from industry 3799 to product class 35232. Products shifting into industry 3523 represent approximately 2 percent of the total 1967 shipments at the U.S. level.

[161]In years prior to 1967, parts were included with individual product classes of industry 3522; whereas, in 1967, parts are included in a separate product class 35229.

[162]For 1972, product class 35222 was reclassified as product classes 35232 and 35242.

[163]For 1972, product class 35228 was reclassified as product class 35238. Power hedge trimmers and shears moved from product class 35228 to 35249, for 1972. Farm wagons, trucks, and other farm transportation equipment were reclassified from product class 37992 to product class 35238. Products shifting into or out of this class of product represent approximately 12 percent of the total 1967 shipments at the U.S. level.

[164]For 1972, product class 35229 was reclassified as product classes 35239 and 35249.

[165]For product class 3523A and 3523B, no data are available for prior years.

[166]For 1972, product class 35220 was reclassified as product classes 35230 and 35240.

[167]Parts and attachments for wheel and tracklaying tractor shovel loaders are included in product class 35313 beginning in 1965. In prior years, they were included in product class 35197. 1963 concentration ratios are not available on a basis comparable to 1967.

[168]For 1972, automatic stackers and parts and attachments are reclassified from product class 35370 to 35362. These products shifting into product class 35362 represent approximately 10 percent of the total 1972 shipments at the U.S. level. For 1967, data for these products were included in industry 3537, but were not available separately.

[169]The definitions of product classes 35441 and 35442 have been revised. Code 35442 11, Diecasting Dies (Molds), was included through 1966 in product class 35441, but is now included in product class 35442. 1963 concentration ratios are not available on a basis comparable to 1967.

[170]For 1972, old industry 3548 was split to form new industries 3546, 3547, and 3549.

[171]For 1977, chain saws and parts were classified in industry 3546. Prior to 1977, chain saws and parts were classified in industry 3353.

[172]Prior to 1977, hydraulic and internal combustion engine driven hand tools and parts (excluding chain saws and parts) were classified in industry 3546, but collected separately.

[173]For 1972, old product class 35480 was split to form product classes 35460, 35470, and 35490.

[174]For 1972, dairy packaging and bottling machinery has shifted from product class 35511 to product class 35514. These products shifting out of product class 35111 represent approximately 34 percent of the total 1972 shipments at the U.S. level.

[175]For 1972, wrapping machines have moved from product class 35512 to Product Class 35514, Wrapping Machines, shifting out of product class 35512 and represent approximately 5 percent of the total 1972 shipments at the U.S. level.

[176]For 1972, product class 35513 was reclassified as product classes 35513 and 35514.

[177]For 1972, industry 3561 was reclassified as industries 3561 and 3563.

[178]For 1972, vacuum pumps shifted from product class 35612 to product class 35631. Products shifting out of product class 35612 represent approximately 12 percent of the total 1967 shipments at the U.S. level.

[179]For 1972, industrial spraying equipment was reclassified as product class 35635; this product was formerly part of product class 35615. Industrial spraying equipment shifting out of product class 35615 represent more than 15 percent of the total shipments at the U.S. level.

[180]For 1972, parts for pumps and compressors (old product class 35616) has been split out to parts and attachments for pumps (product class 35616) and parts and attachments for air and gas compressors (product class 35632).

[181]Data for Product Class 35630, Air and Gas Compressors, N.S.K., were included in Product Class 35610, Pumps and Pumping Equipment, in 1972 and prior years.

[182]For 1967, taper roller bearings (product class 35622) has become a separate product class rather than included with roller bearings, complete (product class 35623). 1963 concentration ratios are not available on a basis comparable to 1967. The 1963 product class representing roller bearings, complete, had total shipments of 446.3 of which the 4 and 8 largest companies accounted for 80 and 93 percent, respectively.

[183]For 1972, industry 3566 was reclassified as industries 3566 and 3568.

[184]For 1972, the "not specified by kind" for product class 35680 is included with product class 35660.

[185]For 1977, data for product classes 35741 and 35743 were combined to avoid disclosing operations of individual companies.

[186]For 1972, product classes 35741 and 35743 are combined with product class 35745 in order to avoid disclosing operations of individual companies.

[187]For 1972, product class 35794 is combined with product class 35796 in order to avoid disclosing operations of individual companies.

[188]For 1972, product class 35797 is combined with product class 35798 in order to avoid disclosing operations of individual companies.

[189]For 1972, coin-operated washers and dryers, under 10-pound load, and parts and attachments for these products have been moved from product class 35820 to product class 36333. Products shifting out of product class 35820 represent more than 15 percent of the total value of shipments.

[190]For 1972, warm air furnaces were changed from product class 34332 to product class 35858. Parts for warm air furnaces moved from product class 34336 to 35858 for 1972. Parts for warm air furnaces shifting into product class 35858 represent approximately 4 percent of the total 1967 shipments at the U.S. level.

[191]For 1972, product classes 35851 and 35852 are reclassified as product classes 35851, 35852, and 35856.

[192]Product Class 36323, Parts for Household Refrigerators and Freezers, is new for 1977. Parts were previously included in product classes 36321 and 36322.

Footnotes are continued on next page.

Table 9. **Share of Value of Shipments of Each Class of Product Accounted for by the 4, 8, 20, and 50 Largest Companies: 1977 and Earlier Years**—Con.

[193]Product Class 36333, Other Household Laundry Equipment and Parts, was expanded from 1967 product class 36332 to include coin-operated washer-extractor combinations and coin-operated drying tumblers, both 10-pound maximum load and under. Both of these products were part of 1967 product class 35820. The value of these added products was $28.0 million in the 1972 Census of Manufactures.

[194]In 1972, Product Class 36457, Portable Residential Type Lighting Fixtures and parts and Accessories for Residential Lighting Fixtures, including 1967 Product Class 36427, Residential Type Electric Fixtures (Portable), includes part of 1967 Product Class 36426, Other Electric and Nonelectric Lighting Equipment (Including Hand Portable Equipment), and Parts and Accessories. The part of 1967 product class 36426 in 1972 product class 36457 had a value in 1972 of $15.1 million.

[195]Value of product class, not specified by kind, for industries 3646, 3647, and 3648 are included in industry 3645 prior to 1972. All products not specified by kind for administrative records and most for other records are included in industry 3645, in 1972.

[196]In 1972, Product Class 36463, Industrial-Type Electric Lighting Fixtures and Parts, Including 1967 Product Class 36423, Industrial Type Electric Fixtures, includes part of 1967 Product Class 36426, Other Electric and Nonelectric Lighting Equipment (Including Hand Portable Equipment) and Parts and Accessories. The part of 1967 product class 36426 in 1972 product class 36463 had a value in 1972 of $22.6 million.

[197]In 1972, parts and accessories for residential, commercial, industrial, institutional, and vehicular lighting fixtures was split out of 1972 Product Class 36489, Other Electric and Nonelectric Lighting Equipment and Parts. These products were part of this product class before 1972. The value of these products in the 1972 Census of Manufactures was $39.1 million.

[198]For Product Class 36710, Electron Tubes, N.S.K., no prior year data is shown due to incomparability.

[199]In 1967, product class 36795 was split into product classes 36780 and 36790 for 1972. In addition, 1967 product class 36790 was tabulated as part of 1972 product class 36790.

[200]Product Class 37161, Motor Homes Produced on Purchased Chassis, was created in 1977 from Product Class 37132, Complete Vehicles Produced on Purchased Chassis. Data for product class 37132 is not strictly comparable with prior years.

[201]For 1972, industry 3722 was split into two separate industries: 3724 and 3764. The historical data for industry 3722 in 1967 are presented with 1972 industry 3724.

[202]For 1972, industry 3729 was split into two separate industries: 3728 and 2769. The historical data for industry 3729 in 1967 are presented with 1972 industry 3728.

[203]This product class was identified as product class 37230 prior to 1967.

[204]For 1972, industry 3751 is not fully comparable with prior years. Self-propelled golf carts were moved from product class 37510 in 1967 to product class 37993 in 1972. The value of shipments for self-propelled golf carts was $36.3 million in 1967 and $54.1 million in 1972.

[205]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Parts of 1967 industry 3791 and Product Class 37910, Recreation Type Trailers, Pickup Campers, Truck Mounted Campers, and Pickup Box Covers or Caps, and industry 3799 and Product Class 37991, Collapsible Camping Trailers and Travel Trailers (less than 11 feet in length) make up industry 3792. Industry 3792 represents approximately 27 percent of the products of old industry 3791, plus 16 percent of old industry 3799.

[206]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Product class 37921 represents approximately 48 percent of 1967 product class 37910.

[207]Comparable data are not available for 1967 and earlier years due to a major revision in the 1972 SIC system. Product class 37922 represents approximately 21 percent of 1967 product class 37910, plus 47 percent of 1967 product class 37991.

[208]The 1967 Standard Industrial Classification Product Class 38213, Industrial Process Instruments, was split into three product classes in the 1972 Census of Manufactures: Product Class 38230, Process Control Instruments; Product Class 38292, Physical Properties Testing and Inspection Equipment; and Product Class 38293, Commercial Meteorological and General Purpose Instruments.

[209]The 1967 Product Class 38216, Other Mechanical Measuring and Controlling Instruments, was split into two product classes in the 1972 Census of Manufactures: Product Class 38243, Counting Devices; and Product Class 38294, Nuclear Radiation, Detection and Monitoring Instruments.

[210]A small part of 1967 Industry 3611, Instruments to Measure Electricity, was not moved to industry 3825 in 1972. Instrument transformers, part of 1967 Product Class 36113, Other Electrical Measuring Instruments, became part of 1972 product class 36125, Specialty Transformers, Except Fluorescent Lamp Ballast. The other part of 1967 product class 36113 became all of 38253, Other Electrical Measuring Instruments, in 1972.

[211]In 1972, Industry 3832, Optical Instruments and Lenses, is a combination of two 1967 industries: Industry 1941, Sighting and Fire-Control Equipment made from Purchased Lenses; and Industry 3831, Optical Instruments and Lenses, Except Sighting and Fire Control Equipment. Historical data for industry 1941 are not available.

[212]The figures for 1972 are not strictly comparable with those for prior years. The report form used for this industry in the 1972 Census of Manufactures contained an inquiry designed to identify establishments either grinding lenses or fitting glasses to prescription. Such establishments have been reclassified to trade industries.

[213]For 1977, product classes 38612, 38616, and 38610 were combined to avoid disclosing operations of individual companies.

[214]Industry 3873, Watches, Clocks, and Watchcases, was published as two separate industries in 1967: Industry 3871, Watches and Clocks; and Industry 3872, Watchcases.

[215]For 1967, golf equipment (product class 39492) has become a separate product class rather than being included with other sporting and athletic goods (product class 39493) as was done in prior years. 1963 concentration ratios are not available on a basis comparable to 1967. The 1963 product class representing other sporting and athletic goods (including golf equipment) had total shipments of $525.4 million of which the 4 and 8 largest companies accounted for 33 and 46 percent, respectively.

[216]Broad-tipped markers, formerly in industry 3953 (code 39530 43), are now included in industry 3951 (code 39510 43). This product code shift out of industry 3953 represents approximately 11 percent of the total 1967 shipments of products in industry 3953. The product code shift into industry 3951 is approximately 8 percent of the total 1967 shipments of products in industry 3951.

[217]Data for 1972 are not directly comparable to earlier data due to a revision in the SIC system. For 1972, data for embalming chemicals are included in product group 2899-; burial garments in product group 2389-; and innerliners, sold as such, in product group 2399-. The exact amount of these products included in product group 3994- for 1967 is unknown, but it is estimated to represent less than 7 percent of the total value of shipments at the U.S. level.

[218]Data for 1972 are not directly comparable to earlier years due to a significant revision in the SIC system. Children-sized caskets and coffins are now included in product class 39953, whereas in 1967, they were included in product classes 39941 and 39942. However, the effect of this change is unknown.

[219]Comparable data for 1967 and earlier years are not available, since the effects of the changes noted in footnotes 217 and 218 are estimated to be greater than 15 percent.

[220]The definition of industry 3999 has been revised for 1967. 1963 concentration ratios are not available on a basis comparable to 1967.

[221]Product Classes 39993, Matches; 39994, Candles; 39995, Lamp Shades; 39996, Furs, Dressed and Dyed, and 39997, Umbrellas, Parasols, and Canes, are part of industry 3999, rather than separate industries as they were in 1966 and prior years. The 1967 figures, therefore, are not directly comparable to 1963 because the administrative record cases (explained in the Introduction under "not specified by kind" classes) have been included in product class 39990 for increasing the associated concentration ratios to a level not comparable to previous years.

[222]Includes receipts for work done on materials owned by others.

Table 10. **Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1977 and Earlier Years**

1977 product code[1]	Class of product and year[1]	Value of shipments[2]		
		Total (million dollars)	Percent accounted for by[3]-- 4 largest companies	8 largest companies
20116 20136	Pork, processed or cured (not canned or made into sausage) 1977	3,778.6	18	30
	1972	2,413.5	22	32
	1967	2,008.0	22	37
	1963	1,634.7	25	41
	1958	1,821.7	30	46
	1954	1,847.3	40	56
20117 20137	Sausage and similar products (not canned) 1977	4,680.0	22	31
	1972	3,264.4	17	26
	1967	2,286.6	19	30
	1963	1,756.2	20	29
	1958	1,526.2	22	29
	1954	1,187.1	24	31
20118 20138	Canned meats, (except dog and catfood) containing 20 percent or more meat 1977	1,256.3	36	51
	1972	1,106.3	41	57
	1967	856.4	34	53
	1963	730.1	39	58
	1958	598.6	42	60
	1954	583.4	46	63
20161 20171	Young chickens (usually under 20 weeks of age) including broilers, fryers, roasters, and capons (1972 product class 20161)[4] 1977	3,961.1	22	33
	1972 product class 20161, Young chickens (usually under 20 weeks of age) including broilers, fryers, roasters, and capons 1972	2,198.0	17	27
20162 20172	Hens and/or fowl (1972 product class 20162)[4] 1977	229.5	48	67
	1972 product class 20162, Hens and/or fowl 1972	147.8	39	57
20163 20173	Turkeys (1972 product class 20163)[4] 1977	927.3	42	59
	1972 product class 20163, Turkeys 1972	538.9	40	56
	1967	504.7	28	39
	1963	371.9	23	35
	1958	257.9	23	32
	1954	203.8	22	31
20164 20174	Other poultry and small game (1972 product class 20164)[4] 1977	57.9	75	89
	1972 product class 20164, Other poultry and small game 1972	23.7	69	89
	1967	19.7	81	89
	1963	14.3	83	89
	1958	19.4	44	58
20165 20175	Processed poultry and small game, except soup (1972 product class 20171)[4] 1977	657.7	42	57
	1972 product class 20171, Processed poultry and small game except soup 1972	358.1	34	51
20415 20455	Flour mixes and refrigerated doughs[5] 1977	1,491.5	48	64
	1972	796.1	61	75
	1967	644.9	59	74
	1963	525.9	60	75
20668 20998	Other chocolate and cocoa products 1977	888.1	69	81
	1972	318.4	69	78
	1967	245.0	70	79
	1963	212.3	60	71
	1958	206.7	62	75
22117 22617	Finished cotton broadwoven fabrics 1977	1,192.3	57	73
	1972	710.8	49	66
	1967	685.3	41	61
	1963	724.1	55	69
	1958	600.2	45	60
	1954	581.4	41	58
22118 22219 23928	Sheets and pillowcases[6] 1977	906.3	59	90
	1972	r634.8	r61	r91
	1967	438.5	62	91
	1963	328.8	58	86
	1958	239.9	56	76
	1954	214.3	50	73
22119 22210 23929	Towels and washcloths[7] 1977	693.0	82	95
	1972	409.1	66	r85
	1967	300.2	76	90
	1963	226.4	76	87
	1958	174.6	75	88
	1954	147.7	80	89

See footnotes at end of table.

Table 10. **Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]		
		Total (million dollars)	Percent accounted for by[3]-- 4 largest companies	8 largest companies
22218 22628	Finished manmade fiber and silk broadwoven fabrics....1977..	2,430.5	59	75
	1972..	1,175.5	53	70
	1967..	591.1	54	70
	1963..	336.9	53	65
	1958..	157.6	38	58
22825 28246	Textured, crimped, or bulked filament yarns, including stretch yarns (1972 product class 22824 only)[8]....1977..	[8]2,111.4	34	55
23412 22542	Women's and children's underwear....1977..	681.2	17	27
	1972..	489.7	19	30
	1967..	563.6	16	23
	1963..	533.1	11	19
	1958..	[9]529.6	11	17
	1954..	[9]534.8	10	15
23413 22543	Women's and children's nightwear....1977..	902.2	20	30
	1972..	642.0	15	24
	1967..	425.7	12	23
	1963..	393.0	11	18
	1958..	[9]280.7	11	19
	1954..	[9]244.7	10	17
29117 29920	Lubricating oils and greases[10]....1977..	3,233.3	35	50
	1972..	1,536.9	28	43
	1967..	1,327.0	37	54
32113 32313	Laminated glass....1977..	1,817.6	79	92
	1972..	535.4	85	98
	1967..	361.7	85	97
	1963..	317.3	87	98
	1958..	253.8	96	99
	1954..	236.2	94	97
33125 33155	Steel wire....1977..	1,336.1	33	47
	1972..	726.3	35	53
	1967..	678.1	33	51
	1963..	619.4	37	54
	1958..	564.7	44	61
	1954..	465.0	51	65
33126 33176	Steel pipe and tubes....1977..	5,620.4	37	59
	1972..	2,758.5	36	54
	1967..	2,629.1	37	56
	1963..	1,887.5	40	58
	1958..	1,723.6	43	63
33127 33167	Cold rolled steel sheet and strip....1977..	8,582.4	42	68
	1972..	4,267.0	35	59
	1967..	3,161.9	36	60
	1963..	2,856.3	39	64
	1958..	2,091.6	41	64
33128 33168	Cold finished steel bars and bar shapes....1977..	1,331.1	41	60
	1972..	827.5	41	62
	1967..	629.2	43	64
	1963..	472.7	43	66
	1958..	338.9	45	67
3312A 34627	Seamless rolled ring forgings, ferrous (1972 product classes 33129 and 34629)....1977..	207.5	55	75
3312B 34628	Open die or smith forgings (hammer or press), ferrous (1972 product classes 33129 and 34629)....1977..	673.6	41	56
	1972 product classes 33129 and 34629, Open die or smith forgings (open frame hammer or press)....1972..	[4]524.5	39	58
	1967..	[4]462.9	33	49
	1963..	[4]294.4	35	54
	1958..	[4]220.9	45	57
33151 34961	Noninsulated ferrous wire rope, cable, and strand....1977..	610.5	30	48
	1972..	369.6	37	52
	1967..	246.0	49	70
	1963..	189.9	45	69
	1958..	163.4	53	70
33152 34967	Steel nails and spikes....1977..	447.1	39	58
33156 34966	Fencing and fence gates....1977..	411.6	32	57
	1972..	250.2	30	53
	1967..	127.0	36	59
	1963..	115.5	42	56
	1958..	103.3	45	62
	1954..	92.9	48	68

See footnotes at end of table.

Table 10. **Share of Value of Shipments of Selected Product Classes Primary to More Than One Industry Accounted for by the 4 and 8 Largest Companies: 1977 and Earlier Years**—Con.

1977 product code[1]	Class of product and year[1]	Value of shipments[2]		
		Total (million dollars)	Percent accounted for by[3]-- 4 largest companies	8 largest companies
33157 34964	Ferrous wire cloth and other ferrous woven wire products....1977..	222.1	34	51
	1972..	128.9	29	47
	1967..	86.4	32	53
	1963..	72.3	31	49
33159 34968	Other fabricated wire products (1972 product class 34969)....1977..	1,265.4	16	26
	1972..	847.5	13	24
	1967..	667.4	15	25
	1963..	501.5	18	27
	1958..	405.4	21	32
	1954..	313.4	23	34
33312 33412	Refined copper....1977..	2,304.5	60	82
	1972..	1,488.8	57	74
	1967..	818.4	48	67
	1963..	668.6	51	66
	1958..	479.7	64	79
33323 33413	Refined lead....1977..	(D)	(D)	(D)
	1972..	455.2	66	80
	1967..	358.9	53	66
	1963..	276.4	64	73
	1958..	280.9	65	73
33334 33414	Refined zinc....1977..	471.3	61	83
	1972..	404.2	55	77
	1967..	316.6	54	81
	1963..	273.7	62	96
	1958..	206.7	49	73
33347 33417 33553	Aluminum ingot[5]....1977..	5,229.2	64	79
	1972..	1,971.2	69	82
	1967..	1,682.4	76	84
	1963..	1,234.7	76	85
33348 33418 33554	Aluminum extrusion billet[5]....1977..	863.3	51	76
	1972..	320.1	67	84
	1967..	281.1	77	93
	1963..	185.5	80	93
33395 33415	Precious metals....1977..	780.4	59	74
	1972..	527.6	67	75
	1967..	282.4	76	88
	1963..	246.4	81	89
	1958..	198.6	77	87
33397 33416	Other nonferrous metals, n.e.c....1977..	1,036.0	53	73
	1972..	602.7	56	69
	1967..	327.8	43	60
	1963..	193.0	42	60
	1958..	163.3	37	55
33551 33571	Aluminum and aluminum-base alloy wire (including ACSR)....1977..	387.5	67	87
	1972..	216.3	55	82
	1967..	251.9	68	89
	1963..	127.9	77	92
	1958..	100.9	73	89
33575 34965	Nonferrous wire cloth and other woven non-ferrous wire products....1977..	104.2	39	62
	1972..	93.9	41	64
	1967..	90.0	44	61
	1963..	70.5	34	55
33576 36996	Apparatus wire and cordage and flexible cord sets....1977..	577.8	41	59
	1972..	361.2	46	63
	1967..	287.2	34	52
	1963..	167.7	29	43
	1958..	127.1	37	42

[1]Product classes (5-digit codes) are assigned to the industry to which they are primary. Products which are primary to more than one industry are split according to the industry codes of the establishment producing them. In this table, such products have been combined to yield a wherever-made total. See table 9 for the figures for each product class separately.

[2]Represents, for the combination of numerically coded product classes, the total value shipped by all producers in all industries.

[3]Company affiliation is determined from census reports and public records. The value of shipments of products falling within each combination of product codes was aggregated for plants under common ownership and company totals derived to determine the largest producers.

[4]For 1972, all data were collected and published under industry 2016, Poultry Dressing Plants, product codes only. However, industry 2016 products are defined to include only those porducts processed at slaughtering plants. Industry 2017, Poultry and Egg Processing, is defined to include the same products but processed from purchased carcasses. For 1977, comparable product classes were created for collecting products primary to both 2016 and 2017 industries.

[5]For 1963, one or more of the 1958 product classes have been redefined. Prior years' data and their associated concentration ratios are not available on a basis comparable to 1963.

[6]For 1977 and 1972, these data include product class 22219. In prior years, the manmade fiber sheets and pillowcases were included in product class 22118.

[7]For 1977, these data include product code 22210 15. In prior years, the manmade fiber towels and washcloths were included in product class 22119.

[8]For 1977, old product class 22824 was split into new product classes 22825 and 28246.

[9]Represents value of production rather than value of shipments.

[10]For 1967, one or more of the 1963 product classes have been redefined. Prior years' data and their associated concentration ratios are not available on a basis comparable to 1967.

Selected Metalworking Operations

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EXPLANATORY TEXT

The 1977 Census of Manufactures included a special inquiry on "selected metalworking and related operations" to provide a measurement of employment in certain metalworking and related facilities in manufacturing. The following operations were included in this inquiry: Foundry (iron or steel); foundry (nonferrous, except die casting); die casting (nonferrous metal only); forging—presses, hammers, or upsetters (excluding manufacture of nuts, bolts, etc.); electroplating and other plating; galvanizing and other hot-dip coating; heat treating of metals for production purposes; automatic screw machine department; machine shop; tool and die shop (if separate from machine shop) for jigs, fixtures, dies, and other special tooling; pattern shop (foundry patterns only—metal, wood, etc.); plate or structural fabrication; stamping, blanking, and forming of metals; painting, lacquering, and enameling on metals; plastics molding; assembly of product; shipping department (including packing and crating); hot forging—presses, hammers, or upsetters (excluding manufacture of nuts, bolts, etc.); cold forging; and powder metallurgy.

Information on selected metal working and related operations was obtained for practically all industries where such operations are important. For individual industries or groups of industries, the inquiry on metalworking and related operations was tailored to fit the principal operations that were characteristic of those industries. The information obtained in each inquiry included the number of production workers engaged in the specified operation.

Production workers are defined to include workers (up through the working supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Supervisory employees above the working supervisor level are excluded from this category.

Table 1 summarizes the number of establishments and production workers engaged in specific metalworking and related operations for 1977 and 1972.

Data on the number of establishments and the number of production workers engaged in specific metalworking and related operations are shown in table 2 for each of the 146 industries included in this special inquiry. The size distribution data in table 2 is based on the number of production workers usually employed in the operation. The number of production workers engaged in these operations is shown for 18 selected operations by industry in table 3, and for 19 selected operations by State in table 5.

An approximation of the coverage for each industry is given in table 4. The coverage is generally highest in industries in which larger establishments have predominance. Similar percentages are not available for States.

Since establishments with less than 5 employees were typically excused from filing reports, these establishments are not included in the metalworking and related operations data. (See the introduction for further explanation.)

In addition, for selected industries, short forms which did not contain metalworking inquiries were mailed to small establishments (typically those with 5 to 20 employees). The special inquiry industries were:

3361	3498	3567
3362	3499	3569
3369	3541	3582
3441	3544	3589
3442	3545	3599
3444	3549	3645
3446	3551	3699
3449	3552	3732
3451	3555	3792
3469	3559	3799
3496	3565	3829

Also, a few larger establishments that filed standard forms did not report their metalworking and related operations. This has resulted in an understatement of the number of establishments performing specific operations, primarily in the smallest size class, and to a much smaller degree in an understatement of the number of production workers in the operation.

For the forging industries (SIC's 3462 and 3463), table 2 contains separate data for hot forging—presses, hammers, or upsetters (excluding manufacture of nuts, bolts, etc.), and cold forging. These data are included with operation entitled "forging—presses, hammers, or upsetters," in tables 3 and 5.

Since the report form used by respondents in Industry 3471, Plating and Polishing, did not include the metalworking and related operations inquiry, the total number of production workers for establishments classified in industry 3471 are shown separately in table 5. Plating and polishing operations performed by establishments classified in industry 3471 are excluded from tables 2, 3, and 4.

Table 1. **Summary of Employment in Selected Metalworking Operations: 1977 and 1972**

Metalworking operations	1977		1972		Metalworking operations	1977		1972	
	Establishments (number)	Production workers (number)	Establishments (number)	Production workers (number)		Establishments (number)	Production workers (number)	Establishments (number)	Production workers (number)
Ferrous foundry	1,225	185,469	1,350	176,639	Tool and die shop	7,530	124,070	8,590	130,263
Nonferrous foundry	845	29,783	1,136	29,588	Foundry pattern shop	1,259	12,423	1,694	13,550
Nonferrous die casting	633	30,913	654	30,696	Plate or structural fabrication	5,935	218,002	6,270	197,958
Forgings--presses, hammer or upsetters	874	31,166	868	27,210	Stamping, blanking, and forming of metals	10,047	317,011	11,602	343,628
Electroplating or other plating	2,102	24,718	2,194	26,258	Painting, lacquering, and enameling of metals	10,549	97,911	11,197	93,091
Plating and polishing industries[1]	3,447	51,200	3,264	45,200	Plastics molding	829	22,263	828	20,830
Galvanizing and other hot-dip coating	350	3,318	377	3,505	Assembly of product	3,573	355,876	3,607	(D)
Heat treating of metals	3,218	28,500	3,231	25,983	Shipping department, including packing and crating	1,205	11,953	1,147	10,576
Automatic screw machine department	2,939	49,066	3,466	49,416	Powder metallurgy[2]	186	7,685	132	3,104
Machine shop	15,744	553,383	18,828	569,200					

(D) Withheld to avoid disclosing operations of individual companies.

[1]Represents the total number of establishments and production workers classified in the plating and polishing industry (SIC 3471). Data are from table 1A of report MC77(2)-34D.

[2]For 1977, powder metallurgy was added to the metalworking and related operations inquiries on the census of manufactures forms of substantially more industries.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3321	Gray iron foundries:					
	Ferrous foundry[3]	581	24	33	524	98,099
	Nonferrous foundry (except die casting)	46	20	13	13	985
	Nonferrous die casting	1	-	1	-	(D)
	Machine shop	141	34	65	42	3,375
	Foundry pattern shop	222	139	66	17	2,216
3322	Malleable iron foundries:					
	Ferrous foundry[3]	45	1	-	44	12,937
	Nonferrous foundry (except die casting)	2	1	1	-	(D)
	Nonferrous die casting	-	-	-	-	-
	Machine shop	8	1	2	5	387
	Foundry pattern shop	25	11	13	1	155
3324	Steel investment foundries:					
	Ferrous foundry[3]	51	2	6	43	4,344
	Nonferrous foundry (except die casting)	13	4	2	7	(D)
	Nonferrous die casting	1	-	-	1	(D)
	Machine shop	13	3	8	2	187
	Foundry pattern shop	9	4	4	1	73
3325	Steel foundries, n.e.c.:					
	Ferrous foundry[3]	185	6	10	169	34,669
	Nonferrous foundry (except die casting)	22	8	7	7	610
	Nonferrous die casting	2	1	-	1	(D)
	Machine shop	57	7	24	26	2,536
	Foundry pattern shop	99	40	43	16	975
3361	Aluminum foundries:					
	Ferrous foundry	14	3	5	6	(D)
	Nonferrous foundry (except die casting)	208	16	52	140	12,522
	Nonferrous die casting[3]	160	18	18	124	13,801
	Machine shop	116	33	49	34	2,410
	Foundry pattern shop	86	48	32	6	659
3362	Brass, bronze, and copper foundries:					
	Ferrous foundry	9	2	4	3	(D)
	Nonferrous foundry (except die casting)[3]	156	11	59	86	4,732
	Nonferrous die casting[3]	7	-	2	5	273
	Machine shop	52	8	27	17	1,066
	Foundry pattern shop	39	30	7	2	149
3369	Nonferrous foundries, n.e.c.:					
	Ferrous foundry	2	1	-	1	(D)
	Nonferrous foundry (except die casting)[3]	32	2	9	21	1,404
	Nonferrous die casting[3]	115	5	23	87	7,523
	Machine shop	27	14	9	4	252
	Foundry pattern shop	11	8	3	-	48

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3411	Metal cans:					
	Machine shop	191	46	104	41	2,613
	Tool and die shop	48	23	22	3	402
	Plate or structural fabrication	53	5	8	40	2,763
	Stamping, blanking, and forming of metals	154	8	26	120	12,830
	Painting, lacquering, and enameling of metals	124	11	45	68	3,815
3412	Metal barrels, drums, and pails:					
	Machine shop	39	16	13	10	568
	Tool and die shop	15	11	1	3	114
	Plate or structural fabrication	7	2	2	3	176
	Stamping, blanking, and forming of metals	76	15	32	29	1,973
	Painting, lacquering, and enameling of metals	80	35	35	10	909
3421	Cutlery:					
	Ferrous foundry	2	1	1	-	(D)
	Forging--presses, hammers, or upsetters	18	8	8	2	247
	Electroplating and other plating	14	6	5	3	143
	Heat treating of metals	37	25	12	-	202
	Automatic screw machine department	4	2	-	2	(D)
	Machine shop	32	14	13	5	413
	Tool and die shop	28	14	13	1	199
	Stamping, blanking, and forming of metals	42	17	19	6	574
	Painting, lacquering, and enameling of metals	15	12	3	-	36
3423	Hand and edge tools, n.e.c.:					
	Ferrous foundry	4	2	2	-	31
	Forging--presses, hammers, or upsetters	82	19	29	34	2,144
	Electroplating and other plating	50	19	26	5	521
	Heat treating of metals	129	80	39	10	840
	Automatic screw machine department	67	33	23	11	766
	Machine shop	164	43	65	56	5,324
	Tool and die shop	125	58	46	21	1,437
	Stamping, blanking, and forming of metals	140	73	50	17	1,848
	Painting, lacquering, and enameling of metals	101	75	22	4	521
3425	Handsaws and saw blades:					
	Ferrous foundry	1	1	-	-	(D)
	Forging--presses, hammers, or upsetters	6	-	5	1	88
	Electroplating and other plating	8	3	3	2	111
	Heat treating of metals	25	7	13	5	308
	Automatic screw machine department	3	3	-	-	8
	Machine shop	32	10	16	6	455
	Tool and die shop	12	7	4	1	112
	Stamping, blanking, and forming of metals	27	7	13	7	436
	Painting, lacquering, and enameling of metals	18	11	7	-	72
3429	Hardware, n.e.c.:					
	Ferrous foundry	6	3	2	1	58
	Nonferrous foundry (except die casting)	28	4	17	7	555
	Nonferrous die casting	50	12	15	23	1,538
	Forging--presses, hammers, or upsetters	21	6	12	3	258
	Electroplating and other plating	116	32	53	31	2,859
	Galvanizing and other hot-dip coating	15	7	4	4	214
	Heat treating of metals	39	30	8	1	202
	Automatic screw machine department	79	38	32	9	(D)
	Machine shop	202	61	85	56	3,942
	Tool and die shop	214	98	88	28	3,152
	Foundry pattern shop	19	16	2	1	76
	Plate or structural fabrication	27	13	6	8	1,060
	Stamping, blanking, and forming of metals	278	73	112	93	11,556
	Painting, lacquering, and enameling of metals	172	101	54	17	2,084
	Powder metallurgy	5	3	1	1	(D)
3431	Metal sanitary ware:					
	Ferrous foundry	4	-	-	4	817
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	1	-	-	1	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	1	1	-	-	(D)
	Automatic screw machine department	2	1	-	1	(D)
	Machine shop	10	3	4	3	277
	Tool and die shop	4	3	1	-	22
	Foundry pattern shop	1	-	-	1	(D)
	Plate or structural fabrication	2	-	1	1	(D)
	Stamping, blanking, and forming of metals	18	2	6	10	1,011
	Painting, lacquering, and enameling of metals	14	1	3	10	985
3432	Plumbing fittings and brass goods:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	21	1	6	14	(D)
	Forging--presses, hammers, or upsetters	3	2	1	-	20
	Electroplating and other plating	38	8	20	10	(D)
	Galvanizing and other hot-dip coating	2	1	1	-	(D)

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3432	Plumbing fittings and brass goods--Con.					
	Heat treating of metals	10	9	-	1	(D)
	Automatic screw machine department	35	13	14	8	559
	Machine shop	61	10	28	23	1,654
	Tool and die shop	38	17	18	3	298
	Foundry pattern shop	11	6	5	-	(D)
	Plate or structural fabrication	3	1	-	2	(D)
	Stamping, blanking, and forming of metals	25	7	13	5	348
	Painting, lacquering, and enameling of metals	11	10	1	-	22
3433	Heating equipment, except electric:					
	Ferrous foundry	10	1	1	8	1,244
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Electroplating and other plating	-	-	-	-	-
	Automatic screw machine department	7	5	2	-	(D)
	Machine shop	69	31	24	14	1,089
	Tool and die shop	36	25	10	1	158
	Foundry pattern shop	11	6	5	-	51
	Plate or structural fabrication	38	12	12	14	983
	Stamping, blanking, and forming of metals	56	17	21	18	1,926
	Painting, lacquering, and enameling of metals	89	67	20	2	343
3441	Fabricated structural metal:					
	Ferrous foundry	4	-	-	4	148
	Nonferrous foundry (except die casting)	2	2	-	-	(D)
	Forging--presses, hammers, or upsetters	16	10	4	2	270
	Electroplating and other plating	6	4	2	-	25
	Galvanizing and other hot-dip coating	18	1	6	11	465
	Heat treating of metals	24	23	-	1	63
	Machine shop	180	106	51	23	1,747
	Tool and die shop	37	29	6	2	169
	Foundry pattern shop	7	3	2	2	99
	Plate or structural fabrication[3]	738	109	259	370	31,417
	Stamping, blanking, and forming of metals	184	97	68	19	1,671
	Painting, lacquering, and enameling of metals	493	396	86	11	1,943
3442	Metal doors, sash, and trim:					
	Ferrous foundry	2	-	2	-	(D)
	Nonferrous foundry (except die casting)	3	2	1	-	(D)
	Forging--presses, hammers, or upsetters	8	-	4	4	216
	Electroplating and other plating	15	3	9	3	253
	Galvanizing and other hot-dip coating	8	4	3	1	90
	Heat treating of metals	21	14	5	2	127
	Machine shop	109	72	29	8	658
	Tool and die shop	73	58	12	3	780
	Foundry pattern shop	5	5	-	-	8
	Plate or structural fabrication	34	15	10	9	770
	Stamping, blanking, and forming of metals	171	52	74	45	3,204
	Painting, lacquering, and enameling of metals	140	84	45	11	972
3443	Fabricated platework (boiler shops):					
	Ferrous foundry	5	-	1	4	376
	Nonferrous foundry (except die casting)	2	2	-	-	(D)
	Forging--presses, hammers, or upsetters	17	8	7	2	282
	Electroplating and other plating	5	5	-	-	9
	Galvanizing and other hot-dip coating	13	7	6	-	(D)
	Heat treating of metals	91	77	12	2	322
	Machine shop	325	152	124	49	5,920
	Tool and die shop	62	45	12	5	380
	Foundry pattern shop	9	4	4	1	59
	Plate or structural fabrication[3]	589	82	193	314	31,316
	Stamping, blanking, and forming of metals	256	128	94	34	2,635
	Painting, lacquering, and enameling of metals	404	334	62	8	1,455
3444	Sheet metal work:					
	Ferrous foundry	2	-	1	1	(D)
	Nonferrous foundry (except die casting)	6	3	2	1	46
	Forging--presses, hammers, or upsetters	7	6	1	-	18
	Electroplating and other plating	10	7	2	1	60
	Galvanizing and other hot-dip coating	30	23	6	1	156
	Heat treating of metals	14	10	3	1	126
	Machine shop	168	103	47	18	1,536
	Tool and die shop	89	69	20	-	280
	Foundry pattern shop	8	7	1	-	23
	Plate or structural fabrication	205	67	83	55	3,487
	Stamping, blanking, and forming of metals	503	124	221	158	12,575
	Painting, lacquering, and enameling of metals	246	183	51	12	1,217
3446	Architectural metal work:					
	Ferrous foundry	1	-	1	-	(D)
	Nonferrous foundry (except die casting)	3	-	3	-	25
	Forging--presses, hammers, or upsetters	9	7	1	1	166
	Electroplating and other plating	7	4	3	-	35
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	3	3	-	-	8

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3446	Architectural metal work--Con.					
	Machine shop	47	24	21	2	454
	Tool and die shop	28	19	7	2	157
	Foundry pattern shop	4	4	-	-	8
	Plate or structural fabrication	82	30	38	14	1,372
	Stamping, blanking, and forming of metals	83	33	22	28	1,937
	Painting, lacquering, and enameling of metals	128	103	22	3	463
3448	Prefabricated metal buildings:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	5	2	1	2	76
	Electroplating and other plating	1	-	1	-	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	1	-	-	1	(D)
	Machine shop	24	13	6	5	282
	Tool and die shop	14	8	6	-	66
	Foundry pattern shop	3	1	1	1	(D)
	Plate or structural fabrication	88	14	27	47	3,484
	Stamping, blanking, and forming of metals	87	18	32	37	2,417
	Painting, lacquering, and enameling of metals	77	42	32	3	655
3449	Miscellaneous metal work:					
	Ferrous foundry	2	-	-	2	(D)
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	2	1	1	-	(D)
	Galvanizing and other hot-dip coating	1	-	1	-	(D)
	Heat treating of metals	4	3	1	-	10
	Machine shop	28	20	7	1	209
	Tool and die shop	8	6	2	-	19
	Foundry pattern shop	2	1	1	-	(D)
	Plate or structural fabrication	48	8	23	17	1,409
	Stamping, blanking, and forming of metals	62	17	29	16	1,056
	Painting, lacquering, and enameling of metals	35	23	10	2	236
3451	Screw machine products:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	4	-	2	2	98
	Electroplating and other plating	16	11	5	-	51
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	32	21	10	1	158
	Automatic screw machine department[3]	525	80	242	203	12,286
	Machine shop	283	81	116	86	5,347
	Tool and die shop	139	113	25	1	492
	Plate or structural fabrication	9	7	2	-	38
	Stamping, blanking, and forming of metals	65	46	14	5	561
	Painting, lacquering, and enameling of metals	15	14	1	-	34
3452	Bolts, nuts, rivets, and washers:					
	Ferrous foundry	1	-	1	-	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	7	4	3	-	37
	Forging--presses, hammers, or upsetters	44	17	13	14	828
	Electroplating and other plating	98	42	50	6	885
	Galvanizing and other hot-dip coating	16	13	3	-	(D)
	Heat treating of metals	144	84	53	7	1,001
	Automatic screw machine department	130	34	53	43	2,798
	Machine shop	198	78	78	42	3,459
	Tool and die shop	186	67	82	37	2,792
	Plate or structural fabrication	8	3	2	3	191
	Stamping, blanking, and forming of metals	197	41	68	88	7,667
	Painting, lacquering, and enameling of metals	30	23	5	2	184
3462	Iron and steel forgings:					
	Machine shop	106	30	44	32	2,356
	Tool and die shop	103	19	49	35	2,550
	Hot forging--presses, hammers, or upsetters[3]	172	7	45	120	11,350
	Cold forging[3]	18	3	7	8	444
3463	Nonferrous forgings:					
	Machine shop	13	6	5	2	165
	Tool and die shop	15	7	5	3	308
	Hot forging--presses, hammers, or upsetters[3]	20	-	8	12	1,979
	Cold forging[3]	-	-	-	-	-
3465	Automotive stampings:					
	Nonferrous die casting	5	1	4	-	41
	Forging--presses, hammers, or upsetters	6	4	2	-	46
	Electroplating and other plating	35	9	14	12	733
	Galvanizing and other hot-dip coating	1	-	1	-	(D)
	Heat treating of metals	17	7	8	2	(D)
	Automatic screw machine department	11	7	4	-	(D)

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3465	Automotive stampings--Con.					
	Machine shop	85	37	28	20	2,021
	Tool and die shop	212	74	94	44	9,250
	Foundry pattern shop	14	2	4	8	285
	Plate or structural fabrication	14	4	6	4	(D)
	Stamping, blanking, and forming of metals[3]	374	20	89	265	59,687
	Painting, lacquering, and enameling of metals	94	38	41	15	1,078
3466	Crowns and closures:					
	Nonferrous die casting	1	-	1	-	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	1	1	-	-	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	2	2	-	-	(D)
	Automatic screw machine department	1	-	1	-	(D)
	Machine shop	26	7	13	6	427
	Tool and die shop	10	3	4	3	151
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	1	1	-	-	(D)
	Stamping, blanking, and forming of metals	36	4	10	22	2,468
	Painting, lacquering, and enameling of metals	20	2	10	8	522
3469	Metal stampings, n.e.c.:					
	Nonferrous die casting	6	3	3	-	(D)
	Forging--presses, hammers, or upsetters	12	7	2	3	261
	Electroplating and other plating	69	35	26	8	(D)
	Galvanizing and other hot-dip coating	10	1	9	-	(D)
	Heat treating of metals	86	68	14	4	543
	Automatic screw machine department	17	15	1	1	83
	Machine shop	283	164	92	27	2,363
	Tool and die shop	510	224	242	44	4,335
	Foundry pattern shop	9	7	1	1	46
	Plate or structural fabrication	71	29	27	15	1,351
	Stamping, blanking, and forming of metals[3]	832	103	315	414	28,616
	Painting, lacquering, and enameling of metals	260	149	74	37	3,047
3482	Small arms ammunition:					
	Ferrous foundry	-	-	-	-	-
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Electroplating and other plating	7	3	4	-	44
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	8	5	2	1	67
	Automatic screw machine department	3	-	3	-	28
	Machine shop	11	3	1	7	567
	Tool and die shop	6	2	2	2	(D)
	Plate or structural fabrication	-	-	-	-	-
	Stamping, blanking, and forming of metals	6	-	-	6	827
	Painting, lacquering, and enameling of metals	4	4	-	-	13
	Powder metallurgy	1	1	-	-	(D)
3483	Ammunition, except small arms, n.e.c.:					
	Ferrous foundry	2	-	2	-	(D)
	Forging--presses, hammers, or upsetters	8	2	3	3	(D)
	Electroplating and other plating	9	3	6	-	59
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	12	4	6	2	189
	Automatic screw machine department	8	2	1	5	206
	Machine shop	30	8	9	13	1,369
	Tool and die shop	13	3	5	5	408
	Plate or structural fabrication	1	1	-	-	(D)
	Stamping, blanking, and forming of metals	14	5	6	3	350
	Painting, lacquering, and enameling of metals	20	7	10	3	309
	Powder metallurgy	2	1	1	-	(D)
3484	Small arms:					
	Ferrous foundry	-	-	-	-	-
	Forging--presses, hammers, or upsetters	4	2	1	1	(D)
	Electroplating and other plating	9	5	4	-	60
	Galvanizing and other hot-dip coating	7	6	1	-	26
	Heat treating of metals	13	5	5	3	206
	Automatic screw machine department	9	2	3	4	158
	Machine shop	25	5	5	15	1,882
	Tool and die shop	16	6	5	5	221
	Plate or structural fabrication	1	-	1	-	(D)
	Stamping, blanking, and forming of metals	12	9	1	2	138
	Painting, lacquering, and enameling of metals	10	8	1	1	94
	Powder metallurgy	2	-	1	1	(D)
3489	Ordnance and accessories, n.e.c.:					
	Ferrous foundry	1	-	-	1	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	8	4	3	1	64
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	8	4	3	1	57
	Automatic screw machine department	9	4	2	3	128

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3489	Ordnance and accessories, n.e.c.--Con.					
	Machine shop	31	8	12	11	1,938
	Tool and die shop	13	6	4	3	(D)
	Plate or structural fabrication	5	3	-	2	(D)
	Stamping, blanking, and forming of metals	15	3	8	4	242
	Painting, lacquering, and enameling of metals	21	12	8	1	128
	Powder metallurgy	1	-	-	1	(D)
3493	Steel springs, except wire:					
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	48	20	14	14	883
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	31	18	12	1	178
	Tool and die shop	20	7	9	4	225
	Plate or structural fabrication	5	1	3	1	57
	Stamping, blanking, and forming of metals	40	11	15	14	1,463
	Painting, lacquering, and enameling of metals	33	20	12	1	188
3494	Valves and pipe fittings:					
	Ferrous foundry	26	1	3	22	3,894
	Nonferrous foundry (except die casting)	46	7	14	25	2,155
	Forging--presses, hammers, or upsetters	36	7	14	15	915
	Electroplating and other plating	38	23	11	4	254
	Galvanizing ahd other hot-dip coating	13	6	4	3	187
	Heat treating of metals	67	51	12	4	397
	Automatic screw machine department	144	62	49	33	2,472
	Machine shop	365	48	100	217	21,370
	Tool and die shop	195	88	88	19	1,787
	Foundry pattern shop	55	26	25	4	500
	Plate or structural fabrication	42	14	14	14	1,535
	Stamping, blanking, and forming of metals	68	29	24	15	1,264
	Painting, lacquering, and enameling of metals	173	146	23	4	646
3495	Wire springs:					
	Galvanizing and other hot-dip coating	8	5	3	-	(D)
	Heat treating of metals	93	80	11	2	262
	Automatic screw machine department	5	2	2	1	54
	Machine shop	63	47	15	1	275
	Tool and die shop	72	51	20	1	337
	Plate or structural fabrication	5	3	1	1	40
	Stamping, blanking, and forming of metals	107	43	31	33	2,487
	Painting, lacquering, and enameling of metals	69	59	10	-	(D)
3496	Miscellaneous fabricated wire products:					
	Galvanizing and other hot-dip coating	13	5	5	3	144
	Heat treating of metals	18	13	5	-	85
	Automatic screw machine department	5	4	1	-	(D)
	Machine shop	101	66	30	5	636
	Tool and die shop	87	62	22	3	384
	Plate or structural fabrication	19	10	7	2	197
	Stamping, blanking, and forming of metals	136	43	54	39	2,663
	Painting, lacquering, and enameling of metals	96	71	20	5	513
3497	Metal foil and leaf:					
	Machine shop	11	6	3	2	143
	Stamping, blanking, and forming of metals	8	1	4	3	336
	Painting, lacquering, and enameling of metals	5	1	1	3	(D)
3498	Fabricated pipe and fittings:					
	Ferrous foundry	1	1	-	-	(D)
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Nonferrous die casting	1	-	1	-	(D)
	Forging--presses, hammers, or upsetters	14	5	7	2	229
	Electroplating and other plating	8	3	4	1	72
	Galvanizing and other hot-dip coating	7	3	3	1	55
	Heat treating of metals	37	32	4	1	143
	Automatic screw machine department	31	16	12	3	268
	Machine shop	104	41	37	26	1,639
	Tool and die shop	32	21	9	2	189
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	51	18	21	12	1,363
	Stamping, blanking, and forming of metals	63	22	22	19	1,475
	Painting, lacquering, and enameling of metals	54	39	13	2	260
3499	Fabricated metal products, n.e.c.:					
	Ferrous foundry	13	3	3	7	(D)
	Nonferrous foundry (except die casting)	15	2	8	5	(D)
	Nonferrous die casting	12	7	5	-	(D)
	Forging--presses, hammers, or upsetters	8	3	4	1	67
	Electroplating and other plating	30	16	11	3	218
	Galvanizing and other hot-dip coating	5	3	1	1	33
	Heat treating of metals	34	24	7	3	204
	Automatic screw machine department	31	22	5	4	333
	Machine shop	266	124	103	39	2,998
	Tool and die shop	125	74	41	10	891

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3499	Fabricated metal products, n.e.c.--Con.					
	Foundry pattern shop	16	11	5	-	68
	Plate or structural fabrication	142	44	59	39	2,315
	Stamping, blanking, and forming of metals	278	108	99	71	4,762
	Painting, lacquering, and enameling of metals	222	162	46	14	1,539
3511	Turbines and turbine generator sets:					
	Ferrous foundry	1	-	1	-	(D)
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Nonferrous die casting	2	-	1	1	(D)
	Forging--presses, hammers, or upsetters	3	-	1	2	57
	Electroplating and other plating	3	2	1	-	10
	Heat treating of metals	13	7	2	4	163
	Automatic screw machine department	4	1	2	1	(D)
	Machine shop	30	3	5	22	9,648
	Tool and die shop	15	1	6	8	433
	Foundry pattern shop	5	3	1	1	33
	Plate or structural fabrication	20	4	3	13	2,533
	Stamping, blanking, and forming of metals	9	3	4	2	(D)
	Painting, lacquering, and enameling of metals	24	13	4	7	666
	Assembly of product	27	4	4	19	4,384
3519	Internal combustion engines, n.e.c.:					
	Ferrous foundry	4	-	-	4	(D)
	Nonferrous foundry (except die casting)	3	1	-	2	(D)
	Nonferrous die casting	6	-	2	4	(D)
	Forging--presses, hammers, or upsetters	5	5	-	-	10
	Electroplating and other plating	19	7	5	7	377
	Heat treating of metals	42	13	20	9	703
	Automatic screw machine department	27	9	9	9	(D)
	Machine shop	85	12	14	59	25,284
	Tool and die shop	51	10	21	20	1,678
	Foundry pattern shop	6	3	3	-	42
	Plate or structural fabrication	13	7	2	4	349
	Stamping, blanking, and forming of metals	42	5	19	18	(D)
	Painting, lacquering, and enameling of metals	64	32	21	11	1,086
	Assembly of product	74	3	11	60	14,900
3523	Farm machinery and equipment:					
	Ferrous foundry	21	2	6	13	4,776
	Nonferrous foundry (except die casting)	6	3	1	2	(D)
	Forging--presses, hammers, or upsetters	47	19	18	10	(D)
	Heat treating of metals	76	41	21	14	1,027
	Automatic screw machine department	48	25	18	5	871
	Machine shop	404	199	136	69	12,401
	Tool and die shop	208	130	52	26	2,417
	Foundry pattern shop	27	20	3	4	(D)
	Plate or structural fabrication	260	105	117	38	3,844
	Stamping, blanking, and forming of metals	379	175	131	73	6,354
	Painting, lacquering, and enameling of metals	493	375	88	30	3,205
	Assembly of product	501	162	205	134	18,263
	Shipping department, including packing and crating	479	310	135	34	4,213
	Powder metallurgy	2	2	-	-	(D)
3524	Lawn and garden equipment:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	1	-	1	-	(D)
	Forging--presses, hammers, or upsetters	3	-	2	1	(D)
	Heat treating of metals	22	18	2	2	154
	Automatic screw machine department	11	6	4	1	90
	Machine shop	47	9	19	19	1,810
	Tool and die shop	44	21	21	2	330
	Foundry pattern shop	2	1	1	-	(D)
	Plate or structural fabrication	8	2	5	1	78
	Stamping, blanking, and forming of metals	59	15	25	19	1,529
	Painting, lacquering, and enameling of metals	65	39	19	7	549
	Assembly of product	70	12	11	47	6,148
	Shipping department, including packing and crating	73	41	26	6	519
	Powder metallurgy	2	-	1	1	(D)
3531	Construction machinery:					
	Ferrous foundry	18	1	1	16	2,024
	Nonferrous foundry (except die casting)	4	1	1	2	108
	Forging--presses, hammers, or upsetters	21	5	12	4	465
	Heat treating of metals	77	43	19	15	1,432
	Automatic screw machine department	29	12	13	4	620
	Machine shop	314	69	108	137	23,246
	Tool and die shop	111	42	48	21	2,100
	Foundry pattern shop	18	9	8	1	115
	Plate or structural fabrication	249	25	81	143	17,620
	Stamping, blanking, and forming of metals	153	51	68	34	3,973
	Painting, lacquering, and enameling of metals	305	189	88	28	2,664
	Assembly of product	298	48	91	159	17,635
	Powder metallurgy	8	2	1	5	281

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3532	Mining machinery:					
	Ferrous foundry	5	-	1	4	308
	Nonferrous foundry (except die casting)	2	-	2	-	(D)
	Forging--presses, hammers, or upsetters	11	8	3	-	51
	Heat treating of metals	39	27	10	2	271
	Automatic screw machine department	15	5	10	-	124
	Machine shop	123	28	40	55	4,841
	Tool and die shop	29	15	11	3	274
	Foundry pattern shop	10	6	3	1	113
	Plate or structural fabrication	77	18	21	38	3,119
	Stamping, blanking, and forming of metals	31	20	7	4	302
	Painting, lacquering, and enameling of metals	89	75	14	-	243
	Assembly of product	98	28	36	34	3,184
	Powder metallurgy	8	2	4	2	198
3533	Oil field machinery:					
	Ferrous foundry	6	1	-	5	545
	Nonferrous foundry (except die casting)	3	1	-	2	(D)
	Forging--presses, hammers, or upsetters	19	3	11	5	1,201
	Heat treating of metals	50	29	14	7	624
	Automatic screw machine department	19	2	6	11	943
	Machine shop	169	20	53	96	16,859
	Tool and die shop	50	14	26	10	1,087
	Plate or structural fabrication	81	7	33	41	4,088
	Stamping, blanking, and forming of metals	29	8	15	6	423
	Painting, lacquering, and enameling of metals	112	75	33	4	628
	Powder metallurgy	7	5	2	-	29
3534	Elevators and moving stairways:					
	Ferrous foundry	-	-	-	-	-
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Heat treating of metals	2	2	-	-	(D)
	Automatic screw machine department	5	3	2	-	(D)
	Machine shop	39	15	13	11	845
	Tool and die shop	18	13	3	2	104
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	39	12	18	9	652
	Stamping, blanking, and forming of metals	31	16	10	5	440
	Painting, lacquering, and enameling of metals	43	32	9	2	168
	Powder metallurgy	-	-	-	-	-
3535	Conveyors and conveying equipment:					
	Ferrous foundry	4	-	2	2	(D)
	Forging--presses, hammers, or upsetters	4	4	-	-	(D)
	Heat treating of metals	14	14	-	-	(D)
	Automatic screw machine department	9	7	2	-	(D)
	Machine shop	164	70	70	24	1,927
	Tool and die shop	39	25	12	2	203
	Foundry pattern shop	5	3	2	-	20
	Plate or structural fabrication	160	35	71	54	3,717
	Stamping, blanking, and forming of metals	109	44	48	17	1,292
	Painting, lacquering, and enameling of metals	172	140	30	2	518
	Powder metallurgy	1	1	-	-	(D)
3536	Hoists, cranes, and monorails:					
	Ferrous foundry:	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Heat treating of metals	9	7	2	-	31
	Automatic screw machine department	9	7	2	-	30
	Machine shop	71	18	34	19	1,893
	Tool and die shop	21	10	10	1	137
	Foundry pattern shop	4	3	1	-	10
	Plate or structural fabrication	58	14	25	19	1,200
	Stamping, blanking, and forming of metals	17	12	4	1	81
	Painting, lacquering, and enameling of metals	70	58	12	-	221
	Assembly of product	66	12	30	24	1,670
	Powder metallurgy	2	1	1	-	(D)
3537	Industrial trucks and tractors:					
	Ferrous foundry	3	-	1	2	(D)
	Forging--presses, hammers, or upsetters	6	3	1	2	144
	Heat treating of metals	20	12	8	-	122
	Automatic screw machine department	6	1	5	-	67
	Machine shop	78	20	31	27	2,899
	Tool and die shop	32	19	8	5	284
	Foundry pattern shop	4	3	1	-	12
	Plate or structural fabrication	77	9	40	28	2,263
	Stamping, blanking, and forming of metals	63	27	29	7	668
	Painting, lacquering, and enameling of metals	97	75	18	4	505
	Powder metallurgy	-	-	-	-	-
3541	Machine tools, metal cutting:					
	Ferrous foundry	6	1	1	4	644
	Nonferrous foundry (except die casting)	2	2	-	-	(D)

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3541	Machine tools, metal cutting--Con.					
	Nonferrous die casting	1	1	-	-	(D)
	Forging--presses, hammers, or upsetters	2	2	-	-	(D)
	Electroplating and other plating	14	11	2	1	68
	Heat treating of metals	60	41	17	2	296
	Automatic screw machine department	36	20	12	4	265
	Machine shop	199	37	52	110	16,545
	Tool and die shop	67	30	27	10	700
	Foundry pattern shop	20	11	8	1	119
	Plate or structural fabrication	39	20	13	6	403
	Stamping, blanking, and forming of metals	27	15	10	2	225
	Painting, lacquering, and enameling of metals	122	86	31	5	571
	Powder metallurgy	3	1	2	-	17
3542	Machine tools, metal forming:					
	Ferrous foundry	5	2	-	3	190
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	6	3	2	1	45
	Electroplating and other plating	3	3	-	-	(D)
	Heat treating of metals	33	27	4	2	139
	Automatic screw machine department	10	5	5	-	(D)
	Machine shop	113	15	41	57	7,023
	Tool and die shop	46	19	21	6	444
	Foundry pattern shop	9	5	4	-	40
	Plate or structural fabrication	41	16	16	9	711
	Stamping, blanking, and forming of metals	16	12	3	1	(D)
	Painting, lacquering, and enameling of metals	61	52	7	2	213
	Powder metallurgy	2	2	-	-	(D)
3544	Special dies, tools, jigs, and fixtures:					
	Ferrous foundry	2	-	1	1	(D)
	Nonferrous foundry (except die casting)	13	7	3	3	170
	Nonferrous die casting	12	7	3	2	100
	Forging--presses, hammers, or upsetters	7	4	2	1	44
	Electroplating and other plating	19	16	3	-	43
	Heat treating of metals	101	95	5	1	392
	Automatic screw machine department	43	27	13	3	431
	Machine shop	510	124	222	164	11,446
	Tool and die shop	712	131	307	274	18,505
	Foundry pattern shop	32	17	11	4	381
	Plate or structural fabrication	55	31	22	2	370
	Stamping, blanking, and forming of metals	166	88	64	14	1,598
	Painting, lacquering, and enameling of metals	35	30	4	1	100
	Powder metallurgy	9	4	5	-	58
3545	Machine tool accessories:					
	Ferrous foundry	1	1	-	-	(D)
	Nonferrous foundry (except die casting)	2	1	1	-	(D)
	Nonferrous die casting	3	3	-	-	(D)
	Forging--presses, hammers, or upsetters	7	3	3	1	84
	Electroplating and other plating	41	32	9	-	137
	Heat treating of metals	119	69	39	11	925
	Automatic screw machine department	75	37	25	13	873
	Machine shop	273	50	91	132	10,661
	Tool and die shop	100	36	36	28	1,791
	Foundry pattern shop	4	3	1	-	11
	Plate or structural fabrication	21	15	5	1	112
	Stamping, blanking, and forming of metals	36	20	8	8	537
	Painting, lacquering, and enameling of metals	40	37	3	-	84
	Powder metallurgy	31	9	6	16	1,847
3546	Power driven hand tools:					
	Nonferrous die casting	5	1	1	3	(D)
	Forging--presses, hammers, or upsetters	2	1	1	-	(D)
	Electroplating and other plating	13	6	7	-	107
	Heat treating of metals	31	16	10	5	302
	Automatic screw machine department	39	7	21	11	808
	Machine shop	56	6	16	34	5,580
	Tool and die shop	40	14	17	9	646
	Stamping, blanking, and forming of metals	25	13	5	7	552
	Painting, lacquering, and enameling of metals	31	16	9	6	392
	Powder metallury	2	-	2	-	(D)
3547	Rolling mill machinery:					
	Ferrous foundry	2	-	-	2	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	2	-	2	-	(D)
	Electroplating and other plating	1	1	-	-	(D)
	Heat treating of metals	10	8	-	2	97
	Automatic screw machine department	1	1	-	-	(D)
	Machine shop	26	1	3	22	2,506
	Tool and die shop	10	3	7	-	92
	Foundry pattern shop	3	1	2	-	(D)

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3547	Rolling mill machinery--Con.					
	Plate or structural fabrication	16	3	5	8	553
	Stamping, blanking, and forming of metals	3	2	1	-	(D)
	Painting, lacquering, or enameling of metals	19	16	3	-	65
	Powder metallurgy	-	-	-	-	-
3549	Metalworking machinery, n.e.c.:					
	Ferrous foundry	1	-	1	-	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	2	1	1	-	(D)
	Forging--presses, hammers, or upsetters	1	-	1	-	(D)
	Electroplating and other plating	8	6	2	-	28
	Heat treating of metals	9	8	1	-	21
	Automatic screw machine department	25	11	9	5	374
	Machine shop	107	16	45	46	3,028
	Tool and die shop	24	8	10	6	912
	Foundry pattern shop	4	3	1	-	(D)
	Plate or structural fabrication	40	16	18	6	509
	Stamping, blanking, and forming of metals	30	14	12	4	446
	Painting, lacquering, and enameling of metals	70	61	7	2	313
	Powder metallurgy	2	1	1	-	(D)
3551	Food products machinery:					
	Ferrous foundry	9	2	2	5	224
	Nonferrous foundry (except die casting)	5	3	1	1	44
	Heat treating of metals	28	24	3	1	81
	Automatic screw machine department	26	16	7	3	189
	Machine shop	214	55	79	80	5,974
	Tool and die shop	57	41	14	2	268
	Foundry pattern shop	19	15	3	1	187
	Plate or structural fabrication	101	29	37	35	2,029
	Stamping, blanking, and forming of metals	110	52	44	14	955
	Painting, lacquering, and enameling of metals	150	133	13	4	462
3552	Textile machinery:					
	Ferrous foundry	13	3	-	10	918
	Nonferrous foundry (except die casting)	4	3	-	1	31
	Heat treating of metals	37	32	5	-	103
	Automatic screw machine department	27	17	8	2	217
	Machine shop	141	33	58	50	4,686
	Tool and die shop	35	24	8	3	234
	Foundry pattern shop	11	8	3	-	41
	Plate or structural fabrication	51	23	21	7	732
	Stamping, blanking, and forming of metals	50	30	15	5	435
	Painting, lacquering, and enameling of metals	72	64	8	-	178
3553	Woodworking machinery:					
	Ferrous foundry	6	2	3	1	140
	Nonferrous die casting	1	1	-	-	(D)
	Forging--presses, hammers, or upsetters	3	3	-	-	5
	Electroplating and other plating	4	3	1	-	13
	Heat treating of metals	14	14	-	-	27
	Automatic screw machine department	7	3	4	-	49
	Machine shop	89	18	41	30	2,613
	Tool and die shop	15	11	3	1	71
	Foundry pattern shop	6	5	1	-	16
	Plate or structural fabrication	42	16	21	5	403
	Stamping, blanking, and forming of metals	20	13	5	2	159
	Painting, lacquering, and enameling of metals	60	56	2	2	161
3554	Paper industries machinery:					
	Ferrous foundry	5	-	1	4	(D)
	Nonferrous foundry (except die casting)	2	1	1	-	(D)
	Machine shop	103	17	38	48	5,006
	Tool and die shop	18	12	6	-	94
	Foundry pattern shop	13	10	3	-	46
	Plate or structural fabrication	45	19	17	9	938
	Painting, lacquering, and enameling of metals	62	51	11	-	187
3555	Printing trades machinery:					
	Ferrous foundry	2	1	1	-	(D)
	Nonferrous foundry (except die casting)	4	4	-	-	(D)
	Heat treating of metals	8	7	1	-	18
	Automatic screw machine department	11	9	1	1	68
	Machine shop	87	21	30	36	3,788
	Tool and die shop	19	12	6	1	117
	Foundry pattern shop	5	4	1	-	11
	Plate or structural fabrication	20	9	8	3	397
	Stamping, blanking, and forming of metals	17	9	6	2	152
	Painting, lacquering, and enameling of metals	50	37	12	1	198
3559	Special industry machinery, n.e.c.:					
	Ferrous foundry	16	2	5	9	612
	Nonferrous foundry (except die casting)	7	6	-	1	50
	Forging--presses, hammers, or upsetters	6	4	2	-	23

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3559	Special industry machinery, n.e.c.--Con.					
	Electroplating and other plating	16	10	6	-	66
	Galvanizing and other hot-dip coating	3	2	1	-	7
	Heat treating of metals	46	39	7	-	115
	Automatic screw machine department	23	12	10	1	142
	Machine shop	337	88	124	125	12,039
	Tool and die shop	79	45	29	5	523
	Foundry pattern shop	26	18	7	1	107
	Plate or structural fabrication	170	42	73	55	3,918
	Stamping, blanking, and forming of metals	84	42	33	9	828
	Painting, lacquering, and enameling of metals	213	182	27	4	637
3561	Pumps and pumping equipment:					
	Ferrous foundry	18	1	2	15	1,260
	Nonferrous foundry (except die casting)	9	1	6	2	210
	Galvanizing and other hot-dip coating	4	3	1	-	16
	Heat treating of metals	39	22	13	4	340
	Automatic screw machine department	35	18	11	6	972
	Machine shop	208	23	61	124	15,155
	Tool and die shop	74	32	38	4	629
	Foundry pattern shop	30	18	12	-	185
	Plate or structural fabrication	52	23	17	12	767
	Stamping, blanking, and forming of metals	29	19	7	3	(D)
	Painting, lacquering, and enameling of metals	139	113	25	1	409
	Assembly of product	202	47	81	74	7,030
	Powder metallurgy	7	5	-	2	(D)
3562	Ball and roller bearings:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	2	-	2	-	(D)
	Forging--presses, hammers, or upsetters	7	-	6	1	(D)
	Electroplating and other plating	10	4	5	1	81
	Heat treating of metals	69	19	30	20	1,533
	Automatic screw machine department	64	6	16	42	3,469
	Machine shop	64	11	19	34	3,044
	Tool and die shop	46	6	22	18	1,703
	Foundry pattern shop	3	3	-	-	(D)
	Plate or structural fabrication	9	4	5	-	68
	Stamping, blanking, and forming of metals	37	5	14	18	1,302
	Painting, lacquering, and enameling of metals	14	13	-	1	52
	Assembly of product	85	12	17	56	4,753
	Powder metallurgy	3	1	-	2	(D)
3563	Air and gas compressors:					
	Ferrous foundry	6	-	-	6	998
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Galvanizing and other hot-dip coating	2	2	-	-	(D)
	Heat treating of metals	15	7	7	1	98
	Automatic screw machine department	13	7	4	2	138
	Machine shop	71	16	15	40	4,897
	Tool and die shop	29	12	11	6	416
	Foundry pattern shop	7	2	4	1	82
	Plate or structural fabrication	27	11	7	9	576
	Stamping, blanking, and forming of metals	18	5	9	4	299
	Painting, lacquering, and enameling of metals	59	40	16	3	280
	Assembly of product	73	10	21	42	4,404
	Powder metallurgy	1	1	-	-	(D)
3564	Blowers and fans:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	5	-	5	-	54
	Electroplating and other plating	2	1	1	-	(D)
	Automatic screw machine department	3	2	1	-	(D)
	Machine shop	75	29	36	10	1,378
	Tool and die shop	31	20	10	1	184
	Foundry pattern shop	5	3	2	-	(D)
	Plate or structural fabrication	72	7	28	37	3,434
	Stamping, blanking, and forming of metals	84	23	35	26	1,688
	Painting, lacquering, and enameling of metals	102	71	29	2	441
3565	Industrial patterns:					
	Ferrous foundry	5	2	2	1	47
	Nonferrous foundry (except die casting)	17	12	4	1	134
	Nonferrous die casting	3	3	-	-	5
	Forges--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	-	-	-	-	-
	Heat treating of metals	-	-	-	-	-
	Automatic screw machine department	2	-	2	-	(D)
	Machine shop	27	13	11	3	212
	Tool and die shop	6	2	3	1	59
	Foundry pattern shop	107	14	55	38	2,414
	Plate or structural fabrication	4	3	1	-	16
	Stamping, blanking, and forming of metals	3	2	1	-	(D)
	Painting, lacquering, and enameling of metals	-	-	-	-	-
	Powder metallurgy	-	-	-	-	-

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3566	Speed changers, drives, and gears:					
	Ferrous foundry	3	1	-	2	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Electroplating and other plating	6	5	1	-	(D)
	Heat treating of metals	39	21	14	4	380
	Automatic screw machine department	36	18	17	1	263
	Machine shop	124	15	30	79	9,049
	Tool and die shop	43	27	13	3	311
	Foundry pattern shop	16	14	1	1	60
	Plate or structural fabrication	7	1	5	1	253
	Stamping, blanking, and forming of metals	14	6	5	3	198
	Painting, lacquering, and enameling of metals	48	41	7	-	135
	Assembly of product	71	24	25	22	1,470
	Powder metallurgy	-	-	-	-	-
3567	Industrial furnaces and ovens:					
	Machine shop	75	40	27	8	593
	Plate or structural fabrication	72	25	32	15	1,222
	Stamping, blanking, and forming of metals	51	23	23	5	415
	Painting, lacquering, and enameling of metals	67	57	10	-	171
	Powder metallurgy	1	1	-	-	(D)
3568	Power transmission equipment, n.e.c.:					
	Ferrous foundry	4	-	-	4	492
	Nonferrous foundry (except die casting)	20	3	11	6	442
	Forging--presses, hammers, or upsetters	3	2	-	1	(D)
	Electroplating and other plating	14	11	3	-	51
	Heat treating of metals	51	26	18	7	489
	Automatic screw machine department	50	20	23	7	625
	Machine shop	125	11	31	83	8,440
	Tool and die shop	53	25	17	11	812
	Foundry pattern shop	10	7	3	-	40
	Plate or structural fabrication	10	6	2	2	107
	Stamping, blanking, and forming of metals	42	14	10	18	1,257
	Painting, lacquering, and enameling of metals	40	34	6	-	131
	Assembly of product	94	30	37	27	3,088
	Powder metallurgy	7	2	3	2	162
3569	General industrial machinery, n.e.c.:					
	Ferrous foundry	3	-	2	1	57
	Nonferrous foundry (except die casting)	3	2	1	-	19
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Electroplating and other plating	8	7	1	-	19
	Galvanizing and other hot-dip coating	3	3	-	-	3
	Heat treating of metals	18	15	3	-	43
	Automatic screw machine department	18	10	7	1	106
	Machine shop	288	90	118	80	5,207
	Tool and die shop	72	48	20	4	388
	Foundry pattern shop	7	6	1	-	(D)
	Plate or structural fabrication	135	51	52	32	2,365
	Stamping, blanking, and forming of metals	100	59	29	12	844
	Painting, lacquering, and enameling of metals	213	188	23	2	588
3573	Electronic computing equipment:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Forging--presses, hammers, or upsetters	1	-	1	-	(D)
	Electroplating and other plating	45	25	16	4	481
	Heat treating of metals	16	12	4	-	60
	Automatic screw machine department	12	6	4	2	201
	Machine shop	138	51	51	36	2,782
	Tool and die shop	50	31	15	4	491
	Plate or structural fabrication	19	11	4	4	247
	Stamping, blanking, and forming of metals	56	23	22	11	906
	Painting, lacquering, and enameling of metals	48	20	19	9	563
	Plastics molding	24	15	2	7	678
	Assembly of product	250	29	53	168	40,269
	Shipping department, including packing and crating	227	135	73	19	1,719
3574	Calculating and accounting machines:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	1	-	1	-	(D)
	Forging--presses, hammers, or upsetters	2	-	1	1	(D)
	Electroplating and other plating	3	2	-	1	(D)
	Heat treating of metals	1	-	-	1	(D)
	Automatic screw machine department	1	-	-	1	(D)
	Machine shop	14	3	7	4	443
	Tool and die shop	6	1	3	2	175
	Plate or structural fabrication	1	-	-	1	(D)
	Stamping, blanking, and forming of metals	4	2	1	1	(D)
	Painting, lacquering, and enameling of metals	6	4	2	-	34
	Plastic molding	3	1	1	1	(D)
	Assembly of product	16	-	2	14	6,215
	Shipping department, including packing and crating	16	5	9	2	186

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3576	Scales and balances, except laboratory:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Electroplating and other plating	5	4	1	-	(D)
	Heat treating of metals	7	6	1	-	(D)
	Automatic screw machine department	7	3	4	-	(D)
	Machine shop	27	5	13	9	473
	Tool and die shop	14	9	5	-	53
	Plate or structural fabrication	18	5	11	2	(D)
	Stamping, blanking, and forming of metals	18	6	9	3	(D)
	Painting, lacquering, and enameling of metals	31	21	10	-	135
	Plastics molding	2	2	-	-	(D)
	Assembly of product	39	3	14	22	1,691
	Shipping department, including packing and crating	37	23	14	-	178
3579	Office machines, n.e.c. and typewriters:[4]					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	3	1	-	2	(D)
	Electroplating and other plating	15	6	7	2	186
	Heat treating of metals	14	8	5	1	131
	Automatic screw machine department	17	5	6	6	366
	Machine shop	40	13	7	20	1,537
	Tool and die shop	32	9	16	7	572
	Plate or structural fabrication	2	1	-	1	(D)
	Stamping, blanking, and forming of metals	34	11	10	13	1,042
	Painting, lacquering, and enameling of metals	26	7	12	7	393
	Plastics molding	7	2	2	3	(D)
	Assembly of product	54	3	11	40	7,929
	Shipping department, including packing and crating	52	25	21	6	539
3581	Automatic merchandising machines:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous die casting	5	3	2	-	17
	Electroplating and other plating	4	4	-	-	8
	Heat treating of metals	5	3	2	-	21
	Automatic screw machine department	3	3	-	-	(D)
	Machine shop	12	6	3	3	131
	Tool and die shop	15	7	7	1	148
	Plate or structural fabrication	3	1	-	2	(D)
	Stamping, blanking, and forming of metals	21	7	6	8	829
	Painting, lacquering, and enameling of metals	16	7	5	4	239
	Powder metallurgy	-	-	-	-	-
3582	Commercial laundry equipment:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	3	3	-	-	4
	Heat treating of metals	1	1	-	-	(D)
	Automatic screw machine department	2	2	-	-	(D)
	Machine shop	25	13	8	4	212
	Tool and die shop	6	4	2	-	19
	Plate or structural fabrication	12	6	6	-	(D)
	Stamping, blanking, and forming of metals	15	8	5	2	123
	Painting, lacquering, and enameling of metals	25	21	4	-	74
	Powder metallurgy	-	-	-	-	-
3585	Refrigeration and heating equipment:					
	Ferrous foundry	6	1	1	4	184
	Nonferrous foundry (except die casting)	6	2	3	1	185
	Nonferrous die casting	1	1	-	-	(D)
	Galvanizing and other hot-dip coating	6	2	3	1	(D)
	Heat treating of metals	19	11	6	2	215
	Automatic screw machine department	22	12	6	4	290
	Machine shop	145	51	51	43	8,152
	Tool and die shop	126	63	45	18	1,981
	Foundry pattern shop	15	8	5	2	(D)
	Plate or structural fabrication	74	23	31	20	4,663
	Stamping, blanking, and forming of metals	266	64	95	107	9,762
	Painting, lacquering, and enameling of metals	258	142	80	36	2,796
	Assembly of product	314	37	68	209	41,816
	Shipping department, including packing and crating	299	144	107	48	3,362
	Powder metallurgy	-	-	-	-	-
3586	Measuring and dispensing pumps:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	2	-	2	-	(D)
	Automatic screw machine department	6	1	2	3	279
	Machine shop	19	3	5	11	1,006
	Tool and die shop	12	4	4	4	188
	Foundry pattern shop	1	1	-	-	(D)
	Plate or structural fabrication	5	-	2	3	179

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3586	Measuring and dispensing pumps--Con.					
	Stamping, blanking, and forming of metals	13	2	6	5	313
	Painting, lacquering, and enameling of metals	16	7	8	1	140
	Assembly of product	18	2	5	11	1,480
	Powder metallurgy	-	-	-	-	-
3589	Service industry machinery, n.e.c.:					
	Ferrous foundry	4	-	2	2	(D)
	Nonferrous die casting	2	1	1	-	(D)
	Electroplating and other plating	8	7	1	-	23
	Heat treating of metals	3	2	-	1	(D)
	Automatic screw machine department	7	5	2	-	22
	Machine shop	98	41	44	13	1,146
	Tool and die shop	44	32	11	1	196
	Plate or structural fabrication	57	15	23	19	1,144
	Stamping, blanking, and forming of metals	92	34	46	12	1,055
	Painting, lacquering, and enameling of metals	96	81	15	-	262
	Powder metallurgy	2	2	-	-	(D)
3592	Carburetors, pistons, rings, and valves:					
	Ferrous foundry	6	-	2	4	274
	Nonferrous foundry (except die casting)	9	2	1	6	877
	Nonferrous die casting	5	-	-	5	549
	Forging--presses, hammers, or upsetters	8	2	2	4	(D)
	Electroplating and other plating	21	8	7	6	339
	Heat treating of metals	20	11	6	3	163
	Automatic screw machine department	7	1	2	4	318
	Machine shop	45	8	7	30	5,048
	Tool and die shop	35	8	15	12	1,253
	Foundry pattern shop	2	1	1	-	(D)
	Plate or structural fabrication	1	-	-	1	(D)
	Stamping, blanking, and forming of metals	11	5	2	4	233
	Painting, lacquering, and enameling of metals	9	6	3	-	40
	Powder metallurgy	3	3	-	-	8
3599	Machinery, except electrical, n.e.c.:					
	Ferrous foundry	11	4	4	3	198
	Nonferrous foundry (except die casting)	15	5	8	2	136
	Nonferrous die casting	7	4	2	1	60
	Forging--presses, hammers, or upsetters	17	12	5	-	(D)
	Electroplating and other plating	54	43	10	1	201
	Heat treating of metals	109	96	12	1	328
	Automatic screw machine department	241	142	80	19	1,606
	Machine shop[3]	2,133	413	927	793	46,539
	Tool and die shop	294	182	95	17	1,810
	Foundry pattern shop	19	13	6	-	(D)
	Plate or structural fabrication	341	152	151	38	(D)
	Stamping, blanking, and forming of metals	271	148	93	30	2,396
	Painting, lacquering, and enameling of metals	288	257	29	2	777
	Powder metallurgy	11	6	3	2	199
3612	Transformers:					
	Heat treating of metals	35	18	10	7	900
	Machine shop	44	24	13	7	589
	Tool and die shop	26	11	12	3	788
	Plate or structural fabrication	39	15	13	11	1,260
	Stamping, blanking, and forming of metals	63	22	21	20	2,095
	Painting, lacquering, and enameling of metals	81	51	20	10	1,228
3613	Switchgear and switchboard apparatus:					
	Ferrous foundry	3	1	1	1	(D)
	Nonferrous foundry (except die casting)	4	-	2	2	119
	Electroplating and other plating	83	45	29	9	661
	Heat treating of metals	37	30	7	-	117
	Automatic screw machine department	31	16	11	4	292
	Machine shop	95	32	36	27	2,167
	Tool and die shop	96	43	44	9	876
	Foundry pattern shop	13	11	2	-	34
	Plate or structural fabrication	54	13	29	12	1,006
	Stamping, blanking, and forming of metals	156	39	69	48	3,671
	Painting, lacquering, and enameling of metals	146	97	42	7	897
	Plastics molding	40	12	15	13	790
3621	Motors and generators:					
	Ferrous foundry	2	-	-	2	(D)
	Nonferrous foundry (except die casting)	8	4	2	2	105
	Nonferrous die casting	77	18	41	18	1,331
	Electroplating and other plating	26	20	5	1	114
	Galvanizing and other hot-dip coating	13	9	3	1	136
	Heat treating of metals	52	37	14	1	245
	Automatic screw machine department	58	24	26	8	538
	Machine shop	159	39	51	69	7,542
	Tool and die shop	119	50	54	15	1,611
	Foundry pattern shop	4	3	1	-	(D)
	Plate or structural fabrication	24	6	6	12	1,041

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977** – Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3621	Motors and generators--Con.					
	Stamping, blanking, and forming of metals	134	41	57	36	2,871
	Painting, lacquering, and enameling of metals	149	88	54	7	993
3622	Industrial controls:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	4	1	2	1	119
	Electroplating and other plating	45	24	17	4	371
	Heat treating of metals	16	12	2	2	109
	Automatic screw machine department	19	10	7	2	180
	Machine shop	110	42	44	24	1,833
	Tool and die shop	47	20	15	12	725
	Foundry pattern shop	3	2	-	1	(D)
	Plate or structural fabrication	41	15	20	6	706
	Stamping, blanking, and forming of metals	75	27	24	24	1,506
	Painting, lacquering, and enameling of metals	104	68	33	3	535
	Plastics molding	22	6	8	8	615
3623	Welding apparatus, electric:					
	Machine shop	58	10	24	24	1,871
	Tool and die shop	19	9	6	4	272
	Plate or structural fabrication	27	13	9	5	393
	Stamping, blanking, and forming of metals	21	12	5	4	379
	Painting, lacquering, and enameling of metals	32	22	8	2	167
3624	Carbon and graphite products:					
	Machine shop	25	5	8	12	819
	Tool and die shop	10	8	2	-	28
	Stamping, blanking, and forming of metals	9	7	1	1	51
	Painting, lacquering, and enameling of metals	3	3	-	-	(D)
3629	Electrical industrial apparatus, n.e.c.:					
	Machine shop	36	17	14	5	346
	Tool and die shop	16	12	3	1	126
	Stamping, blanking, and forming of metals	25	11	9	5	339
	Painting, lacquering, and enameling of metals	28	18	9	1	(D)
3631	Household cooking equipment:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Nonferrous die casting	2	-	2	-	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Galvanizing and other hot-dip coating	2	1	1	-	(D)
	Heat treating of metals	4	3	1	-	15
	Automatic screw machine department	3	1	1	1	(D)
	Machine shop	15	3	10	2	151
	Tool and die shop	29	9	15	5	431
	Foundry pattern shop	4	4	-	-	8
	Plate or structural fabrication	3	-	2	1	44
	Stamping, blanking, and forming of metals	40	2	8	30	2,822
	Painting, lacquering, and enameling of metals	38	5	12	21	1,884
	Plastics molding	2	2	-	-	(D)
	Powder metallurgy	-	-	-	-	-
3632	Household refrigerators and freezers:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	-	-	-	-	-
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	2	1	1	-	(D)
	Automatic screw machine department	3	-	2	1	36
	Machine shop	10	3	3	4	668
	Tool and die shop	13	4	2	7	498
	Foundry pattern shop	1	1	-	-	(D)
	Plate or structural fabrication	-	-	-	-	-
	Stamping, blanking, and forming of metals	20	1	4	15	3,254
	Painting, lacquering, and enameling of metals	19	1	4	14	2,082
	Assembly of product	22	-	2	20	13,798
	Shipping department, including packing and crating	22	2	12	8	1,237
	Powder metallurgy	-	-	-	-	-
3633	Household laundry equipment:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	4	1	1	2	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Galvanizing and other hot-dip coating	3	2	1	-	(D)
	Heat treating of metals	7	2	5	-	37
	Automatic screw machine department	9	1	5	3	196
	Machine shop	13	2	1	10	959
	Tool and die shop	12	2	2	8	347
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	1	-	-	1	(D)
	Stamping, blanking, and forming of metals	15	1	2	12	1,628

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3633	Household laundry equipment--Con.					
	Painting, lacquering, and enameling of metals	16	2	2	12	2,136
	Plastics molding	11	3	3	5	(D)
	Powder metallurgy	1	-	-	1	(D)
3634	Electric housewares and fans:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	2	-	2	-	(D)
	Nonferrous die casting	16	5	5	6	319
	Forging--presses, hammers, or upsetters	2	-	2	-	(D)
	Galvanizing and other hot-dip coating	5	1	4	-	(D)
	Heat treating of metals	22	15	7	-	97
	Automatic screw machine department	9	2	6	1	94
	Machine shop	42	14	21	7	654
	Tool and die shop	47	19	24	4	725
	Foundry pattern shop	1	-	1	-	(D)
	Plate or structural fabrication	7	2	4	1	75
	Stamping, blanking, and forming of metals	75	12	31	32	2,058
	Painting, lacquering, and enameling of metals	63	18	27	18	1,237
	Plastics molding	34	4	9	21	1,423
	Powder metallurgy	1	-	-	1	(D)
3635	Household vacuum cleaners:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	1	-	-	1	(D)
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	2	1	1	-	(D)
	Automatic screw machine department	4	3	-	1	35
	Machine shop	7	4	1	2	101
	Tool and die shop	5	2	1	2	(D)
	Foundry pattern shop	1	1	-	-	(D)
	Plate or structural fabrication	1	1	-	-	(D)
	Stamping, blanking, and forming of metals	7	3	1	3	(D)
	Painting, lacquering, and enameling of metals	7	3	3	1	(D)
	Plastics molding	5	2	-	3	(D)
	Powder metallurgy	-	-	-	-	-
3636	Sewing machines:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	1	-	-	1	(D)
	Forging--presses, hammers, or upsetters	1	-	1	-	(D)
	Galvanizing and other hot-dip coating	2	1	-	1	(D)
	Heat treating of metals	6	5	1	-	25
	Automatic screw machine department	5	3	-	2	(D)
	Machine shop	11	1	4	6	420
	Tool and die shop	7	1	5	1	(D)
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	1	-	1	-	(D)
	Stamping, blanking, and forming of metals	4	1	1	2	(D)
	Painting, lacquering, and enameling of metals	9	7	-	2	(D)
	Plastics molding	1	-	-	1	(D)
	Powder metallurgy	-	-	-	-	-
3639	Household appliances, n.e.c.:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	2	1	-	1	(D)
	Forging--presses, hammers or upsetters	-	-	-	-	-
	Galvanizing and other hot-dip coating	3	2	1	-	(D)
	Heat treating of metals	3	2	1	-	10
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	12	6	2	4	194
	Tool and die shop	8	2	4	2	230
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	2	-	2	-	(D)
	Stamping, blanking, and forming of metals	20	2	6	12	993
	Painting, lacquering, and enameling of metals	19	5	3	11	625
	Plastics molding	3	1	-	2	(D)
	Powder metallurgy	-	-	-	-	-
3641	Electric lamps:					
	Machine shop	36	4	18	14	815
3643	Current-carrying wiring devices:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	4	1	1	2	183
	Nonferrous die casting	3	1	2	-	13
	Forging--presses, hammers, or upsetters	4	1	3	-	39
	Electroplating and other plating	42	22	16	4	302
	Galvanizing and other hot-dip coating	6	5	1	-	18
	Heat treating of metals	18	16	1	1	61
	Automatic screw machine department	33	18	12	3	319

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3643	Current-carrying wiring devices--Con.					
	Machine shop	72	24	29	19	1,372
	Tool and die shop	88	41	34	13	984
	Foundry pattern shop	4	3	1	-	14
	Plate or structural fabrication	4	2	1	1	39
	Stamping, blanking, and forming of metals	99	40	35	24	1,615
	Painting, lacquering, and enameling of metals	27	20	7	-	94
	Plastics molding	49	13	16	20	1,308
3644	Noncurrent-carrying wiring devices:					
	Ferrous foundry	6	-	-	6	783
	Nonferrous foundry (except die casting)	10	-	3	7	552
	Nonferrous die casting	12	2	6	4	287
	Forging--presses, hammers, or upsetters	8	2	1	5	389
	Electroplating and other plating	20	9	7	4	261
	Galvanizing and other hot-dip coating	17	5	7	5	303
	Heat treating of metals	10	9	1	-	22
	Automatic screw machine department	10	7	2	1	161
	Machine shop	53	11	28	14	1,344
	Tool and die shop	36	14	17	5	419
	Foundry pattern shop	12	6	5	1	75
	Plate or structural fabrication	14	6	3	5	424
	Stamping, blanking, and forming of metals	61	16	26	19	1,649
	Painting, lacquering, and enameling of metals	38	23	10	5	330
	Plastics molding	15	5	7	3	254
3645	Residential lighting fixtures:					
	Nonferrous foundry (except die casting)	6	6	-	-	(D)
	Nonferrous die casting	4	3	-	1	(D)
	Electroplating and other plating	33	18	14	1	223
	Heat treating of metals	2	2	-	-	(D)
	Automatic screw machine department	3	1	2	-	(D)
	Machine shop	37	22	13	2	207
	Tool and die shop	29	22	6	1	117
	Plate or structural fabrication	2	-	1	1	(D)
	Stamping, blanking, and forming of metals	50	23	19	8	729
	Painting, lacquering, and enameling of metals	96	55	34	7	720
3646	Commercial lighting fixtures:					
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Nonferrous die casting	2	1	-	1	(D)
	Electroplating and other plating	7	4	1	2	89
	Heat treating of metals	3	2	1	-	10
	Automatic screw machine department	3	2	1	-	(D)
	Machine shop	36	16	16	4	274
	Tool and die shop	30	17	12	1	150
	Plate or structural fabrication	10	7	3	-	53
	Stamping, blanking, and forming of metals	74	17	36	21	1,667
	Painting, lacquering, and enameling of metals	70	35	26	9	824
3647	Vehicular lighting equipment:					
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Nonferrous die casting	4	-	3	1	(D)
	Electroplating and other plating	5	1	2	2	(D)
	Heat treating of metals	2	1	1	-	(D)
	Automatic screw machine department	5	1	4	-	39
	Machine shop	14	4	7	3	422
	Tool and die shop	14	11	1	2	205
	Plate or structural fabrication	2	-	2	-	(D)
	Stamping, blanking, and forming of metals	23	1	13	9	598
	Painting, lacquering, and enameling of metals	18	7	9	2	176
3648	Lighting equipment, n.e.c.:					
	Nonferrous foundry (except die casting)	5	2	3	-	47
	Nonferrous die casting	8	3	3	2	146
	Electroplating and other plating	10	4	3	3	(D)
	Heat treating of metals	3	2	1	-	15
	Automatic screw machine department	7	5	2	-	35
	Machine shop	46	24	18	4	390
	Tool and die shop	27	21	4	2	138
	Plate or structural fabrication	22	9	10	3	263
	Stamping, blanking, and forming of metals	57	31	18	8	630
	Painting, lacquering, and enameling of metals	53	41	10	2	232
3651	Radio and TV receiving sets:					
	Nonferrous die casting	3	1	1	1	(D)
	Electroplating and other plating	9	4	4	1	83
	Automatic screw machine department	6	3	2	1	96
	Machine shop	43	22	13	8	457
	Tool and die shop	29	17	10	2	439
	Stamping, blanking, and forming of metals	32	15	13	4	448
	Painting, lacquering, and enameling of metals	37	25	11	1	215
	Assembly of product	104	13	18	73	25,632

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3661	Telephone and telegraph apparatus:					
	Nonferrous die casting	2	-	-	2	(D)
	Electroplating and other plating	26	6	10	10	630
	Galvanizing and other hot-dip coating	2	2	-	-	(D)
	Heat treating of metals	19	9	8	2	151
	Automatic screw machine department	17	5	5	7	353
	Machine shop	56	18	23	15	2,385
	Tool and die shop	33	11	11	11	(D)
	Plate or structural fabrication	14	7	5	2	214
	Stamping, blanking, and forming of metals	38	9	9	20	1,786
	Painting, lacquering, and enameling of metals	40	27	9	4	320
	Plastics molding	23	6	3	14	1,842
3662	Radio and TV communication equipment:					
	Nonferrous die casting	9	2	1	6	448
	Electroplating and other plating	123	63	42	18	1,537
	Galvanizing and other hot-dip coating	18	13	4	1	(D)
	Heat treating of metals	48	39	8	1	308
	Automatic screw machine department	48	29	15	4	478
	Machine shop	409	155	168	86	7,992
	Tool and die shop	117	63	39	15	(D)
	Plate or structural fabrication	82	32	37	13	1,010
	Stamping, blanking, and forming of metals	205	104	76	25	2,225
	Painting, lacquering, and enameling of metals	245	192	40	13	1,386
	Plastics molding	77	45	23	9	813
	Assembly of product	457	70	128	259	47,221
	Powder metallurgy	4	2	1	1	(D)
3671	Electron tubes, all types:					
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	18	5	12	1	184
	Galvanizing and other hot-dip coating	2	1	-	1	(D)
	Heat treating of metals	18	8	9	1	141
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	39	7	10	22	1,007
	Tool and die shop	15	5	5	5	283
	Plate or structural fabrication	-	-	-	-	-
	Stamping, blanking, and forming of metals	22	9	8	5	478
	Painting, lacquering, and enameling of metals	18	14	2	2	114
	Plastics molding	2	1	1	-	(D)
	Assembly of product	35	1	2	32	12,313
	Powder metallurgy	-	-	-	-	-
3674	Semiconductors and related devices:					
	Nonferrous die casting	1	1	-	-	(D)
	Electroplating and other plating	40	18	15	7	649
	Galvanizing and other hot-dip coating	6	3	2	1	(D)
	Heat treating of metals	17	10	4	3	383
	Automatic screw department	5	-	4	1	(D)
	Machine shop	53	22	25	6	571
	Tool and die shop	24	11	9	4	381
	Plate or structural fabrication	5	2	2	1	64
	Stamping, blanking, and forming of metals	19	10	5	4	572
	Painting, lacquering, and enameling of metals	12	11	1	-	33
	Plastics molding	27	13	10	4	300
	Assembly of product	77	8	11	58	22,123
	Powder metallurgy	4	1	2	1	(D)
3675	Electronic capacitors:					
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	18	14	4	-	69
	Galvanizing and other hot-dip coating	5	4	1	-	15
	Heat treating of metals	3	2	-	1	(D)
	Automatic screw machine department	4	3	1	-	15
	Machine shop	48	21	26	1	351
	Tool and die shop	12	7	5	-	55
	Plate or structural fabrication	4	4	-	-	6
	Stamping, blanking, and forming of metals	11	9	2	-	33
	Painting, lacquering, and enameling of metals	11	10	1	-	23
	Plastics molding	12	7	2	3	(D)
	Assembly of product	57	2	6	49	13,734
	Powder metallurgy	7	3	4	-	37
3676	Electronic resistors:					
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	13	10	3	-	55
	Galvanizing and other hot-dip coating	3	1	1	1	(D)
	Heat treating of metals	1	1	-	-	(D)
	Automatic screw machine department	9	4	4	1	74
	Machine shop	33	12	16	5	480
	Tool and die shop	9	4	2	3	101
	Plate or structural fabrication	-	-	-	-	-
	Stamping, blanking, and forming of metals	14	6	7	1	151
	Painting, lacquering, and enameling of metals	4	4	-	-	6
	Plastics molding	19	8	8	3	156

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977** - Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3676	Electronic resistors--Con.					
	Assembly of product	38	5	5	28	4,451
	Powder metallurgy	2	1	-	1	(D)
3677	Electronic coils and transformers:					
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	4	4	-	-	5
	Galvanizing and other hot-dip coating	3	1	2	-	(D)
	Heat treating of metals	2	2	-	-	(D)
	Automatic screw machine department	5	3	2	-	17
	Machine shop	54	44	8	2	187
	Tool and die shop	22	20	2	-	47
	Plate or structural fabrication	4	4	-	-	9
	Stamping, blanking, and forming of metals	26	21	5	-	80
	Painting, lacquering, and enameling of metals	30	29	1	-	62
	Plastics molding	23	18	5	-	83
	Assembly of product	80	8	19	53	6,344
	Powder metallurgy	2	1	1	-	(D)
3678	Electronic connectors:					
	Nonferrous die casting	3	-	2	1	(D)
	Electroplating and other plating	37	14	14	9	563
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	31	24	7	-	(D)
	Automatic screw machine department	24	3	10	11	1,006
	Machine shop	50	14	24	12	1,208
	Tool and die shop	44	17	16	11	1,028
	Plate or structural fabrication	4	1	3	-	33
	Stamping, blanking, and forming of metals	42	20	10	12	651
	Painting, lacquering, and enameling of metals	9	7	2	-	34
	Plastics molding	36	4	18	14	1,308
	Assembly of product	61	4	12	45	5,446
	Powder metallurgy	-	-	-	-	-
3679	Electronic components, n.e.c.:					
	Nonferrous die casting	7	6	1	-	22
	Electroplating and other plating	206	88	90	28	2,196
	Galvanizing and other hot-dip coating	16	15	1	-	29
	Heat treating of metals	42	35	6	1	163
	Automatic screw machine department	35	17	17	1	327
	Machine shop	262	140	100	22	2,604
	Tool and die shop	122	81	38	3	673
	Plate or sturctural fabrication	20	12	6	2	141
	Stamping, blanking, and forming of metals	135	78	44	13	1,150
	Painting, lacquering, and enameling of metals	92	75	15	2	320
	Plastics molding	65	33	25	7	1,000
	Assembly of product	292	57	70	165	18,485
	Powder metallurgy	9	5	2	2	(D)
3691	Storage batteries:					
	Machine shop	27	7	15	5	324
	Tool and die shop	4	2	2	-	15
	Stamping, blanking, and forming of metals	6	1	5	-	68
3692	Primary batteries, dry and wet:					
	Machine shop	20	4	9	7	374
	Tool and die shop	6	3	3	-	28
	Stamping, blanking, and forming of metals	16	8	7	1	119
3693	X-ray apparatus and tubes:					
	Machines shop	45	23	17	5	550
	Tool and die shop	17	10	5	2	135
	Plate or structural fabrication	11	8	3	-	49
	Stamping, blanking, and forming of metals	18	5	8	5	265
	Painting, lacquering, and enameling of metals	28	18	8	2	244
3694	Engine electrical equipment:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous die casting	8	1	2	5	479
	Electroplating and other plating	22	9	10	3	259
	Heat treating of metals	13	5	5	3	321
	Automatic screw machine department	32	9	12	11	763
	Machine shop	45	8	26	11	1,028
	Tool and die shop	44	13	21	10	1,642
	Stamping, blanking, and forming of metals	45	13	13	19	1,665
	Painting, lacquering, and enameling of metals	38	32	5	1	162
3699	Electrical equipment and supplies, n.e.c.:					
	Machine shop	44	22	20	2	534
	Stamping, blanking, and forming of metals	32	18	9	5	353
	Painting, lacquering, and enameling of metals	19	17	2	-	50

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3711	Motor vehicles and car bodies:					
	Ferrous foundry	3	-	-	3	(D)
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	1	-	-	1	(D)
	Forging--presses, hammers, or upsetters	5	-	-	5	477
	Electroplating and other plating	7	2	1	4	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	9	1	3	5	460
	Automatic screw machine department	5	1	4	-	55
	Machine shop	43	8	8	27	9,378
	Tool and die shop	37	4	6	27	3,882
	Foundry pattern shop	5	2	1	2	(D)
	Plate or structural fabrication	16	1	4	11	906
	Stamping, blanking, and forming of metals	27	5	2	20	7,201
	Painting, lacquering, and enameling of metals	63	5	6	52	15,196
	Plastics molding	8	2	1	5	(D)
	Powder metallurgy	1	1	-	-	(D)
3713	Truck and bus bodies:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	3	2	1	-	(D)
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	3	1	1	1	(D)
	Electroplating and other plating	1	1	-	-	(D)
	Galvanizing and other hot-dip coating	1	1	-	-	(D)
	Heat treating of metals	2	2	-	-	(D)
	Automatic screw machine department	6	5	1	-	(D)
	Machine shop	54	29	18	7	486
	Tool and die shop	27	14	12	1	157
	Foundry pattern shop	4	2	2	-	(D)
	Plate or structural fabrication	81	28	35	18	1,499
	Stamping, blanking, and forming of metals	93	49	31	13	1,151
	Painting, lacquering, and enameling of metals	167	109	47	11	1,097
	Plastics molding	10	7	1	2	(D)
	Powder metallurgy	-	-	-	-	-
3714	Motor vehicle parts and accessories:					
	Ferrous foundry	17	1	3	13	(D)
	Nonferrous foundry (except die casting)	7	3	3	1	(D)
	Nonferrous die casting	22	3	6	13	(D)
	Forging-presses, hammers, or upsetters	43	13	11	19	3,324
	Electroplating and other plating	99	38	37	24	(D)
	Galvanizing and other hot-dip coating	24	15	7	2	(D)
	Heat treating of metals	165	68	53	44	3,867
	Automatic screw machine department	136	35	56	45	3,801
	Machine shop	376	90	99	187	37,375
	Tool and die shop	290	92	120	78	10,830
	Foundry pattern shop	20	10	8	2	231
	Plate or structural fabrication	57	20	16	21	2,556
	Stamping, blanking, and forming of metals	351	78	97	176	31,944
	Painting, lacquering, and enameling of metals	302	198	73	31	2,690
	Plastics molding	39	11	13	15	1,559
	Powder metallurgy	16	4	3	9	(D)
3715	Truck trailers:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	3	1	2	-	(D)
	Electroplating and other plating	-	-	-	-	-
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	4	3	1	-	(D)
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	49	24	20	5	901
	Tool and die shop	17	13	3	1	78
	Foundry pattern shop	2	2	-	-	(D)
	Plate or structural fabrication	71	12	24	35	2,933
	Stamping, blanking, and forming of metals	63	20	32	11	1,140
	Painting, lacquering, and enameling of metals	101	61	31	9	719
	Plastics molding	-	-	-	-	-
	Powder metallurgy	-	-	-	-	-
3716	Motor homes:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Nonferrous die casting	-	-	-	-	-
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	-	-	-	-	-
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	-	-	-	-	-
	Automatic screw machine department	-	-	-	-	-
	Machine shop	-	-	-	-	-
	Tool and die shop	-	-	-	-	-
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	18	4	14	-	145

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3716	Motor homes--Con.					
	Stamping, blanking, and forming of metals	6	4	2	-	18
	Painting, lacquering, and enameling of metals	35	27	8	-	107
	Plastics molding	3	-	1	2	120
	Powder metallurgy	-	-	-	-	-
3721	Aircraft:					
	Ferrous foundry	2	-	1	1	(D)
	Nonferrous foundry (except die casting)	9	2	4	3	153
	Forging--presses, hammers, or upsetters	12	2	3	7	483
	Electroplating and other plating	24	8	9	7	620
	Galvanizing and other hot-dip coating	7	3	3	1	85
	Heat treating of metals	32	11	11	10	751
	Automatic screw machine department	5	2	2	1	(D)
	Machine shop	48	8	10	30	8,761
	Tool and die shop	38	4	10	24	5,740
	Foundry pattern shop	16	5	7	4	469
	Plate or structural fabrication	22	3	5	14	2,733
	Stamping, blanking, and forming of metals	37	4	9	24	4,938
	Painting, lacquering, and enameling of metals	40	6	13	21	1,873
	Plastics molding	31	8	10	13	2,073
	Powder metallurgy	1	1	-	-	(D)
3724	Aircraft engines and engine parts:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	2	1	-	1	(D)
	Forging--presses, hammers, or upsetters	9	2	4	3	(D)
	Electroplating and other plating	31	12	12	7	427
	Galvanizing and other hot-dip coating	7	5	2	-	(D)
	Heat treating of metals	60	37	14	9	664
	Automatic screw machine department	18	9	5	4	(D)
	Machine shop	120	16	37	67	17,869
	Tool and die shop	67	20	27	20	2,690
	Foundry pattern shop	7	4	3	-	36
	Plate or sturctural fabrication	18	5	4	9	1,643
	Stamping, blanking, and forming of metals	49	18	19	12	844
	Painting, lacquering, and enameling of metals	39	28	8	3	301
	Plastics molding	4	1	1	2	(D)
	Powder metallurgy	5	2	2	1	54
3728	Aircraft equipment, n.e.c.:					
	Ferrous foundry	2	2	-	-	(D)
	Nonferrous foundry (except die casting)	3	1	2	-	(D)
	Forging--presses, hammers, or upsetters	10	5	3	2	(D)
	Electroplating and other plating	41	26	10	5	327
	Galvanizing and other hot-dip coating	11	9	2	-	43
	Heat treating of metals	55	34	17	4	402
	Automatic screw machine department	37	23	10	4	330
	Machine shop	209	39	61	109	13,586
	Tool and die shop	87	37	34	16	1,497
	Foundry pattern shop	6	4	1	1	(D)
	Plate or structural fabrication	30	15	4	11	1,136
	Stamping, blanking, and forming of metals	82	42	28	12	1,470
	Painting, lacquering, and enameling of metals	94	69	19	6	459
	Plastics molding	23	10	8	5	(D)
	Powder metallurgy	6	3	1	2	(D)
3731	Ship building and repairing:					
	Ferrous foundry	1	-	-	1	(D)
	Nonferrous foundry (except die casting)	4	2	-	2	(D)
	Forging--presses, hammers, or upsetters	16	9	6	1	120
	Heat treating of metals	22	11	8	3	257
	Machine shop	175	61	67	47	4,773
	Tool and die shop	21	9	7	5	529
	Foundry pattern shop	15	5	6	4	237
	Plate or structural fabrication	157	14	45	101	31,761
	Stamping, blanking, and forming of metals	28	12	9	7	952
	Painting, lacquering, and enameling of metals	137	39	62	36	7,072
	Plastics molding	7	2	2	3	(D)
3732	Boat building and repairing:					
	Ferrous foundry	2	2	-	-	(D)
	Nonferrous foundry (except die casting)	3	3	-	-	6
	Forging--presses, hammers, or upsetters	2	1	1	-	(D)
	Heat treating of metals	9	8	1	-	19
	Machine shop	77	51	24	2	577
	Tool and die shop	22	13	7	2	145
	Foundry pattern shop	20	13	5	2	160
	Plate or structural fabrication	57	19	26	12	857
	Stamping, blanking, and forming of metals	36	21	11	4	312
	Painting, lacquering, and enameling of metals	80	54	26	-	344
	Plastics molding	98	33	26	39	(D)

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
		Number	Number of production workers[2]			
			1 to 4	5 to 19	20 or more	
3743	Railroad equipment:					
	Ferrous foundry	3	-	-	3	1,266
	Nonferrous foundry (except die casting)	2	-	1	1	(D)
	Forging--presses, hammers, or upsetters	15	4	2	9	486
	Automatic screw machine department	5	1	1	3	187
	Machine shop	54	15	20	19	6,249
	Tool and die shop	28	10	8	10	814
	Plate or structural fabrication	58	7	17	34	6,667
	Stamping, blanking, and forming of metals	43	8	9	26	2,046
	Painting, lacquering, and enameling of metals	79	36	27	16	1,482
3751	Motorcycles, bicycles, and parts:					
	Electroplating and other plating	16	4	7	5	377
	Automatic screw machine department	5	4	-	1	(D)
	Machine shop	24	11	8	5	443
	Tool and die shop	21	12	6	3	244
	Stamping, blanking, and forming of metals	35	13	9	13	1,459
	Painting, lacquering, and enameling of metals	19	11	1	7	446
	Powder metallurgy	-	-	-	-	-
3761	Guided missiles and space vehicles:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	12	5	6	1	101
	Galvanizing and other hot-dip coating	2	2	-	-	(D)
	Heat treating of metals	13	12	1	-	29
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	27	1	9	17	1,450
	Tool and die shop	17	2	5	10	800
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	12	1	7	4	573
	Stamping, blanking, and forming of metals	17	6	8	3	216
	Painting, lacquering, and enameling of metals	22	9	13	-	147
	Plastics molding	11	4	5	2	117
	Powder metallurgy	2	1	1	-	(D)
3764	Space propulsion units and parts:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	-	-	-	-	-
	Electroplating and other plating	2	-	1	1	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	6	4	2	-	34
	Automatic screw machine department	1	1	-	-	(D)
	Machine shop	11	-	2	9	884
	Tool and ide shop	5	1	2	2	74
	Foundry pattern shop	1	-	1	-	(D)
	Plate or structural fabrication	4	1	1	2	(D)
	Stamping, blanking, and forming of metals	6	2	2	2	90
	Painting, lacquering, and enameling of metals	12	9	3	-	35
	Plastics molding	7	4	2	1	(D)
	Powder metallurgy	-	-	-	-	-
3769	Space vehicle equipment, n.e.c.:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	-	-	-	-	-
	Forging--presses, hammers, or upsetters	1	1	-	-	(D)
	Electroplating and other plating	6	5	1	-	(D)
	Galvanizing and other hot-dip coating	-	-	-	-	-
	Heat treating of metals	8	8	-	-	14
	Automatic screw machine department	2	1	1	-	(D)
	Machine shop	16	3	3	10	687
	Tool and die shop	7	3	3	1	165
	Foundry pattern shop	-	-	-	-	-
	Plate or structural fabrication	2	1	-	1	(D)
	Stamping, blanking, and forming of metals	9	5	4	-	47
	Painting, lacquering, and enameling of metals	6	6	-	-	12
	Plastics molding	3	1	2	-	(D)
	Powder metallurgy	-	-	-	-	-
3792	Travel trailers and campers:					
	Plate or sturctural fabrication	36	6	25	5	(D)
	Stamping, blanking, and forming of metals	33	10	16	7	409
	Painting, lacquering, and enameling of metals	71	61	8	2	206
3795	Tanks and tank components:					
	Ferrous foundry	2	1	-	1	(D)
	Forging--presses, hammers, or upsetters	1	-	-	1	(D)
	Electroplating and other plating	1	-	1	-	(D)
	Galvanizing and other hot-dip coating	1	-	-	1	(D)
	Heat treating of metals	8	2	2	4	143
	Automatic screw machine department	2	-	2	-	(D)
	Machine shop	16	2	5	9	1,365
	Tool and die shop	8	2	3	3	149

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
			Number of production workers[2]			
		Number	1 to 4	5 to 19	20 or more	
3795	Tanks and tank components--Con.					
	Plate or structural fabrication	6	1	1	4	(D)
	Stamping, blanking, and forming of metals	3	-	2	1	(D)
	Painting, lacquering, and enameling of metals	6	2	2	2	67
	Powder metallurgy	-	-	-	-	-
3799	Transportation equipment, n.e.c.:					
	Electroplating and other plating	6	4	1	1	(D)
	Automatic screw machine department	5	2	2	1	40
	Machine shop	37	18	15	4	334
	Tool and die shop	22	17	5	-	89
	Stamping, blanking, and forming of metals	51	19	24	8	(D)
	Painting, lacquering, and enameling of metals	62	40	19	3	327
	Powder metallurgy	-	-	-	-	-
3811	Engineering and scientific instruments:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	1	1	-	-	(D)
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	15	12	2	1	99
	Heat treating of metals	8	7	1	-	24
	Automatic screw machine department	14	10	4	-	56
	Machine shop	139	53	61	25	1,901
	Tool and die shop	36	22	12	2	273
	Stamping, blanking, and forming of metals	55	31	14	10	609
	Painting, lacquering, and enameling of metals	77	59	14	4	366
	Plastics molding	16	14	2	-	36
3822	Environmental controls:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	1	-	1	-	(D)
	Nonferrous die casting	6	1	-	5	239
	Electroplating and other plating	19	7	9	3	202
	Heat treating of metals	18	12	4	2	200
	Automatic screw machine department	25	8	9	8	353
	Machine shop	44	19	13	12	1,058
	Tool and die shop	35	11	15	9	813
	Stamping, blanking, and forming of metals	37	12	12	13	1,200
	Painting, lacquering, and enameling of metals	19	13	3	3	174
	Plastics molding	14	4	6	4	522
3823	Process control instruments:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	1	-	1	-	(D)
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	18	14	4	-	70
	Heat treating of metals	18	13	4	1	209
	Automatic screw machine department	20	10	8	2	293
	Machine shop	106	39	39	28	2,525
	Tool and die shop	31	15	13	3	391
	Stamping, blanking, and forming of metals	35	19	11	5	443
	Painting, lacquering, and enameling of metals	64	55	6	3	391
	Plastics molding	10	5	4	1	92
3824	Fluid meters and counting devices:					
	Ferrous foundry	-	-	-	-	-
	Nonferrous foundry (except die casting)	2	-	-	2	(D)
	Nonferrous die casting	7	4	1	2	93
	Electroplating and other plating	7	2	5	-	46
	Heat treating of metals	5	4	1	-	27
	Automatic screw machine department	17	6	9	2	208
	Machine shop	45	12	16	17	1,707
	Tool and die shop	19	7	8	4	207
	Stamping, blanking, and forming of metals	26	12	11	3	334
	Painting, lacquering, and enameling of metals	26	18	8	-	106
	Plastics molding	9	-	4	5	343
3825	Instruments to measure electricity:					
	Ferrous foundry	2	1	-	1	(D)
	Nonferrous foundry (except die casting)	1	-	-	1	(D)
	Nonferrous die casting	5	-	4	1	71
	Electroplating and other plating	30	19	6	5	331
	Heat treating of metals	21	14	7	-	100
	Automatic screw machine department	28	18	6	4	279
	Machine shop	131	55	55	21	1,610
	Tool and die shop	50	31	14	5	435
	Stamping, blanking, and forming of metals	71	44	14	13	928
	Painting, lacquering, and enameling of metals	76	59	14	3	375
	Plastics molding	27	12	10	5	594
3829	Measuring and controlling devices, n.e.c.:					
	Ferrous foundry	1	1	-	-	(D)
	Nonferrous foundry (except die casting)	3	3	-	-	7
	Nonferrous die casting	-	-	-	-	-
	Electroplating and other plating	17	12	4	1	74

See footnotes at end of table.

Table 2. **Selected Metalworking Operations by Industry and Operation: 1977**—Con.

SIC code	Industry and operation	Establishments[1]				Production workers in specified operation[1] (number)
			Number of production workers[2]			
		Number	1 to 4	5 to 19	20 or more	
3829	Measuring and controlling devices, n.e.c.--Con.					
	Heat treating of metals	12	11	1	-	23
	Automatic screw machine department	15	8	7	-	96
	Machine shop	101	38	41	22	1,349
	Tool and die shop	23	15	7	1	138
	Stamping, blanking, and forming of metals	36	27	8	1	170
	Painting, lacquering, and enameling of metals	60	51	9	-	174
	Plastics molding	7	6	1	-	27
3873	Watches, clocks, and watchcases:					
	Electroplating and other plating	23	10	10	3	259
	Heat treating of metals	19	15	3	1	197
	Automatic screw machine department	19	7	7	5	281
	Machine shop	24	8	11	5	446
	Tool and die shop	33	12	15	6	558
	Stamping, blanking, and forming of metals	31	9	15	7	406

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies.

[1]Establishments with less than 5 employees were typically excluded from the mail portion of the 1977 Census of Manufactures. Small establishments (typically between 5 to 20 employees) were mailed short forms for the 1977 Census of Manufactures for selected industries. These short forms did not contain a metalworking and related operations inquiry. See the explanatory text for a list of industries that received short forms. In some instances, a few larger establishments failed to report data for metalworking and related operations. The result is an understatement of the number of establishments performing specific operations, primarily in the smallest size class. This understatement exists to a much smaller degree in the number of production workers in the operation. The signifiance of the undercoverage is shown in table 4 in terms of total plant employment.

[2]These size groups are based on the number of employees engaged in each specific operation, not on the total employment in the establishment.

[3]The specific operation basically represents the major activity of the particular industry. A few respondents incorrectly reported that the item did not apply.

[4]Separate data cannot be published for Industry 3572, Typewriters, without revealing the operations of individuals companies. Therefore, industry 3572 has been combined with Industry 3579, Office Machines, N.E.C.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		FERROUS FOUNDRY		NONFERROUS FOUNDRY		NONFERROUS DIE CASTING		FORGINGS--PRESSES, HAMMERS, OR UPSETTERS[1]		ELECTROPLATING AND OTHER PLATING[2]	
	All industries	1,225	185,469	845	29,783	633	30,913	874	31,166	2,102	24,718
33	Primary metal industries	887	151,179	479	20,645	286	21,710	(X)	(X)	(X)	(X)
34	Fabricated metal products	87	7,881	129	4,007	82	1,723	539	20,532	601	7,828
35	Machinery, except electrical	202	16,377	149	3,043	55	2,000	200	4,480	339	2,319
36	Electric and electronic equipment	13	(D)	46	1,223	169	3,867	15	481	787	8,580
37	Transportation equipment	33	8,878	33	611	23	1,210	120	5,673	246	4,910
38	Instruments and related products	3	(D)	9	254	18	403	(X)	(X)	129	1,081
33	Primary metal industries	887	151,179	479	20,645	286	21,710	(X)	(X)	(X)	(X)
332	Iron and steel foundries	862	150,049	83	1,987	4	113	(X)	(X)	(X)	(X)
3321	Gray iron foundries	[3]581	[3]98,099	46	985	1	(D)	(X)	(X)	(X)	(X)
3322	Malleable iron foundries	[3]45	[3]12,937	2	(D)	-	-	(X)	(X)	(X)	(X)
3324	Steel investment foundries	[3]51	[3]4,344	13	(D)	1	(D)	(X)	(X)	(X)	(X)
3325	Steel foundries, n.e.c.	[3]185	[3]34,669	22	610	2	(D)	(X)	(X)	(X)	(X)
336	Nonferrous foundries	25	1,130	396	18,658	282	21,597	(X)	(X)	(X)	(X)
3361	Aluminum foundries	14	(D)	[3]208	[3]12,522	[3]160	[3]13,801	(X)	(X)	(X)	(X)
3362	Brass, bronze, and copper foundries	9	(D)	[3]156	[3]4,732	[3]7	[3]273	(X)	(X)	(X)	(X)
3369	Nonferrous foundries, n.e.c.	2	(D)	[3]32	[3]1,404	[3]115	[3]7,523	(X)	(X)	(X)	(X)
34	Fabricated metal products	87	7,881	129	4,007	82	1,723	539	20,532	601	7,828
342	Cutlery, handtools, and hardware	13	(D)	28	555	50	1,538	127	2,737	188	3,634
3421	Cutlery	2	(D)	(X)	(X)	(X)	(X)	18	247	14	143
3423	Hand and edge tools, n.e.c.	4	31	(X)	(X)	(X)	(X)	82	2,144	50	521
3425	Handsaws and saw blades	1	(D)	(X)	(X)	(X)	(X)	6	88	8	111
3429	Hardware, n.e.c.	6	58	28	555	50	1,538	21	258	116	2,859
343	Plumbing and heating, except electric	14	2,061	22	932	(X)	(X)	3	20	39	721
3431	Metal sanitary ware	4	817	1	(D)	(X)	(X)	-	-	1	(D)
3432	Plumbing fittings and brass goods	-	-	21	(D)	(X)	(X)	3	20	38	(D)
3433	Heating equipment, except electric	10	1,244	-	-	(X)	(X)	(X)	(X)	-	-
344	Fabricated structural metal products	16	892	17	98	(X)	(X)	62	1,028	46	404
3441	Fabricated structural metal	4	148	2	(D)	(X)	(X)	16	270	6	25
3442	Metal doors, sash, and trim	2	(D)	3	(D)	(X)	(X)	8	216	15	253
3443	Fabricated platework (boiler shops)	5	376	2	(D)	(X)	(X)	17	282	5	9
3444	Sheet metal work	2	(D)	6	46	(X)	(X)	7	18	10	60
3446	Architectural metal work	1	(D)	3	25	(X)	(X)	9	166	7	35
3448	Prefabricated metal buildings	-	-	-	-	(X)	(X)	5	76	1	(D)
3449	Miscellaneous metal work	2	(D)	1	(D)	(X)	(X)	-	-	2	(D)
345	Screw machine products, bolts, etc.	1	(D)	-	-	7	37	48	926	114	936
3451	Screw machine products	-	-	-	-	-	-	4	98	16	51
3452	Bolts, nuts, rivets, and washers	1	(D)	-	-	7	37	44	828	98	885
346	Metal forgings and stampings	(X)	(X)	(X)	(X)	12	83	228	14,080	105	1,362
3462	Iron and steel forgings	(X)	(X)	(X)	(X)	(X)	(X)	[3]190	[3]11,794	(X)	(X)
3463	Nonferrous forgings	(X)	(X)	(X)	(X)	(X)	(X)	[3]20	[3]1,979	(X)	(X)
3465	Automotive stampings	(X)	(X)	(X)	(X)	5	41	6	46	35	733
3466	Crowns and closures	(X)	(X)	(X)	(X)	1	(D)	-	-	1	(D)
3469	Metal stampings, n.e.c.	(X)	(X)	(X)	(X)	6	(D)	12	261	69	(D)
348	Ordnance and accessories, n.e.c.	3	(D)	(X)	(X)	(X)	(X)	13	530	33	227
3482	Small arms ammunition	-	-	(X)	(X)	(X)	(X)	1	(D)	7	44
3483	Ammunition, except small arms, n.e.c.	2	(D)	(X)	(X)	(X)	(X)	8	(D)	9	59
3484	Small arms	-	-	(X)	(X)	(X)	(X)	4	(D)	9	60
3489	Ordnance and accessories, n.e.c.	1	(D)	(X)	(X)	(X)	(X)	-	-	8	64
349	Miscellaneous fabricated metal products	40	4,655	62	2,422	13	65	58	1,211	76	544
3494	Valves and pipe fittings	26	3,894	46	2,155	(X)	(X)	36	915	38	254
3498	Fabricated pipe and fittings	1	(D)	1	(D)	1	(D)	14	229	8	72
3499	Fabricated metal products, n.e.c.	13	(D)	15	(D)	12	(D)	8	67	30	218
35	Machinery, except electrical	202	16,377	149	3,043	55	2,000	200	4,480	339	2,319
351	Engines and turbines	5	655	4	275	8	(D)	8	67	22	387
3511	Turbines and turbine generator sets	1	(D)	1	(D)	2	(D)	3	57	3	10
3519	Internal combustion engines, n.e.c.	4	(D)	3	(D)	6	(D)	5	10	19	377
352	Farm and garden machinery	22	(D)	7	90	(X)	(X)	50	1,231	(X)	(X)
3523	Farm machinery and equipment	21	4,776	6	(D)	(X)	(X)	47	(D)	(X)	(X)
3524	Lawn and garden equipment	1	(D)	1	(D)	(X)	(X)	3	(D)	(X)	(X)
353	Construction and related machinery	36	3,209	9	228	(X)	(X)	62	1,870	(X)	(X)
3531	Construction machinery	18	2,024	4	108	(X)	(X)	21	465	(X)	(X)
3532	Mining machinery	5	308	2	(D)	(X)	(X)	11	51	(X)	(X)
3533	Oil field machinery	6	545	3	(D)	(X)	(X)	19	1,201	(X)	(X)
3534	Elevators and moving stairways	-	-	(X)	(X)	(X)	(X)	1	(D)	(X)	(X)

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		FERROUS FOUNDRY		NONFERROUS FOUNDRY		NONFERROUS DIE CASTING		FORGINGS--PRESSES, HAMMERS, OR UPSETTERS[1]		ELECTROPLATING AND OTHER PLATING[2]	
35	Machinery, except electrical--Con.										
353	Construction and related machinery--Con.										
3535	Conveyors and conveying equipment	4	(D)	(X)	(X)	(X)	(X)	4	(D)	(X)	(X)
3536	Hoists, cranes, and monorails	-	-	-	-	(X)	(X)	-	-	(X)	(X)
3537	Industrial trucks and tractors	3	(D)	(X)	(X)	(X)	(X)	6	144	(X)	(X)
354	Metalworking machinery	17	1,112	18	215	23	(D)	27	224	99	389
3541	Machine tools, metal cutting	6	644	2	(D)	1	(D)	2	(D)	14	68
3542	Machine tools, metal forming	5	190	1	(D)	-	-	6	45	3	(D)
3544	Special dies, tools, jigs, and fixtures	2	(D)	13	170	12	100	7	44	19	43
3545	Machine tool accessories	1	(D)	2	(D)	3	(D)	7	84	41	137
3546	Power driven hand tools	(X)	(X)	(X)	(X)	5	(D)	2	(D)	13	107
3547	Rolling mill machinery	2	(D)	-	-	-	-	2	(D)	1	(D)
3549	Metalworking machinery, n.e.c.	1	(D)	-	-	2	(D)	1	(D)	8	28
355	Special industry machinery	51	2,105	22	(D)	1	(D)	9	28	20	79
3551	Food products machinery	9	224	5	44	(X)	(X)	(X)	(X)	(X)	(X)
3552	Textile machinery	13	918	4	31	(X)	(X)	(X)	(X)	(X)	(X)
3553	Woodworking machinery	6	140	(X)	(X)	1	(D)	3	5	4	13
3554	Paper industries machinery	5	(D)	2	(D)	(X)	(X)	(X)	(X)	(X)	(X)
3555	Printing trades machinery	2	(D)	4	(D)	(X)	(X)	(X)	(X)	(X)	(X)
3559	Special industry machinery, n.e.c.	16	612	7	50	(X)	(X)	6	23	16	66
356	General industrial machinery	41	3,389	57	881	3	5	12	162	40	174
3561	Pumps and pumping equipment	18	1,260	9	210	(X)	(X)	(X)	(X)	(X)	(X)
3562	Ball and roller bearings	1	(D)	2	(D)	(X)	(X)	7	(D)	10	81
3563	Air and gas compressors	6	998	1	(D)	(X)	(X)	(X)	(X)	(X)	(X)
3564	Blowers and fans	1	(D)	5	54	(X)	(X)	(X)	(X)	2	(D)
3565	Industrial patterns	5	47	17	134	3	5	-	-	-	-
3566	Speed changers, drives, and gears	3	(D)	-	-	(X)	(X)	1	(D)	6	(D)
3568	Power transmission equipment, n.e.c.	4	492	20	442	(X)	(X)	3	(D)	14	51
3569	General industrial machinery, n.e.c.	3	57	3	19	(X)	(X)	1	(D)	8	19
357	Office and computing machines	2	(D)	2	(D)	(X)	(X)	7	539	68	715
3573	Electronic computing equipment	-	-	1	(D)	(X)	(X)	1	(D)	45	481
3574	Calculating and accounting machines	1	(D)	1	(D)	(X)	(X)	2	(D)	3	(D)
3576	Scales and balances, except laboratory	1	(D)	-	-	(X)	(X)	1	(D)	5	(D)
3579	Office machines, n.e.c. and typewriters[4]	-	-	-	-	(X)	(X)	3	(D)	15	186
358	Refrigeration and service machinery	11	440	6	185	8	25	(X)	(X)	15	35
3581	Automatic merchandising machines	-	-	(X)	(X)	5	17	(X)	(X)	4	8
3582	Commercial laundry equipment	1	(D)	(X)	(X)	-	-	(X)	(X)	3	4
3585	Refrigeration and heating equipment	6	184	6	185	1	(D)	(X)	(X)	(X)	(X)
3586	Measuring and dispensing pumps	-	-	-	-	(X)	(X)	(X)	(X)	(X)	(X)
3589	Service industry machinery, n.e.c.	4	(D)	(X)	(X)	2	(D)	(X)	(X)	8	23
359	Miscellaneous machinery, except electrical	17	472	24	1,013	12	609	25	359	75	540
3592	Carburetors, pistons, rings, valves	6	274	9	877	5	549	8	(D)	21	339
3599	Machinery, except electrical, n.e.c.	11	198	15	136	7	60	17	(D)	54	201
36	Electric and electronic equipment	13	(D)	46	1,223	169	3,867	15	481	787	8,580
361	Electric distributing equipment	3	(D)	4	119	(X)	(X)	(X)	(X)	83	661
3613	Switchgear and switchboard apparatus	3	(D)	4	119	(X)	(X)	(X)	(X)	83	661
362	Electrical industrial apparatus	2	(D)	12	224	77	1,331	(X)	(X)	71	485
3621	Motors and generators	2	(D)	8	105	77	1,331	(X)	(X)	26	114
3622	Industrial controls	-	-	4	119	(X)	(X)	(X)	(X)	45	371
363	Household appliances	1	(D)	3	79	26	623	3	53	(X)	(X)
3631	Household cooking equipment	-	-	1	(D)	2	(D)	-	-	(X)	(X)
3632	Household refrigerators and freezers	-	-	-	-	-	-	(X)	(X)	(X)	(X)
3633	Household laundry equipment	-	-	-	-	4	(D)	-	-	(X)	(X)
3634	Electric housewares and fans	-	-	2	(D)	16	319	2	(D)	(X)	(X)
3635	Household vacuum cleaners	-	-	-	-	1	(D)	-	-	(X)	(X)
3636	Sewing machines	1	(D)	-	-	1	(D)	1	(D)	(X)	(X)
3639	Household appliances, n.e.c.	-	-	-	-	2	(D)	-	-	(X)	(X)
364	Electric lighting and wiring equipment	6	783	27	801	33	626	12	428	117	1,204
3643	Current-carrying wiring devices	-	-	4	183	3	13	4	39	42	302
3644	Noncurrent-carrying wiring devices	6	783	10	552	12	287	8	389	20	261
3645	Residential lighting fixtures	(X)	(X)	6	(D)	4	(D)	(X)	(X)	33	223
3646	Commercial lighting fixtures	(X)	(X)	1	(D)	2	(D)	(X)	(X)	7	89
3647	Vehicular lighting equipment	(X)	(X)	1	(D)	4	(D)	(X)	(X)	5	(D)
3648	Lighting equipment, n.e.c.	(X)	(X)	5	47	8	146	(X)	(X)	10	(D)
365	Radio and TV receiving equipment	(X)	(X)	(X)	(X)	3	(D)	(X)	(X)	9	83
3651	Radio and TV receiving sets	(X)	(X)	(X)	(X)	3	(D)	(X)	(X)	9	83

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		FERROUS FOUNDRY		NONFERROUS FOUNDRY		NONFERROUS DIE CASTING		FORGINGS--PRESSES, HAMMERS, OR UPSETTERS[1]		ELECTROPLATING AND OTHER PLATING[2]	
36	Electric and electronic equipment--Con.										
366	Communication equipment	(X)	(X)	(X)	(X)	11	(D)	(X)	(X)	149	2,167
3661	Telephone and telegraph apparatus	(X)	(X)	(X)	(X)	2	(D)	(X)	(X)	26	630
3662	Radio and TV communication equipment	(X)	(X)	(X)	(X)	9	448	(X)	(X)	123	1,537
367	Electronic components and accessories	(X)	(X)	(X)	(X)	11	126	(X)	(X)	336	3,721
3671	Electron tubes, all types	(X)	(X)	(X)	(X)	-	-	(X)	(X)	18	184
3674	Semiconductors and related devices	(X)	(X)	(X)	(X)	1	(D)	(X)	(X)	40	649
3675	Electronic capacitors	(X)	(X)	(X)	(X)	-	-	(X)	(X)	18	69
3676	Electronic resistors	(X)	(X)	(X)	(X)	-	-	(X)	(X)	13	55
3677	Electronic coils and transformers	(X)	(X)	(X)	(X)	-	-	(X)	(X)	4	5
3678	Electronic connectors	(X)	(X)	(X)	(X)	3	(D)	(X)	(X)	37	563
3679	Electronic components, n.e.c.	(X)	(X)	(X)	(X)	7	22	(X)	(X)	206	2,196
369	Miscellaneous electrical equipment and supplies	1	(D)	(X)	(X)	8	479	(X)	(X)	22	259
3694	Engine electrical equipment	1	(D)	(X)	(X)	8	479	(X)	(X)	22	259
37	Transportation equipment	33	8,878	33	611	23	1,210	120	5,673	246	4,910
371	Motor vehicles and equipment	20	6,323	10	145	23	1,210	54	3,872	107	2,944
3711	Motor vehicles and car bodies	3	(D)	-	-	1	(D)	5	477	7	(D)
3713	Truck and bus bodies	-	-	3	(D)	-	-	3	(D)	1	(D)
3714	Motor vehicle parts and accessories	17	(D)	7	(D)	22	(D)	43	3,324	99	(D)
3715	Truck trailers	-	-	-	-	-	-	3	(D)	-	-
3716	Motor homes	-	-	-	-	-	-	-	-	-	-
372	Aircraft and parts	5	(D)	14	263	(X)	(X)	31	1,161	96	1,374
3721	Aircraft	2	(D)	9	153	(X)	(X)	12	483	24	620
3724	Aircraft engines and engine parts	1	(D)	2	(D)	(X)	(X)	9	(D)	31	427
3728	Aircraft equipment, n.e.c.	2	(D)	3	(D)	(X)	(X)	10	(D)	41	327
373	Ship and boat building and repairing	3	(D)	7	(D)	(X)	(X)	18	(D)	(X)	(X)
3731	Ship building and repairing	1	(D)	4	(D)	(X)	(X)	16	120	(X)	(X)
3732	Boat building and repairing	2	(D)	3	6	(X)	(X)	2	(D)	(X)	(X)
3743	Railroad equipment	3	1,266	2	(D)	(X)	(X)	15	486	(X)	(X)
3751	Motorcycles, bicycles, and parts	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	16	377
376	Guided missiles, space vehicles, parts	-	-	-	-	(X)	(X)	1	(D)	20	155
3761	Guided missiles and space vehicles	-	-	-	-	(X)	(X)	-	-	12	101
3764	Space propulsion units and parts	-	-	-	-	(X)	(X)	-	-	2	(D)
3769	Space vehicle equipment, n.e.c.	-	-	-	-	(X)	(X)	1	(D)	6	(D)
379	Miscellaneous transportation equipment	2	(D)	(X)	(X)	(X)	(X)	1	(D)	7	60
3795	Tanks and tank components	2	(D)	(X)	(X)	(X)	(X)	1	(D)	1	(D)
3799	Transportation equipment, n.e.c.	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	6	(D)
38	Instruments and related products	3	(D)	9	254	18	403	(X)	(X)	129	1,081
3811	Engineering and scientific instruments	-	-	1	(D)	-	-	(X)	(X)	15	99
382	Measuring and controlling devices	3	(D)	8	(D)	18	403	(X)	(X)	91	723
3822	Enviromental controls	-	-	1	(D)	6	239	(X)	(X)	19	202
3823	Process control instruments	-	-	1	(D)	-	-	(X)	(X)	18	70
3824	Fluid meters and counting devices	-	-	2	(D)	7	93	(X)	(X)	7	46
3825	Instruments to measure electricity	2	(D)	1	(D)	5	71	(X)	(X)	30	331
3829	Measuring and controlling devices, n.e.c.	1	(D)	3	7	-	-	(X)	(X)	17	74
3873	Watches, clocks, and watchcases	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	23	259
		GALVANIZING AND OTHER HOT-DIP COATING[5]		HEAT TREATING OF METALS		AUTOMATIC SCREW MACHINE DEPARTMENT		MACHINE SHOP		TOOL AND DIE SHOP	
	All industries	350	3,318	3,218	28,500	2,939	49,066	15,744	553,383	7,530	124,070
33	Primary metal industries	(X)	(X)	(X)	(X)	(X)	(X)	414	10,213	(X)	(X)
34	Fabricated metal products	171	1,637	1,018	6,750	1,128	21,114	3,713	76,274	2,585	32,331
35	Machinery, except electrical	18	223	1,288	10,999	1,051	16,099	7,532	307,992	2,828	44,832
36	Electric and electronic equipment	108	977	418	3,314	391	5,447	2,159	43,190	1,176	16,209
37	Transportation equipment	53	481	393	6,657	231	4,840	1,336	105,118	714	27,883
38	Instruments and related products	(X)	(X)	101	780	138	1,566	590	10,596	227	2,815
33	Primary metal industries	(X)	(X)	(X)	(X)	(X)	(X)	414	10,213	(X)	(X)
332	Iron and steel foundries	(X)	(X)	(X)	(X)	(X)	(X)	219	6,485	(X)	(X)
3321	Gray iron foundries	(X)	(X)	(X)	(X)	(X)	(X)	141	3,375	(X)	(X)
3322	Malleable iron foundries	(X)	(X)	(X)	(X)	(X)	(X)	8	387	(X)	(X)
3324	Steel investment foundries	(X)	(X)	(X)	(X)	(X)	(X)	13	187	(X)	(X)
3325	Steel foundries, n.e.c.	(X)	(X)	(X)	(X)	(X)	(X)	57	2,536	(X)	(X)

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		GALVANIZING AND OTHER HOT-DIP COATING[5]		HEAT TREATING OF METALS		AUTOMATIC SCREW MACHINE DEPARTMENT		MACHINE SHOP		TOOL AND DIE SHOP	
33	Primary metal industries--Con.										
336	Nonferrous foundries	(X)	(X)	(X)	(X)	(X)	(X)	195	3,728	(X)	(X)
3361	Aluminum foundries	(X)	(X)	(X)	(X)	(X)	(X)	116	2,410	(X)	(X)
3362	Brass, bronze, and copper foundries	(X)	(X)	(X)	(X)	(X)	(X)	52	1,066	(X)	(X)
3369	Nonferrous foundries, n.e.c.	(X)	(X)	(X)	(X)	(X)	(X)	27	252	(X)	(X)
34	Fabricated metal products	171	1,637	1,018	6,750	1,128	21,114	3,713	76,274	2,585	32,331
341	Metal cans and shipping containers	(X)	(X)	(X)	(X)	(X)	(X)	230	3,181	63	516
3411	Metal cans	(X)	(X)	(X)	(X)	(X)	(X)	191	2,613	48	402
3412	Metal barrels, drums, and pails	(X)	(X)	(X)	(X)	(X)	(X)	39	568	15	114
342	Cutlery, handtools, and hardware	15	214	230	1,552	153	1,589	430	10,134	379	4,900
3421	Cutlery	(X)	(X)	37	202	4	(D)	32	413	28	199
3423	Hand and edge tools, n.e.c.	(X)	(X)	129	840	67	766	164	5,324	125	1,437
3425	Handsaws and saw blades	(X)	(X)	25	308	3	8	32	455	12	112
3429	Hardware, n.e.c.	15	214	39	202	79	(D)	202	3,942	214	3,152
343	Plumbing and heating, except electric	2	(D)	11	(D)	44	633	140	3,020	78	478
3431	Metal sanitary ware	-	-	1	(D)	2	(D)	10	277	4	22
3432	Plumbing fittings and brass goods	2	(D)	10	(D)	35	559	61	1,654	38	298
3433	Heating equipment, except electric	(X)	(X)	(X)	(X)	7	(D)	69	1,089	36	158
344	Fabricated structural metal products	71	783	158	(D)	(X)	(X)	881	10,806	311	1,851
3441	Fabricated structural metal	18	465	24	63	(X)	(X)	180	1,747	37	169
3442	Metal doors, sash, and trim	8	90	21	127	(X)	(X)	109	658	73	780
3443	Fabricated platework (boiler shops)	13	(D)	91	322	(X)	(X)	325	5,920	62	380
3444	Sheet metal work	30	156	14	126	(X)	(X)	168	1,536	89	280
3446	Architectural metal work	1	(D)	3	8	(X)	(X)	47	454	28	157
3448	Prefabricated metal buildings	-	-	1	(D)	(X)	(X)	24	282	14	66
3449	Miscellaneous metal work	1	(D)	4	10	(X)	(X)	28	209	8	19
345	Screw machine products, bolts, etc.	17	56	176	1,159	655	15,084	481	8,806	325	3,284
3451	Screw machine products	1	(D)	32	158	[3]525	[3]12,286	283	5,347	139	492
3452	Bolts, nuts, rivets, and washers	16	(D)	144	1,001	130	2,798	198	3,459	186	2,792
346	Metal forgings and stampings	11	97	105	757	29	141	513	7,332	850	16,594
3462	Iron and steel forgings	(X)	(X)	(X)	(X)	(X)	(X)	106	2,356	103	2,550
3463	Nonferrous forgings	(X)	(X)	(X)	(X)	(X)	(X)	13	165	15	308
3465	Automotive stampings	1	(D)	17	(D)	11	(D)	85	2,021	212	9,250
3466	Crowns and closures	-	-	2	(D)	1	(D)	26	427	10	151
3469	Metal stampings, n.e.c.	10	(D)	86	543	17	83	283	2,363	510	4,335
348	Ordnance and accessories, n.e.c.	8	(D)	41	519	29	520	97	5,756	48	895
3482	Small arms ammunition	-	-	8	67	3	28	11	567	6	(D)
3483	Ammunition, except small arms, n.e.c.	1	(D)	12	189	8	206	30	1,369	13	408
3484	Small arms	7	26	13	206	9	158	25	1,882	16	221
3489	Ordnance and accessories, n.e.c.	-	-	8	57	9	128	31	1,938	13	(D)
349	Miscellaneous fabricated metal products	47	454	297	1,974	218	3,147	941	27,239	531	3,813
3493	Steel springs, except wire	1	(D)	48	883	2	(D)	31	178	20	225
3494	Valves and pipe fittings	13	187	67	397	144	2,472	365	21,370	195	1,787
3495	Wire springs	8	(D)	93	262	5	54	63	275	72	337
3496	Miscellaneous fabricated wire products	13	144	18	85	5	(D)	101	636	87	384
3497	Metal foil and leaf	(X)	(X)	(X)	(X)	(X)	(X)	11	143	(X)	(X)
3498	Fabricated pipe and fittings	7	55	37	143	31	268	104	1,639	32	189
3499	Fabricated metal products, n.e.c.	5	33	34	204	31	333	266	2,998	125	891
35	Machinery, except electrical	18	223	1,288	10,999	1,051	16,099	7,532	307,992	2,828	44,832
351	Engines and turbines	(X)	(X)	55	866	31	973	115	34,932	66	2,111
3511	Turbines and turbine generator sets	(X)	(X)	13	163	4	(D)	30	9,648	15	433
3519	Internal combustion engines, n.e.c.	(X)	(X)	42	703	27	(D)	85	25,284	51	1,678
352	Farm and garden machinery	(X)	(X)	98	1,181	59	961	451	14,211	252	2,747
3523	Farm machinery and equipment	(X)	(X)	76	1,027	48	871	404	12,401	208	2,417
3524	Lawn and garden equipment	(X)	(X)	22	154	11	90	47	1,810	44	330
353	Construction and related machinery	(X)	(X)	211	2,515	92	1,843	958	52,510	300	4,189
3531	Construction machinery	(X)	(X)	77	1,432	29	620	314	23,246	111	2,100
3532	Mining machinery	(X)	(X)	39	271	15	124	123	4,841	29	274
3533	Oil field machinery	(X)	(X)	50	624	19	943	169	16,859	50	1,087
3534	Elevators and moving stairways	(X)	(X)	2	(D)	5	(D)	39	845	18	104
3535	Conveyors and conveying equipment	(X)	(X)	14	(D)	9	(D)	164	1,927	39	203
3536	Hoists, cranes, and monorails	(X)	(X)	9	31	9	30	71	1,893	21	137
3537	Industrial trucks and tractors	(X)	(X)	20	122	6	67	78	2,899	32	284

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	GALVANIZING AND OTHER HOT-DIP COATING[5]		HEAT TREATING OF METALS		AUTOMATIC SCREW MACHINE DEPARTMENT		MACHINE SHOP		TOOL AND DIE SHOP	
		Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
35	Machinery, except electrical--Con.										
354	Metalworking machinery	(X)	(X)	363	2,172	229	2,814	1,284	56,789	999	23,090
3541	Machine tools, metal cutting	(X)	(X)	60	296	36	265	199	16,545	67	700
3542	Machine tools, metal forming	(X)	(X)	33	139	10	(D)	113	7,023	46	444
3544	Special dies, tools, jigs, and fixtures	(X)	(X)	101	392	43	431	510	11,446	712	18,505
3545	Machine tool accessories	(X)	(X)	119	925	75	873	273	10,661	100	1,791
3546	Power driven hand tools	(X)	(X)	31	302	39	808	56	5,580	40	646
3547	Rolling mill machinery	(X)	(X)	10	97	1	(D)	26	2,506	10	92
3549	Metalworking machinery, n.e.c.	(X)	(X)	9	21	25	374	107	3,028	24	912
355	Special industry machinery	3	7	133	344	94	665	971	34,106	223	1,307
3551	Food products machinery	(X)	(X)	28	81	26	189	214	5,974	57	268
3552	Textile machinery	(X)	(X)	37	103	27	217	141	4,686	35	234
3553	Woodworking machinery	(X)	(X)	14	27	7	49	89	2,613	15	71
3554	Paper industries machinery	(X)	(X)	(X)	(X)	(X)	(X)	103	5,006	18	94
3555	Printing trades machinery	(X)	(X)	8	18	11	68	87	3,788	19	117
3559	Special industry machinery, n.e.c.	3	7	46	115	23	142	337	12,039	79	523
356	General industrial machinery	9	(D)	231	2,883	221	5,603	1,057	47,975	354	4,502
3561	Pumps and pumping equipment	4	16	39	340	35	972	208	15,155	74	629
3562	Ball and roller bearings	(X)	(X)	69	1,533	64	3,469	64	3,044	46	1,703
3563	Air and gas compressors	2	(D)	15	98	13	138	71	4,897	29	416
3564	Blowers and fans	(X)	(X)	(X)	(X)	3	(D)	75	1,378	31	184
3565	Industrial patterns	(X)	(X)	-	-	2	(D)	27	212	6	59
3566	Speed changers, drives, and gears	(X)	(X)	39	380	36	263	124	9,049	43	311
3567	Industrial furnaces and ovens	(X)	(X)	(X)	(X)	(X)	(X)	75	593	(X)	(X)
3568	Power transmission equipment, n.e.c.	(X)	(X)	51	489	50	625	125	8,440	53	812
3569	General industrial machinery, n.e.c.	3	3	18	43	18	106	288	5,207	72	388
357	Office and computing machines	(X)	(X)	38	250	37	719	219	5,235	102	1,291
3573	Electronic computing equipment	(X)	(X)	16	60	12	201	138	2,782	50	491
3574	Calculating and accounting machines	(X)	(X)	1	(D)	1	(D)	14	443	6	175
3576	Scales and balances, except laboratory	(X)	(X)	7	(D)	7	(D)	27	473	14	53
3579	Office machines, n.e.c. and typewriters[4]	(X)	(X)	14	131	17	366	40	1,537	32	572
358	Refrigeration and service machinery	6	(D)	30	297	40	597	299	10,647	203	2,532
3581	Automatic merchandising machines	(X)	(X)	5	21	3	(D)	12	131	15	148
3582	Commercial laundry equipment	(X)	(X)	1	(D)	2	(D)	25	212	6	19
3585	Refrigeration and heating equipment	6	(D)	19	215	22	290	145	8,152	126	1,981
3586	Measuring and dispensing pumps	-	-	2	(D)	6	279	19	1,006	12	188
3589	Service industry machinery, n.e.c.	(X)	(X)	3	(D)	7	22	98	1,146	44	196
359	Miscellaneous machinery, except electrical	(X)	(X)	129	491	248	1,924	2,178	51,587	329	3,063
3592	Carburetors, pistons, rings, valves	(X)	(X)	20	163	7	318	45	5,048	35	1,253
3599	Machinery, except electrical, n.e.c.	(X)	(X)	109	328	241	1,606	[3]2,133	[3]46,539	294	1,810
36	Electric and electronic equipment	108	977	418	3,314	391	5,447	2,159	43,190	1,176	16,209
361	Electric distributing equipment	(X)	(X)	72	1,017	31	292	139	2,756	122	1,664
3612	Transformers	(X)	(X)	35	900	(X)	(X)	44	589	26	788
3613	Switchgear and switchboard apparatus	(X)	(X)	37	117	31	292	95	2,167	96	876
362	Electrical industrial apparatus	13	136	68	354	77	718	388	12,411	211	2,762
3621	Motors and generators	13	136	52	245	58	538	159	7,542	119	1,611
3622	Industrial controls	(X)	(X)	16	109	19	180	110	1,833	47	725
3623	Welding apparatus, electric	(X)	(X)	(X)	(X)	(X)	(X)	58	1,871	19	272
3624	Carbon and graphite products	(X)	(X)	(X)	(X)	(X)	(X)	25	819	10	28
3629	Electrical industrial apparatus, n.e.c.	(X)	(X)	(X)	(X)	(X)	(X)	36	346	16	126
363	Household appliances	16	143	46	199	35	532	110	3,147	121	2,545
3631	Household cooking equipment	2	(D)	4	15	3	(D)	15	151	29	431
3632	Household refrigerators and freezers	1	(D)	2	(D)	3	36	10	668	13	498
3633	Household laundry equipment	3	(D)	7	37	9	196	13	959	12	347
3634	Electric housewares and fans	5	(D)	22	97	9	94	42	654	47	725
3635	Household vacuum cleaners	-	-	2	(D)	4	35	7	101	5	(D)
3636	Sewing machines	2	(D)	6	25	5	(D)	11	420	7	(D)
3639	Household appliances, n.e.c.	3	(D)	3	10	2	(D)	12	194	8	230
364	Electric lighting and wiring equipment	23	321	38	121	61	589	294	4,824	224	2,013
3641	Electric lamps	(X)	(X)	(X)	(X)	(X)	(X)	36	815	(X)	(X)
3643	Current-carrying wiring devices	6	18	18	61	33	319	72	1,372	88	984
3644	Noncurrent-carrying wiring devices	17	303	10	22	10	161	53	1,344	36	419
3645	Residential lighting fixtures	(X)	(X)	2	(D)	3	(D)	37	207	29	117
3646	Commercial lighting fixtures	(X)	(X)	3	10	3	(D)	36	274	30	150
3647	Vehicular lighting equipment	(X)	(X)	2	(D)	5	39	14	422	14	205
3648	Lighting equipment, n.e.c.	(X)	(X)	3	15	7	35	46	390	27	138
365	Radio and TV receiving equipment	(X)	(X)	(X)	(X)	6	96	43	457	29	439
3651	Radio and TV receiving sets	(X)	(X)	(X)	(X)	6	96	43	457	29	439

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		GALVANIZING AND OTHER HOT-DIP COATING[5]		HEAT TREATING OF METALS		AUTOMATIC SCREW MACHINE DEPARTMENT		MACHINE SHOP		TOOL AND DIE SHOP	
36	Electric and electronic equipment--Con.										
366	Communication equipment	20	81	67	459	65	831	465	10,377	150	2,398
3661	Telephone and telegraph apparatus	2	(D)	19	151	17	353	56	2,385	33	(D)
3662	Radio and TV communication equipment	18	(D)	48	308	48	478	409	7,992	117	(D)
367	Electronic components and accessories	36	296	114	843	84	1,626	539	6,408	248	2,568
3671	Electron tubes, all types	2	(D)	18	141	2	(D)	39	1,007	15	283
3674	Semiconductors and related devices	6	(D)	17	383	5	(D)	53	571	24	381
3675	Electronic capacitors	5	15	3	(D)	4	15	48	351	12	55
3676	Electronic resistors	3	(D)	1	(D)	9	74	33	480	9	101
3677	Electronic coils and transformers	3	(D)	2	(D)	5	17	54	187	22	47
3678	Electronic connectors	1	(D)	31	(D)	24	1,006	50	1,208	44	1,028
3679	Electronic components, n.e.c.	16	29	42	163	35	327	262	2,604	122	673
369	Miscellaneous electrical equipment and supplies	(X)	(X)	13	321	32	763	181	2,810	71	1,820
3691	Storage batteries	(X)	(X)	(X)	(X)	(X)	(X)	27	324	4	15
3692	Primary batteries, dry and wet	(X)	(X)	(X)	(X)	(X)	(X)	20	374	6	28
3693	X-ray apparatus and tubes	(X)	(X)	(X)	(X)	(X)	(X)	45	550	17	135
3694	Engine electrical equipment	(X)	(X)	13	321	32	763	45	1,028	44	1,642
3699	Electrical equipment and supplies, n.e.c.	(X)	(X)	(X)	(X)	(X)	(X)	44	534	(X)	(X)
37	Transportation equipment	53	481	393	6,657	231	4,840	1,336	105,118	714	27,883
371	Motor vehicles and equipment	25	296	180	4,344	149	3,888	522	48,140	371	14,947
3711	Motor vehicles and car bodies	-	-	9	460	5	55	43	9,378	37	3,882
3713	Truck and bus bodies	1	(D)	2	(D)	6	(D)	54	486	27	157
3714	Motor vehicle parts and accessories	24	(D)	165	3,867	136	3,801	376	37,375	290	10,830
3715	Truck trailers	-	-	4	(D)	2	(D)	49	901	17	78
3716	Motor homes	-	-	-	-	-	-	-	-	-	-
372	Aircraft and parts	25	(D)	147	1.817	60	631	377	40,216	192	9,927
3721	Aircraft	7	85	32	751	5	(D)	48	8,761	38	5,740
3724	Aircraft engines and engine parts	7	(D)	60	664	18	(D)	120	17,869	67	2,690
3728	Aircraft equipment, n.e.c.	11	43	55	402	37	330	209	13,586	87	1,497
373	Ship and boat building and repairing	(X)	(X)	31	276	(X)	(X)	252	5,350	43	674
3731	Ship building and repairing	(X)	(X)	22	257	(X)	(X)	175	4,773	21	529
3732	Boat building and repairing	(X)	(X)	9	19	(X)	(X)	77	577	22	145
3743	Railroad equipment	(X)	(X)	(X)	(X)	5	187	54	6,249	28	814
3751	Motorcycles, bicycles, and parts	(X)	(X)	(X)	(X)	5	(D)	24	443	21	244
376	Guided missiles, space vehicles, parts	2	(D)	27	77	5	(D)	54	3,021	29	1,039
3761	Guided missiles and space vehicles	2	(D)	13	29	2	(D)	27	1,450	17	800
3764	Space propulsion units and parts	-	-	6	34	1	(D)	11	884	5	74
3769	Space vehicle equipment, n.e.c.	-	-	8	14	2	(D)	16	687	7	165
379	Miscellaneous transportation equipment	1	(D)	8	143	7	(D)	53	1,699	30	238
3795	Tanks and tank components	1	(D)	8	143	2	(D)	16	1,365	8	149
3799	Transportation equipment, n.e.c.	(X)	(X)	(X)	(X)	5	40	37	334	22	89
38	Instruments and related products	(X)	(X)	101	780	138	1,566	590	10,596	227	2,815
3811	Engineering and scientific instruments	(X)	(X)	8	24	14	56	139	1,901	36	273
382	Measuring and controlling devices	(X)	(X)	74	559	105	1,229	427	8,249	158	1,984
3822	Environmental controls	(X)	(X)	18	200	25	353	44	1,058	35	813
3823	Process control instruments	(X)	(X)	18	209	20	293	106	2,525	31	391
3824	Fluid meters and counting devices	(X)	(X)	5	27	17	208	45	1,707	19	207
3825	Instruments to measure electricity	(X)	(X)	21	100	28	279	131	1,610	50	435
3829	Measuring and controlling devices, n.e.c.	(X)	(X)	12	23	15	96	101	1,349	23	138
3873	Watches, clocks, and watchcases	(X)	(X)	19	197	19	281	24	446	33	558
		FOUNDRY PATTERN SHOP		PLATE OR STRUCTURAL FABRICATION		STAMPING, BLANKING, AND FORMING OF METALS		PAINTING, LACQUERING, AND ENAMELING OF METALS		PLASTIC MOLDING	
	All industries	1,259	12,423	5,935	218,002	10,047	317,011	10,549	97,911	829	22,263
33	Primary metal industries	491	4,275	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
34	Fabricated metal products	174	1,363	2,288	86,325	4,413	173,003	3,273	24,601	(X)	(X)
35	Machinery, except electrical	455	5,183	2,604	69,951	2,685	45,970	4,020	21,674	36	1,255
36	Electric and electronic equipment	43	186	398	6,956	1,689	39,043	1,599	17,470	466	11,420
37	Transportation equipment	96	1,416	645	54,770	969	54,905	1,335	32,580	244	7,974
38	Instruments and related products	(X)	(X)	(X)	(X)	291	4,090	322	1,586	83	1,614

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977** – Con.

SIC code	Industries	FOUNDRY PATTERN SHOP		PLATE OR STRUCTURAL FABRICATION		STAMPING, BLANKING, AND FORMING OF METALS		PAINTING, LACQUERING, AND ENAMELING OF METALS		PLASTIC MOLDING	
		Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
33	Primary metal industries	491	4,275	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
332	Iron and steel foundries	355	3,419	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3321	Gray iron foundries	222	2,216	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3322	Malleable iron foundries	25	155	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3324	Steel investment foundries	9	73	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3325	Steel foundries, n.e.c.	99	975	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
336	Nonferrous foundries	136	856	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3361	Aluminum foundries	86	659	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3362	Brass, bronze, and copper foundries	39	149	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
3369	Nonferrous foundries, n.e.c.	11	48	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
34	Fabricated metal products	174	1,363	2,288	86,325	4,413	173,003	3,273	24,601	(X)	(X)
341	Metal cans and shipping containers	(X)	(X)	60	2,939	230	14,803	204	4,724	(X)	(X)
3411	Metal cans	(X)	(X)	53	2,763	154	12,830	124	3,815	(X)	(X)
3412	Metal barrels, drums, and pails	(X)	(X)	7	176	76	1,973	80	909	(X)	(X)
342	Cutlery, handtools, and hardware	19	76	27	1,060	487	14,414	306	2,713	(X)	(X)
3421	Cutlery	(X)	(X)	(X)	(X)	42	574	15	36	(X)	(X)
3423	Hand and edge tools, n.e.c.	(X)	(X)	(X)	(X)	140	1,848	101	521	(X)	(X)
3425	Handsaws and saw blades	(X)	(X)	(X)	(X)	27	436	18	72	(X)	(X)
3429	Hardware, n.e.c.	19	76	27	1,060	278	11,556	172	2,084	(X)	(X)
343	Plumbing and heating, except electric	23	125	43	1,153	99	3,285	114	1,350	(X)	(X)
3431	Metal sanitary ware	1	(D)	2	(D)	18	1,011	14	985	(X)	(X)
3432	Plumbing fittings and brass goods	11	(D)	3	(D)	25	348	11	22	(X)	(X)
3433	Heating equipment, except electric	11	51	38	983	56	1,926	89	343	(X)	(X)
344	Fabricated structural metal products	38	263	1,784	73,255	1,346	25,495	1,523	6,941	(X)	(X)
3441	Fabricated structural metal	7	99	[3]738	[3]31,417	184	1,671	493	1,943	(X)	(X)
3442	Metal doors, sash, and trim	5	8	34	770	171	3,204	140	972	(X)	(X)
3443	Fabricated platework (boiler shops)	9	59	[3]589	[3]31,316	256	2,635	404	1,455	(X)	(X)
3444	Sheet metal work	8	23	205	3,487	503	12,575	246	1,217	(X)	(X)
3446	Architectural metal work	4	8	82	1,372	83	1,937	128	463	(X)	(X)
3448	Prefabricated metal buildings	3	(D)	88	3,484	87	2,417	77	655	(X)	(X)
3449	Miscellaneous metal work	2	(D)	48	1,409	62	1,056	35	236	(X)	(X)
345	Screw machine products, bolts, etc.	(X)	(X)	17	229	262	8,228	45	218	(X)	(X)
3451	Screw machine products	(X)	(X)	9	38	65	561	15	34	(X)	(X)
3452	Bolts, nuts, rivets, and washers	(X)	(X)	8	191	197	7,667	30	184	(X)	(X)
346	Metal forgings and stampings	23	331	86	2,029	1,242	90,771	374	4,647	(X)	(X)
3465	Automotive stampings	14	285	14	(D)	[3]374	[3]59,687	94	1,078	(X)	(X)
3466	Crowns and closures	-	-	1	(D)	36	2,468	20	522	(X)	(X)
3469	Metal stampings, n.e.c.	9	46	71	1,351	[3]832	[3]28,616	260	3,047	(X)	(X)
348	Ordnance and accessories, n.e.c.	(X)	(X)	7	153	47	1,557	55	544	(X)	(X)
3482	Small arms ammunition	(X)	(X)	-	-	6	827	4	13	(X)	(X)
3483	Ammunition, except small arms, n.e.c.	(X)	(X)	1	(D)	14	350	20	309	(X)	(X)
3484	Small arms	(X)	(X)	1	(D)	12	138	10	94	(X)	(X)
3489	Ordnance and accessories, n.e.c.	(X)	(X)	5	(D)	15	242	21	128	(X)	(X)
349	Miscellaneous fabricated metal products	71	568	264	5,507	700	14,450	652	3,464	(X)	(X)
3493	Steel springs, except wire	(X)	(X)	5	57	40	1,463	33	188	(X)	(X)
3494	Valves and pipe fittings	55	500	42	1,535	68	1,264	173	646	(X)	(X)
3495	Wire springs	(X)	(X)	5	40	107	2,487	69	(D)	(X)	(X)
3496	Miscellaneous fabricated wire products	(X)	(X)	19	197	136	2,663	96	513	(X)	(X)
3497	Metal foil and leaf	(X)	(X)	(X)	(X)	8	336	5	(D)	(X)	(X)
3498	Fabricated pipe and fittings	-	-	51	1,363	63	1,475	54	260	(X)	(X)
3499	Fabricated metal products, n.e.c.	16	68	142	2,315	278	4,762	222	1,539	(X)	(X)
35	Machinery, except electrical	455	5,183	2,604	69,951	2,685	45,970	4,020	21,674	36	1,255
351	Engines and turbines	11	75	33	2,882	51	1,752	88	1,752	(X)	(X)
3511	Turbines and turbine generator sets	5	33	20	2,533	9	(D)	24	666	(X)	(X)
3519	Internal combustion engines, n.e.c.	6	42	13	349	42	(D)	64	1,086	(X)	(X)
352	Farm and garden machinery	29	796	268	3,922	438	7,883	558	3,754	(X)	(X)
3523	Farm machinery and equipment	27	(D)	260	3,844	379	6,354	493	3,205	(X)	(X)
3524	Lawn and garden equipment	2	(D)	8	78	59	1,529	65	549	(X)	(X)
353	Construction and related machinery	41	270	741	32,659	433	7,179	888	4,947	(X)	(X)
3531	Construction machinery	18	115	249	17,620	153	3,973	305	2,664	(X)	(X)
3532	Mining machinery	10	113	77	3,119	31	302	89	243	(X)	(X)
3533	Oil field machinery	(X)	(X)	81	4,088	29	423	112	628	(X)	(X)
3534	Elevators and moving stairways	-	-	39	652	31	440	43	168	(X)	(X)
3535	Conveyors and conveying equipment	5	20	160	3,717	109	1,292	172	518	(X)	(X)
3536	Hoists, cranes, and monorails	4	10	58	1,200	17	81	70	221	(X)	(X)
3537	Industrial trucks and tractors	4	12	77	2,263	63	668	97	505	(X)	(X)

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	FOUNDRY PATTERN SHOP		PLATE OR STRUCTURAL FABRICATION		STAMPING, BLANKING, AND FORMING OF METALS		PRINTING, LACQUERING, AND ENAMELING OF METALS		PLASTIC MOLDING	
		Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
35	Machinery, except electrical--Con.										
354	Metalworking machinery	72	585	212	2,658	303	3,443	378	1,738	(X)	(X)
3541	Machine tools, metal cutting	20	119	39	403	27	225	122	571	(X)	(X)
3542	Machine tools, metal forming	9	40	41	711	16	(D)	61	213	(X)	(X)
3544	Special dies, tools, jigs, and fixtures	32	381	55	370	166	1,598	35	100	(X)	(X)
3545	Machine tool accessories	4	11	21	112	36	537	40	84	(X)	(X)
3546	Power driven hand tools	(X)	(X)	(X)	(X)	25	552	31	392	(X)	(X)
3547	Rolling mill machinery	3	(D)	16	553	3	(D)	19	65	(X)	(X)
3549	Metalworking machinery, n.e.c.	4	(D)	40	509	30	446	70	313	(X)	(X)
355	Special industry machinery	80	408	429	8,417	281	2,529	607	1,823	(X)	(X)
3551	Food products machinery	19	187	101	2,029	110	955	150	462	(X)	(X)
3552	Textile machinery	11	41	51	732	50	435	72	178	(X)	(X)
3553	Woodworking machinery	6	16	42	403	20	159	60	161	(X)	(X)
3554	Paper industries machinery	13	46	45	938	(X)	(X)	62	187	(X)	(X)
3555	Printing trades machinery	5	11	20	397	17	152	50	198	(X)	(X)
3559	Special industry machinery, n.e.c.	26	107	170	3,918	84	828	213	637	(X)	(X)
356	General industrial machinery	185	2,837	388	8,808	378	6,214	682	2,207	(X)	(X)
3561	Pumps and pumping equipment	30	185	52	767	29	(D)	139	409	(X)	(X)
3562	Ball and roller bearings	3	(D)	9	68	37	1,302	14	52	(X)	(X)
3563	Air and gas compressors	7	82	27	576	18	299	59	280	(X)	(X)
3564	Blowers and fans	5	(D)	72	3,434	84	1,688	102	441	(X)	(X)
3565	Industrial patterns	107	2,414	4	16	3	(D)	-	-	(X)	(X)
3566	Speed changers, drives, and gears	16	60	7	253	14	198	48	135	(X)	(X)
3567	Industrial furnaces and ovens	(X)	(X)	72	1,222	51	415	67	171	(X)	(X)
3568	Power transmission equipment, n.e.c.	10	40	10	107	42	1,257	40	131	(X)	(X)
3569	General industrial machinery, n.e.c.	7	(D)	135	2,365	100	844	213	588	(X)	(X)
357	Office and computing machines	(X)	(X)	40	697	112	2,259	111	1,125	36	1,255
3573	Electronic computing equipment	(X)	(X)	19	247	56	906	48	563	24	678
3574	Calculating and accounting machines	(X)	(X)	1	(D)	4	(D)	6	34	3	(D)
3576	Scales and balances, except laboratory	(X)	(X)	18	(D)	18	(D)	31	135	2	(D)
3579	Office machines, n.e.c. and typewriters[4]	(X)	(X)	2	(D)	34	1,042	26	393	7	(D)
358	Refrigeration and service machinery	16	109	151	6,135	407	12,082	411	3,511	(X)	(X)
3581	Automatic merchandising machines	(X)	(X)	3	(D)	21	829	16	239	(X)	(X)
3582	Commercial laundry equipment	(X)	(X)	12	(D)	15	123	25	74	(X)	(X)
3585	Refrigeration and heating equipment	15	(D)	74	4,663	266	9,762	258	2,796	(X)	(X)
3586	Measuring and dispensing pumps	1	(D)	5	179	13	313	16	140	(X)	(X)
3589	Service industry machinery, n.e.c.	(X)	(X)	57	1,144	92	1,055	96	262	(X)	(X)
359	Miscellaneous machinery, except electrical	21	103	342	3,773	282	2,629	297	817	(X)	(X)
3592	Carburetors, pistons, rings, valves	2	(D)	1	(D)	11	233	9	40	(X)	(X)
3599	Miscellaneous machinery, except electrical, n.e.c.	19	(D)	341	(D)	271	2,396	288	777	(X)	(X)
36	Electric and electronic equipment	43	186	398	6,956	1,689	39,043	1,599	17,470	466	11,420
361	Electric distributing equipment	13	34	93	2,266	219	5,766	227	2,125	40	790
3612	Transformers	(X)	(X)	39	1,260	63	2,095	81	1,228	(X)	(X)
3613	Switchgear and switchboard apparatus	13	34	54	1,006	156	3,671	146	897	40	790
362	Electrical industrial apparatus	7	39	92	2,140	264	5,146	316	1,856	22	615
3621	Motors and generators	4	(D)	24	1,041	134	2,871	149	993	(X)	(X)
3622	Industrial controls	3	(D)	41	706	75	1,506	104	535	22	615
3623	Welding apparatus, electric	(X)	(X)	27	393	21	379	32	167	(X)	(X)
3624	Carbon and graphite products	(X)	(X)	(X)	(X)	9	51	3	(D)	(X)	(X)
3629	Electrical industrial apparatus, n.e.c.	(X)	(X)	(X)	(X)	25	339	28	(D)	(X)	(X)
363	Household appliances	7	24	15	165	181	11,199	171	8,144	56	2,765
3631	Household cooking equipment	4	8	3	44	40	2,822	38	1,884	2	(D)
3632	Household refrigerators and freezers	1	(D)	-	-	20	3,254	19	2,082	(X)	(X)
3633	Household laundry equipment	-	-	1	(D)	15	1,628	16	2,136	11	(D)
3634	Electric housewares and fans	1	(D)	7	75	75	2,058	63	1,237	34	1,423
3635	Household vacuum cleaners	1	(D)	1	(D)	7	(D)	7	(D)	5	(D)
3636	Sewing machines	-	-	1	(D)	4	(D)	9	(D)	1	(D)
3639	Household appliances, n.e.c.	-	-	2	(D)	20	993	19	625	3	(D)
364	Electric lighting and wiring equipment	16	89	54	859	364	6,888	302	2,376	64	1,562
3643	Current-carrying wiring devices	4	14	4	39	99	1,615	27	94	49	1,308
3644	Noncurrent-carrying wire devices	12	75	14	424	61	1,649	38	330	15	254
3645	Residential lighting fixtures	(X)	(X)	2	(D)	50	729	96	720	(X)	(X)
3646	Commercial lighting fixtures	(X)	(X)	10	53	74	1,667	70	824	(X)	(X)
3647	Vehicular lighting equipment	(X)	(X)	2	(D)	23	598	18	176	(X)	(X)
3648	Lighting equipment, n.e.c.	(X)	(X)	22	263	57	630	53	232	(X)	(X)
365	Radio and TV receiving equipment	(X)	(X)	(X)	(X)	32	448	37	215	(X)	(X)
3651	Radio and TV receiving sets	(X)	(X)	(X)	(X)	32	448	37	215	(X)	(X)

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		FOUNDRY PATTERN SHOP		PLATE OR STRUCTURAL FABRICATION		STAMPING, BLANKING, AND FORMING OF METALS		PAINTING, LACQUERING, AND ENAMELING OF METALS		PLASTIC MOLDING	
36	Electric and electronic equipment--Con.										
366	Communication equipment	(X)	(X)	96	1,224	243	4,011	285	1,706	100	2,655
3661	Telephone and telegraph apparatus	(X)	(X)	14	214	38	1,786	40	320	23	1,842
3662	Radio and TV communication equipment	(X)	(X)	82	1,010	205	2,225	245	1,386	77	813
367	Electronic components and accessories	(X)	(X)	37	253	269	3,115	176	592	184	3,033
3671	Electron tubes, all types	(X)	(X)	-	-	22	478	18	114	2	(D)
3674	Semiconductors and related devices	(X)	(X)	5	64	19	572	12	33	27	300
3675	Electronic capacitors	(X)	(X)	4	6	11	33	11	23	12	(D)
3676	Electronic resistors	(X)	(X)	-	-	14	151	4	6	19	156
3677	Electronic coils and transformers	(X)	(X)	4	9	26	80	30	62	23	83
3678	Electronic connectors	(X)	(X)	4	33	42	651	9	34	36	1,308
3679	Electronic components, n.e.c	(X)	(X)	20	141	135	1,150	92	320	65	1,000
369	Miscellaneous electrical equipment and supplies	(X)	(X)	11	49	117	2,470	85	456	(X)	(X)
3691	Storage batteries	(X)	(X)	(X)	(X)	6	68	(X)	(X)	(X)	(X)
3692	Primary batteries, dry and wet	(X)	(X)	(X)	(X)	16	119	(X)	(X)	(X)	(X)
3693	X-ray apparatus and tubes	(X)	(X)	11	49	18	265	28	244	(X)	(X)
3694	Engine electrical equipment	(X)	(X)	(X)	(X)	45	1,665	38	162	(X)	(X)
3699	Electrical equipment and supplies, n.e.c	(X)	(X)	(X)	(X)	32	353	19	50	(X)	(X)
37	Transportation equipment	96	1,416	645	54,770	969	54,905	1,335	32,580	244	7,974
371	Motor vehicles and equipment	31	427	243	8,039	540	41,454	668	19,809	60	2,163
3711	Motor vehicles and car bodies	5	(D)	16	906	27	7,201	63	15,196	8	(D)
3713	Truck and bus bodies	4	(D)	81	1,499	93	1,151	167	1,097	10	(D)
3714	Motor vehicle parts and accessories	20	231	57	2,556	351	31,944	302	2,690	39	1,559
3715	Truck trailers	2	(D)	71	2,933	63	1,140	101	719	-	-
3716	Motor homes	-	-	18	145	6	18	35	107	3	120
372	Aircraft and parts	29	(D)	70	5,512	168	7,252	173	2,633	58	2,638
3721	Aircraft	16	469	22	2,733	37	4,938	40	1,873	31	2,073
3724	Aircraft engines and engine parts	7	36	18	1,643	49	844	39	301	4	(D)
3728	Aircraft equipment, n.e.c	6	(D)	30	1,136	82	1,470	94	459	23	(D)
373	Ship and boat building and repairing	35	397	214	32,618	64	1,264	217	7,416	105	2,942
3731	Ship building and repairing	15	237	157	31,761	28	952	137	7,072	7	(D)
3732	Boat building and repairing	20	160	57	857	36	312	80	344	98	(D)
3743	Railroad equipment	(X)	(X)	58	6,667	43	2,046	79	1,482	(X)	(X)
3751	Motorcycles, bicycles, and parts	(X)	(X)	(X)	(X)	35	1,459	19	446	(X)	(X)
376	Guided missiles, space vehicles, parts	1	(D)	18	724	32	353	40	194	21	231
3761	Guided missiles and space vehicles	-	-	12	573	17	216	22	147	11	117
3764	Space propulsion units and parts	1	(D)	4	(D)	6	90	12	35	7	(D)
3769	Space vehicle equipment, n.e.c	-	-	2	(D)	9	47	6	12	3	(D)
379	Miscellaneous transportation equipment	(X)	(X)	42	1,210	87	1,077	139	600	(X)	(X)
3792	Travel trailers and campers	(X)	(X)	36	(D)	33	409	71	206	(X)	(X)
3795	Tanks and tank components	(X)	(X)	6	(D)	3	(D)	6	67	(X)	(X)
3799	Transportation equipment, n.e.c	(X)	(X)	(X)	(X)	51	(D)	62	327	(X)	(X)
38	Instruments and related products	(X)	(X)	(X)	(X)	291	4,090	322	1,586	83	1,614
3811	Engineering and scientific instruments	(X)	(X)	(X)	(X)	55	609	77	366	16	36
382	Measuring and controlling devices	(X)	(X)	(X)	(X)	205	3,075	245	1,220	67	1,578
3822	Environmental controls	(X)	(X)	(X)	(X)	37	1,200	19	174	14	522
3823	Process control instruments	(X)	(X)	(X)	(X)	35	443	64	391	10	92
3824	Fluid meters and counting devices	(X)	(X)	(X)	(X)	26	334	26	106	9	343
3825	Instruments to measure electricity	(X)	(X)	(X)	(X)	71	928	76	375	27	594
3829	Measuring and controlling devices, n.e.c	(X)	(X)	(X)	(X)	36	170	60	174	7	27
3873	Watches, clocks, and watchcases	(X)	(X)	(X)	(X)	31	406	(X)	(X)	(X)	(X)

	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
	ASSEMBLY OF PRODUCT		SHIPPING (INCLUDING PACKING AND CRATING)		POWDER METALLURGY	
All industries	3,573	355,876	1,205	11,953	186	7,685
34 Fabricated metal products	(X)	(X)	(X)	(X)	11	207
35 Machinery, except electric	2,350	186,329	1,183	10,716	114	3,436
36 Electrical equipment and supplies	1,223	169,547	(X)	(X)	30	2,814
37 Transportation equipment	(X)	(X)	(X)	(X)	31	1,228

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		ASSEMBLY OF PRODUCT		SHIPPING (INCLUDING PACKING AND CRATING)		POWDER METALLURGY	
34	Fabricated metal products	(X)	(X)	(X)	(X)	11	207
342	Cutlery, handtools, and hardware	(X)	(X)	(X)	(X)	5	(D)
3429	Hardware, n.e.c.	(X)	(X)	(X)	(X)	5	(D)
348	Ordnance and accessories, n.e.c.	(X)	(X)	(X)	(X)	6	(D)
3482	Small arms ammunition	(X)	(X)	(X)	(X)	1	(D)
3483	Ammunition, except small arms, n.e.c.	(X)	(X)	(X)	(X)	2	(D)
3484	Small arms	(X)	(X)	(X)	(X)	2	(D)
3489	Ordnance and accessories, n.e.c.	(X)	(X)	(X)	(X)	1	(D)
35	Machinery, except electric	2,350	186,329	1,183	10,716	114	3,436
351	Engines and turbines	101	19,284	(X)	(X)	(X)	(X)
3511	Turbines and turbine generator sets	27	4,384	(X)	(X)	(X)	(X)
3519	Internal combustion engines, n.e.c.	74	14,900	(X)	(X)	(X)	(X)
352	Farm and garden machinery	571	24,411	552	4,732	4	(D)
3523	Farm machinery and equipment	501	18,263	479	4,213	2	(D)
3524	Lawn and garden equipment	70	6,148	73	519	2	(D)
353	Construction and related machinery	462	22,489	(X)	(X)	26	(D)
3531	Construction machinery	298	17,635	(X)	(X)	8	281
3532	Mining machinery	98	3,184	(X)	(X)	8	198
3533	Oil field machinery	(X)	(X)	(X)	(X)	7	29
3534	Elevators and moving stairways	(X)	(X)	(X)	(X)	-	-
3535	Conveyors and conveying equipment	(X)	(X)	(X)	(X)	1	(D)
3536	Hoists, cranes, and monorails	66	1,670	(X)	(X)	2	(D)
3537	Industrial trucks and tractors	(X)	(X)	(X)	(X)	-	-
354	Metalworking machinery	(X)	(X)	(X)	(X)	49	1,956
3541	Machine tools, metal cutting	(X)	(X)	(X)	(X)	3	17
3542	Machine tools, metal forming	(X)	(X)	(X)	(X)	2	(D)
3544	Special dies, tools, jigs, and fixtures	(X)	(X)	(X)	(X)	9	58
3545	Machine tool accessories	(X)	(X)	(X)	(X)	31	1,847
3546	Power driven hand tools	(X)	(X)	(X)	(X)	2	(D)
3547	Rolling mill machinery	(X)	(X)	(X)	(X)	-	-
3549	Metalworking machinery, n.e.c.	(X)	(X)	(X)	(X)	2	(D)
356	General industrial machinery	525	20,745	(X)	(X)	19	675
3561	Pumps and pumping equipment	202	7,030	(X)	(X)	7	(D)
3562	Ball and roller bearings	85	4,753	(X)	(X)	3	(D)
3563	Air and gas compressors	73	4,404	(X)	(X)	1	(D)
3565	Industrial patterns	(X)	(X)	(X)	(X)	-	-
3566	Speed changers, drives, and gears	71	1,470	(X)	(X)	-	-
3567	Industrial furnaces and ovens	(X)	(X)	(X)	(X)	1	(D)
3568	Power transmission equipment, n.e.c.	94	3,088	(X)	(X)	7	162
357	Office and computing machines	359	56,104	332	2,622	(X)	(X)
3573	Electronic computing equipment	250	40,269	227	1,719	(X)	(X)
3574	Calculating and accounting machines	16	6,215	16	186	(X)	(X)
3576	Scales and balances, except laboratory	39	1,691	37	178	(X)	(X)
3579	Office machines, n.e.c. and typewriters[4]	54	7,929	52	539	(X)	(X)
358	Refrigeration and service machinery	332	43,296	299	3,362	2	(D)
3581	Automatic merchandising machines	(X)	(X)	(X)	(X)	-	-
3582	Commercial laundry equipment	(X)	(X)	(X)	(X)	-	-
3585	Refrigeration and heating equipment	314	41,816	299	3,362	-	-
3586	Measuring and dispensing pumps	18	1,480	(X)	(X)	-	-
3589	Service industry machinery, n.e.c.	(X)	(X)	(X)	(X)	2	(D)
359	Miscellaneous machinery, except electrical	(X)	(X)	(X)	(X)	14	207
3592	Carburetors, pistons, rings, valves	(X)	(X)	(X)	(X)	3	8
3599	Machinery, except electrical, n.e.c.	(X)	(X)	(X)	(X)	11	199
36	Electrical and electronic equipment	1,223	169,547	(X)	(X)	30	2,814
363	Household appliances	(X)	(X)	(X)	(X)	2	(D)
3631	Household cooking equipment	(X)	(X)	(X)	(X)	-	-
3632	Household refrigerators and freezers	22	13,798	22	1,237	-	-
3633	Household laundry equipment	(X)	(X)	(X)	(X)	1	(D)
3634	Electric housewares and fans	(X)	(X)	(X)	(X)	1	(D)
3635	Household vacuum cleaners	(X)	(X)	(X)	(X)	-	-
3636	Sewing machines	(X)	(X)	(X)	(X)	-	-
3639	Household appliances, n.e.c.	(X)	(X)	(X)	(X)	-	-
365	Radio and TV receiving equipment	104	25,632	(X)	(X)	(X)	(X)
3651	Radio and TV receiving sets	104	25,632	(X)	(X)	(X)	(X)
366	Communication equipment	457	47,221	(X)	(X)	4	(D)
3662	Radio and TV communication equipment	457	47,221	(X)	(X)	4	(D)

See footnotes at end of table.

Table 3. **Number of Establishments and Production Workers for Selected Metalworking Operations by Industry: 1977**—Con.

SIC code	Industries	Establishments	Production workers	Establishments	Production workers	Establishments	Production workers
		ASSEMBLY OF PRODUCTS		SHIPPING (INCLUDING PACKING AND CRATING)		POWDER METALLURGY	
36	Electrical and electronic equipment--Con.						
367	Electronic components and accessories	640	82,896	(X)	(X)	24	(D)
3671	Electron tubes, all types	35	12,313	(X)	(X)	-	-
3674	Semiconductors and related devices	77	22,123	(X)	(X)	4	(D)
3675	Electronic capacitors	57	13,734	(X)	(X)	7	37
3676	Electronic resistors	38	4,451	(X)	(X)	2	(D)
3677	Electronic coils and transformers	80	6,344	(X)	(X)	2	(D)
3678	Electronic connectors	61	5,446	(X)	(X)	-	-
3679	Electronic components, n.e.c.	292	18,485	(X)	(X)	9	(D)
37	Transportation equipment	(X)	(X)	(X)	(X)	31	1,228
371	Motor vehicles and equipment	(X)	(X)	(X)	(X)	17	1,024
3711	Motor vehicles and car bodies	(X)	(X)	(X)	(X)	1	(D)
3713	Truck and bus bodies	(X)	(X)	(X)	(X)	-	-
3714	Motor vehicle parts and accessories	(X)	(X)	(X)	(X)	16	(D)
3715	Truck trailers	(X)	(X)	(X)	(X)	-	-
3716	Motor homes	(X)	(X)	(X)	(X)	-	-
372	Aircraft and parts	(X)	(X)	(X)	(X)	12	(D)
3721	Aircraft	(X)	(X)	(X)	(X)	1	(D)
3724	Aircraft engines and engine parts	(X)	(X)	(X)	(X)	5	54
3728	Aircraft equipment, n.e.c.	(X)	(X)	(X)	(X)	6	(D)
3751	Motorcycles, bicycles, and parts	(X)	(X)	(X)	(X)	-	-
376	Guided missiles, space vehicles, parts	(X)	(X)	(X)	(X)	2	(D)
3761	Guided missiles and space vehicles	(X)	(X)	(X)	(X)	2	(D)
3764	Space propulsion units and parts	(X)	(X)	(X)	(X)	-	-
3769	Space vehicle equipment, n.e.c.	(X)	(X)	(X)	(X)	-	-
379	Miscellaneous transportation equipment	(X)	(X)	(X)	(X)	-	-
3795	Tanks and tank components	(X)	(X)	(X)	(X)	-	-
3799	Transportation equipment, n.e.c.	(X)	(X)	(X)	(X)	-	-

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (X) Not collected.

[1]Excludes data on forging operations used in the manufacture of bolts, nuts, and other related products.

[2]Excludes data for the 3,447 establishments classified in Industry 3471, Plating and Polishing, which are usually engaged in work on materials owned by others and generally perform electroplating operations.

[3]The specific operation basically represents the major activity of the particular industry. A few respondents incorrectly reported that the item did not apply.

[4]Separate data cannot be published for Industry 3572, Typewriters, without revealing the operations of individual companies. Therefore, industry 3572 has been combined with Industry 3579, Office Machines, N.E.C.

[5]Excludes data for establishments classified in Industry 3479, Metal Coating and Allied Services, which are primarily engaged in galvanizing and other hot-dip coating, usually on materials owned by others.

Table 4. **Coverage of Selected Metalworking Operations by Industry: 1977**

SIC code	Industry	Establishments		Total employees in industry (1,000)	Percent of total employees in industry--		
		Number	Received metal-working inquiry		Reporting 1 or more specified operations	Reporting no operations apply	Completing inquiry
3321	Gray iron foundries[2]	984	734	138.8	90-94	0-4	90-94
3322	Malleable iron foundries[2]	66	54	18.2	90-94	-	90-94
3324	Steel investment foundries[2]	92	76	10.5	85-89	0-4	85-89
3325	Steel foundries, n.e.c.[2]	323	244	54.8	90-94	0-4	90-94
3361	Aluminum foundries[2]	1,038	523	52.2	80-84	0-4	80-84
3362	Brass, bronze, and copper foundries[2]	489	223	12.6	65-69	0-4	65-69
3369	Nonferrous foundries, n.e.c.[2]	365	177	17.3	85-89	0-4	85-89
3411	Metal cans	403	342	59.8	80-84	5-9	90-94
3412	Metal barrels, drums, and pails	184	144	12.4	75-79	0-4	75-79
3421	Cutlery	130	72	14.9	80-84	0-4	85-89
3423	Hand and edge tools, n.e.c	724	360	47.0	80-84	0-4	80-84
3425	Handsaws and saw blades	115	69	7.6	70-74	0-4	75-79
3429	Hardware, n.e.c	1,168	615	99.2	85-89	0-4	85-89
3431	Metal sanitary ware	101	52	8.1	80-84	0-4	85-89
3432	Plumbing fittings and brass goods	213	134	19.3	75-79	5-9	85-89
3433	Heating equipment, except electric	702	313	25.8	60-64	5-9	65-69
3441	Fabricated structural metal[2]	2,462	1,498	99.3	65-69	0-4	70-74
3442	Metal doors, sash, and trim	1,672	861	65.8	45-49	15-19	60-64
3443	Fabricated platework (boiler shops)[2]	1,864	1,170	123.5	75-79	0-4	75-79
3444	Sheet metal work	3,430	1,268	77.4	50-54	5-9	60-64
3446	Architectural metal work	1,511	283	20.8	50-54	5-9	60-64
3448	Prefabricated metal buildings	466	282	22.7	60-64	0-4	65-69
3449	Miscellaneous metal work	412	288	16.3	50-54	15-19	70-74
3451	Screw machine products[2]	1,770	715	43.8	60-64	0-4	65-69
3452	Bolts, nuts, rivets, and washers	857	529	60.9	80-84	0-4	85-89
3462	Iron and steel forgings[2]	358	260	39.1	85-89	0-4	85-89
3463	Nonferrous forgings[2]	47	35	5.4	85-89	0-4	85-89
3465	Automotive stampings[2]	591	493	132.4	90-94	0-4	95-100
3466	Crowns and closures	56	49	7.9	85-89	5-9	90-94
3469	Metal stampings, n.e.c.[2]	2,663	1,302	103.2	70-74	0-4	70-74
3482	Small arms ammunition	65	25	10.3	90-94	0-4	95-100
3483	Ammunition, except small arms, n.e.c	81	62	20.5	70-74	5-9	80-84
3484	Small arms	112	70	17.5	85-89	0-4	90-94
3489	Ordnance and accessories, n.e.c	89	48	23.6	60-64	20-24	85-89
3493	Steel springs, except wire	131	73	8.2	90-94	0-4	90-94
3494	Valves and pipe fittings	902	631	108.7	80-84	0-4	85-89
3495	Wire springs	332	262	21.7	60-64	5-9	70-74
3496	Miscellaneous fabricated wire products	1,114	460	32.4	50-54	5-9	55-59
3497	Metal foil and leaf	76	60	9.3	15-19	20-24	40-44
3498	Fabricated pipe and fittings	579	368	28.2	60-64	0-4	65-69
3499	Fabricated metal products, n.e.c	3,238	1,552	70.8	50-54	0-4	50-54
3511	Turbines and turbine generator sets	84	49	40.9	95-100	0-4	95-100
3519	Internal combustion engines, n.e.c	232	155	88.8	95-100	0-4	95-100
3523	Farm machinery and equipment	2,004	929	131.3	80-84	0-4	85-89
3524	Lawn and garden equipment	154	125	19.5	90-94	0-4	90-94
3531	Construction machinery	922	560	155.3	90-94	0-4	90-94
3532	Mining machinery	344	215	31.4	85-89	0-4	90-94
3533	Oil field machinery	478	317	58.6	85-89	0-4	85-89
3534	Elevators and moving stairways	152	97	10.2	70-74	5-9	75-79
3535	Conveyors and conveying equipment	617	382	33.0	70-74	5-9	75-79
3536	Hoists, cranes, and monorails	242	154	15.8	65-69	0-4	70-74
3537	Industrial trucks and tractors	475	223	28.8	80-84	0-4	80-84
3541	Machine tools, metal cutting types	917	324	59.4	75-79	0-4	80-84
3542	Machine tools, metal forming types	426	208	23.7	75-79	0-4	80-84
3544	Special dies, tools, jigs and fixtures	7,153	1,694	105.7	40-44	0-4	45-49
3545	Machine tool accessories	1,411	636	54.0	70-74	5-9	75-79
3546	Power driven hand tools	124	89	27.7	85-89	0-4	85-89
3547	Rolling mill machinery	63	42	7.9	85-89	0-4	85-89
3549	Metalworking machinery, n.e.c	534	351	19.4	65-69	0-4	65-69
3551	Food products machinery	740	402	36.3	75-79	0-4	80-84
3552	Textile machinery	638	313	25.9	65-69	0-4	65-69
3553	Woodworking machinery	301	157	10.3	70-74	0-4	75-79
3554	Paper industries machinery	213	143	16.4	90-94	0-4	90-94
3555	Printing trades machinery	595	291	25.5	60-64	10-14	70-74
3559	Special industry machinery, n.e.c	1,600	870	70.4	70-74	0-4	75-79
3561	Pumps and pumping equipment	613	366	63.0	80-84	0-4	80-84
3562	Ball and roller bearings	149	122	50.6	90-94	0-4	90-94
3563	Air and gas compressors	175	137	32.0	90-94	0-4	90-94
3564	Blowers and fans	482	275	28.0	70-74	0-4	70-74
3565	Industrial patterns	1,002	199	9.3	40-44	0-4	40-44
3566	Speed changers, drives, and gears	327	192	25.3	85-89	0-4	85-89
3567	Industrial furnaces and ovens	327	175	15.2	65-69	10-14	75-79
3568	Power transmission equipment, n.e.c	226	188	32.5	85-89	0-4	85-89
3569	General industrial machinery, n.e.c	1,646	1,140	57.5	55-59	0-4	60-64
3573	Electronic computing equipment	931	556	192.6	80-84	0-4	85-89
3574	Calculating and accounting machines	64	39	17.1	80-84	0-4	85-89
3576	Scales and balances, except laboratory	103	62	7.1	85-89	-	85-89

See footnotes at end of table.

Table 4. **Coverage of Selected Metalworking Operations by Industry: 1977** – Con.

SIC code	Industry	Establishments		Total employees in industry (1,000)	Percent of total employees in industry--		
		Number	Received metal-working inquiry		Reporting 1 or more specified operations	Reporting no operations apply	Completing inquiry
3579	Office machines, n.e.c. and typewriters	215	125	42.4	75-79	0-4	75-79
3581	Automatic merchandising machines	113	56	103.2	5-9	0-4	5-9
3582	Commercial laundry equipment	94	47	4.6	50-54	0-4	50-54
3585	Refrigeration and heating equipment	860	577	138.6	90-94	0-4	90-94
3586	Measuring and dispensing pumps	59	38	7.4	85-89	0-4	85-89
3589	Service industry machinery, n.e.c.	988	569	32.1	50-54	5-9	60-64
3592	Carburetors, pistons, rings, and valves	151	98	32.2	90-94	0-4	90-94
3599	Machinery, except electrical, n.e.c.[2]	19.247	3,119	190.4	45-49	0-4	45-49
3612	Transformers	279	183	43.3	75-79	0-4	75-79
3613	Switchgear and switchboard apparatus	667	403	71.4	80-84	0-4	80-84
3621	Motors and generators	446	331	96.9	80-84	0-4	85-89
3622	Industrial controls	727	383	55.5	70-74	5-9	80-84
3623	Welding apparatus, electric	176	111	17.5	80-84	0-4	85-89
3624	Carbon and graphite products	74	57	12.1	60-64	30-34	90-94
3629	Electrical industrial apparatus, n.e.c.	223	138	16.5	65-69	10-14	80-84
3631	Household cooking equipment	96	68	25.4	90-94	0-4	90-94
3632	Household refrigerators and freezers	42	29	35.8	95-100	-	95-100
3633	Household laundry equipment	31	28	19.4	95-100	0-4	95-100
3634	Electric housewares and fans	291	183	47.3	80-84	5-9	85-89
3635	Household vacuum cleaners	36	25	10.4	70-74	0-4	75-79
3636	Sewing machines	92	38	8.2	65-69	0-4	70-74
3639	Household appliances, n.e.c.	80	51	15.7	70-74	5-9	75-79
3641	Electric lamps	167	82	28.7	65-69	20-24	85-89
3643	Current-carrying wiring devices	413	253	43.9	75-79	0-4	80-84
3644	Noncurrent-carrying wiring devices	202	145	25.8	85-89	0-4	85-89
3645	Residential lighting fixtures	710	290	23.7	50-54	5-9	60-64
3646	Commercial lighting fixtures	218	155	15.6	75-79	0-4	80-84
3647	Vehicular lighting equipment	75	50	14.5	90-94	5-9	95-100
3648	Lighting equipment, n.e.c.	223	147	12.8	70-74	5-9	80-84
3651	Radio and TV receiving sets	581	276	74.6	70-74	0-4	70-74
3661	Telephone and telegraph apparatus	264	182	124.4	80-84	5-9	90-94
3662	Radio and TV communication equipment	2,122	1,271	334.6	75-79	0-4	80-84
3671	Electron tubes, all types	146	79	36.7	90-94	0-4	95-100
3674	Semiconductors and related devices	545	314	114.0	60-64	10-14	75-79
3675	Electronic capacitors	118	103	28.9	65-69	5-9	75-79
3676	Electronic resistors	101	90	21.3	70-74	5-9	75-79
3677	Electronic coils and transformers	294	212	20.7	55-59	15-19	70-74
3678	Electronic connectors	133	121	26.0	75-79	0-4	80-84
3679	Electronic components, n.e.c.	3,119	1,428	126.0	55-59	5-9	65-69
3691	Storage batteries	218	145	25.9	35-39	40-44	80-84
3692	Primary batteries, dry and wet	58	39	11.0	80-84	10-14	90-94
3693	X-ray apparatus and tubes	243	158	30.9	40-44	10-14	50-54
3694	Engine electrical equipment	409	240	63.8	80-84	5-9	90-94
3699	Electrical equipment and supplies, n.e.c.	647	232	20.7	40-44	15-19	55-59
3711	Motor vehicles and car bodies	322	155	343.6	70-74	0-4	70-74
3713	Truck and bus bodies	820	445	34.8	50-54	15-19	70-74
3714	Motor vehicle parts and accessories	2,623	1,437	450.7	80-84	5-9	90-94
3715	Truck trailers	353	209	28.1	70-74	5-9	80-84
3716	Motor homes	116	116	19.2	30-34	20-24	50-54
3721	Aircraft	176	213	222.7	90-94	0-4	90-94
3724	Aircraft engines and engine parts	269	206	106.1	90-94	0-4	95-100
3728	Aircraft equipment, n.e.c.	727	372	102.0	80-84	0-4	80-84
3731	Ship building and repairing	605	407	176.4	85-89	0-4	85-89
3732	Boat building and repairing	2,190	653	43.8	40-44	10-14	55-59
3743	Railroad equipment	201	158	56.3	90-94	0-4	90-94
3751	Motorcycles, bicycles, and parts	350	124	15.6	80-84	0-4	80-84
3761	Guided missiles and space vehicles	40	40	94.1	85-89	10-14	95-100
3764	Space propulsion units and parts	26	26	17.0	75-79	15-19	95-100
3769	Space vehicle equipment, n.e.c.	42	34	7.2	90-94	5-9	95-100
3792	Travel trailers and campers	861	375	26.3	35-39	25-29	65-69
3795	Tanks and tank components	24	19	12.4	95-100		95-100
3799	Transportation equipment, n.e.c.	429	167	10.3	65-69	0-4	65-69
3811	Engineering and scientific instruments	786	420	42.3	55-59	5-9	65-69
3822	Environmental controls	201	123	39.0	85-89	5-9	90-94
3823	Process control instruments	426	284	46.5	60-64	5-9	70-74
3824	Fluid meters and counting devices	111	72	15.9	85-89	0-4	90-94
3825	Instruments to measure electricity	671	358	66.5	70-74	5-9	80-84
3829	Measuring and controlling devices, n.e.c.	670	258	32.3	65-69	5-9	70-74
3873	Watches, clocks, and watchcases	303	151	31.6	70-74	10-14	80-84

- Represents zero.

[1]Excludes establishments with less than 5 employees, which were typically not sent Census forms. Also, for selected industries, excludes small establishments (typically between 5 to 20 employees). See explanatory text for further explanation.

[2]The specific operation basically represents the major activity of the particular industry. A few respondents incorrectly reported that the item did not apply.

Table 5. **Number of Production Workers Engaged in Selected Metalworking Operations by Geographic Areas: 1977**

Division and State	Ferrous foundry	Nonferrous foundry (except die casting)	Nonferrous die casting	Forgings--presses, hammers or upsetters	Electro-plating and other plating	Plating and polishing industries	Galvanizing and other hot-dip coatings	Heat treating of metals	Automatic screw machine department	Machine shop
United States.....	185,469	29,783	30,913	[1]31,166	[2]24,718	[3]51,200	[4]3,318	28,500	49,066	553,383
New England:										
Maine.....	(D)	(D)	-	(D)	58	-	(D)	56	63	1,881
New Hampshire.....	702	204	(D)	(D)	154	-	(D)	126	376	3,817
Vermont.....	94	-	-	(D)	74	-	(D)	89	64	2,415
Massachusetts.....	1,743	491	168	656	1,152	1,700	36	1,022	1,717	19,217
Rhode Island.....	209	58	110	249	129	1,900	(D)	86	330	2,646
Connecticut.....	1,717	378	701	469	1,244	1,700	41	902	2,856	21,675
Middle Atlantic:										
New York.....	7,359	2,133	2,145	1,929	1,331	4,900	269	1,192	3,356	31,016
New Jersey.....	2,131	559	758	368	790	1,500	66	643	1,485	15,158
Pennsylvania.....	17,265	2,429	1,586	2,569	1,205	1,700	288	2,049	2,727	42,469
East North Central:										
Ohio.....	27,127	4,539	3,083	5,241	1,837	4,400	511	3,201	6,653	59,754
Indiana.....	11,647	2,384	1,666	2,111	1,001	1,800	92	2,277	2,128	29,790
Illinois.....	14,855	1,919	3,792	3,710	2,422	4,900	199	3,692	5,016	47,302
Michigan.....	29,058	1,228	4,907	3,826	2,939	5,900	127	3,291	5,916	50,000
Wisconsin.....	13,774	1,627	2,110	1,261	599	1,200	52	880	1,973	30,889
West North Central:										
Minnesota.....	1,956	1,107	449	234	444	1,100	16	152	1,670	10,211
Iowa.....	5,562	451	386	441	123	200	10	581	978	12,258
Missouri.....	3,124	900	1,010	253	531	700	112	376	946	7,608
North Dakota.....	33	(D)	-	-	-	-	-	(D)	(D)	359
South Dakota.....	(D)	-	-	-	-	-	-	(D)	8	356
Nebraska.....	346	146	(D)	112	82	-	(D)	113	105	2,611
Kansas.....	1,631	247	(D)	107	110	200	12	359	335	5,902
South Atlantic:										
Delaware.....	(D)	(D)	-	(D)	(D)	-	-	(D)	(D)	415
Maryland.....	431	(D)	(D)	10	215	(D)	(D)	312	228	6,413
District of Columbia.....	-	-	-	-	-	-	-	-	-	(D)
Virginia.....	5,068	166	(D)	25	254	200	15	190	125	4,866
West Virginia.....	595	367	(D)	150	109	(D)	(D)	44	57	1,442
North Carolina.....	1,017	179	349	150	365	800	88	289	599	7,001
South Carolina.....	821	52	473	178	229	200	20	506	621	4,903
Georgia.....	1,770	76	208	89	223	(D)	(D)	176	250	3,477
Florida.....	414	89	201	50	278	900	35	140	233	3,963
East South Central:										
Kentucky.....	1,805	(D)	401	763	307	500	(D)	606	566	6,715
Tennessee.....	4,490	253	886	519	467	1,400	37	491	1,000	7,006
Alabama.....	7,206	1,041	(D)	244	94	300	65	356	406	4,738
Mississippi.....	(D)	183	(D)	106	122	-	(D)	174	47	2,241
West South Central:										
Arkansas.....	720	252	583	61	250	-	105	142	291	3,179
Louisiana.....	1,132	15	51	392	65	-	(D)	177	183	3,609
Oklahoma.....	1,347	227	90	131	154	300	59	184	299	6,130
Texas.....	7,091	1,553	280	2,286	889	1,300	330	1,041	1,411	28,956
Mountain:										
Montana.....	(D)	-	-	-	(D)	-	-	(D)	-	30
Idaho.....	(D)	(D)	-	-	(D)	-	(D)	45	(D)	426
Wyoming.....	-	-	-	-	-	-	-	-	(D)	64
Colorado.....	616	(D)	6	133	129	200	(D)	168	110	3,361
New Mexico.....	(D)	(D)	(D)	-	(D)	-	-	10	10	560
Arizona.....	(D)	211	(D)	8	311	400	5	373	16	3,366
Utah.....	706	34	(D)	(D)	61	-	(D)	36	20	975
Nevada.....	-	-	-	(D)	(D)	-	-	(D)	9	224
Pacific:										
Washington.....	1,686	216	(D)	(D)	(D)	500	(D)	389	61	5,020
Oregon.....	1,586	256	154	201	236	500	(D)	107	167	4,060
California.....	5,381	3,317	2,595	1,546	3,301	8,500	288	1,414	3,626	42,751
Alaska.....	-	-	-	-	-	-	-	-	-	(D)
Hawaii.....	-	-	-	-	-	-	-	-	-	133

See footnotes at end of table.

Table 5. **Number of Production Workers Engaged in Selected Metalworking Operations by Geographic Areas: 1977** – Con.

Division and State	Tool and die shop	Foundry pattern shop	Plate or structural fabrication	Stamping, blanking, and forming of metals	Painting, lacquering, and enameling of metals	Plastics molding	Assembly of product	Shipping department including packing and crating	Powder metallurgy
United States.....	124,070	12,423	218,002	317,011	97,911	22,263	355,876	11,953	7,685
New England:									
Maine.....	223	7	1,816	550	259	(D)	1,856	-	-
New Hampshire.....	490	35	693	883	364	441	4,429	33	(D)
Vermont.....	332	(D)	143	191	116	(D)	646	(D)	-
Massachusetts.....	3,434	184	5,969	5,615	1,772	521	15,558	244	(D)
Rhode Island.....	452	18	2,488	695	294	(D)	441	(D)	-
Connecticut.....	4,234	162	6,942	7,190	1,922	559	5,164	63	91
Middle Atlantic:									
New York.....	8,642	803	9,724	16,358	3,902	841	28,951	647	240
New Jersey.....	2,715	200	3,949	7,826	2,973	550	8,100	204	70
Pennsylvania.....	6,532	1,037	19,428	16,474	4,655	1,260	21,018	434	950
East North Central:									
Ohio.....	16,687	1,137	14,469	39,160	8,198	1,168	19,705	1,107	672
Indiana.....	8,388	506	5,576	17,320	3,952	800	25,009	547	388
Illinois.....	10,878	837	14,210	32,101	7,931	1,690	29,936	1,307	302
Michigan.....	23,739	2,301	7,212	58,534	9,344	1,480	11,416	575	1,222
Wisconsin.....	4,636	705	9,525	13,663	5,601	654	13,008	607	(D)
West North Central:									
Minnesota.....	1,567	147	3,597	5,124	1,662	261	12,055	433	72
Iowa.....	1,871	698	4,930	4,749	2,023	193	12,662	805	(D)
Missouri.....	2,732	130	5,380	7,202	3,328	235	5,720	195	(D)
North Dakota.....	80	(D)	268	209	130	-	424	30	-
South Dakota.....	13	(D)	265	194	78	-	825	50	-
Nebraska.....	304	26	805	1,898	565	72	1,470	232	(D)
Kansas.....	1,307	235	3,536	2,552	1,858	460	2,933	414	(D)
South Atlantic:									
Delaware.....	(D)	-	214	224	(D)	-	(D)	-	-
Maryland.....	541	30	2,054	2,479	1,696	79	2,954	55	(D)
District of Columbia.....	-	-	-	(D)	-	-	(D)	(D)	-
Virginia.....	519	154	7,394	2,862	1,892	240	6,315	56	-
West Virginia.....	258	26	860	1,612	495	(D)	707	-	-
North Carolina.....	1,485	102	4,213	3,462	1,284	1,151	4,264	110	(D)
South Carolina.....	690	42	2,711	1,686	1,159	393	4,935	126	-
Georgia.....	690	384	4,512	4,430	2,287	195	2,197	157	(D)
Florida.....	908	113	2,799	2,667	1,195	801	6,859	122	13
East South Central:									
Kentucky.....	1,455	103	2,290	5,429	2,731	465	7,888	409	11
Tennessee.....	1,804	134	6,128	8,132	2,422	554	8,899	409	(D)
Alabama.....	823	489	4,864	2,545	1,168	430	1,450	174	(D)
Mississippi.....	629	(D)	6,736	3,351	2,897	283	2,461	149	-
West South Central:									
Arkansas.....	1,073	79	894	4,294	1,088	(D)	3,875	209	(D)
Louisiana.....	383	77	7,646	782	1,175	(D)	149	22	(D)
Oklahoma.....	753	77	4,783	1,894	923	265	2,605	52	(D)
Texas.....	2,508	443	16,135	6,858	3,854	1,108	19,223	640	(D)
Mountain:									
Montana.....	(D)	(D)	176	(D)	18	-	19	(D)	-
Idaho.....	29	(D)	336	146	51	(D)	956	31	-
Wyoming.....	(D)	-	(D)	(D)	10	-	-	-	-
Colorado.....	512	(D)	1,356	1,020	316	(D)	1,576	74	(D)
New Mexico.....	57	(D)	455	38	126	(D)	299	(D)	-
Arizona.....	497	37	907	873	277	433	8,578	67	(D)
Utah.....	106	25	1,245	306	181	(D)	1,855	67	(D)
Nevada.....	37	-	75	98	56	(D)	(D)	-	-
Pacific:									
Washington.....	(D)	66	4,440	3,156	784	801	842	19	(D)
Oregon.....	395	127	2,072	1,482	549	(D)	1,206	43	-
California.....	7,092	672	11,465	18,536	7,749	2,211	44,275	996	378
Alaska.....	-	-	(D)	-	4	-	-	-	-
Hawaii.....	(D)	-	140	(D)	(D)	-	(D)	(D)	-

Note: Precise measurement of coverage percentages are not available for geographic divisions and States.

- Represents zero. (D) Withheld to avoid disclosure of operations for individual companies.

[1]Excludes data on forging operations used in the manufacture of bolts, nuts, and other related products.

[2]Excludes data for the 3,447 establishments classified in Industry 3471, Plating and Polishing, which are usually engaged in work on materials owned by others and generally perform electroplating operations.

[3]Represents the total number of production workers classified in the plating and polishing industry. Figure is rounded to the nearest hundred, as are State totals, to correspond with data shown for this industry in table 2 of report MC77(2)-34D.

[4]Excludes data for establishments classified in Industry 3479, Metal Coating and Allied Services, which are primarily engaged in galvanizing and other hot-dip coating, usually on materials owned by others.

Selected Materials Consumed

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SELECTED MATERIALS CONSUMED

GENERAL

In this section, summary data by industries are shown for all materials for which manufacturing consumption was reported in the census of manufactures. All materials collected in the census of manufactures are covered in this section and are segregated into two categories: Materials designated as "incomplete" coverage and those designated as "complete" coverage. "Incomplete" coverage materials are shown in chapter 2 and consist of commodities for which coverage as measured by the census of manufactures is limited; that is, appreciable amounts of these materials may be consumed in other manufacturing industries, but were not collected in the census of manufactures. "Complete" coverage materials are shown in chapters 3 through 8 and consist of those commodities for which data obtained in the census of manufactures represent about 90 percent or more of total consumption by manufacturing industries. There are about 200 "complete" coverage materials and they are divided into separate chapters: Foods; textiles; newsprint and paperboard containers; chemicals, rubber, and plastics; metals; and engines, motors, bearings, electron tubes, and semiconductors.

Chapter 1 shows the percentage that the cost of materials specifically reported is of the cost of all materials consumed by an industry, thus providing the degree to which materials data by industry were collected and compiled in the 1977 Census of Manufactures. Separate data for the specific purchased materials consumed by industry appear in the final industry series MC77(2).

Some additional data on materials consumed are collected and published in the Bureau of the Census' Current Industrial Reports. Selected consumption information, such as quantities produced and consumed, or paper purchased for specific products were also collected in the product and special inquiry sections of the census of manufactures report form. These data, generally, are not to be found in this chapter but appear in the appropriate industry reports.

In addition to the data referred to above, other related statistics were collected in the 1977 Census of Manufactures and 1977 Census of Mineral Industries. Table 3 of the final industry series contains information showing the cost of resales, fuels, electricity, and contract work. The statistics on detailed fuels and electric energy appear in MC77(SR)-4. The statistics on detailed water consumed appear in MC77(SR)-8. Data relating to materials mined by establishments classified in manufacturing, primarily those for Major Group 32, Stone, Clay, Glass, and Concrete Products, are included in the census of mineral industries publications.

ESTABLISHMENT BASIS OF DATA

With a few exceptions that are noted in the individual texts, the data shown are the total consumption by establishments classified in the specified industry rather than the total consumption in the manufacture of the products defined by the industry title. That is, all of the metal consumed by an establishment classified in Industry 3642, Iron and Steel Forgings, is included in the total for that industry. Consequently, the quantity of materials consumed by this industry includes not only that used in forgings, but also the quantities used in producing secondary products such as special dies, jigs, fixtures, and electrical appliances. The 1977 Census of Manufactures summary report (MC77-SR-1) Table 1 in chapter 2 entitled, Industry Statistics, shows: (a) the percentage of primary products shipped within an industry to the total of all products shipped for the industry (specialization ratio) and (b) the percentage of primary products shipped within an industry to the total of primary products shipped by all industries (coverage ratio).

COVERAGE

As noted in the introduction to the census volumes, some undercoverage exists in the statistics for most materials. This undercoverage results from the fact that very small establishments and establishments consuming negligible amounts of specific materials were not required to report these materials. While no precise measure of the effect of the undercoverage is available, it is believed that for most materials for which data are shown in this section, the understatement is insignificant. However, for some materials characterized by large numbers of small consumers, the undercoverage resulting from this factor may be of some consequence, especially in the smaller cells.

DEFINITION OF MATERIALS CONSUMED

Census respondents were requested to report the amounts actually paid or payable after discounts and to include freight and direct charges incurred in acquiring the materials consumed during 1977. For materials transferred from other establishments of the same company, respondents were requested to report the nearest approximation to the commercial value of the material. Where a question arose concerning such transfer values, respondents were requested to determine the value of the material reported in the census as a product by the producing plant and then to add only freight and other direct handling charges. Thus, the cost of materials consumed represents a "purchasers price" as contrasted to the value of the output of the material which may be termed a "producers price."

Consumption of any given item was defined as the quantity actually consumed or put into production by the establishment during the report year. Respondents were generally permitted to use purchase data where purchases closely approximated consumption. However, where inventory change was significant, respondents were requested to take this into account in determining consumption for major items.

RELATIONSHIP OF MATERIALS DATA TO OTHER STATISTICS

The materials consumed by manufacturers may have been obtained from any or all of a number of possible sources—imports as well as materials produced domestically. They may have been obtained directly from the manufacturer of the materials, from some trade channel such as wholesalers, or from the stocks of the consuming manufacturer. In some instances, previously held stocks of producers of the material and of trade channels were a significant source of individual materials consumed during the year.

The products produced from the materials consumed may have been shipped or added either to work in process or finished goods inventory as of the end of the year. Therefore, in relating material consumed data to shipment or value added data, it is necessary to take into account inventory changes in work in process and finished goods for the industry.

Cost of Materials, Parts, Supplies, and Containers Consumed by Each Industry

GENERAL

This chapter shows the percentage that the cost of materials specifically reported is of the total cost of all materials consumed by an industry; thus providing the degree to which materials data by industry were collected and compiled in the 1977 Census of Manufactures. Separate data for the specific purchased materials consumed by industry appear in table 7a of the 1977 Census of Manufactures final industry reports.

TOTAL COST OF MATERIALS

"Total cost of materials" is the cost of all materials consumed by the industry, including miscellaneous materials and materials not reported separately. This information was reported in item 5a of the 1977 Census of Manufactures reporting form. It represents the amounts paid or payable for materials, parts, containers, and supplies consumed or put into production during the year after discounts and including freight charges and other direct charges incurred by the establishment in acquiring these materials. It excludes the cost of items bought and resold in the same condition, cost of contract work, fuels, and electric energy.

COST OF SPECIFIED MATERIALS

"Cost of specified materials" is the total of only those specific materials reported by each industry on item 17 of the 1977 Census of Manufactures reporting form. In part, this figure and the resulting percentage is understated since small establishments were not required to report detailed materials. Further understatement is the result of non-response by larger establishments. The value of detailed materials not reported by both small and large establishments is shown in table 7a of the final industry series reports in Material Code 971000, Materials, N.S.K. The value of materials for which detail was not requested is shown in Material Code 970099, All Other Materials.

Table 1. **Cost of Materials, Parts, Supplies, and Containers Consumed, by Each Industry: 1977**

SIC code	Industry	Total cost of materials (million dollars) A	Cost of specified materials (million dollars) B	Percentage (B÷A) C
	United States total	689,908.3	436,662.0	63
20--	Food and kindred products	121,610.3	97,088.9	79
2011	Meatpacking plants	24,624.7	22,112.1	90
2013	Sausages and other prepared meats	5,312.2	4,181.2	79
2016	Poultry dressing plants	4,337.9	3,913.4	90
2017	Poultry and egg processing	596.9	376.1	63
2021	Creamery butter	783.5	670.6	86
2022	Cheese, natural and processed	4,616.2	3,968.5	86
2023	Condensed and evaporated milk	2,242.2	1,181.1	53
2024	Ice cream and frozen desserts	1,131.3	733.3	65
2026	Fluid milk	9,167.4	7,759.0	85
2032	Canned specialties	1,552.0	1,219.0	79
2033	Canned fruits and vegetables	3,896.6	3,193.0	82
2034	Dehydrated fruits, vegetables, soups	642.7	479.4	75
2035	Pickles, sauces, salad dressings	1,796.5	1,176.9	66
2037	Frozen fruits and vegetables	1,795.3	1,459.7	81
2038	Frozen specialties	1,690.0	836.0	49
2041	Flour, other grain mill products	2,707.4	2,263.0	84
2043	Cereal breakfast foods	901.4	551.8	61
2044	Rice milling	874.0	732.0	84
2045	Blended and prepared flour	550.9	326.4	59
2046	Wet corn milling	1,138.7	852.0	75
2047	Dog, cat, and other pet food	1,495.7	992.9	66
2048	Prepared feeds, n.e.c.	6,697.6	5,032.7	75
2051	Bread, cake, and related products	2,829.1	1,958.2	69
2052	Cookies and crackers	1,117.1	824.0	74
2061	Raw cane sugar	393.2	341.0	87
2062	Cane sugar refining	1,658.9	1,587.9	96
2063	Beet sugar	709.1	611.4	86
2065	Confectionery products	2,173.8	1,658.2	76
2066	Chocolate and cocoa products	967.0	852.9	88
2067	Chewing gum	217.7	114.8	53
2074	Cottonseed oil mills	580.8	507.2	87
2075	Soybean oil mills	6,238.2	5,705.1	91
2076	Vegetable oil mills, n.e.c.	220.4	64.8	29
2077	Animal and marine fats and oils	905.4	(NA)	(NA)
2079	Shortening and cooking oils	2,935.5	2,555.3	87
2082	Malt beverages	3,877.2	3,277.4	85
2083	Malt	344.9	332.5	96
2084	Wines, brandy, and brandy spirits	863.3	651.7	75
2085	Distilled liquor, except brandy	924.2	723.4	78
2086	Bottled and canned soft drinks	4,787.1	3,495.6	73
2087	Flavoring extracts, sirups, n.e.c.	982.8	510.4	52
2091	Canned and cured seafoods	733.9	627.6	86
2092	Fresh or frozen packaged fish	1,725.8	1,313.2	76
2095	Roasted coffee	4,397.3	4,026.4	92
2097	Manufactured ice	23.5	(NA)	(NA)
2098	Macaroni and spaghetti	299.7	189.4	63
2099	Food preparations, n.e.c.	3,153.2	1,150.1	36
21--	Tobacco products	4,289.4	3,665.2	85
2111	Cigarettes	2,483.7	1,999.8	81
2121	Cigars	109.5	84.2	77
2131	Chewing and smoking tobacco	128.9	107.1	83
2141	Tobacco stemming and redrying	1,567.4	1,474.1	94
22--	Textile mill products	22,254.3	15,337.9	69
2211	Weaving mills, cotton	2,344.4	2,038.2	87
2221	Weaving mills, manmade fiber, silk	3,230.2	2,790.9	86
2231	Weaving and finishing mills, wool	225.0	189.8	84
2241	Narrow fabric mills	299.6	(NA)	(NA)
2251	Women's hosiery, except socks	373.4	266.3	71
2252	Hosiery, n.e.c.	478.1	365.4	76
2253	Knit outerwear mills	887.9	431.8	48
2254	Knit underwear mills	325.8	202.8	62
2257	Circular knit fabric mills	1,885.1	1,476.4	78
2258	Warp knit fabric mills	842.0	705.2	83
2259	Knitting mills, n.e.c.	54.1	8.4	15
2261	Finishing plants, cotton	320.5	243.1	75
2262	Finishing plants, manmade fiber, silk	1,440.5	1,228.4	85
2269	Finishing plants, n.e.c.	518.0	442.6	85
2271	Woven carpets and rugs	89.6	(NA)	(NA)
2272	Tufted carpets and rugs	2,847.6	(NA)	(NA)
2279	Carpets and rugs, n.e.c.	65.9	(NA)	(NA)
2281	Yarn mills, except wool	2,238.9	2,059.2	92
2282	Throwing and winding mills	977.2	899.9	92
2283	Wool yarn mills	107.6	86.0	80
22--	Textile mill products--Con.			
2284	Thread mills	320.7	264.2	82
2291	Felt goods, except woven felt, hats	83.2	48.8	59
2292	Lace goods	16.1	8.2	51
2293	Paddings and upholstery filling	117.0	49.7	42
2294	Processed textile waste	108.4	88.3	81
2295	Coated fabrics, not rubberized	609.2	458.3	75
2296	Tire cord and fabric	757.7	642.5	85
2297	Nonwoven fabrics	442.7	271.6	61
2298	Cordage and twine	139.7	71.9	51
2299	Textile goods, n.e.c.	108.4	(NA)	(NA)
23--	Apparel and other textile products	16,110.5	9,324.9	57
2311	Men's and boys' suits and coats	846.8	502.3	59
2321	Men's, boys' shirts, nightwear	1,107.9	766.5	69
2322	Men's and boys' underwear	182.3	142.7	78
2323	Men's and boys' neckwear	93.4	51.3	54
2327	Men's and boys' separate trousers	658.2	411.0	62
2328	Men's and boys' work clothing	1,608.4	1,218.3	75
2329	Men's and boys' clothing, n.e.c.	405.5	226.3	55
2331	Women's, misses' blouses, waists	743.1	473.5	63
2335	Women's and misses' dresses	1,307.9	553.3	42
2337	Women's, misses' suits and coats	940.1	595.2	63
2339	Women's, misses' outerwear, n.e.c.	1,187.9	746.5	62
2341	Women's and children's underwear	659.8	376.1	57
2342	Brassieres and allied garments	225.1	154.5	68
2351	Millinery	41.0	(NA)	(NA)
2352	Hats and caps, except millinery	118.7	(NA)	(NA)
2361	Children's dresses and blouses	273.8	146.3	53
2363	Children's coats and suits	67.3	33.2	49
2369	Children's outerwear, n.e.c.	298.6	180.9	69
2371	Fur goods	260.5	(NA)	(NA)
2381	Fabric dress and work gloves	131.8	90.1	68
2384	Robes and dressing gowns	119.3	98.2	82
2385	Waterproof outergarments	105.5	54.9	52
2386	Leather and sheep lined clothing	109.6	76.8	70
2387	Apparel belts	122.7	66.8	54
2389	Apparel and accessories, n.e.c.	79.1	42.9	54
2391	Curtains and draperies	542.5	354.2	65
2392	House furnishings, n.e.c.	1,392.6	967.9	70
2393	Textile bags	169.8	106.5	63
2394	Canvas and related products	226.5	96.2	42
2395	Pleating and stitching	333.0	(NA)	(NA)
2396	Automotive and apparel trimmings	1,131.8	556.6	49
2397	Schiffli machine embroideries	41.5	(NA)	(NA)
2399	Fabricated textile products, n.e.c.	578.4	235.9	40
24--	Lumber and wood products	20,583.0	13,418.0	65
2411	Logging camps, log contractors	2,376.3	1,146.9	48
2421	Sawmills, planing mills, general	5,718.5	4,518.3	79
2426	Hardwood dimension and flooring	398.7	277.3	69
2429	Special product sawmills, n.e.c.	125.9	80.2	64
2431	Millwork	2,239.4	1,290.6	58
2434	Wood kitchen cabinets	677.4	(NA)	(NA)
2435	Hardwood veneer and plywood	765.3	662.5	87
2436	Softwood veneer and plywood	2,084.8	1,890.0	91
2439	Structural wood members, n.e.c.	450.9	276.3	61
2441	Nailed wood boxes and shook	129.4	66.7	52
2448	Wood pallets and skids	338.6	177.5	52
2449	Wood containers, n.e.c.	122.9	78.6	64
2451	Mobile homes	2,142.4	1,278.2	60
2452	Prefabricated wood buildings	1,109.6	597.8	53
2491	Wood preserving	589.8	440.2	75
2492	Particleboard	213.0	162.3	76
2499	Wood products, n.e.c.	1,100.1	474.6	43
25--	Furniture and fixtures	7,418.6	4,619.7	62
2511	Wood household furniture	1,740.6	1,085.1	62
2512	Upholstered household furniture	1,450.2	1,011.8	70
2514	Metal household furniture	633.8	405.7	64
2515	Mattresses and bedsprings	736.3	443.2	60
2517	Wood TV and radio cabinets	148.3	85.6	58
2519	Household furniture, n.e.c.	159.7	55.5	35
2521	Wood office furniture	224.1	139.6	62
2522	Metal office furniture	487.6	354.2	73
2531	Public bldg., related furniture	318.5	177.1	56
2541	Wood partitions and fixtures	421.6	233.6	55
2542	Metal partitions and fixtures	552.7	346.8	63
2591	Drapery hardware, blinds, shades	290.0	169.7	59
2599	Furniture and fixtures, n.e.c.	255.2	111.8	44

See footnotes at end of table.

Table 1. **Cost of Materials, Parts, Supplies, and Containers Consumed, by Each Industry: 1977** – Con.

SIC code	Industry	Total cost of materials (million dollars) A	Cost of specified materials (million dollars) B	Percentage (B÷A) C
26--	Paper and allied products	26,380.3	20,171.2	76
2611	Pulpmills	978.3	706.0	72
2621	Papermills, except building paper	5,845.6	4,119.5	70
2631	Paperboard mills	2,989.8	2,202.0	73
2641	Paper coating and glazing	1,790.5	1,250.5	70
2642	Envelopes	441.3	364.4	83
2643	Bags, except textile bags	2,030.6	1,661.2	82
2645	Die-cut paper and board	586.3	429.9	73
2646	Pressed and molded pulp goods	66.2	41.2	62
2647	Sanitary paper products	2,686.3	2,405.2	90
2648	Stationery products	309.2	230.0	74
2649	Converted paper products, n.e.c.	807.1	356.6	44
2651	Folding paperboard boxes	1,385.2	1,129.6	82
2652	Setup paperboard boxes	138.1	87.7	64
2653	Corrugated and solid fiber boxes	4,454.6	3,846.7	86
2654	Sanitary food containers	1,110.8	926.7	83
2655	Fiber cans, drums, similar products	589.6	314.0	53
2661	Building paper and board mills	170.8	100.0	58
27--	Printing and publishing	13,216.7	8,143.8	62
2711	Newspapers	3,200.1	2,609.7	81
2721	Periodicals	937.6	598.0	63
2731	Book publishing	485.8	265.6	54
2732	Book printing	573.0	350.5	61
2741	Miscellaneous publishing	203.8	79.1	38
2751	Commercial printing, letterpress	1,600.8	600.7	38
2752	Commercial printing, lithographic	3,366.0	1,811.2	54
2753	Engraving and plate printing	71.8	11.5	16
2754	Commercial printing, gravure	487.9	363.2	74
2761	Manifold business forms	1,298.4	942.8	73
2771	Greeting card publishing	220.5	145.1	66
2782	Blankbooks and looseleaf binders	368.1	206.5	56
2789	Bookbinding and related work	103.1	44.9	44
2791	Typsetting	84.5	15.6	18
2793	Photoengraving	42.4	11.8	28
2794	Electrotyping and stereotyping	3.2	1.3	41
2795	Lithographic platemaking services	169.8	86.3	51
28--	Chemicals and allied products	51,438.3	29,509.5	57
2812	Alkalies and chlorine	436.1	198.2	45
2813	Industrial gases	168.8	(NA)	(NA)
2816	Inorganic pigments	561.0	274.4	49
2819	Industrial inorganic chemicals, n.e.c.	2,988.9	1,743.1	58
2821	Plastics materials and resins	6,119.7	4,673.3	76
2822	Synthetic rubber	1,161.1	1,048.3	90
2823	Cellulosic manmade fibers	567.1	508.7	89
2824	Organic fibers, noncellulosic	3,150.2	2,653.5	84
2831	Biological products	309.4	188.3	81
2833	Medicinals and botanicals	616.1	184.4	30
2834	Pharmaceutical preparations	2,831.3	1,288.6	46
2841	Soap and other detergents	2,519.9	1,432.6	57
2842	Polishes and sanitation goods	1,173.6	514.0	43
2843	Surface active agents	542.0	124.4	22
2844	Toilet preparations	1,708.2	1,272.8	75
2851	Paints and allied products	3,443.2	2,006.3	58
2861	Gum and wood chemicals	179.6	75.6	42
2865	Cyclic crudes and intermediates	2,925.0	1,350.5	46
2869	Industrial organic chemicals, n.e.c.	11,405.5	5,244.1	46
2873	Nitrogenous fertilizers	893.5	663.2	74
2874	Phosphatic fertilizers	1,611.0	1,375.1	85
2875	Fertilizers, mixing only	1,070.8	643.4	60
2879	Agricultural chemicals, n.e.c.	1,210.6	675.5	56
2891	Adhesives and sealants	967.2	654.2	67
2892	Explosives	210.3	110.2	52
2893	Printing ink	541.6	383.0	71
2895	Carbon black	250.9	223.8	89
2899	Chemical preparations, n.e.c.	1,875.6	(NA)	(NA)
29--	Petroleum and coal products	75,360.0	70,855.6	94
2911	Petroleum refining	72,064.8	68,796.0	95
2951	Paving mixtures and blocks	904.3	538.3	60
2952	Asphalt felts and coatings	1,150.4	861.3	75
2992	Lubricating oils and greases	966.4	660.0	68
2999	Petroleum and coal products, n.e.c.	274.2	(NA)	(NA)
30--	Rubber and miscellaneous plastics products	17,793.4	11,923.4	67
3011	Tires and inner tubes	4,049.9	3,645.6	90
3021	Rubber and plastics footwear	192.9	127.2	66
3031	Reclaimed rubber	14.2	(NA)	(NA)
3041	Rubber, plastics hose and belting	627.4	500.2	80
3069	Fabricated rubber products, n.e.c.	1,917.4	1,098.8	57
3079	Miscellaneous plastics products	10,991.6	6,551.6	59
31--	Leather and leather products	3,441.8	2,344.5	68
3111	Leather tanning and finishing	830.2	716.2	86
3131	Boot, shoe cut stock and findings	152.5	49.1	32
3142	House slippers	83.3	18.6	22
3143	Men's footwear, except athletic	795.7	628.3	79
3144	Women's footwear, except athletic	553.5	381.9	69
3149	Footwear, except rubber, n.e.c.	240.9	168.7	70
3151	Leather gloves and mittens	68.5	55.0	80
3161	Luggage	271.4	136.8	50
3171	Women's handbags and purses	184.0	95.4	52
3172	Personal leather goods, n.e.c.	140.4	67.4	48
3199	Leather goods, n.e.c.	121.4	27.1	22
32--	Stone, clay, and glass products	12,491.8	6,386.8	51
3211	Flat glass	486.2	289.9	60
3221	Glass containers	1,117.6	765.3	68
3229	Pressed and blown glass, n.e.c.	470.8	238.4	50
3231	Products of purchased glass	813.7	440.7	54
3241	Cement, hydraulic	532.7	233.0	44
3251	Brick and structural clay tile	128.0	19.0	15
3253	Ceramic wall and floor tile	54.2	20.2	37
3255	Clay refractories	221.6	134.7	61
3259	Structural clay products, n.e.c.	45.2	7.6	17
3261	Vitreous plumbing fixtures	88.5	43.3	48
3262	Vitreous china food utensils	25.1	8.6	34
3263	Fine earthenware food utensils	15.0	7.4	49
3264	Porcelain electrical supplies	95.7	37.4	39
3269	Pottery products, n.e.c.	49.7	13.5	27
3271	Concrete block and brick	404.3	178.7	44
3272	Concrete products, n.e.c.	1,019.8	470.5	46
3273	Ready-mixed concrete	3,296.5	1,941.0	59
3274	Lime	95.1	41.7	44
3275	Gypsum products	424.0	178.8	42
3281	Cut stone and stone products	131.1	39.6	30
3291	Abrasive products	799.1	407.8	51
3292	Asbestos products	391.4	221.2	57
3293	Gaskets, packing, sealing devices	450.2	206.1	46
3295	Minerals, ground or treated	373.5	(NA)	(NA)
3296	Mineral wool	546.3	284.8	52
3297	Nonclay refractories	284.0	157.6	55
3299	Nonmetallic mineral products, n.e.c.	132.5	(NA)	(NA)
33--	Primary metal industries	56,944.6	40,638.5	71
3312	Blast furnaces and steel mills	21,841.0	17,796.1	81
3313	Electrometallurgical products	475.4	111.9	23
3315	Steel wire and related products	1,200.1	832.5	69
3316	Cold finishing of steel shapes	1,853.3	(NA)	(NA)
3317	Steel pipe and tubes	1,601.0	(NA)	(NA)
3321	Gray iron foundries	2,671.2	1,406.7	53
3322	Malleable iron foundries	197.5	93.8	47
3324	Steel investment foundries	118.3	51.5	44
3325	Steel foundries, n.e.c.	714.3	311.1	44
3331	Primary copper	2,885.7	2,796.2	97
3332	Primary lead	489.4	284.4	58
3333	Primary zinc	249.3	202.5	81
3334	Primary aluminum	1,905.7	1,250.7	66
3339	Primary nonferrous metals, n.e.c.	424.9	(NA)	(NA)
3341	Secondary nonferrous metals	2,393.8	1,736.1	73
3351	Copper rolling and drawing	2,822.5	2,315.7	82
3353	Aluminum sheet, plate, and foil	4,696.2	4,008.5	85
3354	Aluminum extruded products	1,286.4	1,063.1	82
3355	Aluminum rolling and drawing, n.e.c.	716.7	542.7	75
3356	Nonferrous rolling and drawing, n.e.c.	1,959.3	1,258.4	64
3357	Nonferrous wiredrawing, insulating	4,264.9	3,442.2	80
3361	Aluminum foundries	1,052.8	768.1	73
3362	Brass, bronze, copper foundries	240.7	211.4	88
3369	Nonferrous foundries, n.e.c.	323.4	154.9	47
3398	Metal heat treating	161.2	(NA)	(NA)
3399	Primary metal products, n.e.c.	399.6	(NA)	(NA)
34--	Fabricated metal products	39,730.9	26,901.0	67
3411	Metal cans	4,643.4	4,267.0	92
3412	Metal barrels, drums, and pails	528.6	381.0	72
3421	Cutlery	172.8	60.1	35
3423	Hand and edge tools, n.e.c.	642.0	278.7	43
3425	Handsaws and saw blades	116.1	61.3	53
3429	Hardware, n.e.c.	2,059.8	1,230.1	60
3431	Metal sanitary ware	185.4	102.5	55
3432	Plumbing fittings and brass goods	539.9	266.7	49
3433	Heating equipment, except electric	626.7	322.9	51

See footnotes at end of table.

Table 1. **Cost of Materials, Parts, Supplies, and Containers Consumed, by Each Industry: 1977**—Con.

SIC code	Industry	Total cost of materials (million dollars) A	Cost of specified materials (million dollars) B	Percentage (B÷A) C
34--	Fabricated metal products--Con.			
3441	Fabricated structural metal	2,351.8	1,640.6	70
3442	Metal doors, sash, and trim	1,559.3	878.6	56
3443	Fabricated platework, boiler shop	2,929.4	1,858.2	63
3444	Sheet metalwork	2,443.0	1,566.3	64
3446	Architectural metalwork	392.3	253.3	65
3448	Prefabricated metal buildings	984.1	693.0	70
3449	Miscellaneous metalwork	722.8	602.0	83
3451	Screw machine products	619.2	376.1	61
3452	Bolts, nuts, rivets, and washers	1,229.9	913.4	74
3462	Iron and steel forgings	1,297.7	1,004.5	77
3463	Nonferrous forgings	198.8	159.5	80
3465	Automotive stampings	4,862.3	4,021.1	83
3466	Crowns and closures	266.1	221.6	83
3469	Metal stampings, n.e.c	2,030.9	1,290.5	64
3471	Plating and polishing	538.1	204.2	38
3479	Metal coating and allied services	742.6	308.3	42
3482	Small arms ammunition	167.0	76.0	46
3483	Ammunition, except small arms, n.e.c.	248.9	84.4	34
3484	Small arms	232.1	52.6	23
3489	Ordnance and accessories n.e.c	198.7	27.0	14
3493	Steel springs, except wire	235.7	199.5	85
3494	Valves and pipe fittings	2,051.6	1,281.4	62
3495	Wire springs	419.1	336.9	80
3496	Miscellaneous fabricated wire products	649.3	315.7	49
3497	Metal foil and leaf	559.6	288.4	51
3498	Fabricated pipe and fittings	846.5	644.5	76
3499	Fabricated metal products, n.e.c	1,439.3	633.1	44
35--	Machinery, except electrical	49,809.3	28,385.5	56
3511	Turbines, turbine generator sets	1,111.4	766.1	69
3519	Internal combustion engines, n.e.c	4,150.6	2,205.8	53
3523	Farm machinery and equipment	5,030.4	2,831.8	56
3524	Lawn and garden equipment	909.1	627.4	69
3531	Construction machinery	6,186.6	3,965.9	64
3532	Mining machinery	827.7	487.4	59
3533	Oilfield machinery	1,253.6	827.4	66
3534	Elevators and moving stairways	191.2	97.6	51
3535	Conveyors and conveying equipment	644.4	289.6	44
3536	Hoists, cranes, and monorails	345.7	158.6	46
3537	Industrial trucks and tractors	945.3	460.7	49
3541	Machine tools, metal-cutting	904.4	426.1	47
3542	Machine tools, metal-forming	395.7	212.8	54
3544	Special dies, tools, jigs, etc	907.3	292.0	32
3545	Machine tool accessories	673.1	345.9	51
3546	Power driven handtools	574.0	155.9	27
3547	Rolling mill machinery	138.0	68.6	50
3549	Metalworking machinery, n.e.c	329.8	111.9	34
3551	Food products machinery	636.4	255.0	40
3552	Textile machinery	331.7	124.7	37
3553	Woodworking machinery	248.0	99.1	40
3554	Paper industries machinery	298.4	125.0	42
3555	Printing trades machinery	452.7	156.8	35
3559	Special industry machinery, n.e.c	1,332.0	599.4	45
3561	Pumps and pumping equipment	1,489.1	937.0	63
3562	Ball and roller bearings	1,018.6	801.3	79
3563	Air and gas compressors	858.8	468.8	55
3564	Blowers and fans	515.1	231.7	45
3565	Industrial patterns	53.4	11.2	21
3566	Speed changers, drives, and gears	364.6	239.5	66
3567	Industrial furnaces and ovens	280.8	86.4	31
3568	Power transmission equipment, n.e.c	550.4	342.7	62
3569	General industrial machinery, n.e.c	1,027.1	336.6	33
3573	Electronic computing equipment	5,240.6	3,970.1	75
3574	Calculating, accounting machines	401.3	219.9	55
3576	Scales, balances, except laboratory	126.7	69.1	55
3579	Office machines, typewriters, etc	892.8	311.9	35
3581	Automatic merchandising machines	197.7	99.6	50
3582	Commercial laundry equipment	96.1	27.4	29
3585	Refrigeration, heating equipment	4,755.7	3,484.6	73
3586	Measuring and dispensing pumps	142.3	53.9	38
3589	Service industry machinery, n.e.c	752.0	272.2	36
3592	Carburetors, pistons, rings, etc	451.9	217.4	48
3599	Machinery, except electrical, n.e.c	1,777.0	512.7	28
36--	Electric and electronic equipment	34,739.5	16,624.3	47
3612	Transformers	1,018.6	604.9	59
3613	Switchgear, switchboard apparatus	1,202.0	762.9	63
36--	Electric and electronic equipment--Con.			
3621	Motors and generators	1,796.6	1,133.3	63
3622	Industrial controls	869.5	408.9	47
3623	Welding apparatus, electric	577.5	233.8	40
3624	Carbon and graphite products	217.1	77.8	36
3629	Electrical industrial apparatus, n.e.c.	263.5	100.1	38
3631	Household cooking equipment	840.6	574.9	68
3632	Household refrigerators, freezers	1,387.0	1,037.4	75
3633	Household laundry equipment	913.1	693.2	76
3634	Electric housewares and fans	1,069.1	653.9	61
3635	Household vacuum cleaners	250.1	126.7	50
3636	Sewing machines	91.0	(D)	(NA)
3639	Household appliances, n.e.c	640.2	411.1	64
3641	Electric lamps	539.3	354.9	66
3643	Current-carrying wiring devices	654.7	320.5	49
3644	Noncurrent-carrying wiring devices	598.1	356.4	60
3645	Residential lighting fixtures	445.6	114.8	26
3646	Commercial lighting fixtures	470.6	283.6	60
3647	Vehicular lighting equipment	367.6	141.5	38
3648	Lighting equipment, n.e.c	300.5	142.8	47
3651	Radio and TV receiving sets	2,861.4	1,520.2	53
3652	Phonograph records, prerecorded tape	340.1	224.0	66
3661	Telephone and telegraph apparatus	3,444.1	667.2	19
3662	Radio and TV communication equipment	4,572.6	1,994.4	43
3671	Electron tubes, all types	618.8	438.3	71
3674	Semiconductors, related devices	1,424.6	456.3	32
3675	Electronic capacitors	245.3	118.0	48
3676	Electronic resistors	145.6	68.9	47
3677	Electronic coils and transformers	209.0	124.2	59
3678	Electronic connectors	343.2	163.9	48
3679	Electronic components, n.e.c	2,288.5	629.2	27
3691	Storage batteries	1,049.6	775.5	74
3692	Primary batteries, dry and wet	291.2	112.5	39
3693	X-ray apparatus and tubes	593.7	102.9	17
3694	Engine electrical equipment	1,457.0	616.9	42
3699	Electrical equipment, supplies, n.e.c.	342.5	78.5	22
37--	Transportation equipment	99,368.3	24,718.6	24
3711	Motor vehicles and car bodies	57,415.1	6,011.4	10
3713	Truck and bus bodies	989.2	296.8	30
3714	Motor vehicle parts, accessories	18,906.5	10,786.9	57
3715	Truck trailers	1,241.0	590.6	47
3716	Motor homes	1,102.7	189.1	17
3721	Aircraft	6,092.2	1,528.4	25
3724	Aircraft engines and engine parts	2,232.6	602.1	26
3728	Aircraft equipment, n.e.c	1,470.3	343.6	23
3731	Ship building and repairing	2,416.2	819.5	34
3732	Boat building and repairing	939.9	402.8	43
3743	Railroad equipment	2,275.8	1,671.1	73
3751	Motorcycles, bicycles, and parts	627.8	263.3	42
3761	Guided missiles, space vehicles	1,368.7	159.9	12
3764	Space propulsion units and parts	265.8	71.5	27
3769	Space vehicle equipment, n.e.c	84.7	50.1	59
3792	Travel trailers and campers	990.4	519.6	52
3795	Tanks and tank components	565.6	225.6	40
3799	Transportation equipment, n.e.c	356.7	186.3	52
38--	Instruments and related equipment	9,041.8	3,590.9	39
3811	Engineering, scientific instruments	556.1	218.2	39
3822	Environmental controls	490.8	174.1	35
3823	Process control instruments	566.7	236.9	42
3824	Fluid meters and counting devices	213.0	120.3	56
3825	Instruments to measure electricity	859.2	418.6	49
3829	Measuring, controlling devices, n.e.c.	357.5	143.5	40
3832	Optical instruments and lenses	399.9	128.2	32
3841	Surgical and medical instruments	537.9	282.1	52
3842	Surgical appliances and supplies	854.7	363.7	42
3843	Dental equipment and supplies	284.6	42.0	15
3851	Ophthalmic goods	262.2	120.8	46
3861	Photographic equipment and supplies	2,857.5	870.5	30
3873	Watches, clocks, and watchcases	801.6	472.0	59
39--	Miscellaneous manufacturing industries	7,885.5	3,013.8	38
3911	Jewelry, precious metal	1,041.6	707.1	68
3914	Silverware and plated ware	172.9	96.3	56
3915	Jewelers' materials, lapidary work	470.0	(NA)	(NA)
3931	Musical instruments	387.8	245.8	63
3942	Dolls	142.7	69.3	49

See footnotes at end of table.

Table 1. **Cost of Materials, Parts, Supplies, and Containers Consumed, by Each Industry: 1977** – Con.

SIC code	Industry	Total cost of materials (million dollars) A	Cost of specified materials (million dollars) B	Percentage (B÷A) C
39--	Miscellaneous manufacturing industries--Con.			
3944	Games, toys, children's vehicles.....	1,024.2	443.5	43
3949	Sporting and athletic goods, n.e.c....	971.4	493.0	51
3951	Pens and mechanical pencils.....	214.1	156.7	73
3952	Lead pencils and art goods.....	113.4	(NA)	(NA)
3953	Marking devices.....	70.4	(NA)	(NA)
3955	Carbon paper and inked ribbons.....	190.8	109.3	57
3961	Costume jewelry.....	255.6	(NA)	(NA)
3962	Artificial flowers.....	70.1	(NA)	(NA)
3963	Buttons.....	35.9	10.9	30
3964	Needles, pins, and fasteners.....	272.2	106.6	39
3991	Brooms and brushes.....	266.6	(NA)	(NA)
3993	Signs and advertising displays.....	588.4	211.7	36
3995	Burial caskets.....	229.2	124.9	54
3996	Hard surface floor coverings.....	276.9	82.3	30
3999	Manufacturing industries, n.e.c.....	1,091.3	156.4	14

(NA) Not available. (D) Withheld to avoid disclosing operations of individual companies.

Materials Consumed (Incomplete Coverage)

This chapter presents data for those materials which were collected in the census of manufactures solely for their importance as material requirements in selected industries. These materials were consumed in other industries, but were not collected due to their insignificance relative to other materials consumed in those industries. Therefore, the data in this chapter do not reflect complete consumption of these materials in manufacturing, but only their consumption in the industries listed. Those materials for which coverage is deemed to be "complete"; that is, consumption by the listed industries, accounts for about 90 percent or more of total manufacturing consumption, are presented in chapters 3 through 8.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**

1977 material code	Material and consuming industry[1]	Unit of measure	1977		1972	
			Quantity	Delivered cost (million dollars)	Quantity	Delivered cost (million dollars)
010012	NUTS, IN SHELLS, INCLUDING PEANUTS:					
	2065 Confectionery products	Million lb	810.9	210.5	397.7	92.7
	2066 Chocolate and cocoa products	do	(D)	(D)	(D)	(D)
010014	ALL OTHER FIBERS (SILK, JUTE, REUSED WOOL, WASTE, ETC.):					
	2211 Weaving mills, cotton	do	39.7	5.4	4.7	.9
	2221 Weaving mills, manmade fiber, silk	do	45.7	26.7	(NA)	11.5
	2231 Weaving and finishing mills, wool	do	(S)	9.3	10.0	4.4
	2281 Yarn mills, except wool	do	17.9	6.4	15.6	6.7
	2283 Wool yarn mills	do	(D)	(D)	(D)	(D)
010015	OTHER SEEDS, NUTS, AND BEANS:					
	2074 Cottonseed oil mills	1,000 s. tons	51.6	13.0	73.9	9.7
	2076 Vegetable oil mills, n.e.c	do	76.3	22.4	268.9	29.0
011241	RICE, ROUGH:					
	2043 Cereal breakfast foods	Million lb	192.8	28.4	(X)	(X)
	2044 Rice milling	do	9,162.5	732.3	8,803.1	484.0
011951	RYE:					
	2085 Distilled liquor, except brandy	Million bu	1.8	6.5	2.9	4.2
011961	SORGHUM GRAIN:					
	2041 Flour, other grain mill products	do	5.4	11.3	4.9	6.0
	2047 Dog, cat, and other pet food	do	.5	1.3	.9	.9
	2048 Prepared feeds, n.e.c	do	*58.8	133.1	112.3	153.1
013111	COTTONSEED:					
	2074 Cottonseed oil mills	1,000 s. tons	3,718.2	444.9	3,850.0	254.7
	2075 Soybean oil mills	do	147.8	17.6	188.0	12.0
	2076 Vegetable oil mills, n.e.c	do	43.8	5.2	(NA)	([5])
013211	UNSTEMMED LEAF TOBACCO:					
	2121 Cigars	Million lb	2.6	3.9	8.8	7.0
	2131 Chewing and smoking tobacco	do	(D)	(D)	(D)	(D)
	2141 Tobacco stemming and redrying	do	697.3	859.4	611.8	510.9
013311	SUGAR BEETS:					
	2063 Beet sugar	1,000 s. tons	23,279.3	599.6	25,706.5	431.8
013321	SUGARCANE:					
	2061 Raw cane sugar	do	21,851.5	341.0	19,295.7	209.5
	2062 Cane sugar refining	do	1,304.2	17.7	1,448.9	13.2
013411	IRISH POTATOES:					
	2032 Canned specialties	do	79.5	7.7	89.9	5.3
	2033 Canned fruits and vegetables	do	*97.6	6.5	117.5	4.8
	2037 Frozen fruits and vegetables	do	4,467.2	282.9	3,092.4	126.8
013921	PEANUTS, IN SHELL:					
	2099 Food preparations, n.e.c	Million lb	3.8	1.7	(NA)	1.1
013923	SHELLED PEANUTS:					
	2099 Food preparations, n.e.c	do	439.6	148.8	385.6	92.3
016101	FRESH VEGETABLES:					
	2038 Frozen specialties	1,000 s. tons	25.1	9.3	47.4	9.8
	2099 Food preparations, n.e.c	do	*1,317.7	146.0	1,752.0	127.1
016111	GREEN PEAS:					
	2032 Canned specialties	do	10.6	2.4	8.1	7.2
	2033 Canned fruits and vegetables	do	304.4	57.7	317.2	32.5
	2037 Frozen fruits and vegetables	do	*168.8	*31.1	196.1	19.9
016121	SNAP OR WAX BEANS:					
	2032 Canned specialities	do	30.7	4.7	40.8	4.5
	2033 Canned fruits and vegetables	do	*503.2	66.2	353.1	31.6
	2037 Frozen fruits and vegetables	do	*136.4	*22.6	115.5	14.0
016122	LIMA BEANS:					
	2032 Canned specialties	do	(D)	(D)	(D)	(D)
	2033 Canned fruits and vegetables	do	18.8	5.5	(D)	(D)
016131	SWEET CORN:					
	2032 Canned specialties	do	76.4	3.8	32.4	.8
	2033 Canned fruits and vegetables	do	1,873.7	81.2	1,550.3	36.5
	2037 Frozen fruits and vegetables	do	540.8	32.4	639.4	19.6
016141	TOMATOES:					
	2032 Canned specialties	do	608.2	37.9	732.4	33.0
	2033 Canned fruits and vegetables	do	6,671.2	430.5	4,719.3	163.9

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
016151	CUCUMBERS:					
	2033 Canned fruits and vegetables	1,000 s. tons	(D)	(D)	6.0	.7
	2035 Pickles, sauces, salad dressings	do	*720.7	113.9	531.1	63.5
016161	CARROTS:					
	2032 Canned specialties	do	(D)	(D)	(D)	(D)
	2033 Canned fruits and vegetables	do	123.9	6.6	(D)	(D)
016191	OTHER FRESH VEGETABLES:					
	2032 Canned specialties	do	188.5	20.4	(D)	(D)
	2033 Canned fruits and vegetables	do	**941.7	87.3	(D)	(D)
	2035 Pickles, sauces, salad dressings	do	(S)	14.8	65.8	7.6
	2037 Frozen fruits and vegetables	do	(NA)	210.2	(NA)	108.3
017011	FRESH FRUITS:					
	2034 Dehydrated fruits, vegetables, soup	do	250.2	44.8	391.2	16.3
	2035 Pickles, sauces, salad dressings	do	**22.9	7.3	14.7	2.4
	2099 Food preparations, n.e.c.	do	63.2	4.6	(NA)	8.9
017021	OTHER FRESH FRUITS:					
	2033 Canned fruits and vegetables	do	**282.4	71.3	(NA)	(NA)
	2037 Frozen fruits and vegetables	do	(NA)	133.6	(NA)	87.0
	2038 Frozen specialties	do	(NA)	19.0	(NA)	17.2
017111	STRAWBERRIES:					
	2037 Frozen fruits and vegetables	do	52.6	22.7	43.7	16.6
	2038 Frozen specialties	do	(D)	(D)	(D)	(D)
017211	GRAPES:					
	2033 Canned fruits and vegetables	do	237.5	43.3	248.7	31.5
	2084 Wines, brandy, and brandy spirits	do	*2,171.3	288.4	1,956.9	167.1
017411	ORANGES:					
	2033 Canned fruits and vegetables	do	*1,905.5	117.6	1,653.4	86.3
	2037 Frozen fruits and vegetables	do	4,518.1	367.8	4,315.7	291.5
017412	GRAPEFRUIT:					
	2033 Canned fruits and vegetables	do	(S)	37.9	(D)	(D)
017511	APPLES:					
	2033 Canned fruits and vegetables	do	925.3	105.0	804.4	45.0
	2037 Frozen fruits and vegetables	do	*160.5	21.7	153.5	8.0
	2038 Frozen specialties	do	20.3	10.8	22.0	9.1
017515	APRICOTS:					
	2033 Canned fruits and vegetables	do	79.7	13.1	74.6	9.3
017521	PEACHES:					
	2033 Canned fruits and vegetables	do	779.3	106.3	615.6	55.7
	2037 Frozen fruits and vegetables	do	26.4	4.5	20.0	1.8
	2038 Frozen specialties	do	(D)	(D)	(D)	(D)
017525	PEARS:					
	2033 Canned fruits and vegetables	do	365.3	51.0	299.3	36.8
017911	PINEAPPLES:					
	2033 Canned fruits and vegetables	do	315.3	51.7	717.2	30.6
017915	CACAO BEANS:					
	2065 Confectionery products	1,000 cwt.	103.4	17.7	186.2	6.3
	2066 Chocolate and cocoa products	do	3,716.8	494.4	5,569.1	162.2
017921	GREEN COFFEE:					
	2095 Roasted coffee	do	17,536.8	3,903.6	26,247.5	1,113.9
	2099 Food preparations, n.e.c.	do	(D)	(D)	690.1	32.8
018211	MUSHROOMS:					
	2032 Canned specialties	Million lb.	41.9	21.5	(X)	(D)
	2033 Canned fruits and vegetables	do	**138.6	85.9	(X)	(D)
019101	AGRICULTURAL PRODUCTS, CRUDE:					
	2831 Biological products		(X)	17.1	(X)	(D)
	2833 Medicinals and botanicals		(X)	30.7	(X)	27.7
	2834 Pharmaceutical preparations		(X)	18.5	(X)	(D)
021013	CATTLE:					
	2011 Meatpacking plants	1,000 head	34,750.0	13,035.1	29,987.2	10,333.1
	2013 Sausages and other prepared meats	do	(NA)	(D)	(NA)	(D)
021023	CALVES:					
	2011 Meatpacking plants	do	3,250.3	330.6	2,029.7	216.4

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
021313	HOGS:					
	2011 Meatpacking plants	1,000 head...	70,241,7	6,652.3	81,506.4	5,063.6
021413	SHEEP AND LAMBS:					
	2011 Meatpacking plants	do.....	6,035.5	321.4	10,035.2	306.6
024111	WHOLE MILK:					
	2021 Creamery butter	Million cwt..	21.4	189.2	53.1	283.2
	2022 Cheese, natural and processed	do.....	257.4	2,352.6	192.6	1,025.2
	2023 Condensed and evaporated milk	do.....	140.6	1,278.0	90.2	462.5
	2024 Ice cream and frozen desserts	do.....	*11.9	147.2	6.9	46.2
	2026 Fluid milk	do.....	*632.0	6,429.8	671.9	4,297.4
025111	YOUNG CHICKENS:					
	2016 Poultry dressing plants	Live weight million lb..	*12,005.9	2,870.4	9,681.6	1,525.6
025121	HENS (OR FOWL) AND OTHER CHICKENS:					
	2016 Poultry dressing plants	do.....	804.0	136.9	529.0	65.4
	2017 Poultry and egg processing	do.....	-	-	183.4	23.0
025211	SHELL EGGS:					
	2016 Poultry dressing plants	1,000 cases (30 doz.)...	1,025.4	13.7	833.6	9.6
	2017 Poultry and egg processing	do.....	13,753.7	170.0	14,006.0	92.9
025311	TURKEYS:					
	2016 Poultry dressing plants	Live weight million lb..	*1,902.7	717.3	1,634.6	359.6
	2017 Poultry and egg processing	do.....	-	-	185.6	49.4
025911	OTHER POULTRY AND SMALL GAME:					
	2016 Poultry dressing plants	.....	(X)	16.4	(X)	10.0
027111	RAW WOOL:					
	2257 Circular knit fabric mills	Million lb...	(D)	(D)	(D)	(D)
081111	COST OF STUMPAGE CUT:					
	2411 Logging camps, log contractors	.....	(X)	1,146.9	(X)	(D)
	2421 Sawmills, planing mills, general	.....	(X)	848.3	(X)	608.6
	2426 Hardwood dimension and flooring	.....	(X)	3.5	(X)	4.8
	2429 Special product sawmills, n.e.c.	.....	(X)	7.1	(X)	7.5
	2435 Hardwood veneer and plywood	.....	(X)	4.0	(X)	4.5
	2436 Softwood veneer and plywood	.....	(X)	179.9	(X)	136.0
	2621 Papermills, except building paper	.....	(X)	3.4	(X)	6.8
	2631 Paperboard mills	.....	(X)	(D)	(X)	(D)
091212	TUNA:					
	2091 Canned and cured seafoods	1,000 s. tons	379.5	312.4	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	4.2	(D)	(D)
091213	SALMON:					
	2091 Canned and cured seafoods	do.....	(S)	104.9	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	*43.5	79.7	(D)	(D)
091214	SARDINES:					
	2091 Canned and cured seafoods	do.....	(S)	4.6	(D)	(D)
091215	GROUND FISH:					
	2092 Fresh or frozen packaged fish	do.....	(S)	142.4	(D)	(D)
091216	FLOUNDER:					
	2092 Fresh or frozen packaged fish	do.....	(S)	30.9	(D)	(D)
091217	OTHER FINFISH, ROUND:					
	2091 Canned and cured seafoods	do.....	(S)	33.4	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	92.4	(D)	(D)
091312	SHRIMP:					
	2091 Canned and cured seafoods	do.....	(S)	51.4	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	316.9	(D)	(D)
091313	CRABS:					
	2091 Canned and cured seafoods	do.....	13.6	12.4	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	175.1	(D)	(D)
091314	OYSTERS:					
	2091 Canned and cured seafoods	do.....	(S)	5.8	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	91.7	(D)	(D)
091315	CLAMS:					
	2091 Canned and cured seafoods	do.....	(S)	25.2	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	44.7	(D)	(D)
091316	OTHER SHELLFISH:					
	2091 Canned and cured seafoods	do.....	.1	.7	(D)	(D)
	2092 Fresh or frozen packaged fish	do.....	(S)	41.1	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977		1972	
			Quantity	Delivered cost (million dollars)	Quantity	Delivered cost (million dollars)
100107	IRON AND FERROUS ALLOY ORES:					
	2816 Inorganic pigments	.....	(X)	5.2	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	44.6	(X)	(D)
100207	NONFERROUS METAL ORES:					
	2816 Inorganic pigments	.....	(X)	100.2	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	295.1	(X)	(D)
101112	CRUDE IRON ORE:					
	3312 Blast furnaces and steel mills	1,000 gross wt. s. tons.	30,203.2	757.2	51,614.7	695.9
101123	CONCENTRATES:					
	3312 Blast furnaces and steel mills	do.....	30,568.8	913.6	15,714.8	224.7
101125	AGGLOMERATES:					
	3312 Blast furnaces and steel mills	do.....	59,990.0	1,907.6	64,618.9	997.0
102100	COPPER:					
	3331 Primary copper	1,000 s. tons	5,249.1	1,271.3	5,889.6	1,189.2
103101	LEAD:					
	3332 Primary lead	do.....	981.9	284.4	1,159.8	202.8
103103	ZINC:					
	3333 Primary zinc	do.....	936.2	196.8	1,400.0	142.5
105101	BAUXITE:					
	2816 Inorganic pigments	do.....	(D)	(D)	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	do.....	13,982.5	441.6	12,689.5	217.8
106112	MANGANESE ORE:					
	3312 Blast furnaces and steel mills	Gross wt. s. tons.....	979.8	38.4	(D)	(D)
	3313 Electrometallurgical products	do.....	469.2	35.6	794.2	22.3
121101	LIGNITE:					
	2861 GUM AND WOOD CHEMICALS:	.....	(X)	(D)	(X)	(D)
121120	COAL USED IN THE PRODUCTION OF COKE:					
	3312 Blast furnaces and steel mills	1,000 s. tons	77,533.3	3,977.8	85,691.0	1,422.9
131111	DOMESTIC CRUDE PETROLEUM:					
	2911 Petroleum refining	Million bbl..	2,798.3	30,387.8	3,419.9	12,445.9
131112	FOREIGN CRUDE PETROLEUM:					
	2911 Petroleum refining	do.....	2,310.0	29,733.6	849.7	3,111.9
131152	NATURAL GAS USED AS A RAW MATERIAL:					
	2812 Alkalies and chlorine	Billion cu. ft	(D)	(D)	8.0	3.2
	2816 Inorganic pigments	do.....	(D)	(D)	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	do.....	4.8	8.0	(S)	6.2
	2821 Plastics materials and resins	do.....	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do.....	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do.....	1.3	3.0	3.6	1.5
	2869 Industrial organic chemicals, n.e.c	do.....	301.7	188.9	241.9	64.8
	2873 Nitrogenous fertilizers	do.....	247.5	323.9	212.4	72.6
	2874 Phosphatic fertilizers	do.....	28.2	38.6	(D)	(D)
	2892 Explosives	do.....	(D)	(D)	(X)	(D)
	2895 Carbon black	do.....	25.2	30.2	58.5	11.7
132120	BUTANE:					
	2911 Petroleum refining	Million bbl..	83.6	889.8	(D)	(D)
132124	GAS MIXTURES:					
	2911 Petroleum refining	do.....	38.1	223.3	(D)	(D)
132125	ISOPENTANE AND NATURAL GASOLINE:					
	2911 Petroleum refining	do.....	73.1	742.9	(D)	(D)
132126	PLANT CONDENSATE:					
	2911 Petroleum refining	do.....	13.5	122.2	(D)	(D)
132127	OTHER NATURAL GAS LIQUIDS:					
	2911 Petroleum refining	do.....	42.0	507.1	(D)	(D)
132128	ETHANE:					
	2911 Petroleum refining	do.....	555.4	181.5	(D)	(D)
132129	PROPANE:					
	2911 Petroleum refining	do.....	26.7	204.0	(D)	(D)
140010	NONMETALLIC MINERALS AND EARTHS:					
	2891 Adhesives and sealants	.....	(X)	21.5	(X)	8.0

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
140107	CRUDE NONMETALLIC MINERALS:					
	2812 Alkalies and chlorine	.....	(X)	15.4	(X)	(D)
	2816 Inorganic pigments	.....	(X)	6.4	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	23.6	(X)	(D)
141101	ROUGH BLOCKS USED TO PRODUCE DRESSED STONE:					
	3281 Cut stone and stone products	1,000 s. tons	(S)	28.9	(S)	30.0
142011	CRUSHED AND BROKEN STONE:					
	3241 Cement, hydraulic	do.....	(S)	72.9	(S)	79.7
	3271 Concrete block and brick	do.....	(S)	29.9	10,743.9	32.8
	3272 Concrete products, n.e.c	do.....	*3,803.3	17.3	6,417.3	20.6
	3274 Lime	do.....	7,223.4	29.0	7,529.0	18.2
	3275 Gypsum products	do.....	(S)	11.0	1,097.0	54.5
142101	BROKEN STONE RECEIVED FOR CRUSHING, SCREENING, OR WASHING:					
	3281 Cut stone and stone products	do.....	(S)	.9	(S)	.1
142200	LIMESTONE:					
	3273 Ready-mixed concrete	do.....	*24,850.7	97.3	(D)	(D)
142300	GRANITE:					
	3273 Ready-mixed concrete	do.....	*4,189.4	16.9	(D)	(D)
142900	OTHER STONE:					
	3273 Ready-mixed concrete	do.....	(S)	13.8	(D)	(D)
144201	SAND AND GRAVEL:					
	2951 Paving mixtures and blocks	do.....	*53,532.2	159.0	51,000.4	111.6
	2952 Asphalt felts and coatings	do.....	*1,177.0	16.4	771.1	6.7
	3271 Concrete block and brick	do.....	(S)	47.9	20,257.0	45.1
	3272 Concrete products, n.e.c	do.....	*17,134.2	60.4	19,482.5	51.8
	3273 Ready-mixed concrete	do.....	167,621.1	540.4	177,505.3	400.0
144603	SAND:					
	3321 Gray iron foundries	do.....	5,554.3	86.9	5,554.4	40.2
	3322 Malleable iron foundries	do.....	412.5	5.1	483.4	4.5
	3324 Steel investment foundries	do.....	6.5	.9	15.9	.9
	3325 Steel foundries, n.e.c	do.....	1,250.7	30.8	1,191.9	14.0
	3361 Aluminum foundries	do.....	186.0	6.0	120.0	2.7
	3362 Brass, bronze, copper foundries	do.....	(S)	2.6	(D)	(D)
	3369 Nonferrous foundries, n.e.c	do.....	19.8	.5	(D)	(D)
144611	GLASS SAND, ALL TYPES:					
	3211 Flat glass	do.....	2,153.3	24.1	1,952.1	13.9
	3221 Glass containers	do.....	8,753.1	92.7	7,818.3	60.1
	3229 Pressed and blown glass, n.e.c	do.....	**1,323.2	26.4	3,640.8	41.0
	3231 Products of purchased glass	do.....	(S)	.7	(X)	(D)
145001	CLAY, CERAMIC, AND REFRACTORY MINERALS:					
	3251 Brick and structural clay tile	do.....	**9,894.4	19.0	(X)	(X)
	3253 Ceramic wall and floor tile	do.....	*586.4	20.2	(X)	(X)
	3255 Clay refractories	do.....	2,078.4	86.4	(X)	(X)
	3259 Structural clay products, n.e.c	do.....	1,483.6	7.6	(X)	(X)
	3261 Vitreous plumbing fixtures	do.....	(S)	35.6	(X)	(X)
	3262 Vitreous china food utensils	do.....	149.0	8.2	(X)	(X)
	3263 Fine earthenware food utensils	do.....	152.5	6.2	(X)	(X)
	3264 Porcelain electrical supplies	do.....	(S)	29.1	(X)	(X)
	3269 Pottery products, n.e.c	do.....	(S)	12.1	(X)	(X)
	3297 Nonclay refractories	do.....	*309.8	50.4	(X)	(X)
145501	KAOLIN AND BALL CLAY:					
	2621 Papermills, except building paper	do.....	1,370.2	103.7	1,681.0	83.2
	2631 Paperboard mills	do.....	247.9	19.2	189.7	9.8
	2661 Building paper and board mills	do.....	24.0	1.5	**32.1	1.2
	3296 Mineral wool	.....	(X)	6.2	(X)	3.0
147001	BARITE, BORATE, POTASH, FLUORSPAR, AND ROCKSALT:					
	3296 Mineral wool	.....	(X)	36.1	(X)	8.0
147007	CRUDE CHEMICAL NONMETALLIC MINERALS:					
	2812 Alkalies and chlorine	.....	(X)	20.8	(X)	(D)
	2816 Inorganic pigments	.....	(X)	6.4	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	36.4	(X)	(D)
147401	MURIATE OF POTASH:					
	2873 Nitrogenous fertilizers	1,000 s. tons	83.7	5.5	(X)	(X)
	2874 Phosphatic fertilizers	do.....	968.9	63.9	(X)	(X)
	2875 Fertilizers, mixing only	do.....	1,566.6	113.8	1,368.4	56.8

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
147402	OTHER POTASH BEARING MATERIALS:					
	2873 Nitrogenous fertilizers	1,000 s. tons	12.0	1.1	(X)	(X)
	2874 Phosphatic fertilizers	do	139.9	11.0	117.8	5.7
	2875 Fertilizers, mixing only	do	267.1	26.9	228.3	11.6
147501	PHOSPHATE ROCK:					
	2819 Industrial inorganic chemicals, n.e.c	do	4,161.6	37.0	2,951.0	17.1
	2873 Nitrogenous fertilizers	do	(D)	(D)	(X)	(X)
	2874 Phosphatic fertilizers	do	28,745.7	413.4	21,245.4	139.5
	2875 Fertilizers, mixing only	do	(D)	(D)	56.8	.9
149905	NATURAL PUMICE, POZZOLAN, AND OTHER MISCELLANEOUS NATURAL NON-METALLIC MINERALS:					
	3273 Ready-mixed concrete	do	(S)	2.8	(X)	(D)
149941	NATURAL ABRASIVE MATERIALS:					
	3291 Abrasive products		(X)	50.8	(X)	20.0
149971	ASBESTOS, CRUDE:					
	2621 Papermills, except building paper	1,000 s. tons	27.2	3.9	(S)	1.8
	2631 Paperboard mills	do	(D)	(D)	(X)	(D)
	2661 Building paper and board mills	do	125.0	26.4	130.7	14.0
	3292 Asbestos products	do	317.0	107.7	448.1	78.7
	3293 Gaskets, packing, sealing devices	do	(S)	22.0	(S)	13.6
	3996 Hard surface floor coverings	do	(X)	(D)	(D)	(D)
200011	ORGANIC AMMONIATES:					
	2874 Phosphatic fertilizers	do	.7	.2	4.6	.6
	2875 Fertilizers, mixing only	do	62.0	5.6	96.7	5.6
200101	PROCESSED FOOD AND KINDRED PRODUCTS:					
	2831 Biological products		(X)	5.8	(X)	(D)
	2833 Medicinals and botanicals		(X)	47.8	(X)	(D)
	2834 Pharmaceutical preparations		(X)	50.5	(X)	31.0
200611	OTHER NATURAL AND ARTIFICIAL SWEETENERS:					
	2051 Bread, cake, and related products	Million lb	732.9	86.0	(X)	(X)
	2052 Cookies and crackers	do	250.3	30.9	(X)	(X)
201013	FRESH AND PREPARED MEATS, OTHER THAN POULTRY, N.S.K.:					
	2013 Sausages and other prepared meats	do	127.0	90.4	(X)	(X)
	2032 Canned specialties	do	*240.9	146.7	222.6	128.7
	2033 Canned fruits and vegetables	do	4.6	2.7	3.6	2.0
	2038 Frozen specialties	do	240.6	187.0	200.9	138.7
201101	MEAT MATERIALS FOR SAUSAGE AND CANNING:					
	2011 Meatpacking plants	do	437.4	241.5	927.4	422.4
	2013 Sausages and other prepared meats	do	*1,019.9	546.3	765.8	397.8
201102	OTHER PURCHASED MEAT MATERIALS:					
	2011 Meatpacking plants	do	87.6	40.3	97.5	27.5
	2013 Sausages and other prepared meats	do	*133.5	88.8	30.6	13.7
201104	TALLOW AND STEARIN, EDIBLE:					
	2079 Shortening and cooking oils	do	573.9	115.7	583.5	58.3
201109	GLUE STOCK AND KILLING FLOOR OFFAL, SCRAPS AND BONES:					
	2891 Adhesives and sealants		(X)	5.4	(X)	10.0
201111	BEEF:					
	2011 Meatpacking plants	Million lb	**975.3	600.1	1,377.9	792.3
	2013 Sausages and other prepared meats	do	*2,224.3	1,333.8	1,137.8	611.6
201121	VEAL:					
	2011 Meatpacking plants	do	(S)	5.7	(D)	(D)
	2013 Sausages and other prepared meats	do	(S)	38.7	20.3	13.8
201131	LAMB:					
	2011 Meatpacking plants	do	(S)	4.2	(D)	(D)
	2013 Sausages and other prepared meats	do	(S)	1.5	25.6	11.8
201141	PORK:					
	2011 Meatpacking plants	do	846.0	530.6	916.9	406.1
	2013 Sausages and other prepared meats	do	*2,491.0	1,667.3	2,300.5	1,067.6
201151	LARD:					
	2051 Bread, cake, and related products	do	123.5	31.3	266.1	30.4
	2052 Cookies and crackers	do	178.2	40.5	204.0	34.2
	2079 Shortening and cooking oils	do	303.5	70.7	515.1	54.2

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201161	PROCESSED PORK:					
	2011 Meatpacking plants	Million lb...	239.4	177.9	113.8	55.1
	2013 Sausages and other prepared meats	do...	**276.6	202.9	260.4	126.8
201191	HIDES, SKINS, AND PELTS PURCHASED:					
	2011 Meatpacking plants	...	(X)	33.6	(X)	76.6
	3111 Leather tanning and finishing	...	(X)	526.6	(X)	439.9
	3131 Boot, shoe cut stock and finishings	...	(X)	16.4	(X)	4.0
201391	ANIMAL CASINGS, PURCHASED:					
	2011 Meatpacking plants	...	(X)	14.3	(X)	12.4
	2013 Sausages and other prepared meats	...	(X)	32.1	(X)	38.6
201601	DRESSED POULTRY, PURCHASED AS SUCH:					
	2016 Poultry dressing plants	Dressed wt. million lb..	432.4	158.7	292.7	83.6
	2017 Poultry and egg processing	do...	478.8	206.1	315.7	100.3
	2032 Canned specialties	do...	50.8	48.2	32.0	18.2
	2033 Canned fruits and vegetables	do...	(D)	(D)	(D)	(D)
	2038 Frozen specialties	do...	398.3	176.0	243.5	85.0
201722	LIQUID, DRIED, AND FROZEN EGGS:					
	2051 Bread, cake, and related products	Million lb...	94.1	49.0	[1]146.1	[1]35.2
	2052 Cookies and crackers	do...	9.6	9.4	(X)	(X)
202000	MILK AND MILK PRODUCTS:					
	2065 Confectionery products	...	(X)	86.8	(X)	(D)
	2066 Chocolate and cocoa products	...	(X)	76.4	(X)	(D)
202101	BUTTER:					
	2024 Ice cream and frozen desserts	Million lb...	**5.7	6.1	7.3	5.7
202301	CONDENSED AND EVAPORATED MILK:					
	2021 Creamery butter	do...	4.6	1.8	56.9	7.2
	2022 Cheese, natural and processed	do...	(S)	1.7	20.3	1.2
	2023 Condensed and evaporated milk	do...	**178.5	50.6	701.8	57.3
	2024 Ice cream and frozen desserts	do...	198.1	57.2	400.3	48.8
	2026 Fluid milk	do...	161.8	38.4	183.2	18.6
202302	WHEY, LIQUID, CONCENTRATED, DRIED, AND MODIFIED WHEY PRODUCTS:					
	2022 Cheese, natural and processed	do...	**737.5	11.8	(X)	(X)
	2023 Condensed and evaporated milk	do...	1,112.8	38.7	(X)	(X)
	2024 Ice cream and frozen desserts	do...	67.3	8.0	(X)	(X)
	2026 Fluid milk	do...	**82.6	12.0	(X)	(X)
202311	DRY MILKS:					
	2021 Creamery butter	do...	.8	.5	1.1	.3
	2022 Cheese, natural and processed	do...	40.8	25.7	39.1	13.4
	2023 Condensed and evaporated milk	do...	233.8	146.4	299.4	102.1
	2024 Ice cream and frozen desserts	do...	49.5	32.0	65.3	16.5
	2026 Fluid milk	do...	173.3	101.9	157.4	51.9
	2051 Bread, cake, and related products	do...	162.7	38.9	184.9	41.5
	2052 Cookies and crackers	do...	28.9	4.7	17.5	3.2
202613	CREAM:					
	2021 Creamery butter	Million cwt..	7.8	461.0	7.3	265.6
	2022 Cheese, natural and processed	do...	*2.2	97.1	1.3	47.8
	2023 Condensed and evaporated milk	do...	*1.4	77.6	.7	26.1
	2024 Ice cream and frozen desserts	do...	*4.0	205.6	3.6	125.8
	2026 Fluid milk	do...	*3.7	172.1	3.9	134.4
203348	CONCENTRATED FRUIT JUICES:					
	2032 Canned specialties	1,000 gal....	1.8	9.9	(S)	4.2
	2033 Canned fruits and vegetables	do...	21.6	107.9	11.8	29.1
	2086 Bottled and canned soft drinks	do...	24.3	73.8	(NA)	41.8
	2087 Flavoring extracts, syrups, n.e.c.	do...	*3.6	*17.1	4.7	15.8
203361	TOMATO PASTE:					
	2032 Canned specialties	Million lb...	233.0	55.9	(X)	(D)
	2033 Canned fruits and vegetables	do...	197.8	57.3	(X)	(D)
	2038 Frozen specialties	do...	(X)	22.9	(X)	(D)
203411	DRIED FRUIT:					
	2032 Canned specialties	1,000 s. tons	(D)	(D)	2.5	1.2
	2033 Canned fruits and vegetables	do...	26.6	14.9	35.6	17.4
	2034 Dehyd. fruits, vegetables, soups	do...	*291.0	237.6	312.6	122.9
	2035 Pickles, sauces, salad dressings	do...	(S)	.6	.2	.3
	2099 Food preparations, n.e.c.	do...	2.3	2.0	(D)	(D)
203413	DRIED BEANS:					
	2032 Canned specialties	do...	270.5	112.8	223.8	62.5
	2033 Canned fruits and vegetables	do...	34.4	17.7	42.6	12.4

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203415	DRIED FRUIT AND NUTS:					
	2043 Cereal breakfast foods	1,000 cwt.	388.3	30.8	(X)	(X)
203416	DRIED AND DEHYDRATED POTATOES:					
	2099 Food preparations, n.e.c	Million lb.	76.5	20.7	(X)	(D)
203701	FROZEN FRUIT:					
	2032 Canned specialties	1,000 s. tons	4.3	2.4	(D)	(D)
	2033 Canned fruits and vegetables	do.	66.3	54.1	(D)	(D)
203702	FROZEN VEGETABLES:					
	2032 Canned specialties	do.	48.0	19.4	(D)	(D)
	2033 Canned fruits and vegetables	do.	13.0	3.5	(D)	(D)
204001	FLOUR (OTHER THAN WHEAT) AND PREPARED FLOUR MIXES:					
	2043 Cereal breakfast foods	1,000 cwt.	2,689.6	26.4	(X)	(X)
	2045 Blended and prepared flour	do.	1,901.4	23.1	(X)	(X)
204010	CORN GERM:					
	2046 Wet corn milling		(X)	(D)	(X)	(X)
204122	WHEAT, MILLFEED AND SCREENINGS:					
	2047 Dog, cat, and other pet food	1,000 s. tons	312.9	26.8	(D)	(D)
	2048 Prepared feeds, n.e.c	do.	2,722.1	249.3	(D)	(D)
204123	WHEAT GERM:					
	2047 Dog, cat, and other pet food	do.	33.6	4.1	12.6	1.3
	2048 Prepared feeds, n.e.c	do.	40.9	4.1	79.7	3.4
204133	HOMINY FEED AND MEAL:					
	2047 Dog, cat, and other pet food	do.	(D)	(D)	(D)	(D)
	2048 Prepared feeds, n.e.c	do.	439.9	40.3	543.4	29.4
204135	CORN MEAL:					
	2047 Dog, cat, and other pet food	1,000 cwt.	671.9	4.0	574.0	1.8
	2048 Prepared feeds, n.e.c	do.	**2,441.1	11.2	16,909.2	55.0
204161	OTHER MILLFEED AND SCREENINGS:					
	2047 Dog, cat, and other pet food	1,000 s. tons	83.2	8.5	(D)	(D)
	2048 Prepared feeds, n.e.c	do.	1,300.6	79.4	(D)	(D)
204556	BREAD-TYPE MIXES:					
	2051 Bread, cake, and related products	Million lb.	59.8	18.5	(D)	(D)
204557	DOUGHNUT, CAKE, AND YEAST-TYPE MIXES:					
	2051 Bread, cake, and related products	do.	263.3	63.8	(D)	(D)
	2052 Cookies and crackers	do.	(D)	(D)	(D)	(D)
204558	OTHER PREPARED FLOUR MIXES:					
	2051 Bread, cake, and related products	do.	194.8	19.2	(D)	(D)
	2052 Cookies and crackers	do.	(D)	(D)	(D)	(D)
204602	CORN SYRUP:					
	2035 Pickles, sauces, salad dressings	do.	*233.4	20.7	127.7	8.8
	2065 Confectionery products	do.	944.1	71.9	(X)	(D)
	2066 Chocolate and cocoa products	do.	**75.6	7.0	(X)	(D)
	2067 Chewing gum	do.	43.2	4.0	(X)	(D)
	2099 Food preparations, n.e.c	do.	*183.9	17.8	196.9	9.8
204605	STARCH AND DEXTRIN:					
	2891 Adhesives and sealants	do.	**204.1	32.2	(X)	5.0
204607	CORN GLUTEN FEED AND MEAL:					
	2047 Dog, cat, and other pet food	1,000 s. tons	214.0	34.2	64.5	5.7
	2048 Prepared feeds, n.e.c	do.	585.5	93.1	740.7	62.0
204609	STARCH:					
	2611 Pulpmills	Million lb.	17.0	1.9	-	-
	2621 Papermills, except building paper	do.	1,043.5	113.7	1,026.3	78.4
	2631 Paperboard mills	do.	308.9	33.6	257.7	17.3
	2661 Building paper and board mills	do.	51.4	5.1	73.4	3.3
204801	SUPPLEMENTS AND CONCENTRATES:					
	2047 Dog, cat, and other pet food		(X)	(D)	(X)	1.3
	2048 Prepared feeds, n.e.c		(X)	28.7	(X)	44.0
204893	ALFALFA MEAL:					
	2047 Dog, cat, and other pet food	1,000 s. tons	28.3	4.1	25.0	1.5
	2048 Prepared feeds, n.e.c	do.	1,122.7	103.5	1,415.0	73.2
206101	RAW CANE SUGAR:					
	2061 Raw cane sugar	do.	(NA)	(D)	(NA)	(D)
	2062 Cane sugar refining	do.	*7,111.2	1,528.0	6,891.5	1,252.3

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206311	MOLASSES:					
	2047 Dog, cat, and other pet food	1,000 cwt	863.4	2.8	(X)	(D)
	2048 Prepared feeds, n.e.c	do	28,650.0	80.7	(X)	(X)
206583	NUTMEATS:					
	2065 Confectionery products	Million lb	721.7	393.1	599.4	247.6
	2066 Chocolate and cocoa products	do	(D)	(D)	(D)	(D)
206601	CHOCOLATE:					
	2051 Bread, cake, and related products		(X)	54.1	(X)	(D)
	2052 Cookies and crackers		(X)	83.4	(X)	(X)
	2099 Food preparations, n.e.c		(X)	100.0	(X)	(D)
206611	CHOCOLATE COATINGS:					
	2065 Confectionery products	1,000 cwt	2,107.3	240.2	3,681.9	129.1
	2066 Chocolate and cocoa products	do	199.4	26.9	409.1	12.1
206688	COCOA BUTTER:					
	2065 Confectionery products	Million lb	52.3	96.6	(X)	(D)
	2066 Chocolate and cocoa products	do	21.8	45.0	(X)	(D)
206701	CHEWING GUM BASE:					
	2067 Chewing gum		(X)	31.1	(X)	(D)
207001	ANIMAL AND VEGETABLE OILS:					
	2911 Petroleum refining	1,000 bbl	(Z)	4.2	114.0	5.6
	2992 Lubricating oils and greases	do	314.0	28.3	206.0	10.0
207003	FATS AND OILS FOR USE IN FLOUR AND PREPARED FLOUR MIXES:					
	2041 Flour, other grain mill products	Million lb	56.0	16.3	42.3	9.6
	2043 Cereal breakfast foods	do	(D)	(D)	(D)	(D)
	2045 Blended and prepared flour	do	196.1	50.5	150.9	25.5
	2047 Dog, cat, and other pet food	do	12.9	3.7	(D)	(D)
	2048 Prepared feeds, n.e.c	do	21.9	3.2	(D)	(D)
207004	FATS AND OILS USED IN ANIMAL FEEDS:					
	2047 Dog, cat, and other pet food	do	357.1	60.4	217.3	16.0
	2048 Prepared feeds, n.e.c	do	800.8	126.8	768.4	55.7
207006	FATS AND OILS, ALL TYPES:					
	2032 Canned specialties	do	96.2	27.3	79.1	12.0
	2033 Canned fruits and vegetables	do	43.2	12.8	54.8	8.3
	2035 Pickles, sauces, salad dressings	do	(S)	708.8	1,402.1	185.8
	2037 Frozen fruits and vegetables	do	(S)	(D)	190.2	28.2
	2038 Frozen specialties	do	(S)	68.0	283.9	45.0
	2091 Canned and cured seafoods	do	(S)	7.9	40.5	6.1
	2092 Fresh or frozen packaged fish	do	37.7	11.2	39.9	5.9
	2099 Food preparations, n.e.c	do	739.1	205.3	665.8	112.2
	2821 Plastics materials and resins	do	104.0	31.1	(X)	(D)
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
207007	FATS AND OILS, INCLUDING SHORTENING:					
	2065 Confectionery products	do	68.5	26.4	(D)	(D)
	2066 Chocolate and cocoa products	do	76.4	32.7	(D)	(D)
207010	VEGETABLE OILS, INCLUDING CRUDE AND PROCESSED:					
	3292 Asbestos products	do	10.0	3.3	28.5	3.5
207011	VEGETABLE OIL:					
	2051 Bread, cake, and related products	do	386.8	104.8	(D)	(D)
	2052 Cookies and crackers	do	233.5	72.7	(D)	(D)
	2841 Soap and other detergents	do	343.7	93.3	241.6	26.5
	2842 Polishes and sanitation goods	do	10.1	3.0	(D)	1.7
	2843 Surface active agents	do	**46.9	13.0	(X)	(X)
207012	SHORTENING, ANIMAL AND BLENDS OF ANIMAL AND VEGETABLE:					
	2051 Bread, cake, and related products	do	134.3	39.0	(D)	(D)
	2052 Cookies and crackers	do	90.4	23.5	(D)	(D)
207014	OTHER FATS AND OILS:					
	2051 Bread, cake, and related products	do	95.7	34.5	148.3	30.5
	2052 Cookies and crackers	do	97.0	30.8	118.0	19.0
207016	ALL OTHER VEGETABLE OILS:					
	2851 Paints and allied products	do	*147.6	51.0	150.4	25.1
207020	FATS, OILS, GREASES AND TALLOW:					
	2844 Toilet preparations		(X)	47.2	(X)	(D)
207411	COTTONSEED OIL, CRUDE:					
	2074 Cottonseed oil mills	Million lb	201.4	49.3	(NA)	(D)
	2079 Shortening and cooking oils	do	468.3	117.9	646.0	79.1

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
207421	ONCE REFINED COTTONSEED OIL:					
	2079 Shortening and cooking oils	Million lb...	154.5	43.3	129.4	17.9
207441	COTTONSEED CAKE AND MEAL:					
	2047 Dog, cat, and other pet food	1,000 s. tons	51.7	8.2	(D)	(D)
	2048 Prepared feeds, n.e.c	do	944.2	160.6	1,105.3	101.9
207511	SOYBEAN OIL CRUDE:					
	2075 Soybean oil mills	Million lb...	1,666.1	369.2	418.9	48.9
	2079 Shortening and cooking oils	do	4,041.3	984.3	3,996.7	471.9
207512	SOYBEAN OIL, ONCE REFINED:					
	2079 Shortening and cooking oils	do	430.9	109.6	257.0	32.9
207521	SOYBEAN CAKE AND MEAL:					
	2047 Dog, cat, and other pet food	1,000 s. tons	616.4	120.3	504.2	55.8
	2048 Prepared feeds, n.e.c	do	6,325.6	1,334.2	6,461.0	731.8
207522	SOYBEAN:					
	2047 Dog, cat, and other pet food	do	60.6	12.8	(D)	(D)
	2048 Prepared feeds, n.e.c	do	291.0	25.0	(D)	(D)
207601	OTHER OIL, CRUDE:					
	2079 Shortening and cooking oils	Million lb...	1,003.0	267.9	1,199.2	153.2
207603	OTHER OIL, ONCE REFINED:					
	2079 Shortening and cooking oils	do	309.6	87.2	145.0	22.2
207611	LINSEED OIL:					
	2851 Paints and allied products	do	*90.2	25.9	171.9	23.5
207631	OTHER OILSEED CAKE AND MEAL:					
	2047 Dog, cat, and other pet food	1,000 s. tons	(D)	(D)	-	-
	2048 Prepared feeds, n.e.c	do	180.4	27.6	252.0	19.8
207721	MEAT MEAL AND TANKAGE:					
	2047 Dog, cat, and other pet food	do	490.3	104.8	366.4	51.3
	2048 Prepared feeds, n.e.c	do	1,427.2	311.0	1,529.4	191.7
207736	FISH MEAL AND SOLUBLES:					
	2047 Dog, cat, and other pet food	do	36.3	14.5	20.9	3.6
	2048 Prepared feeds, n.e.c	do	229.0	80.4	388.3	65.6
207901	MARGARINE AND PUFF PASTE:					
	2051 Bread, cake, and related products	Million lb...	25.6	8.4	59.3	10.6
	2052 Cookies and crackers	do	(D)	(D)	2.9	0.5
207915	COTTONSEED OIL, FULLY REFINED:					
	2079 Shortening and cooking oils	do	188.7	55.5	119.8	15.7
207916	SOYBEAN OIL, FULLY REFINED:					
	2079 Shortening and cooking oils	do	1,217.6	343.8	1,500.5	206.9
207917	OTHER OIL, FULLY REFINED:					
	2079 Shortening and cooking oils	do	396.0	127.1	292.8	52.0
208249	BREWERS' AND DISTILLERS' GRAINS:					
	2047 Dog, cat, and other pet food	1,000 s. tons	13.7	3.0	7.2	0.5
	2048 Prepared feeds, n.e.c	do	510.1	64.7	526.7	34.4
208301	MALT:					
	2082 Malt beverages	1,000 cwt....	42,706.3	533.9	36,848.3	204.8
	2083 Malt	do	(NA)	(D)	477.9	2.7
	2085 Distilled liquor, except brandy	do	863.9	9.5	1,329.7	7.3
208401	WINES PURCHASED FOR BLENDING:					
	2084 Wines, brandy, and brandy spirits	Mil. wine gal	162.8	150.1	117.8	104.7
208511	NEUTRAL SPIRITS:					
	2085 Distilled liquor, except brandy	Mil. tax gal.	120.5	98.8	175.2	71.3
208513	AGED WHISKEY:					
	2085 Distilled liquor, except brandy	Mil. tax gal.	128.3	223.3	107.8	172.5
208701	OTHER FLAVORS INCLUDING BEVERAGE BASES:					
	2086 Bottled and canned soft drinks	.....	(X)	277.1	(X)	167.5
	2087 Flavoring extracts, syrups, n.e.c	.....	(X)	117.7	(X)	58.8
208731	FLAVORING SYRUPS:					
	2086 Bottled and canned soft drinks	Million gal..	**244.3	578.7	226.6	399.4
	2087 Flavoring extracts, syrups, n.e.c	do	(S)	14.0	4.8	7.7

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209231	FROZEN FISH BLOCKS:					
	2092 Fresh or frozen packaged fish	1,000 s. tons	150.7	233.2	(D)	(D)
209942	YEAST:					
	2051 Bread, cake, and related products	Million lb...	312.7	72.1	(X)	(D)
	2052 Cookies and crackers	do.....	6.1	2.0	(X)	(X)
209993	SPICES AND CURING MATERIALS:					
	2011 Meatpacking plants	do.....	(S)	65.3	138.4	40.5
	2013 Sausages and other prepared meats	do.....	(S)	89.2	133.4	39.0
214111	UNSTEMMED LEAF TOBACCO, REDRIED AND PACKED:					
	2111 Cigarettes	do.....	89.7	128.7	(D)	(D)
	2121 Cigars	do.....	11.8	16.5	20.1	24.2
	2131 Chewing and smoking tobacco	do.....	(D)	(D)	(D)	(D)
	2141 Tobacco stemming and redrying	do.....	(D)	(D)	(D)	(D)
214123	STEMMED LEAF TOBACCO:					
	2111 Cigarettes	do.....	1,057.9	1,516.7	891.4	1,059.3
	2121 Cigars	do.....	36.1	29.7	32.3	37.7
	2131 Chewing and smoking tobacco	do.....	(D)	(D)	28.5	24.2
	2141 Tobacco stemming and redrying	do.....	329.7	468.1	583.4	504.8
214124	RECONSTITUTED TOBACCO:					
	2111 Cigarettes	do.....	149.5	55.6	127.2	31.6
	2121 Cigars	do.....	6.6	10.0	10.4	8.4
	2131 Chewing and smoking tobacco	do.....	(D)	(D)	1.1	.7
	2141 Tobacco stemming and redrying	do.....	(D)	(D)	(D)	(D)
214129	OTHER TOBACCO MATERIALS:					
	2111 Cigaretts	do.....	(D)	(D)	(X)	4.6
	2121 Cigars	do.....	3.5	4.3	25.5	18.2
	2131 Chewing and smoking tobacco	do.....	(D)	(D)	(X)	4.2
	2141 Tobacco stemming and redrying	do.....	(D)	(D)	(D)	(D)
220011	CLOTH AND NONWOVEN FABRICS FOR HARDBOUND BOOK COVERS:					
	2732 Book printing	.....	(X)	19.2	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	.6	(X)	(D)
	2752 Commercial printing, lithographic	.....	(X)	5.3	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	(D)	(X)	(D)
220101	COTTON AND MANMADE FIBER FABRICS, BROADWOVEN AND NARROW WOVEN:					
	3291 Abrasive products	.....	(X)	81.4	(X)	44.0
	3296 Mineral wool	.....	(X)	14.5	(X)	12.0
	3964 Needles, pins, and fasteners	.....	(X)	27.3	(X)	44.0
224111	NARROW FABRICS:					
	2393 Textile bags	Mil. lin. yd.	35.6	4.8	(D)	(D)
	2396 Automotive and apparel trimmings	do.....	98.4	17.4	(X)	(X)
	2399 Fabricated textile products, n.e.c	do.....	105.8	21.5	(X)	(D)
	3955 Carbon paper and inked ribbons	.....	(X)	17.9	(X)	(X)
228001 228011	ALL OTHER YARNS:					
	2251 Women's hosiery, except socks	Million lb...	(S)	4.3	2.7	10.1
	2252 Hosiery, n.e.c	do.....	*12.8	29.7	11.0	18.0
	2253 Knit outerwear mills	do.....	14.4	24.2	11.7	17.2
	2257 Circular knit fabric mills	do.....	**113.6	179.4	36.4	40.3
	2258 Warp knit fabric mills	do.....	56.5	73.9	(D)	(D)
228015	TEXTILE YARNS:					
	2269 Finishing plants, n.e.c	Mil. lin. yd.	344.6	386.6	259.1	237.0
	2291 Felt goods, except woven felt, hats	do.....	1.0	1.0	(X)	(D)
228101	SPUN YARN, ALL FIBERS:					
	2211 Weaving mills, cotton	Million lb...	196.6	201.7	199.6	126.1
	2221 Weaving mills, manmade fiber, silk	do.....	659.0	668.0	406.5	334.5
	2231 Weaving and finishing mills, wool	do.....	*10.5	21.3	39.4	40.7
	2281 Yarn mills, except wool	do.....	81.9	60.2	61.4	38.4
	2282 Throwing and winding mills	do.....	50.7	55.0	(D)	(D)
	2283 Wool yarn mills	do.....	(D)	(D)	(D)	(D)
	2284 Thread mills	do.....	63.9	138.9	77.9	93.3
228102	COTTON YARNS:					
	2251 Women's hosiery, except socks	do.....	*7.8	11.8	(NA)	(D)
	2252 Hosiery, n.e.c	do.....	*40.6	53.1	42.3	34.1
	2292 Lace goods	do.....	1.0	1.9	1.5	1.6
	2298 Cordage and twine	do.....	32.4	11.8	34.4	12.0
228110	CARDED COTTON YARNS:					
	2253 Knit outerwear mills	do.....	28.9	36.1	38.6	32.6
	2254 Knit underwear mills	do.....	75.3	94.5	77.6	51.5
	2257 Circular knit fabric mills	do.....	48.7	60.9	71.0	54.9
	2258 Warp knit fabric mills	do.....	(D)	(D)	(D)	(D)
	2259 Knitting mills, n.e.c	do.....	(S)	8.4	7.1	5.8

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
228120	COMBED COTTON YARNS:					
	2253 Knit outerwear mills	Million lb...	**20.7	29.7	39.9	43.8
	2254 Knit underwear mills	do...	26.2	40.7	44.5	38.9
	2257 Circular knit fabric mills	do...	88.9	152.3	97.0	94.4
	2258 Warp knit fabric mills	do...	(D)	(D)	(D)	(D)
228130	RAYON AND ACETATE SPUN YARNS:					
	2253 Knit outerwear mills	do...	**9.6	1.7	(D)	(D)
	2257 Circular knit fabric mills	do...	9.2	9.9	12.1	9.0
	2258 Warp knit fabric mills	do...	29.0	32.3	12.4	10.5
228141	NYLON SPUN YARNS:					
	2251 Women's hoisery, except socks	do...	13.6	40.6	13.5	30.9
	2252 Hoisery, n.e.c.	do...	**16.1	28.7	10.7	15.8
	2253 Knit outerwear mills	do...	*4.2	8.7	9.2	19.2
	2257 Circular knit fabric mills	do...	9.8	11.8	6.5	6.6
	2258 Warp knit fabric mills	do...	34.3	51.6	10.5	13.7
228143	POLYESTER SPUN YARNS:					
	2253 Knit outerwear mills	do...	*21.7	34.0	47.3	74.5
	2257 Circular knit fabric mills	do...	**166.0	207.3	167.4	207.9
	2258 Warp knit fabric mills	do...	30.8	40.4	12.9	19.2
228145	ACRYLIC YARNS:					
	2251 Women's hoisery, except socks	do...	*5.6	8.3	2.8	3.0
	2252 Hoisery, n.e.c.	do...	**41.6	71.7	23.0	33.6
	2253 Knit outerwear mills	do...	*64.1	128.0	52.3	92.6
	2257 Circular knit fabric mills	do...	49.6	63.6	48.9	56.2
	2258 Warp knit fabric mills	do...	8.4	12.2	(D)	(D)
228301	WOOL YARNS:					
	2253 Knit outerwear mills	do...	7.2	24.3	23.2	56.3
	2257 Circular knit fabric mills	do...	.5	1.5	5.2	13.4
	2258 Warp knit fabric mills	do...	(D)	(D)	(D)	(D)
229308	PADDINGS, BATTINGS, AND FILLINGS:					
	2512 Upholstered household furniture	do...	(S)	31.2	(S)	23.0
	2514 Metal household furniture	do...	**5.3	2.5	(NA)	(D)
	2515 Mattresses and bedsprings	do...	(S)	28.4	e112.5	23.9
229501	COATED, IMPREGNATED, AND LAMINATED FABRICS:					
	2451 Mobile homes	Mil. lin. yd.	(S)	24.2	23.0	28.9
	3711 Motor vehicles and car bodies	do...	(D)	(D)	1.7	2.8
	3713 Truck and bus bodies	do...	1.2	3.6	3.4	6.2
	3714 Motor vehicle parts, accessories	do...	*8.1	19.9	8.6	11.0
	3716 Motor homes	do...	(D)	8.6	(X)	(X)
	3792 Travel trailers and campers	do...	(S)	16.2	(S)	9.5
229502	OTHER COATED FABRICS:					
	2396 Automotive and apparel trimmings	do...	(D)	(D)	(D)	(D)
229503	PLASTIC COATED IMPREGNATED OR LAMINATED FABRICS:					
	2392 Housefurnishings, n.e.c.	do...	**75.4	57.9	49.9	29.3
	2393 Textile bags	do...	15.4	5.6	18.0	3.5
	2394 Canvas and related products	do...	(S)	25.1	30.3	19.8
	2399 Fabricated textile products, n.e.c.	do...	(S)	9.5	27.3	11.3
	3142 House slippers	do...	(S)	8.9	4.1	8.3
	3143 Men's footwear, except athletic	do...	14.4	18.4	6.8	11.4
	3144 Women's footwear, except athletic	do...	**11.3	45.0	14.5	36.5
	3149 Footwear, except rubber, n.e.c.	do...	6.4	19.1	7.1	14.4
	3161 Luggage	do...	**50.4	51.3	22.9	21.2
	3171 Women's handbags and purses	do...	(S)	23.1	e24.4	40.0
	3172 Personal leather goods, n.e.c.	do...	(S)	7.0	e4.9	6.2
229506	PLASTIC COATED FABRIC AND SHADE CLOTH:					
	2591 Drapery hardwear, blinds, shades	do...	(S)	45.3	**17.3	31.6
229507	COATED OR IMPREGNATED WOVEN AND NONWOVEN FABRIC:					
	2782 Blankbooks and looseleaf binders	...	(X)	13.2	(X)	8.0
	2789 Bookbinding and related work	...	(X)	10.2	(X)	8.4
229508	COATED OR LAMINATED FABRIC FOR UPHOLSTERY:					
	2512 Upholstered household furniture	Mil. lin. yd.	(S)	57.3	**25.6	40.0
	2514 Metal household furniture	do...	**20.1	28.6	**21.5	22.1
	2515 Mattresses and bedsprings	do...	(S)	3.2	e5.2	6.6
	2521 Wood office furniture	do...	*2.0	9.0	2.1	4.6
	2522 Metal office furniture	do...	**3.9	15.5	9.2	8.0
	2531 Public building, and related furniture	do...	(S)	17.2	**3.6	8.3
	2541 Wood partitions and fixtures	do...	*10.1	.8	(S)	.6
	2542 Metal partitions and fixtures	do...	(S)	1.4	(S)	.2
	2599 Furniture and fixtures, n.e.c.	do...	(S)	8.1	2.9	6.1

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229521	VINYL COATED FABRICS, WITH COTTON BACKING:					
	2396 Automotive and apparel trimmings	Mil. lin. yd.	60.6	203.0	66.8	128.3
229601	COTTON CORD:					
	3011 Tires and inner tubes	Million lb...	1.5	2.1	(D)	(D)
229602	RAYON CORD:					
	3011 Tires and inner tubes	do.....	24.7	29.2	102.1	73.5
229603	NYLON CORD:					
	3011 Tires and inner tubes	do.....	268.6	376.9	285.2	291.4
229604	ARAMID:					
	3011 Tires and inner tubes	do.....	(D)	(D)	(D)	(D)
229605	POLYESTER CORD:					
	3011 Tires and inner tubes	do.....	293.2	358.6	223.5	204.0
229606	FIBERGLASS:					
	3011 Tires and inner tubes	do.....	31.6	33.7	36.7	35.7
229607	METALLIC CORD:					
	3011 Tires and inner tubes	do.....	155.9	159.6	(D)	(D)
229609	CHAFER AND OTHER TIRE FABRIC:					
	3011 Tires and inner tubes	do.....	14.5	35.1	(D)	(D)
229710	NONWOVEN FABRIC:					
	2647 Sanitary paper products	Mil. sq. yd..	(S)	169.5	(S)	72.6
	2648 Stationery products	do.....	(D)	(D)	(NA)	(D)
	2649 Converted paper products, n.e.c	do.....	(S)	6.6	17.4	.6
	3841 Surgical and medical instruments	do.....	(S)	1.5	(X)	(X)
	3842 Surgical appliances and supplies	do.....	(S)	62.0	(S)	15.2
229801	CORDAGE:					
	2591 Drapery hardware, blinds, shades	Mil. lin. ft.	(S)	5.8	485.6	2.3
229921	BURLAP BAGS, NEW:					
	2041 Flour, other grain mill products	Million bags.	5.5	1.8	10.7	3.0
	2047 Dog, cat, and other pet food	do.....	(D)	(D)	1.1	.3
	2048 Prepared feeds, n.e.c	do.....	*6.9	2.3	32.7	9.8
229933	WOOL TOPS:					
	2221 Weaving mills, manmade fiber, silk	Million lb...	(D)	(D)	(D)	(D)
	2231 Weaving and finishing mills, wool	do.....	*3.5	8.8	11.3	15.7
	2281 Yarn mills, except wool	do.....	10.8	30.1	12.2	15.3
	2283 Wool yarn mills	do.....	7.4	21.4	23.8	27.7
239301	COTTON BAGS:					
	2041 Flour, other grain mill products	Million bags.	27.2	9.1	(X)	10.4
	2047 Dog, cat, and other pet food	do.....	(D)	(D)	.2	.1
	2048 Prepared feeds, n.e.c	do.....	*2.2	.7	3.2	1.0
239302	POLYPROPYLENE BAGS (TEXTILE TYPE):					
	2041 Flour, other grain mill products	do.....	23.3	6.3	(X)	(X)
	2047 Dog, cat, and other pet food	do.....	35.1	3.6	(X)	(D)
	2048 Prepared feeds, n.e.c	do.....	62.2	16.7	(X)	(Z)
240000	PULPWOOD:					
	2646 Pressed and molded pulp goods	1,000 s. tons	(D)	(D)	(D)	(D)
240012	WOOD TURNINGS, LATH, AND OTHER WOOD MATERIALS:					
	2591 Drapery hardware, blinds, shades	.....	(X)	27.0	(X)	(D)
241101	SPRUCE AND TRUE FIR:					
	2611 Pulpmills	1,000 cd of 128 cu. ft.	456.1	24.2	209.4	7.7
	2621 Papermills, except building paper	do.....	1,552.6	75.1	2,117.1	68.7
	2631 Paperboard mills	do.....	(D)	(D)	(D)	(D)
241102	HEMLOCK:					
	2611 Pulpmills	do.....	837.5	45.3	965.4	27.7
	2621 Papermills, except building paper	do.....	432.0	19.1	1,121.9	32.8
241103	JACK PINE:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	627.1	27.5	841.6	23.9
241104	SOUTHERN PINE:					
	2611 Pulpmills	do.....	2,864.0	140.3	1,659.0	46.0
	2621 Papermills, except building paper	do.....	5,931.7	255.2	7,041.0	186.9
	2631 Paperboard mills	do.....	12,943.6	555.3	15,446.1	431.4
	2661 Building paper and board mills	do.....	117.8	4.9	285.1	6.9

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
241105	OTHER SOFTWOODS:					
	2611 Pulpmills	1,000 cd of 128 cu. ft.	(D)	(D)	105.8	2.6
	2621 Papermills, except building paper	do.	854.6	31.7	970.9	25.5
	2631 Paperboard mills	do.	(D)	(D)	(D)	(D)
	2661 Building paper and board mills	do.	70.5	2.3	(NA)	(D)
241106	NORTHERN MIXED HARDWOODS:					
	2611 Pulpmills	do.	(D)	(D)	297.9	5.8
	2621 Papermills, except building paper	do.	1,713.3	61.9	2,059.6	50.3
	2631 Paperboard mills	do.	459.6	13.6	413.4	8.0
	2661 Building paper and board mills	do.	(D)	(D)	69.3	1.5
241107	POPLAR (ASPEN AND POPPLE)					
	2611 Pulpmills	do.	(D)	(D)	63.0	1.4
	2621 Papermills, except building paper	do.	774.2	31.1	1,107.7	29.1
	2631 Paperboard mills	do.	168.6	4.4	258.1	5.1
	2661 Building paper and board mills	do.	(D)	(D)	(D)	(D)
241108	SOUTHERN MIXED HARDWOODS:					
	2611 Pulpmills	do.	1,219.8	52.4	1,267.2	32.4
	2621 Papermills, except building paper	do.	2,272.0	85.5	2,603.9	59.9
	2631 Paperboard mills	do.	3,076.9	103.1	3,633.6	81.0
	2661 Building paper and board mills	do.	23.8	.9	71.1	1.4
241109	POLES, PILING, AND OTHER ROUND OR HEWN WOOD PRODUCTS:					
	2491 Wood preserving	.....	(X)	122.1	(X)	82.1
241111	HARDWOOD LOGS, BOLTS, AND UNSLICED FLITCHES:					
	2421 Sawmills, planing mills, general	Million ft (log scale).	*2,829.4	326.8	3,369.9	193.5
	2426 Hardwood dimension and flooring	do.	*261.7	31.8	337.6	23.3
	2429 Special product sawmills, n.e.c.	do.	**46.4	14.8	**61.5	8.3
	2431 Millwork	do.	10.0	2.2	64.8	10.3
	2435 Hardwood veneer and plywood	do.	**248.3	76.7	602.7	61.0
	2436 Softwood veneer and plywood	do.	108.8	25.7	260.5	21.2
	2441 Nailed wood boxes and shook	do.	(S)	3.4	**30.1	1.7
	2448 Wood pallets and skids	do.	(S)	22.9	236.6	15.2
	2449 Wood containers, n.e.c.	do.	110.1	16.5	**84.1	6.5
	2492 Particleboard	do.	(D)	(D)	(NA)	(D)
	2499 Wood products, n.e.c.	do.	*229.1	35.8	261.1	25.9
241112	SOFTWOOD LOGS, BOLTS, AND UNSLICED FLITCHES:					
	2421 Sawmills, planing mills, general	do.	17,306.3	2,648.1	13,399.9	1,053.2
	2426 Hardwood dimension and flooring	do.	*17.5	2.6	52.1	3.8
	2429 Special product sawmills, n.e.c.	do.	**234.3	58.3	**250.0	26.3
	2431 Millwork	do.	*72.4	16.2	81.2	6.8
	2435 Hardwood veneer and plywood	do.	139.3	27.1	128.8	10.4
	2436 Softwood veneer and plywood	do.	5,998.2	1,055.5	4,789.6	435.7
	2441 Nailed wood boxes and shook	do.	(S)	8.5	**62.0	4.9
	2448 Wood pallets and skids	do.	(S)	3.0	22.0	3.0
	2449 Wood containers, n.e.c.	do.	37.6	4.2	**52.2	4.6
	2492 Particleboard	do.	16.0	4.1	(NA)	(D)
	2499 Wood products, n.e.c.	do.	*67.7	11.1	(S)	8.9
241119	OTHER HARDWOODS:					
	2611 Pulpmills	1,000 cd of 128 cu. ft.	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.	443.2	14.1	428.4	10.5
	2631 Paperboard mills	do.	386.9	14.0	859.6	19.9
241131	PULPWOOD:					
	2499 Wood products, n.e.c.	do.	725.1	31.9	(X)	(D)
242011	CHIPS, SLABS, EDGINGS, SHAVING, SAWDUST, AND OTHER WOOD WASTES:					
	2499 Wood products, n.e.c.	.....	(X)	34.0	(X)	28.1
	2861 Gum and wood chemicals	.....	(X)	34.3	(X)	(D)
242013	HARDWOOD SLABS, CHIPS, CORES, AND OTHER MILL WASTE:					
	2611 Pulpmills	1,000 cd of 128 cu. ft.	888.1	44.9	428.8	10.6
	2621 Papermills, except building paper	do.	2,639.7	98.3	1,538.0	39.3
	2631 Paperboard mills	do.	2,491.4	83.0	1,435.9	34.8
	2661 Building paper and board mills	do.	104.4	3.2	132.9	4.2
242015	SOFTWOOD SLABS, CORES, AND OTHER MILL WASTE:					
	2611 Pulpmills	do.	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.	888.3	13.2	547.6	5.7
	2631 Paperboard mills	do.	759.1	11.9	1,040.3	9.6
	2661 Building paper and board mills	do.	97.6	3.2	92.7	1.3
242016	CHIPS, SLABS, EDGINGS, SAWDUST, AND OTHER WOOD WASTES:					
	2492 Particleboard	1,000 s. tons	1,630.6	16.2	(X)	(D)
242017	PLANER SHAVINGS:					
	2492 Particleboard	do.	4,378.1	43.9	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977		1972	
			Quantity	Delivered cost (million dollars)	Quantity	Delivered cost (million dollars)
242101	ROUGH AND DRESSED LUMBER:					
	3585 Refrigeration, heating equipment	Mil. board ft	(S)	16.2	(X)	15.0
	3532 Household refrigerators, freezers	do	(S)	3.4	(X)	4.0
	3931 Musical instruments	do	(S)	26.6	(X)	27.0
	3949 Sporting and athletic goods, n.e.c	do	(S)	33.8	(X)	78.0
	3999 Manufacturing industries, n.e.c	do	(S)	22.8	(X)	(D)
242103	DRESSED LUMBER:					
	2451 Mobile homes	do	(S)	209.6	1,217.8	238.8
	3731 Ship building and repairing	do	28.7	13.1	26.9	6.8
	3732 Boat building and repairing	do	(S)	15.0	24.3	7.0
	3792 Travel trailers and campers	do	(S)	21.0	(S)	22.0
242110	HARDWOOD ROUGH LUMBER:					
	2421 Sawmills, planing mills, general	do	633.6	98.9	790.9	74.4
	2426 Hardwood dimension and flooring	do	*809.2	193.2	790.3	101.3
	2431 Millwork	do	**192.7	87.5	209.0	47.7
	2439 Structural wood members, n.e.c	do	(S)	16.3	30.8	9.0
	2441 Nailed wood boxes and shook	do	*77.6	11.3	**101.3	9.2
	2448 Wood pallets and skids	do	(S)	81.2	570.2	50.1
	2449 Wood containers, n.e.c	do	191.6	26.7	**127.0	11.0
	2452 Prefabricated wood buildings	do	**55.8	9.7	(S)	5.1
	2491 Wood preserving	do	606.9	99.2	*486.7	50.2
	2499 Wood products, n.e.c	do	**123.2	43.9	e132.3	23.1
242111	HARDWOOD LUMBER, ROUGH AND DRESSED:					
	2421 Sawmills, planing mills, general	do	(X)	(D)	(X)	2.4
	2435 Hardwood veneer and plywood	do	**58.3	14.7	171.7	21.3
	2436 Softwood veneer and plywood	do	(D)	(D)	(D)	(D)
	2511 Wood household furniture	do	1,071.3	289.3	1,010.5	210.6
	2512 Upholstered household furniture	do	**297.9	63.9	380.0	e61.2
	2517 Wood television and radio cabinets	do	46.5	16.3	56.4	13.1
	2521 Wood office furniture	do	**60.7	29.0	1.4	19.1
	2522 Metal office furniture	do	(S)	2.2	4.5	1.4
	2531 Public building, related furniture	do	*37.4	15.2	*32.5	10.1
	2541 Wood partitions and fixtures	do	(S)	25.3	**34.5	13.9
	2542 Metal partitions and fixtures	do	(S)	1.7	6.9	1.6
	2599 Furniture and fixtures, n.e.c	do	(S)	8.2	15.7	3.9
	3944 Games, toys, children's vehicles	do	(S)	12.6	(X)	(D)
242117	HARDWOOD, DRESSED LUMBER:					
	2421 Sawmills, planing mills, general	do	25.2	5.2	38.6	6.8
	2426 Hardwood dimension and flooring	do	(S)	28.0	(S)	6.8
	2431 Millwork	do	180.7	49.9	227.1	42.9
	2439 Structural wood members, n.e.c	do	**67.1	14.8	46.9	9.7
	2441 Nailed wood boxes and shook	do	42.9	6.6	**28.2	3.0
	2448 Wood pallets and skids	do	**94.7	14.2	125.3	12.6
	2449 Wood containers, n.e.c	do	20.1	2.9	32.3	3.7
	2452 Prefabricated wood buildings	do	*150.5	29.7	54.3	11.0
	2499 Wood products, n.e.c	do	**76.6	21.8	e130.6	15.6
242121	SOFTWOOD, DRESSED LUMBER:					
	2421 Sawmills, planing mills, general	do	*2,233.4	410.1	2,782.8	289.7
	2426 Hardwood dimension and flooring	do	*22.6	6.3	81.7	11.7
	2431 Millwork	do	836.7	339.7	803.2	181.0
	2439 Structural wood members, n.e.c	do	**91.4	21.3	105.1	18.0
	2441 Nailed wood boxes and shook	do	72.9	13.2	**322.8	30.2
	2448 Wood pallets and skids	do	(S)	22.1	107.0	10.1
	2449 Wood containers, n.e.c	do	31.6	3.8	**23.1	2.7
	2452 Prefabricated wood buildings	do	**85.9	21.2	114.4	21.2
	2491 Wood preserving	do	495.3	109.0	431.3	61.9
	2499 Wood products, n.e.c	do	(S)	42.6	e195.9	26.5
242123	LUMBER, ROUGH AND DRESSED, SOFTWOOD:					
	2435 Hardwood veneer and plywood	do	(S)	(D)	(D)	(D)
	2436 Softwood veneer and plywood	do	*175.5	29.6	(D)	(D)
	2511 Wood household furniture	do	**423.5	102.0	359.1	54.3
	2512 Upholstered household furniture	do	**125.8	23.2	e77.0	10.4
	2517 Wood television and radio cabinets	do	12.7	3.2	22.5	3.4
	2521 Wood office furniture	do	(S)	2.7	4.1	1.4
	2522 Metal office furniture	do	1.6	.7	5.7	1.0
	2531 Public building, related furniture	do	(S)	3.3	**13.2	3.7
	2541 Wood partitions and fixtures	do	(S)	18.5	**30.0	8.3
	2542 Metal partitions and fixtures	do	(S)	1.4	**11.2	2.0
	2599 Furniture and fixtures, n.e.c	do	*31.7	2.6	13.8	2.7
	3942 Dolls	do	(D)	(D)	(X)	(D)
	3944 Games, toys, children's vehicles	do	(S)	12.8	(X)	(D)

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
242128	DRESSED LUMBER, SOFTWOOD:					
	2421 Sawmills, planing mills, general	Mil. board ft	793.8	161.2	728.6	92.5
	2426 Hardwood dimension and flooring	do	*30.1	8.6	10.5	2.5
	2431 Millwork	do	**1,006.7	448.1	1,254.5	301.5
	2439 Structural wood members, n.e.c	do	*752.1	191.6	579.1	97.9
	2441 Nailed wood boxes and shook	do	*95.4	15.9	**178.6	23.5
	2448 Wood pallets and skids	do	284.6	28.5	216.9	18.7
	2449 Wood containers, n.e.c	do	**12.8	2.2	14.1	2.1
	2452 Prefabricated wood buildings	do	*653.4	191.2	768.9	133.9
	2499 Wood products, n.e.c	do	**243.3	43.0	e224.6	34.0
242157	PULPWOOD CHIPS:					
	2611 Pulpmills	1,000 cd of 128 cu. ft.	3,571.0	177.1	2,587.4	73.2
	2621 Papermills, except building paper	do	9,585.2	409.6	6,307.6	144.4
	2631 Paperboard mills	do	12,669.8	510.6	10,594.9	240.6
	2661 Building paper and board mills	do	538.0	18.6	**418.1	7.0
242620	HARDWOOD DIMENSION AND PARTS:					
	2499 Wood products, n.e.c	Mil. board ft	**27.5	15.9	(X)	(D)
	2511 Wood household furniture	do	(S)	100.0	281.3	112.1
	2512 Upholstered household furniture	do	(S)	18.9	80.8	20.1
	2515 Mattresses and bedsprings	do	**27.4	5.5	69.5	9.7
	2517 Wood television and radio cabinets	do	(D)	(D)	24.8	13.9
242661	FURNITURE FRAMES, WOOD:					
	2511 Wood household furniture		(X)	48.3	(X)	9.7
	2512 Upholstered household furniture		(X)	130.0	(X)	96.5
	2515 Mattresses and bedsprings		(X)	27.7	(X)	16.2
	2517 Wood television and radio cabinets		(X)	(D)	(X)	(D)
243011	MILLWORK:					
	3792 Travel trailers and campers		(X)	11.9	(X)	21.0
243056	PLYWOOD:					
	2451 Mobile homes		(X)	141.3	(X)	166.0
	3732 Boat building and repairing		(X)	26.8	(X)	13.3
	3792 Travel trailers and campers		(X)	54.2	(X)	31.0
243101	WOOD WINDOWS AND WINDOW UNITS:					
	2452 Prefabricated wood buildings	Thousands	*638.2	37.4	597.6	18.2
243103	WOOD DOORS AND DOOR UNITS:					
	2452 Prefabricated wood buildings	do	**938.7	29.3	1,227.7	22.8
243510	HARDWOOD PLYWOOD:					
	2435 Hardwood veneer and plywood	Mil. sq. ft (surf. meas.)	*1,866.8	228.0	1,953.8	133.6
	2436 Softwood veneer and plywood	do	(D)	(D)	(D)	(D)
	2439 Structural wood members, n.e.c	do	(S)	.9	(NA)	(D)
	2452 Prefabricated wood buildings	do	(S)	18.1	27.3	5.1
	2521 Wood offices furniture	do	17.1	17.4	13.6	6.6
	2522 Metal office furniture	do	(S)	1.1	5.1	2.2
	2531 Public building, related furniture	do	**7.8	6.2	**15.9	6.9
	2541 Wood partitions and fixtures	do	(S)	13.8	**33.1	14.2
	2542 Metal partitions and fixtures	do	(S)	.8	**3.0	1.2
	2599 Furniture and fixtures, n.e.c	do	(S)	5.9	7.2	2.9
243511	HARDWOOD PLYWOOD, VENEER CORE, OTHER THAN CONTAINER TYPE:					
	2431 Millwork	Mil. sq. ft.	(S)	60.7	257.4	28.8
	2511 Wood household furniture	do	**246.9	29.6	327.3	28.7
	2517 Wood television and radio cabinets	do	4.8	3.8	31.0	5.9
243513	BOARD CORE:					
	2431 Millwork	Mil. sq. ft (surf. meas.)	(S)	15.5	22.0	5.7
	2511 Wood household furniture	do	108.3	26.2	273.4	24.7
	2517 Wood television and radio cabinets	do	(S)	5.8	14.0	5.4
243515	HARDWOOD, CONTAINER TYPE:					
	2441 Nailed wood boxes and shook	Mil. sq. ft.	3.8	.7	(S)	(D)
	2448 Wood pallets and skids	do	(X)	.9	(X)	(D)
	2449 Wood containers, n.e.c	do	(D)	(D)	3.1	.8
243540	HARDWOOD VENEER:					
	2431 Millwork	do	(S)	52.1	717.2	48.3
	2435 Hardwood veneer and plywood	do	2,950.9	179.3	3,547.0	139.7
	2436 Softwood veneer and plywood	do	104.5	7.4	285.8	13.2
	2441 Nailed wood boxes and shook	do	(D)	(D)	(S)	1.6
	2449 Wood containers, n.e.c	do	29.1	8.5	90.7	9.2
	2511 Wood household furniture	do	(S)	60.6	814.9	47.0
	2517 Wood television and radio cabinets	do	(S)	2.5	157.3	6.1
	2521 Wood office furniture	do	*51.5	11.3	54.7	4.6
	2522 Metal office furniture	do	(S)	3.8	6.1	1.8
	2531 Public building, related furniture	do	(S)	4.0	**30.0	2.0
	2541 Wood partitions and fixtures	do	(S)	5.8	**15.9	2.6
	2542 Metal partitions and fixtures	do	(D)	(D)	(S)	.4
	2599 Furniture and fixtures, n.e.c	do	(S)	2.7	(S)	.4

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
243601	SOFTWOOD PLYWOOD:					
	2431 Millwork	Mil. sq. ft.	(S)	7.1	78.2	12.0
	2435 Hardwood veneer and plywood	do	177.7	30.4	(D)	(D)
	2436 Softwood veneer and plywood	do	836.6	85.5	511.6	34.9
	2439 Structural wood members, n.e.c	do	**60.3	12.5	37.6	4.7
	2441 Nailed wood boxes and shook	do	**33.3	5.9	21.6	2.4
	2448 Wood pallets and skids	do	*22.6	4.7	(X)	(D)
	2449 Wood containers, n.e.c	do	**19.1	3.4	6.9	1.0
	2452 Prefabricated wood buildings	do	*325.2	82.4	400.2	59.7
	2511 Wood household furniture	do	**42.0	10.6	87.7	11.9
	2517 Wood television and radio cabinets	do	(D)	(D)	16.4	3.3
	2521 Wood office furniture	do	*2.0	.9	(S)	.6
	2522 Metal office furniture	do	(D)	(D)	2.7	.9
	2531 Public building, related furniture	do	(S)	3.8	**25.6	3.3
	2541 Wood partitions and fixtures	do	**53.4	16.3	**82.1	11.0
	2542 Metal partitions and fixtures	do	8.5	.9	**8.3	1.9
	2599 Furniture and fixtures, n.e.c	do	**21.9	4.0	(S)	2.0
243640	SOFTWOOD VENEER:					
	2431 Millwork	do	(S)	1.2	(S)	5.9
	2435 Hardwood veneer and plywood	do	95.4	21.0	419.9	19.4
	2436 Softwood veneer and plywood	do	2,209.8	378.0	3,335.9	196.0
	2441 Nailed wood boxes and shook	do	(D)	(D)	(S)	(D)
	2449 Wood containers, n.e.c	do	(S)	6.8	11.8	3.2
244021	WOODEN CONTAINERS, COMPLETE:					
	3585 Refrigeration, heating equipment		(X)	19.1	(X)	13.0
	3632 Household refrigerators, freezers		(X)	7.1	(X)	(D)
244950	COOPERAGE:					
	2085 Distilled liquor, except brandy	1,000 units	1,051.9	45.9	(X)	(D)
249200	PARTICLE BOARD (WOOD):					
	2431 Millwork	Mil. sq. ft.	*79.4	13.6	99.6	16.4
	2435 Hardwood veneer and plywood	do	*505.6	66.6	(S)	14.9
	2436 Softwood veneer and plywood	do	24.1	3.7	(S)	.7
	2439 Structural wood members, n.e.c	do	(S)	2.0	(D)	1.8
	2451 Mobile homes	do	(S)	56.4	(X)	(D)
	2452 Prefabricated wood buildings	do	**45.6	8.0	44.5	4.2
	2499 Wood products, n.e.c	do	**366.4	38.2	(X)	(D)
	2511 Wood household furniture	do	(S)	67.1	432.0	66.3
	2514 Metal household furniture	do	(S)	14.6	**100.8	17.0
	2521 Wood office furniture	do	**39.1	8.5	25.0	4.7
	2522 Metal office furniture	do	(S)	2.8	6.8	1.9
	2531 Public building, related furniture	do	**47.6	11.2	44.2	5.7
	2541 Wood partitions and fixtures	do	184.7	37.5	**165.3	26.4
	2542 Metal partitions and fixtures	do	*7.1	2.3	(S)	1.8
	2599 Furniture and fixtures, n.e.c	do	(S)	5.0	(S)	2.9
249941	CORK PRODUCTS:					
	3293 Gaskets, packing, sealing devices		(X)	8.9	(X)	(D)
249960	HARDWOOD (WOOD FIBERBOARD):					
	2431 Millwork	Mil. sq. ft.	378.0	38.0	336.8	23.6
	2439 Structural wood members, n.e.c	do	(S)	.8	(NA)	(D)
	2452 Prefabricated wood buildings	do	100.1	16.2	70.4	5.3
	2499 Wood products, n.e.c	do	*746.7	61.6	(X)	51.2
	2511 Wood household furniture	do	(S)	36.2	432.2	29.3
	2517 Wood television and radio cabinets	do	(S)	2.4	68.7	5.1
	2521 Wood office furniture	do	(S)	2.7	2.6	.3
	2522 Metal office furniture	do	(S)	2.4	(D)	(D)
	2531 Public building, related furniture	do	**22.9	2.9	29.7	1.9
	2541 Wood partitions and fixtures	do	(S)	8.4	**66.5	5.5
	2542 Metal partitions and fixtures	do	(S)	5.9	(X)	5.1
	2599 Furniture and fixtures, n.e.c	do	(S)	1.9	6.4	1.0
249970	MEDIUM DENSITY FIBERBOARD:					
	2431 Millwork	do	(S)	1.4	(NA)	(D)
	2511 Wood household furniture	do	(S)	31.6	(X)	(D)
	2517 Wood television and radio cabinets	do	(S)	1.1	(D)	(D)
	2521 Wood office furniture	do	(S)	.8	(NA)	(D)
	2522 Metal office furniture	do	(D)	(D)	(X)	(D)
	2531 Public building, related furniture	do	(S)	.9	(X)	(D)
	2541 Wood partitions and fixtures	do	15.4	3.8	(X)	(D)
	2542 Metal partitions and fixtures	do	(S)	.5	(X)	(D)
	2599 Furniture and fixtures, n.e.c	do	(S)	.4	(NA)	(D)
251011	CABINETS (WOOD, METAL, AND PLASTICS):					
	3651 Radio and television receiving sets	Millions	(S)	224.2	11.8	207.3

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
251501	PURCHASED MATTRESSES, ALL TYPES:					
	2515 Mattresses and bedsprings	Thousands	(S)	3.3	(D)	(D)
260001 260002 260003 260004 260005 260012 260091	PAPER AND PAPERBOARD PRODUCTS:					
	2062 Cane sugar refining	1,000 s. tons	(S)	42.2	(NA)	29.0
	2063 Beet sugar	do	(S)	11.8	15.9	5.8
	2075 Soybean oil mills	do	(X)	7.4	(X)	3.5
	2079 Shortening and cooking oils	do	(X)	86.1	(X)	46.6
	2091 Canned and cured seafoods	do	(X)	11.8	(X)	7.9
	2092 Fresh or frozen packaged fish	do	(X)	44.0	(X)	(D)
	2111 Cigarettes	do	(S)	199.7	(X)	102.4
	2121 Cigars	do	(S)	11.5	(X)	14.2
	2131 Chewing and smoking tobacco	do	(S)	14.2	(X)	6.9
	2821 Plastics materials and resins	do	(X)	69.8	(X)	40.3
	2822 Synthetic rubber	do	(X)	11.5	(X)	9.3
	2823 Cellulosic manmade fibers	do	(X)	10.5	(X)	5.4
	2824 Organic fibers, noncellulosic	do	(X)	80.4	(X)	43.4
	2844 Toilet preparations	do	(X)	181.9	(X)	137.8
	2861 Gum and wood chemicals	do	(X)	10.4	(X)	(D)
	2891 Adhesives and sealants	do	(X)	18.6	(X)	7.0
	2892 Explosives	do	(X)	10.1	(X)	(D)
	2893 Printing ink	do	(X)	1.0	(X)	(D)
	2895 Carbon black	do	(X)	4.7	(X)	(D)
	2911 Petroleum refining	do	(X)	20.7	(X)	14.4
	2992 Lubricating oils and greases	do	(X)	6.8	(X)	4.8
	3011 Tires and inner tubes	do	(X)	7.9	(X)	6.6
	3021 Rubber and plastics footwear	do	(X)	8.1	(X)	6.9
	3041 Rubber, plastics hose and belting	do	(X)	12.9	(X)	6.0
	3069 Fabricated rubber products, n.e.c	do	(X)	26.6	(X)	28.8
	3079 Miscellaneous plastics products	do	(X)	225.0	(X)	125.0
	3142 House slippers	do	(X)	1.4	(NA)	(D)
	3143 Men's footwear, except athletic	do	(X)	22.0	(NA)	(D)
	3144 Women's footwear, except athletic	do	(X)	21.5	(X)	(D)
	3149 Footwear, except rubber, n.e.c	do	(X)	10.7	(X)	(D)
	3161 Luggage	do	(X)	7.0	(X)	(D)
	3171 Women's handbags and purses	do	(X)	1.1	(X)	(D)
	3172 Personal leather goods, n.e.c	do	(X)	2.6	(X)	(D)
	3291 Abrasive products	do	(X)	47.8	(X)	20.0
	3296 Mineral wool	do	(X)	47.4	(X)	16.0
	3421 Cutlery	do	(X)	12.3	(X)	(D)
	3423 Hand and edge tools, n.e.c	do	(X)	16.8	-	-
	3425 Handsaws and saw blades	do	(X)	3.2	(D)	(D)
	3465 Automotive stampings	do	(X)	4.3	(X)	(D)
	3466 Crowns and closures	do	(X)	10.8	(X)	7.0
	3469 Metal stampings, n.e.c	do	(X)	5.7	(X)	17.0
	3497 Metal foil and leaf	do	(X)	39.4	(X)	(D)
	3573 Electronic computing equipment	do	(X)	13.9	(X)	(D)
	3574 Calculating, accounting machines	do	(X)	2.9	(X)	(D)
	3576 Scales, balances, exc. laboratory	do	(X)	.2	(X)	(D)
	3579 Office machines, typewriters, etc	do	(X)	23.6	(X)	13.0
	3585 Refrigeration, heating equipment	do	(X)	57.7	(X)	48.0
	3612 Transformers	do	(X)	25.4	(X)	18.0
	3624 Carbon and graphite products	do	(X)	1.5	(X)	(D)
	3629 Electrical industrial apparatus, n.e.c	do	(X)	23.5	(X)	(D)
	3631 Household cooking equipment	do	(X)	30.7	(X)	16.0
	3632 Household refrigerators, freezers	do	(X)	39.0	(X)	26.1
	3633 Household laundry equipment	do	(X)	32.7	(X)	23.6
	3634 Electric housewares and fans	do	(X)	52.4	(X)	30.2
	3635 Household vacuum cleaners	do	(X)	5.3	(X)	9.6
	3639 Household appliances, n.e.c	do	(X)	19.5	(X)	10.4
	3641 Electric lamps	do	(X)	49.0	(X)	27.1
	3651 Radio and television receiving sets	do	(X)	40.3	(X)	28.7
	3652 Phonograph records and prerecorded tape	do	(X)	61.7	(X)	(X)
	3662 Radio and television communication equipment	do	(X)	25.3	(X)	11.6
	3671 Electron tubes, receiving type	do	(X)	8.9	(X)	(X)
	3674 Semiconductors, related devices	do	(X)	2.3	(X)	3.0
	3675 Electronic capacitors	do	(X)	10.5	(X)	7.1
	3676 Electronic resistors	do	(X)	3.4	(X)	1.4
	3677 Electronic coils and transformers	do	(X)	1.4	(X)	2.3
	3678 Electronic connectors	do	(X)	.9	(X)	1.9

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
260001 260002 260003 260004 260005 260012 260091	PAPER AND PAPERBOARD PRODUCTS--Con:					
	3679 Electronic components, n.e.c.	1,000 s. tons	(X)	18.2	(X)	8.7
	3841 Surgical and medical instruments	do	(S)	15.2	(X)	(X)
	3842 Surgical appliances and supplies	do	(S)	25.9	(X)	25.0
	3843 Dental equipment and supplies	do	.3	.8	(X)	(X)
	3861 Photographic equipment and supplies	do	(X)	75.6	(X)	59.0
	3911 Jewelry, precious metal	do	(X)	15.7	(X)	2.0
	3931 Musical instruments	do	(X)	4.9	(X)	(D)
	3993 Signs and advertising displays	do	(X)	34.9	(X)	29.0
261101	WOOD PULP USED IN MAKING PRESSED AND MOLDED PULP PRODUCTS:					
	2646 Pressed and molded pulp goods	do	(D)	(D)	121.7	13.8
261102	WOOD PULP, PRODUCED:					
	2611 Pulpmills	do	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do	2,929.9	804.3	2,742.2	357.2
	2631 Paperboard mills	do	159.7	25.8	339.2	27.5
	2661 Building paper and board mills	do	(D)	(D)	(D)	(D)
261104	PURCHASED MARKET WOOD PULP:					
	2297 Nonwoven fabrics	do	27.7	8.0	11.9	4.7
	2611 Pulpmills	do	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do	3,522.4	1,128.2	4,362.3	614.8
	2631 Paperboard mills	do	(D)	(D)	254.9	33.2
	2661 Building paper and board mills	do	3.2	1.1	(D)	(D)
261105	WOOD PULP (AIR DRY BASIS):					
	2647 Sanitary paper products	do	773.2	251.3	(X)	(D)
	2821 Plastics material and resins	do	53.8	19.3	44.1	5.8
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2823 Cellulosic manmade fibers	do	425.0	162.8	568.9	111.5
	2824 Organic fibers, noncellulosic	do	(D)	(D)	(X)	(D)
261122	LINTER PULP:					
	2621 Papermills, except building paper	do	15.0	8.1	33.7	9.3
262100	PAPER:					
	2782 Blankbooks and looseleaf binders	.....	(X)	113.0	(X)	68.9
	2789 Bookbinding and related work	.....	(X)	13.9	(X)	11.8
262101	ALL OTHER PAPER:					
	2711 Newspapers	1,000 s. tons	(S)	26.0	44.2	22.5
262102	UNCOATED PAPERS:					
	2721 Periodicals	do	(S)	82.1	129.2	47.0
	2731 Book publishing	do	154.5	90.2	187.7	61.2
	2732 Book printing	do	(X)	101.2	(X)	74.8
	2741 Miscellaneous publishing	do	*56.5	33.5	52.5	17.1
	2751 Commercial printing, letterpress	do	(X)	112.9	(X)	(D)
	2752 Commercial printing, lithographic	do	(X)	389.6	(X)	(D)
	2753 Engraving and plate printing	do	(X)	4.6	(X)	(D)
	2754 Commercial printing, gravure	do	(X)	6.0	(X)	(D)
	2761 Manifold business forms	do	(S)	605.7	(X)	(D)
	2771 Greeting card publishing	do	(X)	46.7	(X)	(X)
262104	PHOTOGRAPHIC BASE BOXES:					
	3861 Photographic equipment and supplies	.....	(X)	101.7	(X)	40.0
262105	PAPER, OWN, PRODUCED AT SAME LOCATIONS OR OTHER AFFILIATED OR ASSOCIATED MILLS:					
	2641 Paper coating and glazing	1,000 s. tons	(D)	(D)	462.8	120.3
	2642 Envelopes	do	44.1	19.5	48.2	13.7
	2643 Bags, except textile bags	do	1,391.1	366.3	1,447.0	231.1
	2645 Die-cut paper and board	do	63.2	22.7	114.2	19.0
	2647 Sanitary paper products	do	1,915.9	651.3	3,286.0	729.0
	2648 Stationery products	do	29.1	12.6	(D)	(D)
	2649 Converted paper products, n.e.c.	do	**31.5	8.6	151.0	31.8
	2651 Folding paperboard boxes	do	2.2	1.2	18.0	3.6
	2653 Corrugated and solid fiber boxes	do	(D)	(D)	(D)	(D)
	2654 Sanitary food containers	do	(D)	(D)	(D)	(D)
	2655 Fiber cans, drums, similar products	do	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
262106	PAPER, PURCHASED (MARKET):					
	2641 Paper coating and glazing	1,000 s. tons	(D)	(D)	889.4	246.2
	2642 Envelopes	do	620.5	293.5	617.8	167.6
	2643 Bags, except textile bags	do	*1,786.9	520.4	1,168.5	221.3
	2645 Die-cut paper and board	do	211.5	102.3	e395.4	102.5
	2647 Sanitary paper products	do	1,753.5	936.1	291.8	72.0
	2648 Stationery products	do	395.0	185.2	*431.8	107.4
	2649 Converted paper products, n.e.c	do	**392.7	194.9	344.2	90.7
	2651 Folding paperboard boxes	do	*135.6	63.2	79.1	24.2
	2652 Setup paperboard boxes	do	(S)	17.6	*41.4	18.0
	2653 Corrugated and solid fiber boxes	do	(D)	(D)	(D)	(D)
	2654 Sanitary food containers	do	196.0	97.9	199.3	44.8
	2655 Fiber cans, drums, similar products	do	(D)	(D)	76.3	12.3
	3955 Carbon paper and inked ribbons	Short tons	101.4	71.0	(X)	(X)
262131	COATED PAPER, ALL TYPES:					
	2711 Newspapers	1,000 s. tons	**29.5	13.7	64.4	18.0
	2721 Periodicals	do	949.8	467.6	945.3	264.5
	2731 Book publishing	do	(S)	125.6	190.2	63.9
	2741 Miscellaneous publishing	do	**26.7	15.3	31.7	13.8
	2771 Greeting card publishing	do	(X)	52.8	(X)	(D)
262136	PAPER, COATED ON ONE SIDE:					
	2732 Book printing		(X)	17.9	(X)	6.5
	2751 Commercial printing, letterpress		(X)	65.7	(X)	(D)
	2752 Commercial printing, lithographic		(X)	182.0	(X)	92.8
	2754 Commercial printing, gravure		(X)	49.6	(X)	15.3
	2761 Manifold business forms		(X)	22.6	(X)	7.0
262138	TWO SIDED COATED PAPER:					
	2152 Book printing		(X)	75.5	(X)	37.3
	2751 Commercial printing, letterpress		(X)	88.6	(X)	(D)
	2752 Commercial printing, lithographic		(X)	577.5	(X)	263.7
	2753 Engraving and plate printing		(X)	(D)	(X)	(D)
	2754 Commercial printing, gravure		(X)	63.1	(X)	28.6
	2761 Manifold business forms		(X)	10.2	(X)	12.3
262150	BRISTOLS, COVER, TEXT, AND OTHER SPECIALTY PAPER UNCOATED:					
	2721 Periodicals	1,000 s. tons	*9.6	4.6	44.7	11.4
	2731 Book publishing	do	(S)	11.4	114.9	3.9
	2732 Book printing	do	(X)	35.7	(X)	(D)
	2741 Miscellaneous publishing	do	(S)	2.6	6.0	2.7
	2751 Commercial printing, letterpress	do	(X)	32.4	(X)	(D)
	2752 Commercial printing, lithographic	do	(X)	122.1	(X)	(D)
	2753 Engraving and plate printing	do	(X)	4.9	(X)	(D)
	2754 Commercial printing, gravure	do	(X)	18.9	(X)	(D)
	2761 Manifold business forms	do	(S)	22.0	(X)	(D)
	2771 Greeting card publishing	do	(X)	4.0	(X)	(D)
262164	CARBON PAPER, PURCHASED AND CONSUMED:					
	2761 Manifold business forms	do	100.3	72.5	115.1	46.1
263102	PAPERBOARD PRODUCED AT SAME LOCATION OR OTHER AFFILIATED OR ASSOCIATED MILLS:					
	2645 Die-cut paper and board	do	644.7	159.2	650.1	89.0
	2649 Converted paper products, n.e.c	do	(S)	12.6	65.0	10.4
	2651 Folding paperboard boxes	do	1,378.6	419.7	1,526.0	243.4
	2652 Setup paperboard boxes	do	*21.6	4.3	*43.7	5.8
	2653 Corrugated and solid fiber boxes	do	(D)	(D)	(D)	(D)
	2654 Sanitary food containers	do	977.2	408.0	1,355.9	294.4
	2655 Fiber cans, drums, similar products	do	(D)	(D)	487.5	50.5
263103	PURCHASED PAPERBOARD:					
	2642 Envelopes	do	13.1	3.9	29.0	5.1
	2645 Die-cut paper and board	do	*281.5	105.3	303.5	50.7
	2648 Stationery products	do	**45.6	12.3	**51.5	7.9
	2649 Converted paper products, n.e.c	do	*144.8	41.6	65.0	10.4
	2651 Folding paperboard boxes	do	*1,764.4	549.3	1,443.1	252.1
	2652 Setup paperboard boxes	do	(S)	61.1	374.4	49.4
	2653 Corrugated and solid fiber boxes	do	(D)	(D)	(D)	(D)
	2654 Sanitary food containers	do	916.3	324.2	950.1	187.4
	2655 Fiber cans, drums, similar products	do	(D)	(D)	348.3	44.0
263105	PAPERBOARD:					
	2647 Sanitary paper products	do	*38.2	15.2	26.1	4.1
	2732 Book printing		(X)	28.0	(X)	22.8
	2751 Commercial printing, letterpress		(X)	9.9	(X)	10.6
	2752 Commercial printing, lithographic		(X)	36.2	(X)	23.5
	2753 Engraving and plate printing		(X)	.2	(X)	.1
	2754 Commercial printing, gravure		(X)	(D)	(X)	8.5
	2761 Manifold business forms		(X)	2.9	(X)	1.4
	2782 Blankbooks and loseleaf binders		(X)	24.6	(X)	16.9
	2789 Bookbinding and related work		(X)	14.9	(X)	9.7
	3942 Dolls		(X)	.2	(X)	(D)
	3944 Games, toys, children's vehicles		(X)	22.6	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
263112	PAPERBOARD LINERS:					
	3275 Gypsum products	1,000 s. tons	467.0	71.8	571.0	60.2
264140	PRESSURE SENSITIVE BASE STOCK (SELF-ADHESIVE):					
	2732 Book printing		(X)	.7	(X)	.8
	2751 Commercial printing, letterpress		(X)	89.1	(X)	48.7
	2752 Commercial printing, lithographic		(X)	13.7	(X)	(D)
264200	PURCHASED ENVELOPES:					
	2771 Greeting card publishing		(X)	15.6	(X)	(S)
264302	BAGS:					
	2873 Nitrogenous fertilizers		(X)	7.6	(X)	(X)
	2874 Phosphatic fertilizers		(X)	3.6	(X)	6.8
	2875 Fertilizers, mixing only		(X)	23.1	(X)	(D)
264338	PAPER SHIPPING SACKS AND MULTIWALL BAGS:					
	2041 Flour, other grain mill products	Million sacks	328.4	45.6	(X)	27.3
	2047 Dog, cat, and other pet food	do.	461.2	75.9	296.1	30.6
	2048 Prepared feeds, n.e.c.	do.	*369.9	51.7	477.9	38.0
	3241 Cement, hydraulic	1,000 s. tons	(S)	29.2	(S)	21.2
	3274 Lime	do.	(S)	5.7	(X)	4.2
	3275 Gypsum products	do.	(S)	8.9	21.0	7.0
	3296 Mineral wool	do.	**40.7	13.6	(X)	9.0
264926	PAPER (CELLULOSIC WADDING):					
	2297 Nonwoven fabrics	Million lb.	60.5	16.8	(D)	(D)
266101	ROOFING FELTS (UNSATURATED):					
	2952 Asphalt felts and coatings	1,000 s. tons	1,526.2	260.4	1,524.3	124.6
266111	BUILDING PAPER AND BOARD:					
	3293 Gaskets, packing, sealing devices		(X)	(D)	(X)	(D)
	3996 Hard surface floor coverings		(X)	(D)	(X)	(D)
270011	LABELS, COUPONS, INSTRUCTIONS, AND OTHER PRINTED MATERIAL:					
	2841 Soap and other detergents		(X)	15.6	(X)	(D)
	2842 Polishes and sanitation goods		(X)	10.8	(X)	(D)
275001	PRINTED LABELS:					
	2032 Canned specialties		(X)	28.0	(X)	(D)
	2033 Canned fruits and vegetables		(X)	37.1	(X)	(D)
278227	METAL LOOSELEAF COMPONENTS:					
	2782 Blankbooks and looseleaf binders		(X)	22.2	(X)	15.0
	2789 Bookbinding and related work		(X)	1.3	(X)	1.4
279511	LITHOGRAPHIC PLATES:					
	2793 Photoengraving		(X)	(D)	(X)	(D)
	2795 Lithographic platemaking services		(X)	6.5	(X)	(D)
279512	EXPOSED LITHOGRAPHIC PLATES PREPARED FOR PRINTING:					
	2711 Newspapers		(X)	7.0	(X)	(D)
	2732 Book printing		(X)	2.8	(X)	(D)
	2751 Commercial printing, letterpress		(X)	3.6	(X)	(D)
	2752 Commercial printing, lithographic		(X)	16.2	(X)	(D)
280001	INDUSTRIAL CHEMICALS:					
	3261 Vitreous plumbing fixtures		(X)	1.1	(X)	(X)
	3262 Vitreous china food utensils		(X)	(D)	(X)	(X)
	3263 Fine earthernware food utensils		(X)	1.2	(X)	(X)
	3264 Porcelain electrical supplies		(X)	1.5	(X)	(X)
	3269 Pottery products, n.e.c.		(X)	1.4	(X)	(X)
280009	OTHER INDUSTRIAL CHEMICALS:					
	3291 Abrasive products		(X)	22.5	(X)	(D)
280010	CHEMICAL ADDITIVES:					
	2297 Nonwoven fabrics	Million lb.	(X)	2.6	(X)	(D)
280011	ANTIOXIDANTS, ANTIKNOCK COMPOUNDS, AND INHIBITORS:					
	2911 Petroleum refining	1,000 bbl.	2,500.0	608.9	(S)	468.4
	2992 Lubricating oils and greases	do.	421.0	41.0	252.0	15.4
280012	OTHER ADDITIVES:					
	2911 Petroleum refining	do.	2,630.0	241.9	3,095.0	134.9
	2992 Lubricating oils and greases	do.	793.0	73.0	505.0	39.1
280015	FLAME RETARDANTS:					
	2491 Wood preserving	do.	*9.7	3.6	(X)	(D)
280021	TANNING MATERIALS, DRESSINGS, DYES, AND FINISHING AGENTS:					
	3111 Leather tanning and finishing		(X)	157.4	(X)	104.8
	3131 Boot, shoe cut stock and findings		(X)	1.9	(X)	2.0

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
280023	ORGANIC AND INORGANIC PIGMENTS:					
	2893 Printing ink	Million lb...	139.8	170.9	(X)	(D)
	3292 Asbestos products	do.....	18.4	9.5	57.3	13.5
	3996 Hard surface floor coverings	do.....	*8.5	5.6	13.3	3.8
280031	DYES, LAKES, AND TONERS:					
	2211 Weaving mills, cotton	.....	(X)	82.1	(X)	29.0
	2221 Weaving mills, manmade fiber, silk	.....	(X)	70.9	(X)	47.7
	2231 Weaving and finishing mills, wool	.....	(X)	11.2	(X)	14.6
	2261 Finishing plants, cotton	.....	(X)	110.9	(X)	82.5
	2262 Finishing plants, manmade fiber, silk	.....	(X)	216.7	(X)	134.9
	2269 Finishing plants, n.e.c	.....	(X)	56.0	(X)	45.7
	2281 Yarn mills, except wool	.....	(X)	22.3	(X)	23.3
	2282 Throwing and winding mills	.....	(X)	13.2	(X)	(D)
	2283 Wool yarn mills	.....	(X)	(D)	(X)	3.3
	2284 Thread mills	.....	(X)	7.4	(X)	11.1
280035	AEROSOL PROPELLANTS:					
	2879 Agricultural chemicals, n.e.c	Million lb...	(S)	.8	(X)	(D)
280093	MIXED ACID (SULFURIC AND NITRIC):					
	2892 Explosives	1,000 s. tons	21.2	1.6	5.8	.5
281000	INDUSTRIAL INORGANIC CHEMICALS:					
	3296 Mineral wool	.....	(X)	49.6	(X)	(D)
281001	READY-MIXED CONCRETE CHEMICAL PROCESSING PREPARATION AND MATERIALS:					
	3273 Ready-mixed concrete	Million tons.	(S)	39.2	(X)	(D)
281246	POTASSIUM HYDROXIDE:					
	2841 Soap and other detergents	1,000 s. tons	37.5	7.3	(D)	(D)
	2842 Polishes and sanitation goods	do.....	**8.3	1.0	(NA)	(D)
	2861 Gum and wood chemicals	do.....	(D)	(D)	(X)	(D)
281301	ACETYLENE AND OTHER INDUSTRIAL GASES, COMPRESSED AND LIQUIFIED:					
	2812 Alkalies and chlorine	.....	(X)	(D)	(X)	(D)
	2816 Inorganic pigments	.....	(X)	3.9	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	7.9	(X)	(D)
	2865 Cyclic crudes and intermediates	.....	(X)	13.7	(X)	(D)
	2869 Industrial organic chemicals, n.e.c	.....	(X)	80.2	(X)	54.0
281302	INDUSTRIAL GASES, COMPRESSED AND LIQUIFIED:					
	2844 Toilet preparations	Mil. cu. ft..	(S)	5.6	(X)	(D)
281340	OXYGEN:					
	3312 Blast furnaces and steel mills	do.....	195,656.1	195.0	190,701.2	177.2
281600	INORGANIC PIGMENTS:					
	2821 Plastics materials and resins	Million lb...	47.9	27.0	(X)	(D)
	2822 Synthetic rubber	do.....	25.2	2.3	(X)	(D)
	3011 Tires and inner tubes	do.....	364.8	84.6	532.3	65.0
	3021 Rubber and plastics footwear	do.....	(X)	(D)	29.0	1.8
	3041 Rubber, plastics hose and belting	do.....	87.9	14.9	53.7	4.4
	3069 Fabricated rubber products, n.e.c	do.....	142.2	17.2	357.1	21.7
281601	OTHER INORGANIC CHEMICALS:					
	2851 Paints and allied products	.....	(X)	136.2	(X)	119.7
281611	TITANIUM DIOXIDE, COMPOSITE AND PURE:					
	2621 Papermills, except building paper	Million lb...	208.1	97.8	230.7	60.2
	2631 Paperboard mills	do.....	51.4	22.0	29.4	6.8
	2661 Building paper and board mills	do.....	2.0	.9	6.9	1.6
	2851 Paints and allied products	do.....	*964.7	298.4	738.1	190.8
281622	ZINC OXIDE PIGMENTS:					
	2851 Paints and allied products	Million lb...	(S)	32.3	77.9	14.9
281634	LITHARGE:					
	3691 Storage batteries	1,000 s. tons	273.4	167.8	156.1	53.7
281900	INDUSTRIAL INORGANIC CHEMICALS:					
	3641 Electric lamps	.....	(X)	33.0	(X)	27.0
	3691 Storage batteries	.....	(X)	6.7	(X)	(D)
	3692 Primary batteries, dry and wet	.....	(X)	37.8	(X)	(D)
281901	ALL OTHER INDUSTRIAL INORGANIC CHEMICALS:					
	2821 Plastics materials and resins	.....	(X)	57.6	(X)	(D)
	2822 Synthetic rubber	.....	(X)	48.7	(X)	(D)
	2823 Cellulosic manmade fibers	.....	(X)	19.4	(X)	(D)
	2824 Organic fibers, noncellulosic	.....	(X)	38.4	(X)	(D)
	3211 Flat glass	.....	(X)	9.0	(X)	(D)
	3229 Pressed and blown glass, n.e.c	.....	(X)	69.2	(X)	16.0
	3231 Products of purchased glass	.....	(X)	2.2	(X)	(D)

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
281902	WATER-BORN SALTS:					
	2491 Wood preserving	Million lb...	14.0	11.1	(X)	(D)
281903 281907	INORGANIC CHEMICALS, N.E.C.:					
	2879 Agricultural chemicals, n.e.c.	Million lb...	*527.2	83.6	(X)	(D)
	3861 Photographic equipment and supplies	.....	(X)	44.7	(X)	59.0
281944	HYDROCHLORIC ACID:					
	2812 Aklalies and chlorine	1,000 s. tons	46.3	3.3	110.5	2.1
	2816 Inorganic pigments	do.....	8.5	.9	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c.	do.....	*191.9	8.2	122.2	4.0
	2865 Cyclic crudes and intermediates	do.....	53.3	4.5	43.5	2.0
	2869 Industrial organic chemicals, n.e.c.	do.....	394.6	153.0	396.1	14.8
281946	HYDROFLUORIC ACID:					
	2819 Industrial inorganic chemicals, n.e.c.	do.....	19.1	9.3	13.3	4.8
	2865 Cyclic crudes and intermediates	do.....	(D)	(D)	(NA)	(D)
	2869 Industrial organic chemicals, n.e.c.	do.....	79.9	46.7	(D)	(D)
281950	ALUMINUM OXIDE:					
	3291 Abrasive products	Thousand tons	**208.5	102.7	(X)	(D)
281951	ALUMINA:					
	3334 Primary aluminum	1,000 s. tons	7,961.9	1,192.7	7,942.2	500.4
281961	ALUMINUM SULFATE:					
	2611 Pulpmills	do.....	15.3	1.3	7.1	.3
	2621 Papermills, except building paper	do.....	264.4	22.7	273.7	13.3
	2631 Paperboard mills	do.....	273.3	21.7	245.5	11.3
	2661 Building paper and board mills	do.....	7.3	.5	(NA)	(D)
281962	ALUMINA ZIRCONIA:					
	3291 Abrasive products	do.....	*21.5	18.6	(X)	(D)
281971	POTASSIUM PYROPHOSPHATE (TKPP):					
	2841 Soap and other detergents	do.....	37.4	14.7	27.4	5.4
	2842 Polishes and sanitation goods	do.....	*1.5	.9	(D)	(D)
281972	SODIUM TRIPOLYPHOSPHATE (STPP):					
	2841 Soap and other detergents	do.....	592.6	218.1	930.7	131.8
	2842 Polishes and sanitation goods	do.....	4.7	2.1	8.6	1.3
281973	TETRASODIUM PYROPHOSPHATE (TSPP):					
	2841 Soap and other detergents	do.....	11.4	4.5	18.7	3.0
	2842 Polishes and sanitation goods	do.....	.3	.2	(D)	(D)
281974	TRISODIUM PHOSPHATE (TSP):					
	2841 Soap and other detergents	do.....	84.6	19.6	87.3	11.8
	2842 Polishes and sanitation goods	do.....	4.4	.9	(D)	(D)
281975	SODIUM NITRATE (NITRATE OF SODA):					
	2892 Explosives	do.....	*25.5	4.1	(X)	(D)
281976	SODIUM SULFATE, INCLUDING SALT CAKE:					
	2611 Pulpmills	do.....	120.1	7.4	29.2	.9
	2621 Papermills, except building paper	do.....	415.5	30.2	472.1	15.8
	2631 Paperboard mills	do.....	588.8	37.8	756.7	24.8
	2841 Soap and other detergents	do.....	686.1	45.7	(D)	(D)
	2842 Polishes and sanitation goods	do.....	(S)	.7	(NA)	(D)
	3211 Flat glass	do.....	33.5	2.4	65.8	2.4
	3229 Pressed and blown glass, n.e.c.	do.....	(S)	.8	(D)	(D)
281978	SODIUM SILICATES (WATER GLASS TYPE):					
	2841 Soap and other detergents	do.....	112.1	10.6	(X)	(D)
	2842 Polishes and sanitation goods	do.....	(D)	(D)	(NA)	(D)
281979	OTHER SODIUM SILICATES:					
	2841 Soap and other detergents	do.....	432.8	44.6	(X)	(D)
	2842 Polishes and sanitation goods	do.....	2.7	.8	(NA)	(D)
281980	CHEMICAL CATALYTIC PREPARATIONS:					
	2992 Lubricating oils and greases	.....	(X)	3.6	(X)	.3
281992	SILICON CARBIDE:					
	3291 Abrasive products	1,000 s. tons	(S)	42.3	(X)	(D)
281995	SILICON, HYPER PURE:					
	3662 Radio and television communication equipment	1,000 kg.....	(D)	(D)	(S)	2.5
	3674 Semiconductors, related devices	do.....	348.2	86.7	(S)	47.5
	3676 Electronic resistors	do.....	(D)	(D)	(D)	(D)
	3677 Electronic coils and transformers	do.....	(Z)	(Z)	.3	.4
	3679 Electronic components, n.e.c.	do.....	(S)	2.4	(S)	3.0

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
281996	PHOSPHOROUS, ELEMENTAL:					
	2812 Alkalies and chlorine	1,000 s. tons	-	-	(D)	(D)
	2816 Inorganic pigments	do	(D)	(D)	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c.	do	393.5	253.1	451.0	132.1
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(NA)	(D)
	2869 Industrial organic chemicals, n.e.c.	do	40.5	31.3	(D)	(D)
281997	SILVER NITRATE:					
	3861 Photographic equipment and supplies	Million oz	*56.9	162.7	41.2	38.9
282011	MANMADE FIBER YARN:					
	2292 Lace goods	Million lb	2.7	6.4	3.1	5.1
	2298 Cordage and twine	do	*95.5	60.2	53.9	22.9
282014	MANMADE FIBERS, STAPLE, AND TOW:					
	2257 Circular knit fabric mills	do	106.4	85.8	109.1	63.0
	2258 Warp knit fabric mills	do	(D)	(D)	(D)	(D)
	2392 Housefurnishings, n.e.c.	do	97.7	33.3	44.7	20.9
	2399 Fabricated textile products, n.e.c.	do	6.3	6.5	28.0	15.1
282301	RAYON AND ACETATE FILAMENT YARNS:					
	2211 Weaving mills, cotton	do	19.4	11.6	16.2	14.9
	2221 Weaving mills, manmade fiber, silk	do	152.2	146.3	183.7	146.4
	2253 Knit outerwear mills	do	**1.0	1.4	1.2	1.4
	2257 Circular knit fabric mills	do	(D)	(D)	6.0	3.3
	2258 Warp knit fabric mills	do	91.6	93.7	141.6	105.7
	2281 Yarn mills, except wool	do	2.9	3.6	(D)	(D)
	2282 Throwing and winding mills	do	*4.3	4.8	(D)	(D)
	2296 Tire cord and fabric	do	(NA)	(D)	49.7	27.7
282303	CELLULOSIC TEXTILE FIBERS:					
	2297 Nonwoven fabrics	do	127.3	74.2	110.4	41.4
282403	NONCELLULOSIC TEXTILE FIBERS:					
	2297 Nonwoven fabrics	do	122.5	67.7	71.2	29.2
282407	ALL OTHER MANMADE FILAMENT YARNS:					
	2211 Weaving mills, cotton	do	(S)	8.2	(D)	(D)
	2221 Weaving mills, manmade fiber, silk	do	49.5	59.4	(D)	(D)
	2231 Weaving and finishing mills, wool	do	(D)	(D)	(D)	(D)
	2281 Yarn mills, except wool	do	99.6	97.8	35.4	29.3
	2282 Throwing and winding mills	do	75.9	41.9	(D)	(D)
	2284 Thread mills	do	**.3	.6	(D)	(D)
	2296 Tire cord and fabric	do	14.5	29.7	(D)	(D)
282411	NYLON FILAMENT YARNS:					
	2211 Weaving mills, cotton	do	13.8	4.3	(D)	(D)
	2221 Weaving mills, manmade fiber, silk	do	103.1	143.9	(D)	(D)
	2231 Weaving and finishing mills, wool	do	(D)	(D)	(D)	(D)
	2251 Women's hosiery, except socks	do	*52.7	95.7	64.3	157.0
	2252 Hosiery, n.e.c.	do	22.5	42.6	24.7	39.2
	2253 Knit outerwear mills	do	6.4	18.1	20.7	30.8
	2257 Circular knit fabric mills	do	37.2	97.8	25.5	38.7
	2258 Warp knit fabric mills	do	141.8	216.8	151.4	187.7
	2282 Throwing and winding mills	do	235.2	248.2	(D)	(D)
	2284 Thread mills	do	16.9	22.8	(D)	(D)
	2296 Tire cord and fabric	do	282.8	319.4	(D)	(D)
282423	POLYESTER FILAMENT YARNS:					
	2211 Weaving mills, cotton	do	44.1	45.0	8.3	6.0
	2221 Weaving mills, manmade fiber, silk	do	396.7	341.1	142.7	146.1
	2231 Weaving and finishing mills, wool	do	(D)	(D)	(D)	(D)
	2253 Knit outerwear mills	do	22.9	35.2	34.5	61.1
	2257 Circular knit fabric mills	do	254.1	289.3	343.1	476.7
	2258 Warp knit fabric mills	do	117.1	135.6	81.9	118.4
	2281 Yarn mills, except wool	do	7.1	7.3	34.4	26.4
	2282 Throwing and winding mills	do	705.8	526.8	(D)	(D)
	2284 Thread mills	do	14.6	21.2	(D)	(D)
	2296 Tire cord and fabric	do	243.1	228.8	215.6	151.8
282435	SPANDEX FILAMENT YARNS:					
	2251 Women's hosiery, except socks	do	3.2	28.0	(NA)	(D)
	2252 Hosiery, n.e.c.	do	1.2	4.8	(NA)	(D)
283111	BLOOD DERIVATIVES AND EXTENDERS:					
	2831 Biological products		(X)	115.7	(X)	(D)
	2833 Medicinals and botanicals		(X)	(D)	(X)	(D)
	2834 Pharmaceutical preparations		(X)	16.9	(X)	13.0

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
283301	VITAMINS:					
	2047 Dog, cat, and other pet food	1,000 s. tons	(X)	11.5	(X)	(D)
	2048 Prepared feeds, n.e.c	do	(X)	97.7	(X)	(D)
	2831 Biological products		(X)	(D)	(X)	(D)
	2833 Medicinals and botanicals		(X)	17.0	(X)	(D)
	2834 Pharmaceutical preparations		(X)	219.4	(X)	114.7
283302	DRUGS AND ANTIBIOTICS:					
	2047 Dog, cat, and other pet food	1,000 s. tons	(X)	1.8	(X)	(D)
	2048 Prepared feeds, n.e.c	do	(X)	168.1	(X)	(D)
283304	ALL OTHER MICROINGREDIENTS:					
	2047 Dog, cat, and other pet food	do	(X)	8.7	(X)	(D)
	2048 Prepared feeds, n.e.c	do	(X)	113.7	(X)	(D)
283305	MINERALS:					
	2047 Dog, cat, and other pet food	do	(X)	9.0	(X)	(D)
	2048 Prepared feeds, n.e.c	do	(X)	181.0	(X)	(D)
283313	SYNTHETIC HORMONES:					
	2831 Biological products		(X)	.1	(X)	(D)
	2833 Medicinals and botanicals		(X)	.5	(X)	(D)
	2834 Pharmaceutical preparations		(X)	25.7	(X)	(D)
283317	SULFA DRUGS, BULK:					
	2831 Biological products		(X)	2.4	(X)	(D)
	2833 Medicinals and Botanicals		(X)	9.0	(X)	(D)
	2834 Pharmaceutical preparations		(X)	5.4	(X)	22.4
283318	ANTIBIOTICS FOR HUMAN AND VETERINARY USE:					
	2831 Biological products		(X)	2.9	(X)	(D)
	2833 Medicinals and botanicals		(X)	42.6	(X)	(D)
	2834 Pharmaceutical preparations		(X)	195.8	(X)	57.3
283321	ACETYL SALICYLIC ACID:					
	2833 Medicinals and botanicals		(X)	(D)	(X)	(D)
	2834 Pharmaceutical preparations		(X)	23.3	(X)	11.0
283322	ALKALOIDS:					
	2833 Medicinals and botanicals		(X)	(D)	(X)	(D)
	2834 Pharmaceutical preparations		(X)	64.3	(X)	9.0
283324	NATURAL HORMONES:					
	2831 Biological products		(X)	(D)	(X)	(D)
	2834 Pharmaceutical preparations		(X)	14.5	(X)	(D)
284055	DETERGENTS AND DISINFECTANTS:					
	2032 Canned specialties		(X)	(D)	(X)	(D)
	2033 Canned fruits and vegetables		(X)	1.7	(X)	(D)
284101	SOAP AND DETERGENTS:					
	2821 Plastics materials and resins	Million lb	40.5	13.4	39.9	6.3
	2822 Synthetic rubber	do	60.9	13.7	133.4	17.7
284141	GLYCERIN:					
	2821 Plastics materials and resins	do	20.6	10.4	26.1	5.7
	2841 Soap and other detergents	do	**26.9	10.0	51.6	9.1
	2842 Polishes and sanitation goods	do	(S)	.6	1.0	.2
	2843 Surface active agents	do	12.2	6.3	(NA)	(NA)
	2861 Gum and wood chemicals	do	1.8	.9	(X)	(D)
284301	SURFACTANTS:					
	2879 Agricultural chemicals, n.e.c	do	(S)	9.2	(X)	(D)
284307	BULK SURFACE ACTIVE AGENTS:					
	2844 Toilet preparations	do	**99.1	33.5	(X)	(D)
284308	BULK SURFACE ACTIVE AGENTS, EMULSIFERS:					
	2841 Soap and other detergents	do	74.9	23.8	88.6	14.3
	2842 Polishes and sanitation goods	do	91.9	19.8	47.3	7.6
	2843 Surface active agents	do	111.9	27.3	(NA)	(NA)
284309	BULK SURFACE ACTIVE AGENTS FOR DETERGENT PURPOSES:					
	2841 Soap and other detergents	do	516.6	155.7	752.4	96.7
	2842 Polishes and sanitation goods	do	(S)	58.6	107.0	16.3
	2843 Surface active agents	do	113.1	32.6	(NA)	(NA)
284421	PERFUME OIL MIXTURES AND BLENDS:					
	2841 Soap and other detergents	do	(X)	108.3	(X)	55.5
	2842 Polishes and sanitation goods	do	(X)	24.2	(X)	13.8
	2843 Surface active agents	do	(X)	(D)	(NA)	(NA)
	2844 Toilet preparations	do	(S)	144.5	(X)	(D)

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285100	PAINTS AND ALLIED PRODUCTS:					
	2499 Wood products, n.e.c.	1,000 gal.	7,475.5	40.2	(X)	(D)
285101	PAINTS, VARNISHES, LACQUERS, JAPANS, ENAMELS:					
	2452 Prefabricated wood buildings	Million gal.	*1.1	5.5	.9	3.0
	2511 Wood household furniture	do.	**26.5	91.3	26.6	58.7
	2512 Upholstered household furniture	do.	2.3	7.3	2.2	5.4
	2514 Metal household furniture	do.	1.7	8.6	2.3	7.2
	2517 Wood television and radio cabinets	do.	*2.2	7.9	3.2	6.7
	2521 Wood office furniture	do.	(S)	4.6	.7	1.8
	2522 Metal office furniture	do.	(S)	16.8	2.6	9.0
	2531 Public building, related furniture	do.	1.1	5.2	1.4	4.0
	2541 Wood partitions and fixtures	do.	(S)	8.0	**1.4	4.8
	2542 Metal partitions and fixtures	do.	**2.9	16.4	**2.8	10.1
	2599 Furniture and fixtures, n.e.c.	do.	(S)	2.6	.6	1.6
	2893 Printing ink	do.	124.4	53.2	(X)	(D)
	3411 Metal cans	do.	**40.7	181.9	35.8	98.1
	3412 Metal barrels, drums, and pails	do.	*3.3	19.9	3.9	13.3
	3433 Heating equipment, except electric	do.	(X)	4.2	(X)	7.0
	3441 Fabricated structural metal	do.	(S)	15.7	(X)	(D)
	3443 Fabricated platework, boiler shop	do.	(X)	9.1	(X)	23.0
	3444 Sheet metalwork	do.	(X)	31.3	(X)	23.0
	3446 Architectural metalwork	do.	(S)	3.1	(X)	(D)
	3448 Prefabricated metal building	do.	(X)	8.1	(X)	(D)
	3449 Miscellaneous metalwork	do.	(X)	4.0	(X)	(X)
	3465 Automotive stampings	do.	(X)	21.5	(X)	6.0
	3466 Crowns and closures	do.	(X)	11.3	(X)	8.0
	3469 Metal stampings, n.e.c.	do.	(X)	18.9	(X)	11.0
	3498 Fabricated pipe and fittings	do.	(S)	.9	(X)	(D)
	3499 Fabricated metal products, n.e.c.	do.	*1.5	9.2	(D)	3.0
	3523 Farm machinery and equipment	do.	*5.1	29.5	(D)	(D)
	3524 Lawn and garden equipment	do.	*.8	5.0	(X)	(D)
	3531 Construction machinery	do.	(X)	19.8	(X)	11.0
	3532 Mining machinery	do.	(X)	3.0	(X)	1.0
	3536 Hoists, cranes, and monorails	do.	(X)	1.0	(X)	(D)
	3564 Blowers and fans	do.	(S)	3.3	(X)	(D)
	3585 Refrigeration, heating equipment	do.	(X)	26.6	(X)	18.0
	3612 Transformers	do.	(X)	9.1	(X)	10.0
	3631 Household cooking equipment	do.	(X)	31.9	(X)	7.0
	3632 Household refrigerators, freezers	do.	(X)	23.4	(X)	33.0
	3633 Household laundry equipment	do.	(X)	20.9	(X)	14.0
	3634 Electric housewares and fans	do.	(X)	12.3	(X)	6.0
	3635 Household vacuum cleaners	do.	(X)	1.2	(X)	(D)
	3639 Household appliances, n.e.c.	do.	(X)	14.2	(X)	8.0
	3711 Motor vehicles and car bodies	do.	(X)	207.1	(X)	186.0
	3713 Truck and bus bodies	do.	(X)	15.8	(X)	17.0
	3714 Motor vehicle parts, accessories	do.	(S)	54.4	(X)	29.0
	3715 Truck trailers	do.	(X)	11.9	(X)	7.0
	3716 Motor homes	do.	(X)	5.6	(NA)	(NA)
	3721 Aircraft	do.	(X)	30.2	(X)	27.0
	3724 Aircraft engines and engine parts	do.	(X)	1.0	(X)	(D)
	3728 Aircraft equipment, n.e.c.	do.	(X)	2.6	(X)	7.0
	3731 Ship building and repairing	do.	(X)	27.1	(X)	(D)
	3732 Boat building and repairing	do.	(X)	8.5	(X)	(D)
	3743 Railroad equipment	do.	(X)	16.6	(X)	(D)
	3751 Motorcycles, bicycles, and parts	do.	(X)	4.7	(X)	(D)
	3761 Guided missiles, space vehicles	do.	(X)	2.1	(X)	4.0
	3764 Space propulsion units and parts	do.	(X)	(D)	(X)	(D)
	3769 Space vehicle equipment, n.e.c.	do.	(X)	(D)	(X)	(D)
	3792 Travel trailers and campers	do.	(X)	7.3	(X)	2.0
	3799 Transportation equipment, n.e.c.	do.	(X)	4.5	(X)	4.0
	3993 Signs and advertising displays	do.	(X)	13.1	(X)	15.0
285102	PAINTS PURCHASED FOR PACKAGING IN AEROSOL CONTAINERS:					
	2851 Paints and allied products	do.	(X)	17.5	(X)	(D)
285191	PURCHASED PIGMENT DISPERSION:					
	2851 Paints and allied products	do.	(X)	49.5	(X)	(D)
286001	OTHER SYNTHETIC ORGANIC CHEMICALS:					
	2821 Plastics materials and resins	...	(X)	399.8	(X)	(D)
	2822 Synthetic rubber	...	(X)	(D)	(X)	(D)
	2823 Cellulosic manmade fibers	...	(X)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	...	(X)	(D)	(X)	(D)
286010	INDUSTRIAL ORGANIC CHEMICALS, N.E.C.:					
	2891 Adhesives and sealants	...	(X)	147.0	(X)	115.0

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
286102	TALL OIL AND ROSIN:					
	2851 Paints and allied products	Million lb	*38.4	12.0	(X)	9.0
	2861 Gum and wood chemicals	do	277.5	21.0	(X)	(D)
286104	WOOD ROSIN, TURPENTINE, AND OTHER WOOD CHEMICALS:					
	2821 Plastics materials and resins	do	(X)	23.6	(X)	(D)
	2822 Synthetic rubber	do	65.6	16.6	(X)	(D)
	2891 Adhesives and sealants	do	40.6	11.1	(X)	23.0
	2893 Printing ink	do	30.3	7.6	(X)	(D)
286501	ORTHO-XYLENE:					
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(X)	(D)
	2869 Industrial organic chemicals, n.e.c	do	253.0	29.1	(X)	(D)
286502	PARA-XYLENE:					
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(X)	(D)
	2869 Industrial organic chemicals, n.e.c	do	(D)	(D)	(X)	(D)
286509	ETHYLBENZENE:					
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(X)	(D)
	2869 Industrial organic chemicals, n.e.c	do	(D)	(D)	(X)	(D)
286511	ANILINE:					
	2816 Inorganic pigments	do	(D)	(D)	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do	(D)	(D)	5.5	1.1
	2865 Cyclic crudes and intermediates	do	286.5	68.5	79.7	12.0
	2869 Industrial organic chemicals, n.e.c	do	171.5	55.9	122.6	15.9
286512	NITROBENZENE:					
	2865 Cyclic crudes and intermediates	do	4.5	1.1	12.0	.3
	2869 Industrial organic chemicals, n.e.c	do	(D)	(D)	(X)	(D)
286513	PHENOL:					
	2821 Plastics materials and resins	do	910.8	178.7	629.2	43.0
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	56.3	12.5	46.4	3.4
	2869 Industrial organic chemicals, n.e.c	do	631.9	107.2	(X)	(D)
286514	PHTHALIC ANHYDRIDE:					
	2821 Plastics materials and resins	do	210.7	52.3	227.2	19.2
	2851 Paints and allied products	do	95.6	25.3	126.2	11.2
	2865 Cyclic crudes and intermediates	do	18.5	5.2	19.2	1.8
	2869 Industrial organic chemicals, n.e.c	do	163.6	40.5	151.9	11.2
286515	MELAMINE:					
	2821 Plastics materials and resins	do	60.1	18.4	50.7	8.7
286516	STYRENE:					
	2821 Plastics materials and resins	do	4,389.7	778.5	3,122.2	189.1
	2822 Synthetic rubber	do	572.3	114.2	632.4	38.5
	2851 Paints and allied products	do	46.8	9.9	61.3	4.6
286517	DIMETHYLTERIPHALTE (DMT):					
	2824 Organic fibers, noncellulosic	do	630.3	134.8	(X)	(D)
286518	TEREPHTALIC ACID (TPA):					
	2824 Organic fibers, noncellulosic	do	1,216.3	250.5	(X)	(D)
286519	TUOLINE AND XYLENE:					
	2816 Inorganic pigments	do	(D)	(D)	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do	9.2	1.8	(X)	(D)
	2865 Cyclic crudes and intermediates	do	2,324.1	182.9	(NA)	(D)
	2869 Industrial organic chemicals, n.e.c	do	690.4	54.6	(X)	42.0
286532	PIGMENTS:					
	2851 Paints and allied products	.....	(X)	81.5	(X)	52.1
286535	DYES, PIGMENTS, LAKES, AND TONERS:					
	2821 Plastics materials and resins	Million lb	46.0	21.4	(X)	(D)
	2823 Cellulosic manmade fibers	do	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do	7.2	21.8	(X)	21.0
286551	CREOSOTE OIL:					
	2491 Wood preserving	Million gal	*90.3	58.9	141.9	35.2
286552	BENZOL AND BENZENE:					
	2821 Plastics materials and resins	Million lb	173.7	23.7	(X)	(D)
	2822 Synthetic rubber	do	(X)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	1,758.9	188.7	1,100.3	35.2
	2869 Industrial organic chemicals, n.e.c	do	2,780.5	291.7	2,793.0	80.0

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
286553	TAR, CRUDE:					
	2851 Paints and allied products	1,000 s. tons	17.1	1.5	(X)	(X)
	2865 Cyclic crudes and intermediates	do	1,630.1	133.0	1,299.5	38.1
	2869 Industrial organic chemicals, n.e.c	do	(D)	(D)	(X)	(D)
286555	NAPHTHALENE:					
	2865 Cyclic crudes and intermediates	Million lb	37.3	6.7	(D)	(D)
	2869 Industrial organic chemicals, n.e.c	do	261.4	34.5	612.8	27.8
286556	PITCH:					
	3624 Carbon and graphite products		(X)	15.5	(X)	(D)
286901	OPTICAL BLEACH:					
	2841 Soap and other detergents		(X)	26.3	(X)	27.2
	2842 Polishes and sanitation goods		(X)	(D)	(X)	1.0
286902	PHOTOGRAPHIC CHEMICALS, EXCEPT PREPARED:					
	3861 Photographic equipment and supplies		(X)	59.0	(X)	121.0
286903	REFRIGERANT AND OTHER SYNTHETIC ORGANIC GASES:					
	3585 Refrigeration, heating equipment		(X)	27.0	(X)	(D)
	3632 Household refrigerators, freezers		(X)	19.2	(X)	13.0
286904	SYNTHETIC ORGANIC CHEMICALS:					
	2844 Toilet preparations	Million lb	(S)	181.8	(X)	(D)
286911	DRIERS:					
	2851 Paints and allied products		(X)	20.3	(X)	14.8
286914	HEXAMETHYLENEDIEMINE:					
	2824 Organic fibers, noncellulosic	Million lb	(D)	(D)	(D)	(D)
286915	PENTACHLOROPHENOL:					
	2491 Wood preserving	do	41.1	16.1	(X)	(D)
286920	ALCOHOLS, EXCEPT ETHYL:					
	2821 Plastics materials and resins	do	520.7	80.1	490.4	20.1
286921	ACRYLONTRILE:					
	2821 Plastics materials and resins	do	256.8	60.1	274.1	30.9
	2822 Synthetic rubber	do	19.7	5.3	74.6	6.4
	2824 Organic fibers, noncellulosic	do	857.4	208.2	640.0	71.0
286922	BUTYL ALCOHOL SOLVENTS:					
	2851 Paints and allied products		(X)	236.9	(X)	105.2
286923	FORMALDEHYDE:					
	2819 Industrial inorganic chemicals, n.e.c	Million lb	14.1	1.7	(D)	(D)
	2821 Plastics materials and resins	do	989.9	75.6	1,362.2	30.8
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	155.7	7.4	77.1	2.2
	2869 Industrial organic chemicals, n.e.c	do	272.9	18.8	233.7	5.2
286924	CELLULOSE ACETATE:					
	2821 Plastics materials and resins	do	205.0	42.6	(D)	(D)
286925	ACRYLATES AND METHACRYLATES MONOMERS:					
	2821 Plastics materials and resins	do	1,429.1	382.0	789.5	101.6
	2822 Synthetic rubber	do	5.6	3.3	(X)	(D)
	2823 Cellulosic manmade fibers	do	(D)	(D)	-	-
	2824 Organic fibers, noncellulosic	do	(D)	(D)	27.4	4.4
286926	SOLVENTS:					
	2879 Agricultural chemicals, n.e.c	do	251.5	91.6	(X)	(D)
286927	VINYL ACETATE MONOMER:					
	2821 Plastics materials and resins	do	551.2	111.7	425.3	35.2
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2851 Paints and allied products	do	*77.5	18.4	112.4	14.0
286928	VINYL CHLORIDE MONOMER:					
	2821 Plastics materials and resins	do	3,378.4	502.6	2,591.4	124.4
286929	ACETIC ANHYDRIDE:					
	2823 Cellulosic manmade fibers	do	(D)	(D)	(D)	(D)
	2824 Organic fibers, noncellulosic	do	(D)	(D)	(D)	(D)
286931	PERFUME MATERIALS:					
	2844 Toilet preparations	do	**16.5	32.3	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
286933	RUBBER PROCESSING CHEMICALS:					
	2821 Plastics materials and resins	.....	(X)	(D)	(X)	18.7
	2822 Synthetic rubber	.....	(X)	33.9	(X)	37.2
	3011 Tires and inner tubes	.....	(X)	275.9	(X)	99.8
	3021 Rubber and plastics footwear	.....	(X)	6.4	(X)	4.5
	3041 Rubber, plastics hose and belting	.....	(X)	20.0	(X)	14.6
	3069 Fabricated rubber products, n.e.c	.....	(X)	107.2	(X)	61.4
286935	SYNTHETIC ORGANIC PLASTICIZERS:					
	2295 Coated fabrics, not rubberized	Million lb...	186.0	53.9	(X)	(D)
	2821 Plastics materials and resins	do.....	169.1	65.6	205.9	58.5
	2822 Synthetic rubber	do.....	(D)	(D)	(X)	(D)
	3011 Tires and inner tubes	do.....	298.4	29.0	356.8	22.6
	3021 Rubber and plastics footwear	do.....	13.1	1.6	22.2	2.6
	3041 Rubber, plastics hose and belting	do.....	86.5	15.3	60.1	6.8
	3069 Fabricated rubber products, n.e.c	do.....	167.0	35.8	161.7	20.4
	3079 Miscellaneous plastics products	do.....	393.6	146.8	278.8	47.6
286937	PLASTICIZERS:					
	2851 Paints and allied products	do.....	*85.5	25.9	59.1	13.2
286941	TOXICANTS:					
	2879 Agricultural chemicals, n.e.c	do.....	349.5	326.6	(X)	(D)
286952	ALCOHOL, ETHYL, PURE AND DENATURED:					
	2819 Industrial inorganic chemicals, n.e.c	.....	(X)	3.4	(X)	1.4
	2865 Cyclic crudes and intermediates	.....	(X)	3.9	(X)	1.0
	2869 Industrial organic chemicals, n.e.c	.....	(X)	73.0	(X)	39.8
286953	ESSENTIAL OILS AND FLAVORS, SYNTHETIC:					
	2065 Confectionery products	.....	(X)	16.9	(X)	(D)
	2066 Chocolate and cocoa products	.....	(X)	6.4	(X)	(D)
	2067 Chewing gum	.....	(X)	16.6	(X)	(D)
286954	ETHYL AND METHYL ALCOHOL:					
	2831 Biological products	.....	(X)	.8	(X)	(D)
	2833 Medicinals and botanicals	.....	(X)	6.3	(X)	(D)
	2834 Pharmaceutical preparations	.....	(X)	22.9	(X)	(D)
286956	ALCOHOLS, OTHER:					
	2833 Medicinals and botanicals	.....	(X)	4.0	(X)	(D)
	2834 Pharmaceutical preparations	.....	(X)	24.4	(X)	(D)
286957	ORGANIC CHEMICALS:					
	2816 Inorganic pigments	Million gal..	(D)	(D)	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do.....	60.8	32.4	23.1	5.8
	2865 Cyclic crudes and intermediates	do.....	76.8	22.7	53.7	9.3
	2869 Industrial organic chemicals, n.e.c	do.....	385.0	284.4	917.5	122.4
286962	CELLULOSE ESTERS:					
	2851 Paints and allied products	Million lb...	*76.4	53.1	74.0	30.4
286963	CAPROLACTAM:					
	2824 Organic fibers, noncellulosic	do.....	745.1	304.0	763.9	141.0
286965	GLYCOLS:					
	2823 Cellulosic manmade fibers	do.....	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do.....	1,336.1	265.6	1,141.9	62.7
	2892 Explosives	do.....	14.4	3.0	(X)	(D)
286967	GLYCEROL, GLYCERINE:					
	2851 Paints and allied products	do.....	23.7	11.9	32.1	7.1
286968	PENTAERYTHRITOL:					
	2851 Paints and allied products	do.....	25.5	11.9	65.2	12.1
286969	GLYCERINE:					
	2892 Explosives	do.....	3.6	1.8	(D)	(D)
287311	NITRIC ACID:					
	2816 Inorganic pigments	1,000 s. tons	(D)	(D)	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do.....	*35.1	5.6	53.6	3.1
	2865 Cyclic crudes and intermediates	do.....	257.3	31.5	101.4	7.2
	2869 Industrial organic chemicals, n.e.c	do.....	143.2	20.3	221.2	15.9
	2892 Explosives	do.....	24.8	3.4	(X)	(D)
287312	AMMONIA, SYNTHETIC ANHYDRONS:					
	2812 Alkalies and chlorine	do.....	(D)	(D)	(D)	(D)
	2816 Inorganic pigments	do.....	8.7	1.2	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do.....	167.8	20.1	(D)	(D)
	2865 Cyclic crudes and intermediates	do.....	158.9	18.3	191.9	7.4
	2869 Industrial organic chemicals, n.e.c	do.....	971.8	116.0	640.0	25.4
	2873 Nitrogenous fertilizers	do.....	2,045.1	191.3	960.4	31.0
	2874 Phosphatic fertilizers	do.....	1,617.8	178.0	1,141.4	43.5
	2875 Fertilizers, mixing only	do.....	144.3	19.3	135.3	6.5
	2892 Explosives	do.....	(D)	(D)	(X)	(D)

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
287313	AMMONIATING OR NITROGEN SOLUTIONS:					
	2873 Nitrogenous fertilizers	1,000 s. tons	(D)	(D)	(X)	(X)
	2874 Phosphatic fertilizers	do	64.8	11.4	204.4	10.9
	2875 Fertilizers, mixing only	do	253.2	29.3	344.8	23.7
287314	AMMONIUM NITRATE:					
	2873 Nitrogenous fertilizers	do	268.4	16.6	(NA)	(NA)
	2874 Phosphatic fertilizers	do	18.4	2.3	49.2	2.4
	2875 Fertilizers, mixing only	do	220.8	24.7	326.6	17.0
	2892 Explosives	do	*298.9	31.8	312.5	12.5
287315	AMMONIUM SULFATE:					
	2873 Nitrogenous fertilizers	do	2.0	.2	(NA)	(NA)
	2874 Phosphatic fertilizers	do	111.0	8.0	290.4	11.0
	2875 Fertilizers, mixing only	do	465.8	38.0	436.8	11.3
287316	OTHER CHEMICALS, NITROGENOUS MATERIALS:					
	2873 Nitrogenous fertilizers	do	*359.4	19.8	(NA)	(NA)
	2874 Phosphatic fertilizers	do	35.9	3.8	37.5	2.2
	2875 Fertilizers, mixing only	do	210.2	25.5	113.6	8.9
287321	UREA:					
	2047 Dog, cat, and other pet food	do	3.1	.3	(D)	(D)
	2048 Prepared feeds, n.e.c	do	290.2	38.5	(D)	(D)
	2821 Plastics materials and resins	do	251.3	26.7	346.9	9.7
	2873 Nitrogenous fertilizers	do	455.9	47.0	(NA)	(NA)
	2874 Phosphatic fertilizers	do	18.9	2.3	15.9	.9
	2875 Fertilizers, mixing only	do	317.7	45.7	117.8	10.9
287410	PHOSPHORIC ACID:					
	2812 Alkalies and chlorine	do	(D)	(D)	-	-
	2816 Inorganic pigments	do	.9	.3	(NA)	(NA)
	2819 Industrial inorganic chemicals, n.e.c	do	69.9	24.2	(D)	(D)
	2865 Cyclic crudes and intermediates	do	5.6	2.1	(NA)	(D)
	2869 Industrial organic chemicals, n.e.c	do	43.1	10.1	(D)	(D)
	2873 Nitrogenous fertilizers	do	76.1	15.0	(D)	(D)
	2874 Phosphatic fertilizers	do	1,035.4	175.7	667.6	53.3
	2875 Fertilizers, mixing only	do	*449.5	72.8	293.0	25.0
287421	NORMAL AND ENRICHED PHOSPHATIC MATERIALS, SUPERPHOSPHATE USED IN MIXED GOODS:					
	2873 Nitrogenous fertilizers	do	(D)	(D)	(NA)	(NA)
	2874 Phosphatic fertilizers	do	236.6	13.8	339.7	7.7
	2875 Fertilizers, mixing only	do	**561.6	40.1	(S)	23.0
287424	PHOSPHATIC MATERIALS, SUPERPHOSPHATE USED IN MIXED GOODS, TRIPLE:					
	2873 Nitrogenous fertilizers	do	(D)	(D)	(NA)	(NA)
	2874 Phosphatic fertilizers	do	87.8	10.2	234.3	14.8
	2875 Fertilizers, mixing only	do	464.1	50.4	298.5	31.3
287425	DIAMONIUM PHOSPHATE, SOLID GRADE:					
	2873 Nitrogenous fertilizers	do	(D)	(D)	(NA)	(NA)
	2874 Phosphatic fertilizers	do	52.9	10.1	(D)	(D)
	2875 Fertilizers, mixing only	do	452.6	65.9	(D)	(D)
287427	OTHER AMONIUM PHOSPHATES:					
	2873 Nitrogenous fertilizers	do	(D)	(D)	(NA)	(NA)
	2874 Phosphatic fertilizers	do	20.4	3.1	(D)	(D)
	2875 Fertilizers, mixing only	do	86.9	14.8	(D)	(D)
287428	OTHER PHOSPHATIC FERTILIZER MATERIALS:					
	2873 Nitrogenous fertilizers	do	(D)	(D)	(NA)	(NA)
	2874 Phosphatic fertilizers	do	39.3	3.3	(D)	(D)
	2875 Fertilizers, mixing only	do	*200.4	22.4	(D)	(D)
287936	FUNGICIDES AND MILDICIDES:					
	2851 Paints and allied products	.....	(X)	14.1	(X)	(D)
289100	ADHESIVES AND SEALANTS:					
	2499 Wood products, n.e.c	Million lb...	*16.7	3.9	(X)	(D)
289101	GLUES AND ADHESIVES:					
	2421 Sawmills, planing mills, general	do	(S)	19.7	(X)	(D)
	2426 Hardwood dimension and flooring	do	**19.4	3.3	(X)	(D)
	2435 Hardwood veneer and plywood	do	**132.6	14.2	119.0	7.1
	2436 Softwood veneer and plywood	do	**1,338.3	119.3	1,046.0	46.4
	2641 Paper coating and glazing	do	(D)	(D)	215.0	33.4
	2642 Envelopes	do	(S)	15.1	42.1	9.4
	2643 Bags, except textile bags	do	*122.0	24.1	99.0	12.8
	2645 Die-cut paper and board	do	*11.2	4.8	14.8	2.9
	2646 Pressed and molded pulp goods	do	(D)	(D)	**1.5	.7
	2647 Sanitary paper products	do	70.3	37.1	32.0	9.1
	2648 Stationery products	do	*3.6	1.8	*3.6	1.1
	2649 Converted paper products, n.e.c	do	**23.7	6.8	33.8	4.3
	2651 Folding paperboard boxes	do	**28.9	10.0	24.9	5.4

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
289101	GLUES AND ADHESIVES--Con.					
	2652 Setup paperboard boxes	1,000 s. tons	*10.8	3.3	12.1	2.7
	2653 Corrugated and solid fiber boxes	do	**659.5	82.9	496.0	37.8
	2654 Sanitary food containers	do	*20.0	7.2	32.7	6.7
	2655 Fiber cans, drums, similar products	do	*165.9	18.6	121.9	9.7
	2732 Book printing	Million lb	(X)	7.2	(X)	(D)
	2751 Commercial printing, letterpress	do	(X)	7.6	(X)	(D)
	2752 Commercial printing, lithographic	do	(X)	5.8	(X)	(D)
	2753 Engraving and plate printing	do	(X)	(Z)	(X)	(D)
	2754 Commercial printing, gravure	do	(X)	2.3	(X)	(D)
	3291 Abrasive products	do	(S)	41.1	(X)	19.0
	3296 Mineral wool	do	(X)	13.0	(X)	27.0
289102	ADHESIVES AND SEALANTS:					
	3292 Asbestos products		(X)	1.9	(X)	3.0
	3293 Gaskets, packing, sealing devices		(X)	2.8	(X)	(D)
289147	ADHESIVES AND BINDERS (RESINS):					
	2297 Nonwoven fabrics	Million lb	*129.0	42.2	44.6	9.2
289215	WATER GEL AND SLURRY SENSITIZERS:					
	2892 Explosives		(X)	7.2	(X)	(D)
289216	HIGH EXPLOSIVES:					
	2892 Explosives		(X)	16.2	(X)	(D)
289217	SMOKELESS POWDER:					
	3482 Small arms ammunition	Million lb	7.6	18.5	22.3	19.9
	3483 Ammunition, except small arms, n.e.c.	do	(D)	(D)	(X)	(D)
289300	PRINTING INK:					
	3955 Carbon paper and inked ribbons	do	(S)	7.6	(X)	(X)
289301	PRINTING INKS, (COMPLETE FORMULATIONS):					
	2641 Paper coating and glazing	do	32.9	35.9	24.8	19.0
	2643 Bags, except textile bags	do	*53.2	54.8	46.9	30.3
	2647 Sanitary paper products	do	(S)	10.9	7.2	5.1
	2648 Stationery products	do	**.3	.8	(NA)	(D)
	2649 Converted paper products, n.e.c.	do	*16.5	11.7	16.5	7.9
	2651 Folding paperboard boxes	do	*61.6	70.4	44.3	33.7
	2652 Setup paperboard boxes	do	(S)	1.4	(NA)	(D)
	2653 Corrugated and solid fiber boxes	do	**52.9	45.3	78.8	27.5
	2654 Sanitary food containers	do	20.5	27.8	24.7	21.4
	2655 Fiber cans, drums, similar products	do	(S)	.6	(X)	(D)
	2741 Miscellaneous publishing	do	(S)	3.5	(X)	47.6
	2751 Commercial printing, letterpress	do	(S)	(X)	(S)	(X)
	2752 Commercial printing, lithographic	do	(S)	(X)	(S)	(X)
	2754 Commercial printing, gravure	do	(S)	(X)	(S)	(X)
	2761 Manifold business forms	do	(S)	11.7	(S)	6.0
	2771 Greeting card publishing	do	(X)	6.6	(X)	(D)
289305	OTHER PRINTING INKS:					
	2711 Newspapers	do	(S)	2.0	(S)	(D)
	2721 Periodicals	do	(D)	(D)	(D)	(D)
	2731 Book publishing	do	(D)	(D)	(D)	(D)
	2732 Book printing	do	(S)	.5	2.8	.6
	2741 Miscellaneous publishing	do	(S)	(D)	(X)	(D)
	2751 Commercial printing, letterpress	do	(S)	25.6	(S)	15.1
	2752 Commercial printing, lithographic	do	(S)	5.3	(S)	4.7
	2753 Engraving and plate printing	do	(S)	.1	(S)	(D)
	2754 Commercial printing, gravure	do	(S)	113.1	246.9	51.7
289311	PRINTING INKS, LETTERPRESS, INCLUDING NEWS:					
	2711 Newspapers	do	(S)	42.4	(D)	(D)
	2721 Periodicals	do	(S)	10.2	(D)	(D)
	2731 Book publishing	do	(D)	(D)	(D)	(D)
	2732 Book printing	do	(S)	1.5	5.0	2.1
	2741 Miscellaneous publishing	do	(S)	(D)	(X)	(D)
	2751 Commercial printing, letterpress	do	(S)	29.3	64.5	34.7
	2752 Commercial printing, lithographic	do	(S)	15.3	(S)	7.6
	2753 Engraving and plate printing	do	(S)	.1	(S)	(D)
	2754 Commercial printing, gravure	do	(S)	1.5	8.0	4.2
289323	PRINTING INKS, LITHOGRAPHIC:					
	2711 Newspapers	do	(S)	(D)	(S)	(D)
	2721 Periodicals	do	(S)	(D)	(S)	(D)
	2731 Book publishing	do	(D)	(D)	(D)	(D)
	2732 Book printing	do	(S)	20.6	(S)	10.5
	2741 Miscellaneous publishing	do	5.2	2.7	(X)	(D)
	2751 Commercial printing, letterpress	do	(S)	6.8	(S)	6.4
	2752 Commercial printing, lithographic	do	(S)	140.1	(S)	77.3
	2753 Engraving and plate printing	do	(S)	.2	(S)	(D)
	2754 Commercial printing, gravure	do	(S)	.8	(S)	.7

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
289501	CARBON BLACK:					
	2821 Plastics materials and resins	Million lb...	36.3	7.2	(D)	(D)
	2822 Synthetic rubber	do.....	409.0	59.2	367.5	29.0
	2893 Printing ink	do.....	67.7	16.1	(X)	(D)
	3011 Tires and inner tubes	do.....	2,124.2	314.0	1,788.2	148.8
	3041 Rubber, plastics hose and belting	do.....	134.9	23.0	127.5	10.7
	3069 Fabricated rubber products, n.e.c	do.....	288.8	48.3	261.8	23.2
289900	FOUNDRY CHEMICALS, METAL TREATING COMPOUNDS, AND PLATING COMPOUNDS:					
	3471 Plating and polishing	.....	(X)	168.0	(X)	(X)
	3479 Metal coating and allied services	.....	(X)	70.4	(X)	(X)
289911	SALT IN BRINE:					
	2812 Alkalies and chlorine	1,000 s. tons	3,433.3	21.0	(X)	(D)
	2819 Industrial inorganic chemicals, n.e.c	do.....	**956.0	15.7	(X)	(D)
289921	FATTY ACIDS:					
	2861 Gum and wood chemicals	Million lb...	(D)	(D)	(X)	(D)
289943	GELATIN (PHARMACEUTICAL GRADE) AND GELATIN CAPSULES:					
	2831 Biological products	.....	(X)	(D)	(X)	(D)
	2833 Medicinals and botanicals	.....	(X)	1.7	(X)	(D)
	2834 Pharmaceutical preparations	.....	(X)	47.2	(X)	31.0
289945	GELATIN, PHOTOGRAPHIC GRADE:					
	3861 Photographic equipment and supplies	.....	(X)	16.2	(X)	24.0
289951	ESSENTIAL OILS, NATURAL:					
	2844 Toilet preparations	Million lb...	(S)	55.9	(X)	(D)
289956	ROSIN SIZING:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	138.9	40.2	143.0	26.2
	2631 Paperboard mills	do.....	129.6	31.3	134.7	18.6
	2661 Building paper and board mills	do.....	(D)	(D)	(NA)	(D)
290001	REFINED PETROLEUM PRODUCTS:					
	3612 Transformers	.....	(X)	27.9	(X)	20.0
290002	OTHER REFINED PETROLEUM PRODUCTS:					
	2821 Plastics materials and resins	.....	(X)	163.1	(X)	(D)
	2822 Synthetic rubber	.....	(X)	2.0	(X)	(D)
290010	HYDROCARBON OILS AND SOLVENTS:					
	2893 Printing ink	Million gal..	83.8	58.0	(X)	(D)
291101	FUEL OIL USED AS A RAW MATERIAL:					
	2892 Explosives	1,000 barrels	**90.2	1.5	-	-
	2895 Carbon black	do.....	15,617.6	188.9	13,800.0	48.1
291102	REFINED PETROLEUM PRODUCTS:					
	2844 Toilet preparations	.....	(X)	23.2	(X)	(D)
291104	PETROLEUM DISTILLATE SOLVENTS:					
	2879 Agricultural chemicals, n.e.c	Million lb...	255.2	18.5	(X)	(D)
291105	PETROLEUM THINNERS (NAPTHA):					
	2851 Paints and allied products	Million gal..	161.1	87.6	203.0	47.9
291106	PETROLEUM WAX:					
	2641 Paper coating and glazing	Million lb...	(D)	(D)	96.1	9.3
	2643 Bags, except textile bags	do.....	9.2	2.2	(D)	(D)
	2651 Folding paperboard boxes	do.....	10.9	3.6	(X)	(D)
	2653 Corrugated and solid fiber boxes	do.....	**168.8	33.6	132.1	16.7
	2654 Sanitary food containers	do.....	198.3	31.2	177.6	17.3
	2655 Fiber cans, drums, similar products	do.....	(S)	.4	(X)	(D)
291107	BENZOL (BENZENE) (100 PERCENT C_6 H_6):					
	2911 Petroleum refining	Million bbl..	.5	20.0	4.4	29.9
291108	PETROLEUM SOLVENTS:					
	2491 Wood preserving	Million gal..	45.3	20.2	(D)	(D)
291160	OTHER LIQUID PETROLEUM AND REFINERY GASES USED AS RAW MATERIALS OR FEEDSTOCKS:					
	2821 Plastics materials and resins	Million lb...	416.7	64.6	(D)	(D)
	2822 Synthetic rubber	do.....	(D)	(D)	(D)	(D)
	2823 Cellulosic manmade fibers	do.....	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do.....	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do.....	(D)	(D)	(D)	(D)
	2869 Industrial organic chemicals, n.e.c	do.....	6,462.2	337.2	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
291161	ETHANE AND ETHYLENE:					
	2821 Plastics materials and resins	Million lb	6,039.5	641.4	(D)	(D)
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	321.1	40.2	(D)	(D)
	2869 Industrial organic chemicals, n.e.c	do	12,047.3	1,067.4	(D)	(D)
291162	PROPANE AND PROPYLENE:					
	2821 Plastics materials and resins	do	2,598.4	227.8	(D)	(D)
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2824 Organic fibers, noncellulosic	do	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(D)	(D)
	2869 Industrial organic chemicals, n.e.c	do	10,183.9	718.6	(D)	(D)
291163	BUTANE, BUTYLENE, AND ISOBUTANE:					
	2821 Plastics materials and resins	do	861.7	46.6	(D)	(D)
	2822 Synthetic rubber	do	(D)	(D)	(X)	(D)
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(D)	(D)
	2869 Industrial organic chemicals, n.e.c	do	3,486.9	250.5	(D)	(D)
291167	BUTADRINE:					
	2821 Plastics materials and resins	do	381.6	78.2	344.6	28.1
	2822 Synthetic rubber	do	2,288.8	464.0	2,520.9	205.0
	2865 Cyclic crudes and intermediates	do	(D)	(D)	(NA)	(D)
	2869 Industrial organic chemicals, n.e.c	do	973.0	180.0	(X)	(D)
291171	EXTENDER OILS OF PETROLEUM ORIGIN:					
	2821 Plastics materials and resins	do	109.4	11.2	(S)	6.8
	2822 Synthetic rubber	do	693.5	35.2	730.9	14.5
291181	FOREIGN UNFINISHED OILS:					
	2911 Petroleum refining	do	14.9	202.9	52.8	209.8
291192	ASPHALT, PAVING GRADE:					
	2951 Paving mixtures and blocks	do	**28.5	362.9	(S)	(D)
	2952 Asphalt felts and coatings	do	*1.7	22.3	(S)	(D)
291193	ROOFING GRADE ASPHALTS:					
	2951 Paving mixtures and blocks	do	(S)	2.1	(S)	(D)
	2952 Asphalt felts and coatings	do	1,302.7	387.9	(S)	(D)
291194	ASPHALTS, OTHER THAN PAVING AND ROOFING GRADE:					
	2951 Paving mixtures and blocks	do	1.1	14.3	(S)	(D)
	2952 Asphalt felts and coatings	do	2.2	23.4	(S)	(D)
295231	ASPHALT ROOFING:					
	2452 Prefabricated wood buildings	1,000 sales sq.	*1,302.3	23.0	1,567.7	13.9
299901	COKE, USED AS RAW MATERIAL:					
	3624 Carbon and graphite products	1,000 s. tons	340.0	46.7	(X)	15.0
	3629 Electrical industrial apparatus, n.e.c	do	(NA)	(D)	(NA)	(D)
300115	PLASTIC, NATURAL, AND SYNTHETIC RUBBER:					
	3142 House slippers		(X)	.4	(X)	1.1
	3143 Men's footwear except athletic		(X)	46.2	(X)	38.8
	3144 Women's footwear, except athletic		(X)	35.6	(X)	24.2
	3149 Footwear, except rubber, n.e.c		(X)	16.5	(X)	8.1
301101	PNEUMATIC AND SOLID TIRES AND INNER TUBES:					
	2451 Mobile homes	Million tires	(X)	35.5	(X)	(D)
	3534 Elevators and moving stairways	do	(X)	(Z)	(X)	(D)
	3535 Conveyors and conveying equipment	do	(X)	(D)	(X)	3.0
	3537 Industrial trucks and tractors	do	(X)	10.5	(X)	20.0
	3711 Motor vehicles and car bodies	do	44.1	1,668.7	(D)	(D)
	3713 Truck and bus bodies	do	(S)	2.6	.4	6.2
	3714 Motor vehicle parts, accessories	do	(D)	(D)	(S)	9.7
	3715 Truck trailers	do	(S)	113.8	.7	52.3
	3716 Motor homes	do	(S)	13.4	(NA)	(NA)
	3751 Motorcycles, bicycles, and parts	do	(X)	35.4	(X)	(D)
	3792 Travel trailers and campers	do	(X)	21.4	(X)	4.0
	3799 Transportation equipment, n.e.c	do	(X)	16.1	(X)	21.0
301131	PNEUMATIC TIRES:					
	3523 Farm machinery and equipment	Thousands	5,218.0	204.1	(S)	74.6
	3524 Lawn and garden equipment	do	**8,165.0	26.3	(D)	(D)
	3531 Construction machinery	do	7,417.0	202.3	(S)	89.4
	3532 Mining machinery	do	(S)	6.7	9.6	1.5
	3536 Hoists, cranes, and monorails	do	(D)	(D)	45.7	.7
301141	INNER TUBES:					
	3523 Farm machinery and equipment	do	**442.0	4.3	(D)	(D)
	3524 Lawn and garden equipment	do	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
303101	RECLAIMED RUBBER:					
	3011 Tires and inner tubes	Million lb...	202.1	32.6	122.5	33.8
	3041 Rubber, plastics hose and belting	do.....	6.2	1.0	12.9	2.6
	3069 Fabricated rubber products, n.e.c	do.....	182.6	12.7	72.4	6.1
304101	RUBBER AND PLASTIC HOSE AND BELTING:					
	3711 Motor vehicles and car bodies	.....	(X)	105.4	(X)	(D)
	3713 Truck and bus bodies	.....	(X)	(D)	(X)	(D)
	3714 Motor vehicle parts, accessories	.....	(X)	60.5	(X)	(D)
	3715 Truck trailers	.....	(X)	(D)	(X)	(D)
306902	FABRICATED RUBBER PRODUCTS:					
	3292 Asbestos products	.....	(X)	(D)	(X)	5.0
	3293 Gaskets, packing, sealing devices	.....	(X)	12.8	(X)	(D)
	3429 Hardware, n.e.c	.....	(X)	10.8	(X)	18.0
	3494 Valves and pipe fittings	.....	(X)	21.6	(X)	36.0
	3523 Farm machinery and equipment	.....	(X)	29.9	(X)	(D)
	3524 Lawn and garden equipment	.....	(X)	4.3	(X)	(D)
	3531 Construction machinery	.....	(X)	12.3	(X)	24.0
	3532 Mining machinery	.....	(X)	3.7	(X)	6.0
	3533 Oilfield machinery	.....	(X)	17.7	(X)	8.0
	3534 Elevators and moving stairways	.....	(X)	.9	(X)	(D)
	3535 Conveyors and conveying equipment	.....	(X)	3.6	(X)	9.0
	3536 Hoists, cranes, and monorails	.....	(X)	.8	(X)	(D)
	3537 Industrial trucks and tractors	.....	(X)	6.0	(X)	4.0
	3553 Woodworking machinery	.....	(X)	(D)	(X)	(D)
	3554 Paper industries machinery	.....	(X)	5.8	(X)	(D)
	3561 Pumps and pumping equipment	.....	(X)	11.2	(X)	7.0
	3563 Air and gas compressors	.....	(X)	1.1	(X)	6.0
	3573 Electronic computing equipment	.....	(X)	4.0	(X)	(D)
	3574 Calculating, accounting machines	.....	(X)	.3	(X)	(D)
	3576 Scales, balances, except laboratory	.....	(X)	(D)	(X)	(D)
	3579 Office machines, typewriters, etc	.....	(X)	5.8	(X)	3.0
	3585 Refrigeration, heating equipment	.....	(X)	24.4	(X)	35.0
	3586 Measuring and dispensing pumps	.....	(X)	.7	(X)	(D)
	3621 Motors and generators	.....	(X)	8.1	(X)	11.0
	3631 Household cooking equipment	.....	(X)	3.8	(X)	1.0
	3632 Household refrigerators, freezers	.....	(X)	14.0	(X)	19.0
	3633 Household laundry equipment	.....	(X)	22.0	(X)	31.0
	3634 Electric housewares and fans	.....	(X)	4.2	(X)	3.0
	3635 Household vacuum cleaners	.....	(X)	(D)	(X)	(D)
	3639 Household appliances, n.e.c	.....	(X)	.8	(X)	6.0
	3691 Storage batteries	.....	(X)	19.5	(X)	49.0
	3692 Primary batteries, dry and wet	.....	(X)	.1	(X)	(D)
	3694 Engine electrical equipment	.....	(X)	12.5	(X)	15.0
	3711 Motor vehicles and car bodies	.....	(X)	(D)	(X)	(D)
	3713 Truck and bus bodies	.....	(X)	3.2	(X)	(D)
	3714 Motor vehicle parts, accessories	.....	(X)	133.7	(X)	(D)
	3715 Truck trailers	.....	(X)	2.4	(X)	(D)
	3716 Motor homes	.....	(X)	.4	(X)	(NA)
	3731 Ship building and repairing	.....	(X)	2.4	(X)	(D)
	3732 Boat building and repairing	.....	(X)	.7	(X)	(D)
	3751 Motorcycles, bicycles, and parts	.....	(X)	1.4	(X)	(D)
	3799 Transportation equipment, n.e.c	.....	(X)	3.0	(X)	1.0
	3841 Surgical and medical instruments	.....	(X)	38.4	(X)	(NA)
	3842 Surgical appliances and supplies	.....	(X)	24.5	(X)	15.0
	3843 Dental equipment and supplies	.....	(X)	.6	(X)	(NA)
306933	FOAM CORES FOR MATTRESSES:					
	2512 Upholstered household furniture	Thousand.....	(S)	3.4	(S)	2.4
	2515 Mattresses and bedsprings	do.....	(S)	4.8	e405.4	13.0
306965	RUBBER AND ELASTOMER RESIN SOLING SLABS AND TOP LIFT SHEETS:					
	3142 House slippers	Mil. sq. ft..	(S)	1.1	10.0	3.8
	3143 Men's footwear, except athletic	do.....	**41.3	30.7	(X)	10.0
	3144 Women's footwear, except athletic	do.....	**40.8	29.8	64.1	22.9
	3149 Footwear, except rubber, n.e.c	do.....	(S)	7.7	(X)	6.2
306980	RUBBER COMPOUNDS AND MIXTURES, PURCHASED:					
	3011 Tires and inner tubes	Million lb...	205.7	71.4	88.0	33.6
	3021 Rubber and plastics footwear	do.....	(X)	(D)	(X)	(D)
	3041 Rubber, plastics hose and belting	do.....	104.9	50.3	29.9	15.7
	3069 Fabricated rubber products, n.e.c	do.....	364.9	79.5	180.8	41.5

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
311100	FINISHED LEATHER:					
	2381 Fabric dress and work gloves	Mil. sq. ft..	*30.1	13.9	39.2	15.8
	2386 Leather and sheep lined clothing	Mil. sq. ft..	*86.7	70.0	85.4	47.5
	2387 Apparel belts	Mil. sq. ft..	*45.4	60.8	72.3	61.4
	2389 Apparel and accessories, n.e.c	Mil. sq. ft..	(D)	(D)	(D)	(D)
	3151 Leather gloves and mittens	Mil. sq. ft..	74.1	46.8	[e]56.5	25.6
	3161 Luggage	Mil. sq. ft..	(X)	7.7	(X)	4.6
	3171 Women's handbags and purses	.....	(X)	34.0	(X)	25.1
	3172 Personal leather goods, n.e.c	.....	(X)	34.6	(X)	18.5
	3199 Leather goods, n.e.c	.....	(X)	27.1	(X)	23.8
	3949 Sporting and athletic goods, n.e.c	Mil. lb.....	(S)	28.3	13.6	16.5
311102	FINISHED UPPER LEATHER:					
	3111 Leather tanning and finishing	.....	(X)	10.1	(X)	8.9
	3131 Boot, shoe cut stock and findings	.....	(X)	1.7	(X)	2.9
311105	FINISHED INNERSOLE LEATHER:					
	3111 Leather tanning and finishing	.....	(X)	(D)	(X)	(D)
	3131 Boot, shoe cut stock and findings	.....	(X)	5.1	(X)	1.3
311106	FINISHED SOLING LEATHER:					
	3111 Leather tanning and finishing	.....	(X)	(D)	(X)	(D)
	3131 Boot, shoe cut stock and findings	.....	(X)	19.4	(X)	27.3
311107	ALL OTHER FINISHED LEATHER:					
	3111 Leather tanning and finishing	.....	(X)	17.6	(X)	10.1
	3131 Boot, shoe cut stock and findings	.....	(X)	4.6	(X)	2.3
	3143 Men's footwear, except athletic	.....	(X)	15.0	(X)	1.5
	3144 Women's footwear, except athletic	.....	(X)	3.4	(X)	2.9
	3149 Footwear, except rubber, n.e.c	.....	(X)	1.7	(X)	2.8
311111	FINISHED UPPER LEATHER AND LINING:					
	3142 House slippers	Million sq.ft	*6.2	4.8	8.9	6.4
	3143 Men's footwear, except athletic	Million sq.ft	*360.8	359.4	438.6	275.3
	3144 Women's footwear, except athletic	Million sq.ft	**164.2	158.2	240.0	156.2
	3149 Footwear, except rubber, n.e.c	Million sq.ft	**81.1	73.6	87.8	57.0
311112	FINISHED SOLING LEATHER AND INNERSOLES:					
	3142 House slippers	Million lb...	(S)	(D)	(NA)	.7
	3143 Men's footwear, except athletic	Million lb...	**42.7	57.1	49.8	38.1
	3144 Women's footwear, except athletic	Million lb...	(S)	21.6	22.3	17.0
	3149 Footwear, except rubber, n.e.c	Million lb...	5.9	9.3	7.3	6.0
313108	OTHER CUT LEATHER STOCK AND FINDINGS:					
	3142 House slippers	.....	(X)	(D)	(X)	.6
	3143 Men's footwear, except athletic	.....	(X)	33.7	(X)	31.7
	3144 Women's footwear, except athletic	.....	(X)	28.7	(X)	20.7
	3149 Footwear, except rubber, n.e.c	.....	(X)	11.2	(X)	5.4
320101 320102 320103 320311 320313	GLASS AND GLASS PRODUCTS:					
	3631 Household cooking equipment	.....	(X)	26.5	(X)	17.0
	3633 Household laundry equipment	.....	(X)	(D)	(X)	(D)
	3634 Electric housewares and fans	.....	(X)	25.4	(X)	11.0
	3639 Household appliances, n.e.c	.....	(X)	6.7	(X)	1.0
	3641 Electric lamps	.....	(X)	179.6	(X)	94.8
	3662 Radio and TV communication equipment	.....	(X)	4.3	(X)	5.6
	3671 Electron tubes, receiving type	.....	(X)	32.9	(X)	(NA)
	3674 Semiconductors, related devices	.....	(X)	7.8	(X)	5.4
	3675 Electronic capacitors	.....	(X)	(D)	(X)	.5
	3677 Electronic coils and transformers	.....	(X)	(D)	-	-
	3679 Electronic components, n.e.c	.....	(X)	(D)	(X)	3.0
	3693 X-ray apparatus and tubes	.....	(X)	4.3	(X)	(NA)
	3711 Motor vehicles and car bodies	.....	(X)	339.4	(X)	830.0
	3713 Truck and bus bodies	.....	(X)	11.0	(X)	21.0
	3714 Motor vehicle parts, accessories	.....	(X)	15.8	(X)	17.0
	3715 Truck trailers	.....	(X)	.4	(X)	(D)
	3716 Motor homes	.....	(X)	15.5	(X)	(NA)
	3811 Engineering, scientific instruments	.....	(X)	2.8	(X)	(D)
	3822 Environmental controls	.....	(X)	.1	(X)	(D)
	3823 Process control instruments	.....	(X)	3.2	(X)	3.0
	3824 Fluid meters and counting devices	.....	(X)	.7	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	5.8	(X)	5.0
	3829 Measuring, controlling devices, n.e.c	.....	(X)	3.9	(X)	6.0
	3841 Surgical and medical instruments	.....	(X)	7.8	(X)	(NA)
	3842 Surgical appliances and supplies	.....	(X)	13.6	(X)	12.0
	3843 Dental equipment and supplies	.....	(X)	1.7	(X)	(NA)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
320591	CLAY AND NONCLAY REFRACTORIES:					
	3241 Cement, hydraulic	1,000 s. tons	(S)	30.4	83.8	18.5
	3255 Clay refractories	do	**1,234.0	48.3	(X)	(X)
	3274 Lime	do	(S)	2.8	(S)	2.9
	3275 Gypsum products	do	(D)	(D)	3.0	1.6
	3297 Nonclay refractories	do	(S)	35.7	(X)	2.0
321101	FLAT GLASS:					
	2511 Wood household furniture	Million sq.ft	(S)	17.8	39.6	9.5
	2519 Household furniture, n.e.c	do	.5	.3	(X)	(D)
	2521 Wood office furniture	do	2.8	.3	(NA)	(D)
	2522 Metal office furniture	do	**.5	.5	(X)	(D)
	2531 Public building, related furniture	do	(S)	.5	(X)	(D)
	2541 Wood partitions and fixtures	do	(S)	5.1	(X)	(D)
	2542 Metal partitions and fixtures	do	(S)	1.6	(X)	(D)
	2599 Furniture and fixtures, n.e.c	do	5.8	.3	(NA)	(D)
321111	SHEET GLASS:					
	3211 Flat glass	1,000 sq. ft.	(D)	(D)	(D)	(D)
	3229 Pressed and blown glass, n.e.c	do	(D)	(D)	(D)	(D)
	3231 Products of purchased glass	do	(S)	75.5	393.3	85.3
321121	PLATE AND FLOAT GLASS:					
	3211 Flat glass	do	558.4	141.1	182.0	53.8
	3231 Products of purchased glass	Mil. sq. ft.	755.2	251.0	673.2	238.5
322101 322102 322103	GLASS CONTAINERS:					
	2022 Cheese, natural and processed	1,000 gross	(D)	(D)	(X)	(X)
	2023 Condensed and evaporated milk	do	(S)	27.3	(X)	(X)
	2026 Fluid milk	do	**311.4	8.7	(X)	(X)
	2032 Canned specialties	do	15,662.2	100.2	(X)	81.5
	2033 Canned fruits and vegetables	do	(S)	297.6	(NA)	173.1
	2035 Pickles, sauces, salad dressings	do	*15,716.8	229.0	13,734.4	131.6
	2065 Confectionery products	do	*1,619.8	25.2	(X)	(D)
	2079 Shortening and cooking oils	do	5,274.0	99.4	2,360.0	31.3
	2082 Malt beverages		(X)	235.7	(X)	(NA)
	2086 Bottled and canned soft drinks		(X)	405.0	(X)	(D)
	2095 Roaster coffee	1,000 gross	3,399.6	55.7	4,099.2	36.4
	2099 Food preparation, n.e.c	do	*6,446.0	98.3	7,494.0	59.2
	2831 Biological products		(X)	13.3	(X)	7.8
	2833 Medicinals and botanicals		(X)	3.3	(X)	2.0
	2834 Pharmaceutical preparations		(X)	196.3	(X)	130.6
	2842 Polishes and sanitation goods		(X)	12.9	(X)	13.4
	2843 Surface active agents		(X)	.7	(X)	(X)
	2844 Toilet preparations		(X)	151.6	(X)	116.3
	2879 Agricultural chemicals, n.e.c		(X)	3.7	(X)	(X)
322104	GLASS CONTAINERS WITH PAPERBOARD WRAPPING:					
	2082 Malt beverages		(X)	532.5	(X)	(NA)
	2086 Bottled and canned soft drinks		(X)	335.9	(X)	(D)
322105	GLASS CONTAINERS USED FOR WINE AND BRANDY:					
	2084 Wines, brandy, and brandy spirits	1,000 gross	*8,367.3	197.6	6,279.5	89.2
322106	GLASS CONTAINERS USED FOR DISTILLED LIQUOR:					
	2085 Distilled liquor, except brandy	do	10,913.3	251.2	12,046.5	169.5
322901	OTHER GLASS PRODUCTS:					
	3211 Flat glass		(X)	(D)	(X)	(D)
	3229 Pressed and blown glass, n.e.c		(X)	19.2	(X)	14.1
	3231 Products of purchased glass		(X)	58.3	(X)	34.3
	3832 Optical instruments and lenses		(X)	5.3	(X)	(D)
	3851 Ophthalmic goods		(X)	6.8	(X)	(NA)
322911	GLASS TUMBLERS, STEMWARE, AND TABLEWARE:					
	3229 Pressed and blown glass, n.e.c		(X)	(D)	(X)	5.0
	3231 Products of purchased glass		(X)	18.7	(X)	9.0
322921	TUBE BLANKS:					
	3662 Radio and television communication equipment	Millions	(S)	2.1	(S)	1.3
	3671 Electron tubes, receiving type	do	(X)	186.7	(X)	(X)
	3674 Semiconductors, related devices	do	(D)	(D)	(S)	.6
	3675 Electronic capacitors	do	(NA)	(NA)	-	-
	3677 Electronic coils and transformers	do	(D)	(D)	-	-
	3679 Electronic components, n.e.c	do	(NA)	(NA)	(X)	(D)
	3693 X-ray apparatus and tubes	do	(X)	(D)	(X)	(X)
322931	GLASS FIBER, ROVING, MATS, ETC.:					
	2952 Asphalt felts and coatings	1,000 s. tons	30.1	24.2	(X)	(D)
	3079 Miscellaneous plastics products	Million lb	284.0	167.6	146.6	69.6
	3731 Ship building and repairing	do	*9.2	5.7	6.7	3.4
	3732 Boat building and repairing	do	(S)	38.8	62.3	33.4

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
322935	GLASS FILAMENT YARN AND ROVING:					
	2221 Weaving mills, manmade fiber, silk	Million lb	101.0	82.7	137.5	64.5
	2296 Tire cord and fabric	do	28.7	25.9	34.5	26.0
322941	LENS BLANKS, OPTICAL AND OPHTHALMIC:					
	3832 Optical instruments and lenses	Millions	(S)	7.9	(X)	(D)
	3851 Ophthalmic goods	do	(S)	54.4	(X)	33.0
323150	FRAMED AND UNFRAMED MIRRORS:					
	2511 Wood household furniture	Mil. sq. ft.	(S)	19.9	35.9	18.7
	2519 Household furniture, n.e.c	do	(D)	(D)	(X)	(X)
324101	PORTLAND CEMENT:					
	3271 Concrete block and brick	1,000 s. tons	(S)	97.2	3,536.3	90.0
	3272 Concrete products, n.e.c	do	*4,020.3	172.4	5,113.3	132.8
	3273 Ready-mixed concrete	do	28,870.1	1,210.4	37,456.9	866.3
	3292 Asbestos products	do	399.1	17.8	504.8	13.4
325501	CLAY REFRACTORIES:					
	3211 Flat glass	do	(D)	(D)	(D)	(D)
	3221 Glass containers	do	(S)	4.0	(S)	2.1
	3229 Pressed and blown glass, n.e.c	do	**5.2	4.4	(S)	2.6
	3231 Products of purchased glass	do	(D)	(D)	(X)	(D)
	3312 Blast furnaces and steel mills	do	(S)	224.1	1,528.6	107.0
	3313 Electrometallurgical products	do	8.7	.5	(NA)	.9
	3321 Gray iron foundries	Mil. s. tons	(S)	30.9	331.9	11.1
	3322 Malleable iron foundries	do	(S)	3.3	40.2	3.1
	3324 Steel investment foundries	do	(S)	.7	3.6	.3
	3325 Steel foundries, n.e.c	do	(S)	10.6	87.2	5.4
	3361 Aluminum foundries	do	1.0	.4	1.0	.2
326400	PORCELAIN, STRATITE AND OTHER CERAMIC ELECTRICAL PRODUCTS:					
	3612 Transformers		(X)	22.6	(X)	23.0
	3613 Switchgear, switchboard apparatus		(X)	27.1	(X)	36.0
	3622 Industrial controls		(X)	1.8	(X)	(D)
	3624 Carbon and graphite products		(X)	(D)	(X)	(D)
	3629 Electrical industrial apparatus, n.e.c		(X)	14.7	(X)	10.0
327300	READY-MIXED CONCRETE:					
	3271 Concrete block and brick	Mil. cu. yd.	(S)	1.9	(X)	(X)
	3272 Concrete products, n.e.c	1,000 cu. yd.	(S)	28.0	(X)	(D)
327401	LIME:					
	2611 Pulpmills	1,000 s. tons	251.2	12.1	83.8	1.9
	2621 Papermills, except building paper	do	604.8	25.9	561.3	11.9
	2631 Paperboard mills	do	391.4	16.9	344.7	6.9
	2661 Building paper and board mills	do	1.8	.1	(NA)	(D)
327403	LIME INCLUDING QUICKLIME AND DEAD-BURNED DOLOMITE:					
	3221 Glass containers	do	1,902.7	30.9	(X)	18.0
	3312 Blast furnaces and steel mills	do	9,883.4	293.7	6,435.5	107.8
327404	DEAD-BURNED DOLOMITE:					
	3297 Nonclay refractories	do	(NA)	(D)	(X)	5.0
327511	GYPSUM BUILDING BOARD:					
	2439 Structural wood members, n.e.c	do	(S)	.1	(NA)	(D)
	2452 Prefabricated wood buildings	do	(S)	16.0	283.6	13.9
329101	GRINDING WHEELS AND OTHER ABRASIVE PRODUCTS:					
	3471 Plating and polishing		(X)	9.9	(X)	(X)
	3479 Metal coating and allied services		(X)	1.3	(X)	(X)
	3541 Machine tools, metal-cutting		(X)	5.6	(X)	7.0
	3542 Machine tools, metal-forming		(X)	1.4	(X)	3.0
	3544 Special dies, tools, jigs, etc		(X)	7.2	(X)	133.1
	3545 Machine tool accessories		(X)	13.9	(X)	21.0
	3547 Rolling mill machinery		(X)	(NA)	(X)	(D)
	3549 Metalworking machinery, n.e.c		(X)	(NA)	(X)	(D)
	3566 Speed changers, drives, and gears		(X)	3.1	(X)	(Z)
	3568 Power transmission equipment, n.e.c		(X)	1.5	(X)	(D)
329103	ABRASIVES AND MISCELLANEOUS NONMETALLIC MINERALS PRODUCTS:					
	3296 Mineral wool		(X)	13.7	(X)	16.0
329104	ABRASIVES AND ABRASIVE PRODUCTS:					
	3281 Cut stone and stone products	1,000 s. tons	(X)	6.9	(X)	(NA)
329201	ASBESTOS PRODUCTS:					
	3296 Mineral wool		(X)	(D)	(X)	(D)

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
329221	ASBESTOS FRICTION MATERIALS:					
	3711 Motor vehicles and car bodies	.....	(X)	(D)	(X)	(X)
	3713 Truck and bus bodies	.....	(X)	.3	(X)	(D)
	3714 Motor vehicle parts, accessories	.....	(X)	93.0	(X)	59.0
	3715 Truck trailers	.....	(X)	.5	(X)	(D)
329300	GASKETS (ALL TYPE) AND ASBESTOS PACKING:					
	3431 Metal sanitary ware	.....	(X)	(D)	(X)	(D)
	3432 Plumbing fittings and brass goods	.....	(X)	(NA)	(X)	(X)
	3494 Valves and pipe fittings	.....	(X)	12.1	(X)	11.0
	3612 Transformers	.....	(X)	1.9	(X)	10.0
	3631 Household cooking equipment	.....	(X)	3.7	(X)	2.0
	3633 Household laundry equipment	.....	(X)	7.4	(X)	(D)
	3634 Electric housewares and fans	.....	(X)	.9	(X)	1.0
	3635 Household vacuum cleaners	.....	(X)	1.1	(X)	(D)
	3639 Household appliances, n.e.c.	.....	(X)	3.0	(X)	3.0
329501	ROOFING GRANULES:					
	2952 Asphalt felts and coatings	1,000 s. tons	3,013.5	129.8	2,730.8	77.0
329502	DEAD-BURNED MAGNESIA OR MAGNESITE:					
	3255 Clay refractories	do.....	(NA)	(D)	(X)	(X)
	3297 Nonclay refractories	do.....	429.7	71.5	(X)	(D)
	3312 Blast furnaces and steel mills	do.....	10.4	1.4	19.2	1.9
329503	LIMESTONE:					
	3312 Blast furnaces and steel mills	do.....	18,256.4	112.6	17,588.7	60.3
329504	LIGHTWEIGHT AGGREGATE, INCLUDING VERMICULITE, PERLITE, EXPANDED CLAYS, SHALE, AND SLAG:					
	3273 Ready-mixed concrete	do.....	**2,620.9	20.2	(X)	(D)
329505	FLUORSPAR:					
	3312 Blast furnaces and steel mills	do.....	540.4	50.9	509.7	36.7
329506	OTHER FLUXES:					
	3312 Blast furnaces and steel mills	do.....	4,389.1	51.0	8,052.6	50.7
329507	GRANULAR:					
	2879 Agricultural chemicals, n.e.c.	Million lb...	323.0	9.5	(D)	(D)
329508	NATURAL GRAPHITE:					
	3624 Carbon and graphite products	1,000 s. tons	(S)	4.5	(NA)	(D)
329509	DUST AND POWDERS:					
	2879 Agricultural chemicals, n.e.c.	do.....	212.8	6.5	(X)	(X)
329511	NONMETALLIC MINERALS AND EARTHS, AROUND OR OTHERWISE TREATED:					
	2851 Paints and allied products	do.....	(X)	78.7	(X)	(D)
	3211 Flat glass	do.....	(X)	8.5	(X)	(D)
	3221 Glass containers	do.....	992.5	33.8	(X)	59.0
	3229 Pressed and blown glass, n.e.c.	do.....	(X)	17.9	(X)	26.0
	3231 Products of purchased glass	do.....	(X)	(D)	(X)	(D)
	3241 Cement, hydraulic	do.....	(X)	100.5	(X)	(D)
	3274 Lime	do.....	(S)	4.2	(X)	(D)
	3275 Gypsum products	do.....	(S)	87.0	(X)	(D)
329601	MINERAL WOOL INSULATION:					
	2451 Mobile homes	.....	(X)	76.8	(X)	(X)
	2452 Prefabricated wood buildings	.....	(X)	22.0	(X)	(D)
	3585 Refrigeration, heating equipment	.....	(X)	19.4	(X)	13.0
	3632 Household refrigerators, freezers	.....	(X)	27.5	(X)	18.0
329701	REFRACTORIES, NONCLAY:					
	3211 Flat glass	1,000 s. tons	(D)	(D)	(D)	(D)
	3221 Glass containers	do.....	**15.1	12.0	1.8	1.6
	3229 Pressed and blown glass, n.e.c.	do.....	**3.1	4.9	(S)	2.7
	3231 Products of purchased glass	do.....	(D)	(D)	(X)	(D)
	3312 Blast furnaces and steel mills	do.....	(S)	183.4	1,628.7	122.9
	3313 Electrometallurgical products	do.....	(D)	(D)	9.6	.9
	3321 Gray iron foundries	do.....	*55.2	15.0	74.6	9.7
	3322 Malleable iron foundries	do.....	6.2	2.5	9.1	1.5
	3324 Steel investment foundries	do.....	*5.4	2.4	2.2	.5
	3325 Steel foundries, n.e.c.	do.....	(S)	7.8	27.7	3.5
	3361 Aluminum foundries	do.....	1.2	.7	1.9	.3
329903	INDUSTRIAL DIAMONDS:					
	3541 Machine tools, metal-cutting	Carats.....	(S)	1.4	(S)	.4
	3542 Machine tools, metal-forming	do.....	(Z)	(Z)	(S)	(Z)
	3544 Special dies, tools, jigs, etc.	do.....	(S)	2.8	137.2	2.3
	3545 Machine tool accessories	do.....	(S)	11.7	1.8	9.3
	3547 Rolling mill machinery	do.....	(X)	(D)	(D)	(D)
	3549 Metalworking machinery, n.e.c.	do.....	(X)	(D)	(D)	(D)
	3553 Woodworking machinery	do.....	(X)	.3	(X)	(D)

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329905	MICA:					
	3662 Radio and television communication equipment	1,000 lb.	(D)	(D)	(S)	.7
	3671 Electron tubes, receiving type	do.	(D)	(D)	(X)	(X)
	3674 Semiconductors, related devices	do.	(D)	(D)	(X)	(X)
	3675 Electronic capacitors	do.	(D)	(D)	(X)	(X)
	3676 Electronic resistors	do.	(S)	.3	(X)	(X)
	3677 Electronic coils and transformers	do.	(S)	.2	(X)	(X)
	3679 Electronic components, n.e.c	do.	(S)	2.4	(X)	(X)
330005	METAL FOR PRINTING PLATES:					
	2791 Typesetting		(X)	.4	(X)	(D)
	2793 Photoengraving		(X)	3.0	(X)	(X)
	2794 Electrotyping and stereotyping		(X)	.9	(X)	(X)
	2795 Lithographic platemaking services		(X)	31.6	(X)	(X)
330006	METAL FOR LITHOGRAPHIC PLATES:					
	2732 Book printing		(X)	3.4	(X)	(X)
	2751 Commercial printing, letterpress		(X)	.9	(X)	(X)
	2752 Commercial printing, lithographic		(X)	12.2	(X)	(X)
	2754 Commercial printing, gravure		(X)	(D)	(X)	(D)
330120	COPPER AND COPPER BASE MATERIALS:					
	2521 Wood office furniture	Million lb.	(S)	(Z)	(NA)	(D)
	2531 Public building, related furniture	do.	(D)	(D)	(X)	(D)
	2541 Wood partitions and fixtures	do.	(D)	(D)	(X)	(D)
	2542 Metal partitions and fixtures	do.	**8.5	6.2	(X)	(D)
	2599 Furniture and fixtures, n.e.c	do.	3.0	.2	(NA)	(D)
331000 331002 331003	STEEL MILL SHAPES AND FORMS:					
	3011 Tires and inner tubes	Mil. s. tons.	(D)	(D)	(X)	(D)
	3471 Plating and polishing	1,000 s. tons	(S)	26.2	(X)	(X)
	3479 Metal coating and allied services	do.	*926.4	236.6	(X)	(X)
	3841 Surgical and medical instruments		(X)	29.6	(X)	(X)
	3842 Surgical appliances and supplies		(X)	31.7	(X)	21.0
	3843 Dental equipment and supplies		(X)	5.0	(X)	(X)
	3993 Signs and advertising displays		(X)	36.6	(X)	59.0
331005	INGOTS, SEMIFINISHED SHAPES (BLOOMS, BILLETS, ETC.), AND OTHER STEEL SHAPES RECEIVED FOR FURTHER PROCESSING, EXCEPT FOR DRAWING WIRE:					
	3312 Blast furnaces and steel mills		(X)	4,051.5	(X)	2,305.5
	3315 Steel wire and related products		(X)	41.0	(X)	21.3
331042	BLOOMS, BILLETS, AND SLABS:					
	3462 Iron and steel forgings	1,000 s. tons	(D)	(D)	(D)	(D)
	3463 Nonferrous forgings	do.	(D)	(D)	.6	.2
331061	CARBON STEEL RODS:					
	3315 Steel wire and related products	do.	2,055.7	570.8	1,440.6	227.3
331063	ALLOY STEEL RODS:					
	3315 Steel wire and related products	do.	**50.5	28.4	31.3	9.6
331065	STAINLESS STEEL RODS:					
	3315 Steel wire and related products	do.	(S)	37.4	12.4	14.5
331073	CARBON STEEL WIRE FOR REDRAWING:					
	3315 Steel wire and related products	do.	**239.7	95.2	167.7	39.3
331075	ALLOY STEEL WIRE FOR REDRAWING:					
	3315 Steel wire and related products	do.	(S)	12.7	(S)	1.5
331077	STAINLESS STEEL WIRE FOR REDRAWING:					
	3315 Steel wire and related products	do.	6.0	15.2	2.6	4.1
331079	OTHER STEEL SHAPES FOR DRAWING WIRE:					
	3315 Steel wire and related products	do.	(S)	9.7	5.7	1.7
331081	STEEL RAILS FOR REROLLING:					
	3312 Blast furnaces and steel mills	do.	203.3	16.6	263.5	13.7
331091	WIRE STRAND AND BARS OR RODS:					
	3271 Concrete block and brick	do.	(S)	.4	(S)	.6
	3272 Concrete products, n.e.c	do.	**174.0	78.0	240.8	59.6
331092	WELDED WIRE CONCRETE REINFORCING MESH:					
	3271 Concrete block and brick	do.	**1.5	.5	5.6	1.2
	3272 Concrete products, n.e.c	do.	205.2	79.1	248.6	52.9

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
331094	STEEL, STRIP, AND WIRE:					
	2782 Blankbooks and looseleaf binders	1,000 s. tons	(X)	13.2	(X)	4.4
	2789 Bookbinding and related work	do	(X)	2.2	(X)	1.2
331212	CRUDE BLAST FURNACE SLAG:					
	3296 Mineral wool	do	1,057.5	9.9	(X)	13.0
331309	OTHER FERROALLOYS:					
	3321 Gray iron foundries	do	264.2	80.4	(D)	(D)
	3322 Malleable iron foundries	do	15.8	4.4	45.4	7.9
	3324 Steel investment foundries	do	(S)	32.8	17.1	14.4
	3325 Steel foundries, n.e.c	do	32.6	33.4	31.3	12.0
	3361 Aluminum foundries	do	(D)	(D)	(X)	(D)
	3362 Brass, bronze, copper foundries	do	(D)	(D)	(D)	(D)
331313	FERROMANGANESE, SILICOMANGANESE, AND MANGANESE:					
	3312 Blast furnaces and steel mills	do	1,087.0	477.1	1,035.8	188.9
	3313 Electrometallurgical products	do	(D)	(D)	(D)	(D)
	3321 Gray iron foundries	do	97.2	41.7	(X)	7.2
	3322 Malleable iron foundries	do	2.8	1.6	(X)	(D)
	3324 Steel investment foundries	do	(S)	1.2	.2	.1
	3325 Steel foundries, n.e.c	do	*43.1	19.9	(X)	(D)
	3361 Aluminum foundries	do	(D)	(D)	(D)	(D)
	3362 Brass, bronze, copper foundries	do	(D)	(D)	(D)	(D)
331320	FERROCHROMIUM:					
	3312 Blast furnaces and steel mills	do	372.3	217.8	326.5	105.4
	3313 Electrometallurgical products	do	(D)	(D)	(X)	(D)
	3321 Gray iron foundries	do	10.1	6.3	11.7	4.1
	3322 Malleable iron foundries	do	.2	.2	(Z)	(Z)
	3324 Steel investment foundries	do	(S)	3.5	.5	.2
	3325 Steel foundries, n.e.c	do	**23.0	19.9	16.2	6.6
	3361 Aluminum foundries	do	(D)	(D)	(X)	(D)
	3362 Brass, bronze, copper foundries	do	(D)	(D)	(D)	(D)
331331	FERROSILICON:					
	3312 Blast furnaces and steel mills	do	253.7	114.2	281.8	61.1
	3313 Electrometallurgical products	do	(D)	(D)	(D)	(D)
	3321 Gray iron foundries	do	176.2	67.0	(D)	(D)
	3322 Malleable iron foundries	do	16.3	7.5	(X)	(D)
	3324 Steel investment foundries	do	(D)	(D)	(X)	(D)
	3325 Steel foundries, n.e.c	do	**21.9	8.9	(X)	(D)
	3361 Aluminum foundries	do	(D)	(D)	(X)	(D)
	3362 Brass, bronze, copper foundries	do	(D)	(D)	(X)	(X)
331340	SPIEGELEISEN:					
	3312 Blast furnaces and steel mills	do	(D)	(D)	10.6	1.1
331342	OTHER IRON FERROALLOYS:					
	3312 Blast furnaces and steel mills	do	104.5	111.4	179.3	82.9
331343	FERROMOLYBDENUM:					
	3312 Blast furnaces and steel mills	do	12.1	73.5	8.7	25.9
331345	FERRONICKEL:					
	3312 Blast furnaces and steel mills	do	53.8	102.8	53.2	60.2
331351	FERROTUNGSTEN:					
	3312 Blast furnaces and steel mills	do	.6	11.2	.7	4.4
	3313 Electrometallurgical products	do	(D)	(D)	(X)	(D)
331353	FERROVANADIUM:					
	3312 Blast furnaces and steel mills	do	5.6	49.7	6.1	32.6
332161	GRAY IRON IGNOT MOLDS AND STOOLS:					
	3312 Blast furnaces and steel mills	do	1,813.2	353.7	2,225.7	185.9
333010	NONFERROUS PLATING METALS:					
	3499 Fabricated metal products, n.e.c		(X)	6.7	(X)	3.7
333111	BLISTER OR ANODE COPPER:					
	3331 Primary copper	1,000 s. tons	(D)	(D)	(D)	(D)
333232	LEAD AND LEAD BASED ALLOYS:					
	3312 Blast furnaces and steel mills	do	14.3	10.7	8.3	3.0
	3315 Steel wire and related products	do	4.0	2.4	3.2	1.0
	3351 Copper rolling and drawing	do	3.9	2.2	5.4	1.7
	3354 Aluminum extruded products	do	.1	.2	(D)	(D)
	3356 Nonferrous rolling and drawing, n.e.c	do	29.9	19.1	21.9	8.4
333233	REFINED UNALLOYED LEAD:					
	3341 Secondary nonferrous metals	do	25.8	15.0	25.3	7.3
	3691 Storage batteries	do	301.2	177.0	254.7	76.6
	3692 Primary batteries, dry and wet	do	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
333234	ANTIMONIAL LEAD:					
	3691 Storage batteries	1,000 s. tons	378.9	248.6	340.0	110.1
	3692 Primary batteries, dry and wet	do	-	-	(D)	(D)
333235	CALCIUM ALLOYED LEAD:					
	3691 Storage batteries	do	*25.6	17.4	(X)	(D)
333903	PRECIOUS METALS, ALL FORMS:					
	3661 Telephone and telegraph apparatus	1,000 troy oz	(D)	(D)	(X)	(D)
	3662 Radio and television communication equipment	do	(S)	10.9	(X)	(D)
	3671 Electron tubes, receiving type	do	160.7	5.2	(X)	(X)
	3674 Semiconductors, related devices	do	(S)	71.7	(X)	(D)
	3675 Electronic capacitors	do	(S)	30.7	(X)	(D)
	3676 Electronic resistors	do	(S)	9.3	(X)	(D)
	3677 Electronic coils and transformers	do	(S)	.5	(X)	(D)
	3678 Electronic connectors	do	(S)	32.1	(X)	(D)
	3679 Electronic components, n.e.c	do	(S)	49.7	(X)	(D)
	3851 Ophthalmic goods	do	(S)	9.7	(X)	25.0
	3911 Jewelry, precious metal	do	(S)	390.1	(X)	291.0
333909	OTHER NONFERROUS METALS AND ALLOYS:					
	3351 Copper rolling and drawing	1,000 s. tons	2.3	11.2	(D)	(D)
	3353 Aluminum sheet, plate, and foil	do	24.5	30.3	82.8	31.0
	3354 Aluminum extruded products	do	(D)	(D)	2.5	2.1
	3356 Nonferrous rolling and drawing, n.e.c	do	(NA)	723.9	131.1	251.1
333970	NONFERROUS METAL REFINERY SHAPES:					
	3661 Telephone and telegraph apparatus	do	(D)	(D)	(X)	(D)
333971	NICKEL AND NICKEL-BASE ALLOYS:					
	3312 Blast furnaces and steel mills	do	50.9	200.5	54.0	132.1
	3351 Copper rolling and drawing	do	4.8	21.9	7.1	19.8
	3354 Aluminum extruded products	do	(Z)	(Z)	(D)	(D)
	3356 Nonferrous rolling and drawing, n.e.c	do	68.6	308.3	49.8	183.6
333973	MAGNESIUM AND MAGNESIUM-BASE ALLOYS:					
	3321 Gray iron foundries	do	33.5	33.4	(X)	(D)
	3322 Malleable iron foundries	do	.1	.1	(S)	(D)
	3324 Steel investment foundries	do	(D)	(D)	(X)	(D)
	3325 Steel foundries, n.e.c	do	**.2	.2	.9	.4
	3351 Copper rolling and drawing	do	.2	.3	.2	.2
	3353 Aluminum sheet, plate, and foil	do	36.3	69.7	23.2	16.4
	3354 Aluminum extruded products	do	3.6	6.8	11.3	2.6
	3356 Nonferrous rolling and drawing, n.e.c	do	9.9	17.5	22.7	14.8
	3361 Aluminum foundries	do	2.9	6.2	3.5	2.4
	3362 Brass, bronze, copper foundries	do	(D)	(D)	.3	.3
	3369 Nonferrous foundries, n.e.c	do	*9.5	14.9	3.2	3.8
333974	MAGNESIUM INGOT:					
	3341 Secondary nonferrous metals	do	1.3	3.7	(D)	(D)
333975	TIN:					
	3312 Blast furnaces and steel mills	do	20.1	185.1	25.7	86.8
333976	REFINED UNALLOYED TIN:					
	3357 Nonferrous wiredrawing, insulating	do	1.7	15.1	2.0	4.4
333977	GERMANIUM:					
	3621 Motors and generators	1,000 lb	-	-	(X)	(D)
	3662 Radio and television communication equipment	do	(S)	2.0	(S)	.3
	3671 Electron tubes, receiving type	do	(S)	.2	(X)	(X)
	3674 Semiconductors, related devices	do	(S)	2.6	9.1	1.7
	3677 Electronic coils and transformers	do	(Z)	(Z)	-	-
	3678 Electronic connectors	do	-	.1	-	-
	3679 Electronic components, n.e.c	do	(D)	(D)	-	-
333981	MOLYBDENUM AND MOLYBDENUM-BASE ALLOYS:					
	3356 Nonferrous rolling and drawing, n.e.c	Million lb	2.3	11.0	3.3	6.0
333982	COBALT:					
	3312 Blast furnaces and steel mills	do	1.7	9.0	.9	4.6
333983	TIN AND TIN-BASED ALLOYS:					
	3351 Copper rolling and drawing	do	2.8	13.2	2.3	4.7
	3353 Aluminum sheet, plate, and foil	do	(D)	(D)	(D)	(D)
	3354 Aluminum extruded products	do	(Z)	(X)	(X)	(D)
	3356 Nonferrous rolling and drawing, n.e.c	do	16.7	71.8	8.8	17.6
333985	VANADIUM AND VANADIUM-BASE ALLOYS:					
	3356 Nonferrous rolling and drawing, n.e.c	do	(D)	(D)	(D)	(D)
333987	TUNGSTEN AND TUNGSTEN-BASE ALLOYS:					
	3356 Nonferrous rolling and drawing, n.e.c	do	(D)	(D)	6.1	16.8

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
334130	LEAD-BASE AND TIN-BASE SOLDER:					
	3411 Metal cans	1,000 s. tons	**39.1	30.8	(D)	(D)
	3412 Metal barrels, drums, and pails	do	(D)	(D)	(D)	(D)
335002	NONFERROUS METAL MILL SHAPES AND FORMS:					
	3292 Asbestos products	do	(D)	(D)	(X)	(D)
	3293 Gaskets, packing, sealing devices	do	(D)	(D)	(X)	(D)
	3841 Surgical and medical instruments	do	(S)	14.1	(X)	(X)
	3842 Surgical appliances and supplies	do	(S)	5.0	(X)	10.4
	3843 Dental equipment and supplies	do	**4.8	9.7	(X)	(X)
	3993 Signs and advertising displays	do	(X)	33.1	(X)	24.0
335005	NONFERROUS METAL WIRE:					
	3641 Electric lamps		(X)	85.7	(X)	(D)
335009	ALUMINUM AND ALUMINUM-BASE ALLOY RODS:					
	3357 Nonferrous wiredrawing, insulating	Million lb	448.5	231.9	731.3	229.2
335107	COPPER AND COPPER-BASE ALLOY FORGING STOCK:					
	3462 Iron and steel forgings	do	(S)	.4	(X)	(D)
	3463 Nonferrous forgings	do	18.0	12.8	20.8	9.4
335112	COPPER AND COPPER-BASE ALLOY WIRE FOR REDRAWING:					
	3357 Nonferrous wiredrawing, insulating	do	283.5	191.7	181.2	105.3
335133	UNALLOYED COPPER RODS:					
	3357 Nonferrous wiredrawing, insulating	do	1,607.5	1,106.1	1,337.0	706.3
335135	COPPER-BASE ALLOY RODS:					
	3357 Nonferrous wiredrawing, insulating	do	175.3	123.7	167.8	89.0
335511	ALUMINUM AND ALUMINUM-BASE ALLOY FOR REDRAWING:					
	3357 Nonferrous wiredrawing, insulating	do	209.3	100.0	124.1	41.4
335601	TITANIUM AND TITANIUM-BASE ALLOY:					
	3724 Aircraft engines and engine parts	1,000 lb	1,810.1	16.3	.8	5.9
	3728 Aircraft equipment, n.e.c	do	(S)	6.6	(S)	18.5
	3761 Guided missiles, space vehicles	do	48.9	.6	-	-
	3764 Space propulsion units and parts	do	(D)	(D)	.1	.5
	3769 Space vehicle equipment, n.e.c	do	(S)	.4	(D)	(D)
335608	OTHER WIRE FOR REDRAWING:					
	3357 Nonferrous wiredrawing, insulating	Million lb	(NA)	12.8	(S)	17.1
335609	NONFERROUS METAL MILL SHAPES AND FORMS:					
	3357 Nonferrous wiredrawing, insulating	do	53.3	57.6	26.6	14.4
	3541 Machine tools, metal-cutting	do	(D)	(D)	(D)	(D)
	3542 Machine tools, metal-forming	do	(S)	(D)	(X)	1.0
	3544 Special dies, tools, jigs, etc	do	(X)	2.6	(D)	(D)
	3545 Machine tool accessories	do	(S)	7.1	(X)	9.3
	3546 Power driven handtools	do	(D)	(D)	(D)	(D)
	3549 Metalworking machinery, n.e.c	do	(D)	(D)	(D)	(D)
	3553 Woodworking machinery	do	*.7	.7	(X)	(D)
	3559 Special industry machinery, n.e.c	do	(X)	4.5	(X)	24.0
	3561 Pumps and pumping equipment	do	(S)	.4	(X)	(D)
	3563 Air and gas compressors	do	(D)	(D)	(S)	9.3
	3565 Industrial patterns	do	(Z)	(Z)	(Z)	(Z)
	3569 General industrial machinery, n.e.c	do	(X)	2.1	(X)	2.0
	3592 Carburetors, pistons, rings, etc	do	(D)	.6	(D)	(D)
	3599 Machinery, except electrical, n.e.c	do	(S)	5.7	(X)	(D)
	3643 Current-carrying wiring devices	do	(X)	4.2	(X)	36.0
	3644 Noncurrent-carrying wiring devices	do	(X)	(D)	(X)	4.0
	3661 Telephone and telegraph apparatus	do	(D)	(D)	(X)	(D)
	3694 Engine electrical equipment	do	(S)	23.8	(X)	20.0
	3699 Electrical equipment, supplies, n.e.c	do	(S)	.6	(X)	15.0
	3873 Watches, clocks, and watchcases	do	*.4	1.8	(X)	18.0
335616	NICKEL AND NICKEL-BASE ALLOY:					
	3451 Screw machine products	do	(S)	.8	(NA)	(D)
	3452 Bolts, nuts, rivets, and washers	do	*2.2	8.3	(NA)	(D)
	3674 Semiconductors, related devices	do	.3	1.6	1.5	4.2
	3675 Electronic capacitors	do	(D)	(D)	(D)	(D)
	3676 Electronic resistors	do	(S)	.7	(D)	(D)
	3677 Electronic coils and transformers	do	-	-	(S)	.4
	3678 Electronic connectors	do	(D)	(D)	(D)	(D)
	3679 Electronic components, n.e.c	do	*1.1	4.3	.8	3.0
335627	TITANIUM AND TITANIUM-BASE ALLOY INGOTS:					
	3462 Iron and steel forgings	do	9.2	27.2	10.4	21.3
	3463 Nonferrous forgings	do	**6.3	21.3	(D)	(D)

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
335628	MILL SHAPES:					
	3462 Iron and steel forgings	Million lb...	.7	3.8	.8	2.1
	3463 Nonferrous forgings	do...	(S)	29.5	(D)	(D)
335691	TANTALUM MILL PRODUCTS:					
	3662 Radio and television communication equipment	1,000 lb...	(Z)	(Z)	-	-
	3671 Electron tubes, receiving type	do...	(Z)	(Z)	(X)	(X)
	3674 Semiconductors, related devices	do...	(D)	(D)	-	-
	3675 Electronic capacitors	do...	233.7	11.6	235.9	9.0
	3679 Electronic components, n.e.c	do...	(D)	(D)	(D)	(D)
335693	MOLYBDENUM ROLLED, DRAWN, OR EXTRUDED:					
	3462 Iron and steel forgings	Million lb...	-	-	(D)	(D)
	3662 Radio and television communication equipment	do...	(S)	.1	-	-
	3671 Electron tubes, receiving type	do...	(S)	3.6	(X)	(X)
	3674 Semiconductors, related devices	do...	(D)	(D)	(S)	.1
	3679 Electronic components, n.e.c	do...	(S)	1.0	(D)	(D)
335697	ZINC AND ZINC-BASED ALLOY MILL SHAPES AND FORMS:					
	3691 Storage batteries	1,000 s. tons	(D)	(D)	(D)	(D)
	3692 Primary batteries, dry and wet	do...	**27.8	26.1	21.0	10.6
335698	VANADIUM AND VANADIUM-BASE ALLOY FORGING STOCK:					
	3462 Iron and steel forgings	Million lb...	(D)	(D)	-	-
335699	MANGANESE AND MANGANESE-BASE ALLOY FORGING STOCK:					
	3462 Iron and steel forgings	do...	(D)	(D)	(D)	(D)
335718	ALUMINUM AND ALUMINUM-BASE ALLOY:					
	3357 Nonferrous wiredrawing, insulating	do...	44.8	28.7	161.4	24.6
335733	TUNGSTEN WIRE:					
	3662 Radio and television communication equipment	Mil. meters..	(Z)	(Z)	-	-
	3671 Electron tubes, receiving type	do...	(S)	4.9	(X)	(X)
	3674 Semiconductors, related devices	do...	(D)	(D)	(S)	.1
	3677 Electronic coils and transformers	do...	(D)	(D)	-	-
	3679 Electronic components, n.e.c	do...	.9	.3	(D)	(D)
335762	COMPLETE FLEXIBLE CORD SETS:					
	3633 Household laundry equipment	...	(X)	(D)	(X)	(D)
	3634 Electric housewares and fans	...	(X)	24.2	(X)	16.0
	3635 Household vacuum cleaners	...	(X)	(D)	(X)	(D)
	3639 Household appliances, n.e.c	...	(X)	.9	(X)	(D)
335770	MAGNET WIRE:					
	3544 Special dies, tools, jigs, etc	Million lb...	(S)	(D)	(D)	(D)
	3545 Machine tool accessories	do...	(S)	(D)	(D)	(D)
	3546 Power driven handtools	do...	8.5	11.5	(D)	(D)
	3573 Electronic computing equipment	do...	(S)	2.1	(D)	(D)
	3579 Office machines, typewriters, etc	do...	(S)	(D)	(D)	(D)
	3612 Transformers	do...	*51.7	63.2	(D)	(D)
	3613 Switchgear, switchboard apparatus	do...	6.2	7.6	(D)	(D)
	3621 Motors and generators	do...	**169.0	193.7	(X)	(D)
	3622 Industrial controls	do...	**6.7	7.1	(D)	(D)
	3623 Welding apparatus, electric	do...	303.3	3.3	(X)	(D)
	3629 Electrical industrial apparatus, n.e.c	do...	11.4	15.5	(D)	(D)
	3631 Household cooking equipment	do...	(D)	(D)	(D)	(D)
	3633 Household laundry equipment	do...	(S)	(D)	(D)	(D)
	3634 Electric housewares and fans	do...	6.2	8.4	(D)	(D)
	3635 Household vacuum cleaners	do...	3.3	3.4	(D)	(D)
	3639 Household appliances, n.e.c	do...	(S)	(D)	(D)	(D)
	3645 Residential lighting fixtures	do...	(S)	(D)	(D)	(D)
	3646 Commercial lighting fixtures	do...	(S)	(D)	(D)	(D)
	3648 Lighting equipment, n.e.c	do...	2.2	2.4	(D)	(D)
	3651 Radio and television receiving sets	do...	(S)	4.4	(X)	(D)
	3661 Telephone and telegraph apparatus	do...	9.1	18.0	(D)	(D)
	3662 Radio and television communication equipment	do...	**5.8	7.9	(D)	(D)
	3671 Electron tubes, receiving type	do...	(D)	(D)	(X)	(X)
	3674 Semiconductors, related devices	do...	(S)	(D)	(D)	(D)
	3675 Electronic capacitors	do...	(S)	(D)	(D)	(D)
	3676 Electronic resistors	do...	(D)	(D)	(D)	(D)
	3677 Electronic coils and transformers	do...	**22.8	29.8	(D)	(D)
	3678 Electronic connectors	do...	.1	.2	(D)	(D)
	3679 Electronic components, n.e.c	do...	**2.3	4.0	(S)	(D)
	3693 X-ray apparatus and tubes	do...	(S)	.6	(X)	(X)
	3694 Engine electrical equipment	do...	63.5	65.3	(S)	(X)
	3699 Electrical equipment, supplies, n.e.c	do...	(S)	2.1	(X)	(D)
	3721 Aircraft	do...	(D)	(D)	(X)	(D)
	3724 Aircraft engines and engine parts	do...	(D)	(D)	(X)	(D)
	3728 Aircraft equipment, n.e.c	do...	**.3	.6	(X)	(D)
	3761 Guided missiles, space vehicles	do...	(D)	(D)	-	-
	3769 Space vehicle equipment, n.e.c	do...	(D)	(D)	(X)	(D)
	3873 Watches, clocks, and watchcases	do...	**1.4	2.2	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
335793	ALUMINUM INSULATED WIRE AND CABLE:					
	3544 Special dies, tools, jigs, etc.	Mil. lb (aluminum content)	(S)	(D)	(D)	(D)
	3545 Machine tool accessories	do.	(S)	(D)	(S)	(D)
	3546 Power driven handtools	do.	(D)	(D)	(D)	(D)
	3612 Transformers	do.	(S)	1.4	(S)	(D)
	3613 Switchgear, switchboard apparatus	do.	(S)	1.0	(D)	(D)
	3621 Motors and generators	do.	*.8	.9	(S)	(D)
	3622 Industrial controls	do.	1.0	(D)	(D)	(D)
	3623 Welding apparatus, electric	do.	(D)	(D)	(D)	(D)
	3629 Electrical industrial apparatus, n.e.c.	do.	(D)	(D)	(S)	(D)
	3631 Household cooking equipment	do.	(D)	(D)	(D)	(D)
	3633 Household laundry equipment	do.	(S)	(D)	(D)	(D)
	3634 Electric housewares and fans	do.	(D)	(D)	(D)	(D)
	3639 Household appliances, n.e.c.	do.	(S)	(D)	(D)	(D)
	3643 Current-carrying wiring devices	do.	(D)	(D)	(S)	(D)
	3644 Noncurrent-carrying wiring devices	do.	(D)	(D)	(S)	(D)
	3645 Residential lighting fixtures	do.	(S)	(D)	(S)	(D)
	3646 Commercial lighting fixtures	do.	(S)	(D)	(S)	(D)
	3647 Vehicular lighting equipment	do.	(S)	(D)	(S)	(D)
	3648 Lighting equipment, n.e.c.	do.	.3	.5	(S)	(D)
	3651 Radio and television receiving sets	do.	.5	.1	(S)	(D)
	3661 Telephone and telegraph apparatus	do.	(D)	(D)	(D)	(D)
	3662 Radio and television communication equipment	do.	(S)	4.0	(S)	(D)
	3674 Semiconductors, related devices	do.	(S)	(D)	(S)	(D)
	3675 Electronic capacitors	do.	(S)	(D)	(D)	(D)
	3676 Electronic resistors	do.	(D)	(D)	(D)	(D)
	3677 Electronic coils and transformers	do.	(S)	2.3	(S)	(D)
	3679 Electronic components, n.e.c.	do.	(S)	.3	(S)	(D)
	3693 X-ray apparatus and tubes	do.	(S)	.3	(X)	(X)
	3694 Engine electrical equipment	do.	(D)	(D)	(D)	(D)
	3699 Electrical equipment, supplies, n.e.c.	do.	(S)	2.1	(X)	(D)
	3721 Aircraft	do.	(S)	.4	(D)	(D)
	3724 Aircraft engines and engine parts	do.	(D)	(D)	(D)	(D)
	3728 Aircraft equipment, n.e.c.	do.	(D)	(D)	(D)	(D)
	3761 Guided missiles, space vehicles	do.	-	-	(D)	(D)
336910	ZINC AND ZINC-BASED ALLOY PURCHASED:					
	3631 Household cooking equipment	1,000 s. tons	(D)	(D)	(X)	2.3
	3633 Household laundry equipment	do.	5.2	7.4	(X)	20.0
	3634 Electric housewares and fans	do.	3.0	5.6	(S)	10.0
	3635 Household vacuum cleaners	do.	.8	.8	(NA)	(D)
	3639 Household appliances, n.e.c.	do.	(D)	(D)	(D)	(D)
339913	FERRITES (POWDER AND PASTE):					
	3651 Radio and television receiving sets		(X)	8.4	(X)	2.4
	3662 Radio and television communication equipment		(X)	1.7	(X)	1.6
	3671 Electron tubes, receiving type		(X)	(D)	(X)	(X)
	3677 Electronic coils and transformers		(X)	2.7	(X)	-
	3678 Electronic connectors		(X)	(D)	(X)	-
	3679 Electronic components, n.e.c.		(X)	5.8	(X)	-
340001 340003 340101	METAL CONTAINERS:					
	2047 Dog, cat, and other pet food		(X)	175.7	(X)	111.4
	2079 Shortening and cooking oils		(X)	58.6	(X)	38.3
	2091 Canned and cured seafoods		(X)	57.1	(X)	29.4
	2092 Fresh or frozen packaged fish		(X)	5.7	(X)	3.7
	2812 Alkalies and chlorine		(X)	5.2	(X)	(X)
	2816 Inorganic pigments		(X)	1.0	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c.		(X)	26.5	(X)	(X)
	2821 Plastics materials and resins		(X)	32.5	(X)	(D)
	2822 Synthetic rubber		(X)	12.3	(X)	(D)
	2831 Biological products		(X)	.9	(X)	.4
	2833 Medicinals and botanicals		(X)	4.5	(X)	(D)
	2834 Pharmaceutical preparations		(X)	52.5	(X)	41.1
	2841 Soap and other detergents		(X)	60.4	(X)	40.7
	2842 Polishes and sanitation goods		(X)	104.7	(X)	(X)
	2843 Surface active agents		(X)	15.5	(X)	(X)
	2844 Toilet preparations		(X)	136.8	(X)	129.1
	2851 Paints and allied products		(X)	319.7	(X)	184.0
	2861 Gum and wood chemicals		(X)	2.5	(X)	(X)
	2865 Cyclic crudes and intermediates		(X)	26.9	(X)	(D)
	2869 Industrial organic chemicals, n.e.c.		(X)	115.6	(X)	43.0
	2879 Agricultural chemicals, n.e.c.		(X)	91.8	(X)	(D)
	2891 Adhesives and sealants		(X)	42.0	(X)	31.0
	2893 Printing ink		(X)	12.0	(X)	(D)
	2911 Petroleum refining		(X)	73.4	(X)	72.8
	2992 Lubricating oils and greases		(X)	58.2	(X)	32.8

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
341101	METAL CANS:					
	2022 Cheese, natural and processed	.....	(X)	(D)	(X)	(X)
	2023 Condensed and evaporated milk	.....	(X)	78.4	(X)	(X)
	2024 Ice cream and frozen desserts	.....	(X)	(D)	(X)	(X)
	2026 Fluid milk	.....	(X)	19.8	(X)	(X)
	2032 Canned specialties	.....	(X)	424.5	(X)	223.0
	2033 Canned fruits and vegetables	.....	(X)	942.0	(X)	539.5
	2037 Frozen fruits and vegetables	.....	(X)	64.3	(X)	48.6
	2038 Frozen specialties	.....	(X)	7.2	(X)	5.0
	2065 Confectionery products	.....	(X)	33.7	(X)	(D)
	2082 Malt beverages	.....	(X)	1,659.8	(X)	(D)
	2086 Bottled and canned soft drinks	.....	(X)	1,221.7	(X)	(D)
	2099 Food preparations, n.e.c	.....	(X)	41.0	(X)	(D)
341151	LIDS, ENDS, AND PARTS FOR METAL CANS:					
	3411 Metal cans	.....	(X)	331.6	(X)	(D)
	3412 Metal barrels, drums, and pails	.....	(X)	15.4	(X)	(D)
	3465 Automotive stampings	.....	(X)	(D)	(X)	(D)
	3469 Metal stampings, n.e.c	.....	(X)	.5	(X)	(D)
341220	METAL DRUMS:					
	2079 Shortening and cooking oils	.....	(X)	4.4	(X)	(D)
342301	STONECUTTING TOOLS AND ACCESSORIES:					
	3281 Cut stone and stone products	1,000 s. tons	(X)	2.9	(X)	(X)
342901	FURNITURE AND BUILDERS' HARDWARE:					
	2511 Wood household furniture	.....	(X)	97.0	(X)	83.0
	2512 Upholstered household furniture	.....	(X)	23.7	(X)	28.6
	2514 Metal household furniture	.....	(X)	35.2	(X)	17.5
	2517 Wood television and radio cabinets	.....	(X)	11.2	(X)	13.1
	2519 Household furniture, n.e.c	.....	(X)	3.2	(X)	(D)
	2521 Wood office furniture	.....	(X)	18.7	(X)	10.5
	2522 Metal office furniture	.....	(X)	48.8	(X)	34.4
	2531 Public building, related furniture	.....	(X)	15.5	(X)	12.0
	2541 Wood partitions and fixtures	.....	(X)	21.0	(X)	18.9
	2542 Metal partitions and fixtures	.....	(X)	15.7	(X)	10.7
	2599 Furniture and fixtures, n.e.c	.....	(X)	6.1	(X)	3.8
342902	METAL CASKET AND CASKET SHELL HARDWARE:					
	3995 Burial caskets	.....	(X)	53.7	(X)	(X)
342903	METAL HARDWARE:					
	3585 Refrigeration, heating equipment	.....	(X)	19.7	(X)	24.0
	3632 Household refrigerators, freezers	.....	(X)	28.8	(X)	24.0
342940	BUILDERS' HARDWARE:					
	2431 Millwork	.....	(X)	134.2	(X)	78.7
	2439 Structural wood members, n.e.c	.....	(X)	6.3	(X)	2.4
	2452 Prefabricated wood buildings	.....	(X)	14.5	(X)	11.2
342983	TRUNK AND LUGGAGE HARDWARE:					
	3161 Luggage	.....	(X)	34.0	(X)	24.2
	3171 Women's handbags and purses	.....	(X)	2.1	(X)	8.3
	3172 Personal leather goods, n.e.c	.....	(X)	1.6	(X)	(D)
342986	HOSE FITTINGS AND COUPLINGS:					
	3041 Rubber, plastics hose and belting	.....	(X)	16.6	(X)	12.6
	3069 Fabricated rubber products, n.e.c	.....	(X)	7.1	(X)	5.2
343201	METAL PLUMBING FIXTURES, FITTINGS, AND TRIM:					
	2451 Mobile homes	.....	(X)	52.5	(X)	(D)
	3792 Travel trailers and campers	.....	(X)	18.8	(X)	25.0
343301	NON-ELECTRIC HEATING EQUIPMENT:					
	2451 Mobile homes	.....	(X)	41.6	(X)	(D)
	3792 Travel trailers and campers	.....	(X)	19.8	(X)	17.0
343309	NON-ELECTRIC HEATING EQUIPMENT PARTS AND ATTACHMENTS:					
	3433 Heating equipment, except electric	.....	(X)	33.5	(X)	32.0
344001	FABRICATED STRUCTURAL METAL PRODUCTS:					
	3511 Turbines, turbine generator sets	.....	(X)	(D)	(X)	(D)
	3519 Internal combustion engines, n.e.c	.....	(X)	9.4	(X)	(D)
	3531 Construction machinery	.....	(X)	121.6	(X)	22.0
	3532 Mining machinery	.....	(X)	32.5	(X)	(D)
	3536 Hoists, cranes, and monorails	.....	(X)	14.9	(X)	(D)
344112	IRON AND STEEL FABRICATED STRUCTURAL METAL FOR BUILDINGS:					
	2439 Structural wood members, n.e.c	1,000 s. tons	**8.8	7.6	(NA)	(D)
	2452 Prefabricated wood buildings	do.....	46.8	29.9	25.2	8.6

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977		1972	
			Quantity	Delivered cost (million dollars)	Quantity	Delivered cost (million dollars)
344117	ALUMINUM FABRICATED STRUCTURAL METAL FOR BUILDINGS:					
	2452 Prefabricated wood buildings	1,000 s. tons	(S)	.2	(S)	(Z)
344201	METAL DOORS AND DOOR UNITS, WINDOW AND WINDOW UNITS:					
	2451 Mobile homes	.....	(X)	86.6	(X)	(D)
	3792 Travel trailers and campers	.....	(X)	38.8	(X)	(D)
344211	METAL DOORS AND DOOR UNITS:					
	2452 Prefabricated wood buildings	Thousands....	123.1	13.0	99.9	4.3
344221	METAL WINDOW AND WINDOW UNITS:					
	2452 Prefabricated wood buildings	do.....	*293.6	14.1	431.4	9.7
344301	METAL TANKS, HEAT EXCHANGERS, STEAM CONDENSERS, AND OTHER BOILER PRODUCTS:					
	3511 Turbines, turbine generator sets	.....	(X)	30.4	(X)	(D)
	3519 Internal combustion engines, n.e.c	.....	(X)	35.6	(X)	16.0
	3551 Food products machinery	.....	(X)	11.3	(X)	10.0
	3559 Special industry machinery, n.e.c	.....	(X)	41.5	(X)	51.0
	3561 Pumps and pumping equipment	.....	(X)	9.6	(X)	14.0
	3563 Air and gas compressors	.....	(X)	40.0	(X)	21.3
	3569 General industrial machinery, n.e.c	.....	(X)	18.3	(X)	7.3
	3586 Measuring and dispensing pumps	.....	(X)	.6	(X)	(D)
344309	PARTS SPECIALLY DESIGNED FOR STEEL POWER BOILERS:					
	3441 Fabricated structural metal	.....	(X)	(D)	(X)	(D)
	3443 Fabricated platework, boiler shop	.....	(X)	75.6	(X)	(D)
344401	SHEET METAL PRODUCTS:					
	3573 Electronic computing equipment	.....	(X)	123.0	(X)	(D)
	3574 Calculating, accounting machines	.....	(X)	2.2	(X)	(D)
	3576 Scales, balances, except laboratory	.....	(X)	.9	(X)	(D)
	3579 Office machines, typewriters, etc	.....	(X)	14.3	(X)	5.0
	3613 Switchgear, switchboard apparatus	.....	(X)	4.7	(X)	7.0
	3622 Industrial controls	.....	(X)	16.0	(X)	22.0
	3671 Electron tubes, receiving type	.....	(X)	3.0	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	1.1	(X)	(D)
	3675 Electronic capacitors	.....	(X)	.2	(X)	(D)
	3676 Electronic resistors	.....	(X)	(D)	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	2.2	(X)	(D)
	3678 Electronic connectors	.....	(X)	.7	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	14.3	(X)	(D)
	3792 Travel trailers and campers	.....	(X)	16.3	(X)	(D)
	3811 Engineering, scientific instruments	.....	(X)	12.6	(X)	12.0
	3822 Environmental controls	.....	(X)	2.0	(X)	(D)
	3823 Process control instruments	.....	(X)	6.8	(X)	(D)
	3824 Fluid meters and counting devices	.....	(X)	3.2	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	15.2	(X)	(D)
	3829 Measuring, controlling devices, n.e.c	.....	(X)	7.1	(X)	(D)
	3944 Games, toys, children's vehicles	.....	(X)	.2	(X)	(X)
344451	METAL SIDING:					
	2451 Mobile homes	1,000 s. tons	(S)	104.7	(X)	(D)
345001	BOLTS, NUTS, SCREWS, RIVETS, AND SCREW MACHINE PRODUCTS:					
	2451 Mobile homes	.....	(X)	26.1	(X)	(D)
	3429 Hardware, n.e.c	.....	(X)	76.2	(X)	59.0
	3433 Heating equipment, except electric	.....	(X)	5.9	(X)	6.0
	3465 Automotive stampings	.....	(X)	67.7	(X)	39.0
	3466 Crowns and closures	.....	(X)	.3	(X)	(NA)
	3469 Metal stampings, n.e.c	.....	(X)	25.6	(X)	23.0
	3493 Steel springs, except wire	.....	(X)	6.2	(X)	(D)
	3494 Valves and pipe fittings	.....	(X)	121.4	(X)	49.0
	3495 Wire springs	.....	(X)	(D)	(X)	(D)
	3496 Miscellaneous fabricated wire products	.....	(X)	3.5	(X)	(D)
	3511 Turbines, turbine generator sets	.....	(X)	9.1	(X)	9.0
	3519 Internal combustion engines, n.e.c	.....	(X)	87.1	(X)	29.0
	3523 Farm machinery and equipment	.....	(X)	96.3	(X)	(D)
	3524 Lawn and garden equipment	.....	(X)	23.6	(X)	(D)
	3531 Construction machinery	.....	(X)	83.2	(X)	48.0
	3532 Mining machinery	.....	(X)	6.8	(X)	6.0
	3536 Hoists, cranes, and monorails	.....	(X)	5.7	(X)	(D)
	3541 Machine tools, metal-cutting	.....	(X)	10.0	(X)	9.0
	3542 Machine tools, metal-forming	.....	(X)	5.5	(X)	3.0
	3544 Special dies, tools, jigs, etc	.....	(X)	7.4	(X)	(D)
	3545 Machine tool accessories	.....	(X)	7.2	(X)	1.0
	3546 Power driven handtools	.....	(X)	8.5	(X)	(D)
	3547 Rolling mill machinery	.....	(X)	1.5	(X)	(D)
	3549 Metalworking machinery, n.e.c	.....	(X)	3.2	(X)	(D)
	3559 Special industry machinery, n.e.c	.....	(X)	17.9	(X)	10.0
	3561 Pumps and pumping equipment	.....	(X)	24.1	(X)	26.0
	3562 Ball and roller bearings	.....	(X)	2.6	(X)	4.0
	3563 Air and gas compressors	.....	(X)	13.8	(X)	10.0
	3564 Blowers and fans	.....	(X)	7.4	(X)	(D)
	3565 Industrial patterns	.....	(X)	.1	(X)	(X)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
345001	BOLTS, NUTS, SCREWS, RIVETS, AND SCREW MACHINE PRODUCTS--Con.					
3566	Speed changers, drives, and gears	.....	(X)	8.0	(X)	3.0
3569	General industrial machinery, n.e.c	.....	(X)	10.4	(X)	7.0
3573	Electronic computing equipment	.....	(X)	33.8	(X)	(D)
3574	Calculating, accounting machines	.....	(X)	4.3	(X)	(D)
3576	Scales, balances, except laboratory	.....	(X)	2.5	(X)	(D)
3579	Office machines, typewriters, etc	.....	(X)	15.7	(X)	11.5
3581	Automatic merchandising machines	.....	(X)	6.7	(X)	12.3
3582	Commercial laundry equipment	.....	(X)	.5	(X)	(D)
3585	Refrigeration, heating equipment	.....	(X)	74.7	(X)	46.0
3586	Measuring and dispensing pumps	.....	(X)	3.9	(X)	(D)
3589	Service industry machinery, n.e.c	.....	(X)	7.6	(X)	6.0
3592	Carburetors, pistons, rings, etc	.....	(X)	16.9	(X)	(D)
3599	Machinery, except electrical, n.e.c	.....	(X)	13.6	(X)	(D)
3612	Transformers	.....	(X)	9.3	(X)	10.0
3613	Switchgear, switchboard apparatus	.....	(X)	38.3	(X)	29.0
3621	Motors and generators	.....	(X)	28.2	(X)	24.0
3622	Industrial controls	.....	(X)	19.1	(X)	12.0
3631	Household cooking equipment	.....	(X)	17.5	(X)	10.0
3632	Household refrigerators, freezers	.....	(X)	25.6	(X)	19.0
3633	Household laundry equipment	.....	(X)	26.5	(X)	21.0
3634	Electric housewares and fans	.....	(X)	30.8	(X)	18.0
3635	Household vacuum cleaners	.....	(X)	4.6	(X)	(D)
3639	Household appliances, n.e.c	.....	(X)	14.3	(X)	13.0
3643	Current-carrying wiring devices	.....	(X)	24.2	(X)	13.0
3644	Noncurrent-carrying wiring devices	.....	(X)	16.6	(X)	22.0
3645	Residential lighting fixtures	.....	(X)	8.4	(X)	(D)
3646	Commercial lighting fixtures	.....	(X)	8.7	(X)	(D)
3647	Vehicular lighting equipment	.....	(X)	11.6	(X)	(D)
3648	Lighting equipment, n.e.c	.....	(X)	5.1	(X)	(D)
3651	Radio and television receiving sets	.....	(X)	15.4	(X)	27.0
3661	Telephone and telegraph apparatus	.....	(X)	30.0	(X)	(D)
3662	Radio and television communication equipment	.....	(X)	76.8	(X)	53.2
3671	Electron tubes, receiving type	.....	(X)	2.1	(X)	(X)
3674	Semiconductors, related devices	.....	(X)	2.2	(X)	(D)
3675	Electronic capacitors	.....	(X)	1.2	(X)	2.0
3676	Electronic resistors	.....	(X)	1.8	(X)	4.0
3677	Electronic coils and transformers	.....	(X)	2.0	(X)	6.0
3678	Electronic connectors	.....	(X)	12.0	(X)	5.0
3679	Electronic components, n.e.c	.....	(X)	23.2	(X)	11.0
3694	Engine electrical equipment	.....	(X)	35.7	(X)	15.0
3711	Motor vehicles and car bodies	.....	(X)	(D)	(X)	430.0
3713	Truck and bus bodies	.....	(X)	11.7	(X)	13.0
3714	Motor vehicle parts, accessories	.....	(X)	320.1	(X)	275.0
3715	Truck trailers	.....	(X)	13.4	(X)	16.0
3716	Motor homes	.....	(X)	12.8	(X)	(X)
3721	Aircraft	.....	(X)	123.8	(X)	65.0
3724	Aircraft engines and engine parts	.....	(X)	27.9	(X)	15.0
3728	Aircraft equipment, n.e.c	.....	(X)	33.7	(X)	38.0
3731	Ship building and repairing	.....	(X)	18.1	(X)	(D)
3732	Boat building and repairing	.....	(X)	8.3	(X)	(D)
3743	Railroad equipment	.....	(X)	21.4	(X)	15.0
3761	Guided missiles, space vehicles	.....	(X)	7.0	(X)	20.0
3764	Space propulsion units and parts	.....	(X)	(D)	(X)	2.0
3769	Space vehicle equipment, n.e.c	.....	(X)	1.1	(X)	2.0
3792	Travel trailers and campers	.....	(X)	14.0	(X)	5.0
3811	Engineering, scientific instruments	.....	(X)	11.5	(X)	9.0
3822	Environmental controls	.....	(X)	19.6	(X)	15.0
3823	Process control instruments	.....	(X)	9.4	(X)	15.0
3824	Fluid meters and counting devices	.....	(X)	9.9	(X)	5.0
3825	Instruments to measure electricity	.....	(X)	14.0	(X)	7.0
3829	Measuring, controlling devices, n.e.c	.....	(X)	7.7	(X)	2.0
3841	Surgical and medical instruments	.....	(X)	12.7	(X)	(X)
3842	Surgical appliances and supplies	.....	(X)	5.6	(X)	18.0
3843	Dental equipment and supplies	.....	(X)	5.1	(X)	(X)
3861	Photographic equipment and supplies	.....	(X)	20.3	(X)	6.0
3873	Watches, clocks, and watchcases	.....	(X)	6.8	(X)	22.0
346326	PURCHASED TITANIUM AND TITANIUM-BASE ALLOY:					
3721	Aircraft	Million lb...	*1.9	37.0	1.1	12.4
3724	Aircraft engines and engine parts	do.....	**9.8	62.6	12.8	50.0
3728	Aircraft equipment, n.e.c	do.....	(S)	4.2	.5	4.9
3761	Guided missiles, space vehicles	do.....	81.1	1.4	-	-
3764	Space propulsion units and parts	do.....	(D)	(D)	(D)	(D)
3769	Space vehicle equipment, n.e.c	do.....	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
346901	METAL STAMPINGS:					
	3261 Vitreous plumbing fixtures		(X)	(D)	(X)	(X)
	3262 Vitreous china food utensils		(X)	(D)	(X)	(X)
	3263 Fine earthenware food utensils		(X)	(D)	(X)	(X)
	3264 Porcelain electrical supplies		(X)	(D)	(X)	(X)
	3269 Pottery products, n.e.c		(X)	(D)	(X)	(X)
	3411 Metal cans		(X)	3.2	(X)	(D)
	3412 Metal barrels, drums, and pails		(X)	2.7	(X)	(D)
	3431 Metal sanitary ware		(X)	3.5	(X)	(D)
	3432 Plumbing fittings and brass goods		(X)	11.0	(X)	(D)
	3433 Heating equipment, except electric		(X)	4.4	(X)	9.0
	3494 Valves and pipe fittings		(X)	13.3	(X)	12.0
	3498 Fabricated pipe and fittings		(X)	.7	(X)	(D)
	3511 Turbines, turbine generator sets		(X)	(D)	(X)	(D)
	3519 Internal combustion engines, n.e.c		(X)	48.4	(X)	28.0
	3523 Farm machinery and equipment		(X)	48.2	(X)	(D)
	3524 Lawn and garden equipment		(X)	29.1	(X)	(D)
	3531 Construction machinery		(X)	12.2	(X)	32.0
	3532 Mining machinery		(X)	1.2	(X)	(D)
	3536 Hoists, cranes, and monorails		(X)	1.0	(X)	(D)
	3559 Special industry machinery, n.e.c		(X)	2.9	(X)	(D)
	3564 Blowers and fans		(X)	5.4	(X)	(D)
	3569 General industrial machinery, n.e.c		(X)	7.5	(X)	11.0
	3573 Electronic computing equipment		(X)	67.4	(X)	(D)
	3574 Calculating, accounting machines		(X)	14.6	(X)	(D)
	3576 Scales, balances, except laboratory		(X)	1.8	(X)	(D)
	3579 Office machines, typewriters, etc		(X)	37.5	(X)	6.0
	3581 Automatic merchandising machines		(X)	7.8	(X)	(D)
	3582 Commercial laundry equipment		(X)	1.3	(X)	(D)
	3585 Refrigeration, heating equipment		(X)	127.5	(X)	85.0
	3589 Service industry machinery, n.e.c		(X)	2.9	(X)	13.0
	3621 Motors and generators		(X)	57.6	(X)	30.0
	3631 Household cooking equipment		(X)	27.5	(X)	6.2
	3632 Household refrigerators, freezers		(X)	25.8	(X)	11.0
	3633 Household laundry equipment		(X)	(D)	(X)	(D)
	3634 Electric housewares and fans		(X)	29.6	(X)	(D)
	3635 Household vacuum cleaners		(X)	(D)	(X)	(D)
	3639 Household appliances, n.e.c		(X)	12.4	(X)	6.3
	3651 Radio and television receiving sets		(X)	45.6	(X)	80.0
	3662 Radio and television communication equipment		(X)	41.7	(X)	72.0
	3671 Electron tubes, receiving type		(X)	15.5	(X)	(X)
	3674 Semiconductors, related devices		(X)	68.6	(X)	59.0
	3675 Electronic capacitors		(X)	7.3	(X)	3.0
	3676 Electronic resistors		(X)	8.5	(X)	7.0
	3677 Electronic coils and transformers		(X)	14.0	(X)	6.0
	3678 Electronic connectors		(X)	12.2	(X)	4.0
	3679 Electronic components, n.e.c		(X)	27.4	(X)	33.0
	3691 Storage batteries		(X)	9.0	(X)	(D)
	3692 Primary batteries, dry and wet		(X)	24.9	(X)	(D)
	3731 Ship building and repairing		(X)	2.8	(X)	(D)
	3732 Boat building and repairing		(X)	.3	(X)	(D)
	3811 Engineering, scientific instruments		(X)	3.9	(X)	5.0
	3822 Environmental controls		(X)	8.9	(X)	(D)
	3823 Process control instruments		(X)	6.6	(X)	(D)
	3824 Fluid meters and counting devices		(X)	2.9	(X)	(D)
	3825 Instruments to measure electricity		(X)	6.5	(X)	(D)
	3829 Measuring, controlling devices, n.e.c		(X)	1.7	(X)	(D)
	3861 Photographic equipment and supplies		(X)	30.8	(X)	21.0
	3963 Buttons		(X)	.6	(X)	(D)
	3964 Needles, pins, and fasteners		(X)	5.3	(X)	(D)
349012	FABRICATED WIRE PRODUCTS, INCLUDING WIRE ROPE, CABLE, AND SPRINGS, ETC.:					
	3292 Asbestos products		(X)	(D)	(X)	(D)
	3293 Gaskets, packing, sealing devices		(X)	10.4	(X)	(D)
	3429 Hardware, n.e.c		(X)	7.6	(X)	(D)
	3431 Metal sanitary ware		(X)	(D)	(X)	(D)
	3432 Plumbing fittings and brass goods		(X)	.6	(X)	(D)
	3494 Valves and pipe fittings		(X)	5.9	(X)	11.0
	3531 Construction machinery		(X)	41.4	(X)	22.0
	3532 Mining machinery		(X)	5.3	(X)	(D)
	3536 Hoists, cranes, and monorails		(X)	5.6	(X)	(D)
	3811 Engineering, scientific instruments		(X)	2.2	(X)	(D)
	3822 Environmental controls		(X)	1.4	(X)	11.0
	3823 Process control instruments		(X)	4.4	(X)	4.0
	3824 Fluid meters and counting devices		(X)	(D)	(X)	1.0
	3825 Instruments to measure electricity		(X)	8.6	(X)	3.0
	3829 Measuring, controlling devices, n.e.c		(X)	.6	(X)	1.0

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
349013	WIRE RACKS, GRILLS, SPRINGS, AND OTHER FABRICATED NONELECTRIC WIRE PRODUCTS:					
	3631 Household cooking equipment	.....	(X)	20.7	(X)	15.0
	3633 Household laundry equipment	.....	(X)	6.4	(X)	6.0
	3634 Electric housewares and fans	.....	(X)	6.0	(X)	5.0
	3635 Household vacuum cleaners	.....	(X)	2.0	(X)	(D)
	3639 Household appliances, n.e.c	.....	(X)	1.1	(X)	1.0
349401	VALVES AND ROPE FITTINGS, EXCEPT PLUMBERS' BRASS GOODS AND FITTINGS:					
	3531 Construction machinery	.....	(X)	55.6	(X)	37.0
	3532 Mining machinery	.....	(X)	5.7	(X)	(D)
	3533 Oilfield machinery	.....	(X)	40.4	(X)	(D)
	3536 Hoists, cranes, and monorails	.....	(X)	2.1	(X)	(D)
349402	FABRICATED METAL PIPE, VALVES, AND PIPE FITTINGS:					
	3433 Heating equipment, except electric	.....	(X)	8.9	(X)	14.0
	3441 Fabricated structural metal	.....	(X)	22.1	(X)	(D)
	3443 Fabricated platework, boiler shop	.....	(X)	133.6	(X)	3.0
	3444 Sheet metalwork	.....	(X)	48.9	(X)	(D)
	3559 Special industry machinery, n.e.c	.....	(X)	21.5	(X)	24.0
	3561 Pumps and pumping equipment	.....	(X)	11.6	(X)	14.0
	3563 Air and gas compressors	.....	(X)	9.0	(X)	29.0
	3564 Blowers and fans	.....	(X)	4.4	(X)	(D)
	3569 General industrial machinery, n.e.c	.....	(X)	21.8	(X)	7.0
	3581 Automatic merchandising machines	.....	(X)	(D)	(X)	(D)
	3582 Commercial laundry equipment	.....	(X)	.6	(X)	(X)
	3585 Refrigeration, heating equipment	.....	(X)	66.0	(X)	141.0
	3586 Measuring and dispensing pumps	.....	(X)	.9	(X)	(D)
	3589 Service industry machinery, n.e.c	.....	(X)	(D)	(X)	16.0
	3632 Household refrigerators, freezers	.....	(X)	(D)	(X)	(D)
349403	METAL VALVES AND FITTINGS PURCHASED FOR FURTHER ASSEMBLY:					
	3494 Valves and pipe fittings	.....	(X)	36.1	(X)	36.0
349450	METAL FITTINGS, FLANGES, AND UNIONS FOR PIPING SYSTEMS:					
	3498 Fabricated pipe and fittings	.....	(X)	75.8	(X)	(D)
	3499 Fabricated metal products, n.e.c	.....	(X)	.6	(X)	(D)
349535	CONSTRUCTION (MECHANISMS) FOR DUAL-PURPOSE SLEEP FURNITURE:					
	2512 Upholstered household furniture	.....	(X)	32.5	(X)	11.5
	2515 Mattresses and bedsprings	.....	(X)	14.7	(X)	15.6
349538	SPRINGS, INNERSPRING UNITS, AND BOX SPRING CONSTRUCTION:					
	2512 Upholstered household furniture	1,000 s. tons	(S)	40.5	76.8	39.9
	2514 Metal household furniture	do.....	(S)	1.6	4.2	2.1
	2515 Mattresses and bedsprings	do.....	(S)	141.5	225.6	100.3
349702	ALUMINUM FOIL, CONVERTED (QUANTITY REPRESENTS METAL CONTENT):					
	2641 Paper coating and glazing	Million lb...	6.8	10.7	3.5	2.4
	2643 Bags, except textile bags	do.....	**1.9	3.8	3.2	1.8
	2649 Converted paper products, n.e.c	do.....	.7	1.3	(D)	(D)
349704	FOIL AND FOIL LAMINATES:					
	2732 Book printing	.....	(X)	2.0	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	4.1	(X)	(D)
	2752 Commercial printing, lithographic	.....	(X)	7.2	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	33.6	(X)	23.5
349801	IRON AND STEEL FABRICATED PIPE AND FITTINGS:					
	2452 Prefabricated wood buildings	1,000 s. tons	9.7	.7	(S)	.9
349803	COPPER AND COPPER-BASE ALLOY FABRICATED PIPE AND PIPE FITTINGS:					
	2452 Prefabricated wood buildings	Million lb...	(S)	4.0	6.7	3.9
349940	FABRICATED METAL PRODUCTS:					
	3951 Pens and mechnical pencils	.....	(X)	37.1	(X)	(X)
351991	DIESEL ENGINE PARTS:					
	3743 Railroad equipment	.....	(X)	(D)	(X)	(D)
354011	DIES, JIGS, FIXTURES, PUNCHES, AND CUTTING TOOLS FOR MACHINE TOOLS:					
	3631 Household cooking equipment	.....	(X)	4.1	(X)	9.0
	3633 Household laundry equipment	.....	(X)	4.5	(X)	(D)
	3634 Electric housewares and fans	.....	(X)	8.6	(X)	5.0
	3635 Household vacuum cleaners	.....	(X)	(D)	(X)	(D)
	3639 Household appliances, n.e.c	.....	(X)	(D)	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
354401	SPECIAL DIES, TOOLS, JIGS, AND FIXTURES:					
	3451 Screw machine products		(X)	6.5	(X)	(D)
	3452 Bolts, nuts, rivets, and washers		(X)	47.6	(X)	(D)
	3465 Automotive stampings		(X)	55.8	(X)	(D)
	3466 Crowns and closures		(X)	.6	(X)	(D)
	3469 Metal stampings, n.e.c		(X)	16.4	(X)	(D)
	3531 Construction machinery		(X)	8.7	(X)	28.0
	3532 Mining machinery		(X)	1.5	(X)	2.0
	3533 Oilfield machinery		(X)	5.7	(X)	2.0
	3536 Hoists, cranes, and monorails		(X)	2.3	(X)	(D)
	3561 Pumps and pumping equipment		(X)	15.3	(X)	8.0
	3562 Ball and roller bearings		(X)	7.3	(X)	22.0
	3563 Air and gas compressors		(X)	2.1	(X)	5.0
	3566 Speed changers, drives, and gears		(X)	4.6	(X)	(Z)
	3568 Power transmission equipment, n.e.c		(X)	4.3	(X)	5.0
	3586 Measuring and dispensing pumps		(X)	.9	(X)	(D)
	3621 Motors and generators		(X)	22.4	(X)	23.0
	3662 Radio and television communication equipment		(X)	18.2	(X)	39.0
	3671 Electron tubes, receiving type		(X)	3.9	(X)	(X)
	3675 Electronic capacitors		(X)	.5	(X)	1.0
	3676 Electronic resistors		(X)	4.6	(X)	1.0
	3677 Electronic coils and transformers		(X)	.2	(X)	(Z)
	3678 Electronic connectors		(X)	3.9	(X)	5.0
	3679 Electronic components, n.e.c		(X)	8.9	(X)	6.0
	3694 Engine electrical equipment		(X)	20.1	(X)	18.0
	3711 Motor vehicles and car bodies		(X)	(D)	(X)	(X)
	3713 Truck and bus bodies		(X)	9.0	(X)	(D)
	3714 Motor vehicle parts, accessories		(X)	201.8	(X)	166.0
	3715 Truck trailers		(X)	(D)	(X)	(D)
	3716 Motor homes		(X)	(D)	(X)	(X)
354501	CUTTING TOOLS FOR MACHINE TOOLS:					
	3519 Internal combustion engines, n.e.c		(X)	52.0	(X)	17.0
	3531 Construction machinery		(X)	13.8	(X)	33.0
	3532 Mining machinery		(X)	4.6	(X)	2.0
	3533 Oilfield machinery		(X)	15.6	(X)	8.0
	3536 Hoists, cranes, and monorails		(X)	1.5	(X)	(D)
	3541 Machine tools, metal-cutting		(X)	16.6	(X)	19.0
	3542 Machine tools, metal-forming		(X)	5.0	(X)	4.0
	3547 Rolling mill machinery		(X)	2.5	(X)	(D)
	3549 Metalworking machinery, n.e.c		(X)	2.4	(X)	(D)
	3561 Pumps and pumping equipment		(X)	11.4	(X)	10.0
	3562 Ball and roller bearings		(X)	5.7	(X)	(D)
	3563 Air and gas compressors		(X)	5.4	(X)	2.0
	3566 Speed changers, drives, and gears		(X)	13.6	(X)	2.0
	3568 Power transmission equipment, n.e.c		(X)	6.7	(X)	9.0
	3586 Measuring and dispensing pumps		(X)	.4	(X)	(D)
355911	PARTS AND ATTACHMENTS FOR CHEMICAL INDUSTRIES MACHINERY AND EQUIPMENT:					
	2812 Alkalies and chlorine		(X)	48.3	(X)	(X)
	2816 Inorganic pigments		(X)	38.5	(X)	(X)
	2819 Industrial inorganic chemicals, n.e.c		(X)	116.0	(X)	(X)
	2865 Cyclic crudes and intermediates		(X)	67.6	(X)	29.4
	2869 Industrial organic chemicals, n.e.c		(X)	317.8	(X)	114.0
	2873 Nitrogenous fertilizers		(X)	9.5	(X)	(X)
356011	HYDRAULIC AND PNEUMATIC EQUIPMENT:					
	3541 Machine tools, metal-cutting		(X)	23.4	(X)	26.0
	3542 Machine tools, metal-forming		(X)	13.6	(X)	8.0
	3544 Special dies, tools, jigs, etc		(X)	3.2	(X)	(D)
	3545 Machine tool accessories		(X)	1.3	(X)	(D)
	3546 Power driven handtools		(X)	(D)	(X)	(D)
	3547 Rolling mill machinery		(X)	1.8	(X)	(D)
	3549 Metalworking machinery, n.e.c		(X)	10.1	(X)	(D)
356023	SPEED REDUCERS, GEARS, DRIVES, AND OTHER MECHANICAL POWER TRANSMISSION EQUIPMENT:					
	3552 Textile machinery		(X)	6.7	(X)	(D)
356101	PUMPS AND PUMP PARTS USED AS MATERIALS:					
	3523 Farm machinery and equipment	Thousands	592.1	49.4	(X)	(D)
	3524 Lawn and garden equipment	do	(D)	(D)	(X)	(D)
	3531 Construction machinery	do	(X)	114.4	(D)	(D)
	3532 Mining machinery	do	(X)	12.6	(D)	(D)
	3559 Special industry machinery, n.e.c	do	(X)	24.3	(X)	(D)
	3561 Pumps and pumping equipment	do	(S)	49.8	(S)	(D)
	3563 Air and gas compressors	do	(S)	12.9	(S)	(D)
	3569 General industrial machinery, n.e.c	do	(X)	9.6	(X)	(D)
	3586 Measuring and dispensing pumps	do	(S)	(D)	(X)	(D)

See footnotes at end of table.

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1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
356120	HYDRAULIC FLUID POWER PUMPS, MOTORS, AND RELATED HYDRAULIC EQUIPMENT:					
	3511 Turbines, turbine generator sets	Thousands	2.1	4.5	(X)	(D)
	3519 Internal combustion engines, n.e.c	do	(S)	8.9	(X)	(D)
	3721 Aircraft		(X)	65.7	(X)	32.6
	3724 Aircraft engines and engine parts		(X)	(D)	(X)	5.5
	3728 Aircraft equipment, n.e.c		(X)	9.2	(X)	2.5
	3761 Guided missiles, space vehicles		(X)	25.3	-	-
	3764 Space propulsion units and parts		(X)	(D)	(X)	.4
	3769 Space vehicle equipment, n.e.c		(X)	(D)	(X)	(D)
356295	BALLS, ROLLERS, CAGES, COLLARS, RACES, AND OTHER ANTIFRICTION BEARING COMPONENTS, AND PARTS:					
	3562 Ball and roller bearings		(X)	166.3	(X)	87.8
	3566 Speed changers, drives, and gears		(X)	2.4	(X)	1.8
	3568 Power transmission equipment, n.e.c		(X)	2.7	(X)	2.5
356301	AIR AND GAS COMPRESSORS:					
	3511 Turbines, turbine generator sets	Thousands	(D)	(D)	(X)	(D)
	3519 Internal combustion engines, n.e.c	do	(S)	28.4	(X)	(D)
	3523 Farm machinery and equipment	do	(S)	7.8	(X)	(D)
	3524 Lawn and garden equipment	do	(D)	(D)	(X)	(D)
	3531 Construction machinery	do	(S)	22.7	(X)	(D)
	3532 Mining machinery	do	(X)	7.2	(X)	(D)
	3536 Hoists, cranes, and monorails	do	(D)	(D)	(X)	(D)
	3559 Special industry machinery, n.e.c	do	(X)	2.4	(X)	16.0
	3561 Pumps and pumping equipment	do	(S)	(Z)	(S)	(D)
	3563 Air and gas compressors	do	(S)	23.1	(S)	(D)
	3569 General industrial machinery, n.e.c	do	(X)	6.8	(X)	(D)
	3586 Measuring and dispensing pumps	do	(S)	(D)	(X)	(D)
356401	FANS AND BLOWERS:					
	3585 Refrigeration, heating equipment	do	(X)	55.1	(X)	51.0
	3632 Household refrigerators, freezers	do	(D)	(D)	(X)	5.0
356601	SPEED CHANGERS, DRIVES, AND GEARS:					
	3511 Turbines, turbine generator sets		(X)	10.8	(X)	(D)
	3519 Internal combustion engines, n.e.c		(X)	82.9	(X)	(D)
	3523 Farm machinery and equipment		(X)	121.9	(X)	(D)
	3524 Lawn and garden equipment		(X)	29.6	(X)	(D)
	3531 Construction machinery		(X)	313.4	(X)	(D)
	3532 Mining machinery		(X)	47.2	(X)	(D)
	3533 Oilfield machinery		(X)	11.6	(X)	(D)
	3534 Elevators and moving stairways		(X)	2.6	(X)	(D)
	3535 Conveyors and conveying equipment		(X)	16.4	(X)	(D)
	3536 Hoists, cranes, and monorails		(X)	7.4	(X)	(D)
	3537 Industrial trucks and tractors		(X)	64.7	(X)	(D)
	3541 Machine tools, metal-cutting		(X)	14.7	(X)	(D)
	3542 Machine tools, metal-forming		(X)	6.3	(X)	(D)
	3544 Special dies, tools, jigs, etc		(X)	.7	(X)	(D)
	3545 Machine tool accessories		(X)	.7	(X)	(D)
	3546 Power driven handtools		(X)	1.9	(X)	(D)
	3547 Rolling mill machinery		(X)	4.8	(X)	(D)
	3549 Metalworking machinery, n.e.c		(X)	4.1	(X)	(D)
	3551 Food products machinery		(X)	13.1	(X)	(D)
	3554 Paper industries machinery		(X)	10.1	(X)	(D)
	3555 Printing trades machinery		(X)	6.8	(X)	(D)
	3559 Special industry machinery, n.e.c		(X)	19.6	(X)	(D)
	3561 Pumps and pumping equipment		(X)	10.2	(X)	(D)
	3563 Air and gas compressors		(X)	13.6	(X)	(D)
	3569 General industrial machinery, n.e.c		(X)	8.7	(X)	(D)
	3581 Automatic merchandising machines		(X)	(X)	(X)	(D)
	3582 Commercial laundry equipment		(X)	.8	(X)	(D)
	3586 Measuring and dispensing pumps		(X)	.4	(X)	(D)
	3589 Service industry machinery, n.e.c		(X)	5.0	(X)	(D)
	3621 Motors and generators		(X)	7.1	(X)	(D)
	3694 Engine electrical equipment		(X)	13.3	(X)	(D)
	3731 Ship building and repairing		(X)	7.6	(X)	(D)
	3732 Boat building and repairing		(X)	3.5	(X)	(D)
	3743 Railroad equipment		(X)	(D)	(X)	(D)
	3861 Photographic equipment and supplies		(X)	10.9	(X)	(D)
356810	PLAIN BEARINGS AND BUSHINGS:					
	3511 Turbines, turbine generator sets		(X)	5.7	(X)	(D)
	3519 Internal combustion engines, n.e.c		(X)	36.9	(X)	(D)
	3523 Farm machinery and equipment		(X)	16.6	(X)	(D)
	3524 Lawn and garden equipment		(X)	5.2	(X)	(D)
	3533 Oilfield machinery		(X)	1.6	(X)	(D)
	3534 Elevators and moving stairways		(X)	.2	(X)	(D)
	3535 Conveyors and conveying equipment		(X)	2.9	(X)	(D)
	3537 Industrial trucks and tractors		(X)	5.9	(X)	(D)
	3551 Food products machinery		(X)	2.1	(X)	(D)
	3552 Textile machinery		(X)	1.8	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
356810	PLAIN BEARINGS AND BUSHINGS--Con.					
	3554 Paper industries machinery	.....	(X)	1.2	(X)	(D)
	3555 Printing trades machinery	.....	(X)	1.3	(X)	(D)
	3559 Special industry machinery, n.e.c	.....	(X)	3.0	(X)	(D)
	3561 Pumps and pumping equipment	.....	(X)	6.0	(X)	(D)
	3563 Air and gas compressors	.....	(X)	7.4	(X)	(D)
	3569 General industrial machinery, n.e.c	.....	(X)	1.2	(X)	(D)
	3581 Automatic merchandising machines	.....	(X)	(D)	(X)	(D)
	3582 Commercial laundry equipment	.....	(X)	.8	(X)	(D)
	3586 Measuring and dispensing pumps	.....	(X)	(D)	(X)	(D)
	3621 Motors and generators	.....	(X)	14.7	(X)	(D)
	3694 Engine electrical equipment	.....	(X)	6.1	(X)	14.0
	3743 Railroad equipment	.....	(X)	(D)	(X)	(D)
357301	ELECTRICAL COMPUTING EQUIPMENT AND PARTS:					
	3811 Engineering, scientific instruments	.....	(X)	11.4	(X)	(D)
	3822 Environmental controls	.....	(X)	(D)	(X)	(D)
	3823 Process control instruments	.....	(X)	8.7	(X)	(D)
	3824 Fluid meters and counting devices	.....	(X)	(D)	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	21.0	(X)	16.0
	3829 Measuring, controlling devices, n.e.c	.....	(X)	16.9	(X)	(D)
357330	PARTS AND ATTACHMENTS SPECIALLY DESIGNED FOR ELECTRONIC COMPUTING EQUIPMENT:					
	3573 Electronic computing equipment	.....	(X)	2,364.5	(X)	1,228.1
	3574 Calculating, accounting machines	.....	(X)	66.9	(X)	29.4
	3576 Scales, balances, except laboratory	.....	(X)	5.6	(X)	(D)
	3579 Office machines, typewriters, etc	.....	(X)	12.5	(X)	(D)
	3861 Photographic equipment and supplies	.....	(X)	.1	(X)	(D)
358501	COMPRESSORS, COMPRESSOR UNITS, CONDENSING UNITS, FIN COILS, AND OTHER HEAT-TRANSFER EQUIPMENT:					
	3581 Automatic merchandising machines	.....	(X)	7.1	(X)	8.0
	3582 Commercial laundry equipment	.....	(X)	.3	(X)	(D)
	3585 Refrigeration, heating equipment	.....	(X)	554.3	(X)	364.9
	3589 Service industry machinery, n.e.c	.....	(X)	5.6	(X)	(D)
	3632 Household refrigerators, freezers	.....	(X)	167.4	(X)	84.1
359225	PISTONS, PISTON RINGS, CARBURETORS, VALVES (INTAKE AND EXHAUST ONLY):					
	3511 Turbines, turbine generator sets	.....	(X)	(D)	(X)	(D)
	3519 Internal combustion engines, n.e.c	.....	(X)	170.7	(X)	83.1
	3523 Farm machinery and equipment	.....	(X)	(D)	(X)	(D)
	3524 Lawn and garden equipment	.....	(X)	3.4	(X)	(D)
	3534 Elevators and moving stairways	.....	(X)	(D)	(X)	(D)
	3535 Conveyors and conveying equipment	.....	(X)	(D)	(X)	(D)
	3537 Industrial trucks and tractors	.....	(X)	10.1	(X)	(D)
359901	HYDRAULIC CYCLINDERS, AND FLEXIBLE METAL HOSE:					
	3534 Elevators and moving stairways	.....	(X)	1.4	(X)	(D)
	3535 Conveyors and conveying equipment	.....	(X)	3.5	(X)	(D)
	3537 Industrial trucks and tractors	.....	(X)	28.3	(X)	(D)
359902	HYDRAULIC AND PNEUMATIC EQUIPMENT:					
	3523 Farm machinery and equipment	.....	(X)	95.4	(X)	(D)
	3524 Lawn and garden equipment	.....	(X)	6.3	(X)	(D)
360101	ELECTRICAL TRANSMISSION, DISTRIBUTION, AND CONTROL EQUIPMENT:					
	3534 Elevators and moving stairways	.....	(X)	4.0	(X)	(D)
	3535 Conveyors and conveying equipment	.....	(X)	11.7	(X)	(D)
	3537 Industrial trucks and tractors	.....	(X)	44.7	(X)	(D)
	3541 Machine tools, metal-cutting	.....	(X)	33.4	(X)	(D)
	3542 Machine tools, metal-forming	.....	(X)	12.3	(X)	(D)
	3544 Special dies, tools, jigs, etc	.....	(X)	1.9	(X)	(D)
	3545 Machine tool accessories	.....	(X)	1.8	(X)	(D)
	3546 Power driven handtools	.....	(X)	(D)	(X)	(D)
	3547 Rolling mill machinery	.....	(X)	4.3	(X)	(D)
	3549 Metalworking machinery, n.e.c	.....	(X)	9.4	(X)	(D)
	3551 Food products machinery	.....	(X)	19.2	(X)	10.0
	3552 Textile machinery	.....	(X)	10.7	(X)	8.0
	3553 Woodworking machinery	.....	(X)	5.7	(X)	(D)
	3554 Paper industries machinery	.....	(X)	8.8	(X)	(D)
	3555 Printing trades machinery	.....	(X)	52.6	(X)	(D)
	3559 Special industry machinery, n.e.c	.....	(X)	48.0	(X)	(D)
	3561 Pumps and pumping equipment	.....	(X)	21.9	(X)	(D)
	3563 Air and gas compressors	.....	(X)	12.2	(X)	(D)
	3567 Industrial furnaces and ovens	.....	(X)	30.7	(X)	9.0
	3569 General industrial machinery, n.e.c	.....	(X)	20.0	(X)	11.0

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
360101	ELECTRICAL TRANSMISSION, DISTRIBUTION, AND CONTROL EQUIPMENT--Con.:					
	3573 Electronic computing equipment		(X)	64.3	(X)	(D)
	3574 Calculating, accounting machines		(X)	(D)	(X)	(D)
	3576 Scales, balances, except laboratory		(X)	2.4	(X)	(D)
	3579 Office machines, typewriters, etc		(X)	11.3	(X)	4.0
	3581 Automatic merchandising machines		(X)	10.8	(X)	(D)
	3582 Commercial laundry equipment		(X)	1.3	(X)	(D)
	3585 Refrigeration, heating equipment		(X)	111.9	(X)	(D)
	3586 Measuring and dispensing pumps		(X)	.5	(X)	(D)
	3589 Service industry machinery, n.e.c		(X)	11.2	(X)	(D)
	3621 Motors and generators		(X)	19.6	(X)	(D)
	3624 Carbon and graphite products		(X)	(D)	(X)	(D)
	3629 Electrical industrial apparatus, n.e.c		(X)	(D)	(X)	(D)
	3631 Household cooking equipment		(X)	34.4	(X)	(D)
	3632 Household refrigerators, freezers		(X)	(D)	(X)	(D)
	3633 Household laundry equipment		(X)	(D)	(X)	(D)
	3634 Electric housewares and fans		(X)	17.2	(X)	(D)
	3635 Household vacuum cleaners		(X)	(D)	(X)	(D)
	3822 Environmental controls		(X)	.3	(X)	5.0
	3823 Process control instruments		(X)	17.3	(X)	11.0
	3824 Fluid meters and counting devices		(X)	(D)	(X)	(D)
	3825 Instruments to measure electricity		(X)	2.8	(X)	8.0
	3829 Measuring, controlling devices, n.e.c		(X)	2.7	(X)	6.0
361201	SPECIALTY TRANSFORMERS AND FLUORESCENT BALLASTS:					
	3645 Residential lighting fixtures		(X)	6.6	(X)	(D)
	3646 Commercial lighting fixtures		(X)	103.3	(X)	(D)
	3647 Vehicular lighting equipment		(X)	.5	(X)	(D)
	3648 Lighting equipment, n.e.c		(X)	13.4	(X)	(D)
	3993 Signs and advertising displays		(X)	18.2	(X)	25.0
361301	SWITCHES, EXCEPT SNAP, TOGGLE AND PUSH, AND CIRCUIT BREAKERS:					
	3613 Switchgear, switchboard apparatus		(X)	55.2	(X)	22.0
	3622 Industrial controls		(X)	11.4	(X)	10.0
361302	RAILWAY ELECTRICAL CONTROL EQUIPMENT:					
	3743 Railroad equipment		(X)	61.5	(X)	(D)
362001	ELECTRICAL CAPACITORS, RESISTORS, RHEOSTATS AND COIL WINDINGS:					
	3612 Transformers		(X)	36.2	(X)	54.0
	3621 Motors and generators		(X)	35.7	(X)	(D)
362101	ELECTRIC MOTORS, GENERATORS AND PARTS:					
	3613 Switchgear, switchboard apparatus		(X)	4.7	(X)	7.0
	3622 Industrial controls		(X)	9.3	(X)	10.0
362200	PURCHASED INDUSTRIAL ELECTRICAL CONTROL EQUIPMENT:					
	3613 Switchgear, switchboard apparatus		(X)	101.3	(X)	85.5
	3622 Industrial controls		(X)	64.7	(X)	52.0
362201	NUMERICAL CONTROLS FOR METAL WORKING MACHINERY:					
	3541 Machine tools, metal-cutting		(X)	60.9	(X)	(D)
	3542 Machine tools, metal-forming		(X)	5.0	(X)	(D)
	3547 Rolling mill machinery		(X)	.1	(X)	(D)
	3549 Metalworking machinery, n.e.c		(X)	1.0	(X)	(D)
362209	INTERPLANT TRANSFERS OF INDUSTRIAL ELECTRICAL CONTROL EQUIPMENT:					
	3613 Switchgear, switchboard apparatus		(X)	171.9	(X)	96.4
	3622 Industrial controls		(X)	86.0	(X)	45.0
363001	ELECTRIC HEARING EQUIPMENT, REFRIGERATORS, COOKING EQUIPMENT, AND OTHER HOUSEHOLD APPLIANCES:					
	2451 Mobile homes		(X)	118.7	(X)	(D)
	3792 Travel trailers and campers		(X)	74.2	(X)	60.0
364101	ELECTRIC LIGHT BULBS:					
	3861 Photographic equipment and supplies		(X)	9.7	(X)	11.0
364300	CURRENT-CARRYING WIRING DEVICES:					
	2451 Mobile homes		(X)	52.3	(X)	(D)
	3581 Automatic merchandising machines		(X)	4.9	(X)	3.0
	3582 Commercial laundry equipment		(X)	1.0	(X)	(D)
	3585 Refrigeration, heating equipment		(X)	39.7	(X)	22.0
	3589 Service industry machinery, n.e.c		(X)	9.9	(X)	13.0
	3612 Transformers		(X)	13.8	(X)	33.0
	3631 Household cooking equipment		(X)	26.3	(X)	20.0
	3632 Household refrigerators, freezers		(X)	16.3	(X)	(D)
	3633 Household laundry equipment		(X)	28.7	(X)	(D)
	3634 Electric housewares and fans		(X)	12.9	(X)	30.0

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
364300	CURRENT-CARRYING WIRING DEVICES--Con.					
	3635 Household vacuum cleaners	.....	(X)	4.1	(X)	(D)
	3639 Household appliances, n.e.c	.....	(X)	17.6	(X)	16.0
	3643 Current-carrying wiring devices	.....	(X)	15.8	(X)	53.0
	3644 Noncurrent-carrying wiring devices	.....	(X)	2.5	(X)	3.0
	3645 Residential lighting fixtures	.....	(X)	14.0	(X)	(D)
	3646 Commercial lighting fixtures	.....	(X)	15.7	(X)	(D)
	3647 Vehicular lighting equipment	.....	(X)	7.9	(X)	(D)
	3648 Lighting equipment, n.e.c	.....	(X)	5.3	(X)	(D)
	3651 Radio and television receiving sets	.....	(X)	59.8	(X)	47.0
	3661 Television and telegraph apparatus	.....	(X)	59.6	(X)	86.0
	3662 Radio and television communication equipment	.....	(X)	30.0	(X)	54.0
	3674 Semiconductors, related devices	.....	(X)	4.3	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	(D)	(X)	-
	3679 Electronic components, n.e.c	.....	(X)	16.4	(X)	(D)
	3699 Electrical equipments, supplies, n.e.c	.....	(X)	17.6	(X)	30.0
	3792 Travel trailers and campers	.....	(X)	23.4	(X)	(D)
	3811 Engineering, scientific instruments	.....	(X)	11.7	(X)	(D)
	3822 Environmental controls	.....	(X)	(D)	(X)	(D)
	3823 Process control instruments	.....	(X)	6.3	(X)	(D)
	3824 Fluid meters and counting devices	.....	(X)	.3	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	12.8	(X)	(D)
	3829 Measuring, controlling devices, n.e.c	.....	(X)	1.0	(X)	(D)
364301	APPLIANCE OUTLETS, CONNECTORS, SWITCHES, LAMPHOLDERS, AND OTHER CURRENT-CARRYING WIRING DEVICES:					
	3261 Vitreous plumbing fixtures	.....	(X)	(D)	(X)	(X)
	3263 Fine earthenware food utensils	.....	(X)	(D)	(X)	(X)
	3264 Porcelain electrical supplies	.....	(X)	(D)	(X)	(X)
	3573 Electronic computing equipment	.....	(X)	33.8	(X)	28.1
	3574 Calculating, accounting machines	.....	(X)	2.0	(X)	3.5
	3576 Scales, balances, except laboratory	.....	(X)	(D)	(X)	(D)
	3579 Office machines, typewriters, etc	.....	(X)	8.6	(X)	4.4
364401	NONCURRENT-CARRYING WIRING DEVICES, INCLUDING BOXES AND COVERS, INSULATING BUSHINGS, NIPPLES, AND JACKS:					
	3651 Radio and television receiving sets	.....	(X)	10.9	(X)	29.0
365141	TUNERS:					
	3651 Radio and television receiving sets	.....	(X)	149.8	(X)	(D)
365150	LOUDSPEAKERS, MICROPHONES, AND TUNERS, ALL TYPES:					
	3931 Musical instruments	.....	(X)	5.8	(X)	12.0
365151	SPEAKER SYSTEMS AND SPEAKERS SOLD SEPARATELY:					
	3651 Radio and television receiving sets	.....	(X)	133.6	(X)	(D)
365201	RECORD BLANKS:					
	3652 Phonograph records, prerecorded tape	Millions.....	**27.9	10.5	(X)	(X)
366211	RADIO AND ELECTRONIC COMMUNICATION EQUIPMENT AND NAVIGATION AIDS, AIRBORNE TRANSMITTERS AND RECEIVERS, RADAR, ELECTRONIC-TYPE FIRE CONTROL EQUIPMENT, ETC.:					
	3724 Aircraft engines and engine parts	.....	(X)	(D)	(X)	(D)
	3728 Aircraft equipment, n.e.c	.....	(X)	(D)	(X)	(D)
	3761 Guided missiles, space vehicles	.....	(X)	44.3	(X)	125.0
	3764 Space propulsion units and parts	.....	(X)	4.0	(X)	(D)
	3769 Space vehicle equipment, n.e.c	.....	(X)	(D)	(X)	(D)
367000	ELECTRONIC COMPONENTS AND ACCESSORIES:					
	3931 Musical instruments	.....	(X)	110.1	(X)	45.0
367001	RESISTORS, CAPACITORS, TRANSFORMERS, TRANSDUCERS, AND OTHER ELECTRONIC-TYPE COMPONENTS AND ACCESSORIES, EXCEPT ELECTRON TUBES AND SEMICONDUCTORS:					
	3574 Calculating, accounting machines	.....	(X)	30.2	(X)	34.7
	3576 Scales, balances, except laboratory	.....	(X)	13.0	(X)	(D)
	3579 Office machines, typewriters, etc	.....	(X)	22.1	(X)	(D)
	3613 Switchgear, switchboard apparatus	.....	(X)	38.4	(X)	13.0
	3622 Industrial controls	.....	(X)	69.5	(X)	31.0
	3721 Aircraft	.....	(X)	161.9	(X)	184.0
	3724 Aircraft engines and engine parts	.....	(X)	13.1	(X)	2.0
	3728 Aircraft equipment, n.e.c	.....	(X)	30.0	(X)	38.0
	3761 Guided missiles, space vehicles	.....	(X)	35.3	(X)	93.0
	3764 Space propulsion units and parts	.....	(X)	5.3	(X)	9.0
	3769 Space vehicle equipment, n.e.c	.....	(X)	(D)	(X)	23.0
	3822 Environmental controls	.....	(X)	(D)	(X)	7.0
	3823 Process control instruments	.....	(X)	30.1	(X)	28.0
	3824 Fluid meters and counting devices	.....	(X)	14.6	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	117.7	(X)	89.0
	3829 Measuring, controlling devices, n.e.c	.....	(X)	29.0	(X)	16.0
	3832 Optical instruments and lenses	.....	(X)	66.4	(X)	14.0
	3841 Surgical and medical instruments	.....	(X)	16.3	(X)	(X)
	3842 Surgical appliances and supplies	.....	(X)	16.4	(X)	12.0
	3843 Dental equipment and supplies	.....	(X)	9.6	(X)	(X)
	3851 Ophthalmic goods	.....	(X)	(D)	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
367301	TRANSMITTAL, INDUSTRIAL, AND SPECIAL PURPOSE ELECTRON TUBES, EXCEPT X-RAY:					
	3693 X-ray apparatus and tubes	.....	(X)	12.8	(X)	(D)
367500 367501	CAPACITORS FOR ELECTRONIC APPLICATIONS:					
	3651 Radio and television receiving sets	.....	(X)	65.3	(X)	(D)
	3661 Television and telegraph apparatus	.....	(X)	(D)	(X)	(D)
	3662 Radio and television communication equipment	.....	(X)	118.4	(X)	(D)
	3671 Electron tubes, receiving type	.....	(X)	6.0	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	8.9	(X)	(D)
	3675 Electronic capacitors	.....	(X)	(D)	(X)	(D)
	3676 Electronic resistors	.....	(X)	8.9	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	2.8	(X)	(D)
	3678 Electronic connectors	.....	(X)	.6	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	25.9	(X)	(D)
	3693 X-ray apparatus and tubes	.....	(X)	3.7	(X)	(X)
367600 367601	RESISTORS FOR ELECTRONIC APPLICATIONS:					
	3651 Radio and television receiving sets	.....	(X)	43.4	(X)	(D)
	3661 Telephone and telegraph apparatus	.....	(X)	75.1	(X)	(D)
	3662 Radio and television communication equipment	.....	(X)	71.7	(X)	(D)
	3671 Electron tubes, receiving type	.....	(X)	1.1	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	2.6	(X)	(D)
	3675 Electronic capacitors	.....	(X)	(D)	(X)	(D)
	3676 Electronic resistors	.....	(X)	.9	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	.7	(X)	(D)
	3678 Electronic connectors	.....	(X)	.2	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	17.0	(X)	(D)
	3693 X-ray apparatus and tubes	.....	(X)	3.1	(X)	(X)
367700	COILS, TRANSFORMERS, REACTORS, AND CHOKES FOR ELECTRONIC APPLICATIONS:					
	3662 Radio and television communication equipment	.....	(X)	93.8	(X)	(D)
	3671 Electron tubes, receiving type	.....	(X)	11.8	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	.5	(X)	(D)
	3675 Electronic capacitors	.....	(X)	(D)	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	17.8	(X)	(D)
	3678 Electronic connectors	.....	(X)	.1	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	18.7	(X)	(D)
367800	ELECTRONIC CONNECTORS:					
	3693 X-ray apparatus and tubes	.....	(X)	2.8	(X)	(X)
367900	OTHER ELECTRONIC COMPONENTS AND ACCESSORIES, N.E.C.:					
	3651 Radio and television receiving sets	.....	(X)	140.7	(X)	(D)
	3661 Telephone and telegraph apparatus	.....	(X)	323.1	(X)	(D)
	3662 Radio and television communication equipment	.....	(X)	(D)	(X)	(D)
	3693 X-ray apparatus and tubes	.....	(X)	28.3	(X)	(X)
367901	FABRICATED ELECTRON TUBE PARTS:					
	3662 Radio and television communication equipment	.....	(X)	5.7	(X)	7.9
	3671 Electron tubes, receiving type	.....	(X)	84.6	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	(D)	(X)	(D)
	3675 Electronic capacitors	.....	(X)	(D)	(X)	(D)
	3678 Electronic connectors	.....	(X)	(Z)	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	3.6	(X)	(D)
	3693 X-ray apparatus and tubes	.....	(X)	4.6	(X)	(X)
367902	ELECTRONIC CUTTING STYLI:					
	3652 Phonograph records, prerecorded tape	.....	(X)	(D)	(X)	(X)
367903	ELECTRONIC COMPONENTS AND ACCESSORIES:					
	3671 Electron tubes, receiving type	.....	(X)	35.2	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	30.0	(X)	(D)
	3675 Electronic capacitors	.....	(X)	(D)	(X)	(D)
	3676 Electronic resistors	.....	(X)	1.8	(X)	8.0
	3677 Electronic coils and transformers	.....	(X)	11.8	(X)	(D)
	3678 Electronic connectors	.....	(X)	16.4	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	(D)	(X)	(D)
367904	UNRECORDED AUDIO-RANGE MAGNETIC TAPE:					
	3652 Phonograph records, prerecorded tape	.....	(X)	40.4	(X)	(X)
369101	STORAGE BATTERIES:					
	3534 Elevators and moving stairways	Thousands....	(S)	.1	-	-
	3535 Conveyors and conveying equipment	do.....	(X)	(D)	(D)	(D)
	3537 Industrial trucks and tractors	do.....	96.2	3.8	(S)	6.1
369401	ENGINE ELECTRICAL EQUIPMENT:					
	3511 Turbines, turbine generator sets	.....	(X)	(D)	(X)	(D)
	3519 Internal combustion engines, n.e.c	.....	(X)	166.8	(X)	40.3
	3523 Farm machinery and equipment	.....	(X)	61.7	(X)	(D)
	3524 Lawn and garden equipment	.....	(X)	10.5	(X)	(D)
	3731 Ship building and repairing	.....	(X)	22.1	(X)	(D)
	3732 Boat building and repairing	.....	(X)	4.5	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
371411	TRAILER AXLES, WHEELS, BRAKES, UNDER CARRIAGES, AND OTHER METAL VEHICULAR PARTS:					
	2451 Mobile homes	.....	(X)	116.8	(X)	(D)
	3751 Motorcycles, bicycles, and parts	.....	(X)	5.5	(X)	(D)
	3792 Travel trailers and campers	.....	(X)	62.9	(X)	77.0
	3799 Transportation equipment, n.e.c	.....	(X)	31.4	(X)	53.0
374311	LOCOMOTIVE PARTS, OTHER THAN BRAKES:					
	3743 Railroad equipment	.....	(X)	(D)	(X)	(D)
374331	RAILWAY PARTS AND STREET CAR PARTS NOT LISTED ABOVE:					
	3743 Railroad equipment	.....	(X)	231.6	(X)	183.0
374332	BRAKES, RAILWAY AND STREET CAR (AIR AND VACUUM):					
	3743 Railroad equipment	.....	(X)	(D)	(X)	117.0
382201	AUTOMATIC TEMPERATURE CONTROLS:					
	3433 Heating equipment, except electric	.....	(X)	33.7	(X)	26.3
	3564 Blowers and fans	.....	(X)	3.6	(X)	1.0
	3585 Refrigeration, heating equipment	.....	(X)	130.2	(X)	39.0
	3631 Household cooking equipment	.....	(X)	79.6	(X)	44.0
	3632 Household refrigerators, freezers	.....	(X)	41.0	(X)	(D)
	3633 Household laundry equipment	.....	(X)	40.7	(X)	41.0
	3634 Electric housewares and fans	.....	(X)	31.7	(X)	12.0
	3635 Household vacuum cleaners	.....	(X)	(D)	(X)	(D)
	3639 Household appliances, n.e.c	.....	(X)	67.6	(X)	28.0
382501	ELECTRICAL INSTRUMENT MECHANISMS AND METER MOVEMENTS, INCLUDING INSTRUMENT RELAYS:					
	3662 Radio and television communication equipment	.....	(X)	51.5	(X)	64.0
	3671 Electron tubes, receiving type	.....	(X)	1.4	(X)	(X)
	3674 Semiconductors, related devices	.....	(X)	3.1	(X)	(D)
	3676 Electronic resistors	.....	(X)	.3	(X)	(D)
	3677 Electronic coils and transformers	.....	(X)	.5	(X)	(D)
	3678 Electronic connectors	.....	(X)	(D)	(X)	(D)
	3679 Electronic components, n.e.c	.....	(X)	8.7	(X)	(D)
	3811 Engineering, scientific instruments	.....	(X)	22.0	(X)	11.0
	3822 Environmental controls	.....	(X)	3.6	(X)	2.0
	3823 Process control instruments	.....	(X)	16.8	(X)	4.0
	3824 Fluid meters and counting devices	.....	(X)	2.7	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	18.3	(X)	(D)
	3829 Measuring controlling devices, n.e.c	.....	(X)	7.8	(X)	6.0
382591	ELECTRICAL MEASURING INSTRUMENTS AND PARTS, N.E.C.:					
	3811 Engineering, scientific instruments	.....	(X)	6.3	(X)	(D)
	3822 Environmental controls	.....	(X)	.4	(X)	11.0
	3823 Process control instruments	.....	(X)	16.7	(X)	22.0
	3824 Fluid meters and counting devices	.....	(X)	(D)	(X)	(D)
	3825 Instruments to measure electricity	.....	(X)	53.9	(X)	69.0
	3829 Measuring controlling devices, n.e.c	.....	(X)	5.7	(X)	8.0
383201	LENSES AND PRISMS FOR OPTICAL SIGHTINGS AND FIRE-CONTROL EQUIPMENT:					
	3832 Optical instruments and lenses	.....	(X)	17.0	(X)	(D)
383211	PHOTOGRAPHIC AND PROJECTION LENSES AND PRISMS:					
	3861 Photographic equipment and supplies	.....	(X)	26.3	(X)	49.9
383241	SIGHTING, TRACKING, AND FIRE CONTROL EQUIPMENT, OPTICAL TYPE:					
	3721 Aircraft	.....	(X)	23.2	(X)	53.0
	3724 Aircraft engines and engine parts	.....	(X)	(D)	(X)	(D)
	3728 Aircraft equipment, n.e.c	.....	(X)	(D)	(X)	(D)
	3761 Guided missiles, space vehicles	.....	(X)	(D)	(X)	-
	3769 Space vehicle equipment, n.e.c	.....	(X)	(D)	(X)	(D)
386101	LIGHT SENSITIVE FILMS AND PAPERS:					
	2711 Newspapers	.....	(X)	34.7	(X)	16.5
	2721 Periodicals	.....	(X)	1.6	(X)	(D)
	2731 Book publishing	.....	(X)	1.9	(X)	1.7
	2741 Miscellaneous publishing	.....	(X)	5.6	(X)	(D)
	2771 Greeting card publishing	.....	(X)	2.6	(X)	(X)
	2791 Typesetting	.....	(X)	12.1	(X)	(D)
	2793 Photoengraving	.....	(X)	4.6	(X)	(D)
	2794 Electrotyping and sterotyping	.....	(X)	(D)	(X)	(D)
	2795 Lithographic platemaking services	.....	(X)	31.1	(X)	(D)
386153	UNEXPOSED LITHOGRAPHIC PLATES, INCLUDING PRESENSITIZED:					
	2711 Newspapers	.....	(X)	22.6	(X)	11.1
	2721 Periodicals	.....	(X)	1.1	(X)	(D)
	2731 Book publishing	.....	(X)	17.1	(X)	3.4
	2732 Book printing	.....	(X)	10.7	(X)	(D)
	2741 Miscellaneous publishing	.....	(X)	1.9	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	2.8	(X)	(D)
	2752 Commercial printing, lithographic	.....	(X)	42.5	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	.2	(X)	.7
	2771 Greeting card publishing	.....	(X)	1.2	(X)	(S)
	2791 Typesetting	.....	(X)	.2	(X)	(D)
	2793 Photoengraving	.....	(X)	1.2	(X)	(D)
	2795 Lithographic platemaking services	.....	(X)	7.0	(X)	(D)

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
386154	PHOTOGRAPHIC PLATES AND SLIDES:					
	2791 Typewriting	.....	(X)	.6	(X)	(D)
	2793 Photoengraving	.....	(X)	(D)	(X)	(D)
	2794 Electrotyping and sterotyping	.....	(X)	(D)	(X)	(D)
	2795 Lithographic platemaking services	.....	(X)	.6	(X)	(D)
386155	LIGHT SENSITIVE FILMS:					
	2732 Book printing	.....	(X)	12.7	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	4.0	(X)	(D)
	2752 Commercial printing, lithographic	.....	(X)	34.7	(X)	(D)
	2753 Engraving and plate printing	.....	(X)	.2	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	4.0	(X)	(D)
	3446 Architectural metalwork	.....	(X)	(Z)	(X)	(D)
386166	LIGHT SENSITIVE PAPERS:					
	2732 Book printing	.....	(X)	.8	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	.9	(X)	(D)
	2752 Commercial printing, lithographic	.....	(X)	3.8	(X)	(D)
	2753 Engraving and plate printing	.....	(X)	(Z)	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	.9	(X)	(D)
386180	PREPARED PHOTOGRAPHIC CHEMICALS:					
	3861 Photographic equipment and supplies	.....	(X)	42.1	(X)	(D)
386181	PHOTOGRAPHIC DEVELOPERS AND CHEMICALS USED IN PLATE PREPARATION:					
	2711 Newspapers	.....	(X)	16.0	(X)	8.9
	2721 Periodicals	.....	(X)	1.1	(X)	(D)
	2731 Book publishing	.....	(X)	4.3	(X)	.3
	2732 Book printing	.....	(X)	3.2	(X)	(D)
	2741 Miscellaneous publishing	.....	(X)	.7	(X)	(D)
	2751 Commercial printing, letterpress	.....	(X)	2.1	(X)	2.4
	2752 Commercial printing, lithographic	.....	(X)	11.7	(X)	11.9
	2753 Engraving and plate printing	.....	(X)	.5	(X)	(D)
	2754 Commercial printing, gravure	.....	(X)	3.1	(X)	1.3
	2771 Greeting card publishing	.....	(X)	.4	(X)	(S)
	2791 Typesetting	.....	(X)	2.2	(X)	(D)
	2793 Photoengraving	.....	(X)	3.0	(X)	(D)
	2794 Electrotyping and sterotyping	.....	(X)	(D)	(X)	(D)
	2795 Lithographic platemaking services	.....	(X)	9.6	(X)	(D)
387316	TIMING MECHANISMS:					
	3631 Household cooking equipment	Thousands....	*2,585.6	22.9	2,896.7	16.0
	3633 Household laundry equipment	do.....	**5,354.7	26.3	6,536.2	26.3
	3634 Electric housewares and fans	do.....	**740.2	1.1	740.2	1.1
	3635 Household vacuum cleaners	do.....	(D)	(D)	(D)	(D)
	3639 Household appliances, n.e.c	do.....	(D)	(D)	(D)	(D)
387341	IMPORTED WATCH MOVEMENTS AND MODULES, WITH BALANCE WHEEL AND HAIRSPRING:					
	3873 Watches, clocks, and watchcases	Millions.....	*9.0	100.8	(D)	(D)
387342	IMPORTED WATCH MOVEMENTS AND MODULES, WITHOUT BALANCE WHEEL AND HAIRSPRING:					
	3873 Watches, clocks, and watchcases	do.....	3.3	41.7	(D)	(D)
387353	WATCH PARTS:					
	3873 Watches, clocks, and watchcases	.....	(X)	195.0	(X)	77.0
387371	PRECIOUS METAL WATCHCASES:					
	3873 Watches, clocks, and watchcases	Millions.....	3.0	25.1	(D)	(D)
38372	BASE METAL WATCHCASES:					
	3873 Watches, clocks, and watchcases	do.....	(D)	(D)	(D)	(D)
387373	OTHER WATCHCASES:					
	3873 Watches, clocks, and watchcases	do.....	(D)	(D)	(D)	(D)
391521	PRECIOUS, SEMIPRECIOUS, AND SYNTHETIC STONES, AND PEARLS, CUT POLISHED OR DRILLED:					
	3911 Jewelry, precious metal	.....	(X)	222.4	(X)	104.0
391561	JEWELERS' FINDINGS:					
	3911 Jewelry, precious metal	.....	(X)	78.9	(X)	35.0
393101	PARTS SPECIALLY DESIGNED FOR MUSICAL INSTRUMENTS:					
	3931 Musical instruments	.....	(X)	98.4	(X)	48.0
394200	DOLLS PARTS:					
	3942 Dolls	.....	(X)	16.2	(X)	(D)
	3944 Games, toys, children's vehicles	.....	(X)	20.7	(X)	(D)
394901	SPORTING GOODS PARTS:					
	3949 Sporting and athletic goods, n.e.c	.....	(X)	113.1	(X)	35.0

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
395101	PARTS FOR PENS AND MECHANICAL PENCILS:					
	3951 Pens and mechanical pencils	.....	(X)	80.5	(X)	(X)
395523	ONE-TIME CARBON PAPER, PRODUCED AND CONSUMED:					
	2761 Manifold business forms	1000 s. tons.	(S)	(X)	(S)	(X)
396401	NEEDLES, PINS, FASTENERS, AND SIMILAR MATERIALS PURCHASED FOR FURTHER MANUFACTURE OR ASSEMBLY:					
	3963 Buttons	.....	(X)	(D)	(X)	(D)
	3964 Needles, pins, and fasteners	.....	(X)	4.3	(X)	18.0
941110	WASTEPAPER, ALL TYPES:					
	2646 Pressed and molded pulp goods	1,000 s. tons	166.3	15.6	198.3	10.1
941111	MIXED WASTEPAPER:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	445.1	51.2	391.0	23.1
	2631 Paperboard mills	do.....	1,758.0	58.2	1,997.1	43.9
	2661 Building paper and board mills	do.....	447.9	11.9	489.6	9.2
941112	NEWS WASTEPAPER:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	612.5	34.9	472.0	15.5
	2631 Paperboard mills	do.....	1,280.1	58.4	1,441.1	34.4
	2661 Building paper and board mills	do.....	117.6	4.9	**181.5	4.3
941113	CORRUGATED WASTEPAPER:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	172.3	11.4	196.3	8.2
	2631 Paperboard mills	do.....	5,267.4	284.1	3,852.4	126.8
	2661 Building paper and board mills	do.....	(D)	(D)	148.2	4.0
941114	HIGH GRADE PULP SUBSTITUTE WASTEPAPER:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	624.9	126.5	541.6	50.1
	2631 Paperboard mills	do.....	897.9	91.3	1,021.8	66.8
	2661 Building paper and board mills	do.....	(D)	(D)	(NA)	(D)
941115	HIGH GRADE DRINKING WASTEPAPER:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	830.2	95.4	488.2	31.0
	2631 Paperboard mills	do.....	118.5	13.0	91.4	5.0
941259	OTHER FIBROUS MATERIALS:					
	2611 Pulpmills	do.....	(D)	(D)	(D)	(D)
	2621 Papermills, except building paper	do.....	238.0	52.6	244.3	40.1
	2631 Paperboard mills	do.....	60.6	2.1	54.7	1.6
	2661 Building paper and board mills	do.....	(D)	(D)	345.0	5.9
970005	CONTAINERS AND WRAPPING MATERIALS:					
	2051 Bread, cake, and related products	.....	(X)	369.6	(X)	264.1
	2052 Cookies and crackers	.....	(X)	247.3	(X)	157.3
970089	COST OF MATERIALS RECEIVED FROM PETROLEUM FEFINERIES AND LUBE MANUFACTURERS:					
	2911 Petroleum refining	.....	(X)	4,187.8	(X)	918.6
	2992 Lubricating oils and greases	.....	(X)	400.4	(X)	126.5
970092	ALL OTHER MATERIALS, INGREDIENTS, CONTAINERS, AND SUPPLIES USED IN DISTILLING OPERATIONS·					
	2085 Distilled liquor, except brandy	.....	(X)	26.7	(X)	(D)
970093	ALL OTHER MATERIALS, INGREDIENTS, CONTAINERS, AND SUPPLIES USED IN BOTTLING OPERATIONS:					
	2085 Distilled liquor, except brandy	.....	(X)	115.4	(X)	(D)
999806	COTTON WASTE:					
	2293 Paddings and upholstery filling	Million lb...	41.9	7.3	146.2	8.9
	2294 Processed textile waste	do.....	**55.6	8.9	74.6	5.6
	2512 Upholstered household furniture	do.....	(S)	1.5	(X)	(D)
	2515 Mattresses and bedsprings	do.....	(S)	6.2	(D)	(D)
999813	LEAD AND LEAD-BASE ALLOY SCRAP:					
	3341 Secondary nonferrous metals	1,000 s. tons	965.6	351.1	418.4	89.1
	3351 Copper rolling and drawing	do.....	(D)	(D)	(X)	(D)
	3356 Nonferrous rolling and drawing, n.e.c	do.....	(D)	(D)	(X)	(D)
999814	ZINC AND ZINC-BASE ALLOY SCRAP:					
	3333 Primary zinc	do.....	(D)	(D)	(D)	(D)
	3341 Secondary nonferrous metals	do.....	141.6	67.2	119.7	26.8
	3351 Copper rolling and drawing	do.....	4.1	2.6	7.0	2.5
	3356 Nonferrous rolling and drawing, n.e.c	do.....	8.9	3.9	-	-

See footnotes at end of table.

Table 2. **Materials Consumed by Industries (Incomplete Coverage): 1977 and 1972**—Con.

1977 material code	Material and consuming industry[1]	Unit of measure	1977 Quantity	1977 Delivered cost (million dollars)	1972 Quantity	1972 Delivered cost (million dollars)
999815	TIN PLATE SCRAP:					
	3341 Secondary nonferrous metals	1,000 s. tons	3.4	23.7	16.4	10.5
999816	CULLET (GLASS SCRAP):					
	3211 Flat glass	Million lb	1,011.1	21.8	824.9	7.2
	3221 Glass containers	do	1,546.2	49.3	1,589.8	28.0
	3229 Pressed and blown glass, n.e.c	do	215.9	7.2	594.8	11.1
	3231 Products of purchased glass	do	(D)	(D)	(X)	(D)
999821	INERT FILLERS:					
	2873 Nitrogenous fertilizers	1,000 s. tons	**65.7	2.2	(NA)	(NA)
	2874 Phosphatic fertilizers	do	145.1	2.0	310.6	3.4
	2875 Fertilizers, mixing only	do	1,013.4	18.0	920.0	12.6
999823	WOOL NOILS AND WASTE:					
	2291 Felt goods, except woven felt, hats	Million lb	(D)	(D)	14.8	10.4
	2294 Processed textile waste	do	(S)	5.2	(D)	(D)
999825	NEW AND USED RAGS, CLIPS, ETC.:					
	2291 Felt goods, except woven felt, hats	do	(S)	4.0	(X)	(D)
	2293 Paddings and upholstery filling	do	(S)	9.4	(X)	(D)
	2294 Processed textile waste	do	15.1	7.7	(D)	(D)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. [e]Estimated for 1972 quantities. (NA) Not available. (S) Withheld because the data did not meet publication standards. (X) Not applicable. (Z) Less than half the unit of measure shown.

[1]For some establishments, data have been estimated from central values, which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * indicates 10 to 19 percent estimated; ** indicates 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

Foods

GENERAL

This chapter presents data on selected important materials used primarily in the food manufacturing industries. Characteristically, many of these materials are used for similar purposes both in manufacturing and nonmanufacturing establishments. For example, flour is consumed in bakeries, which are classified in manufacturing, and also in retail bakery products stores, which are not classified in manufacturing. In addition, substantial quantities of many of these materials are consumed directly by households. The discussion and tables that follow relate only to industrial consumption; that is, consumption in the manufacturing sector as defined in the Standard Industrial Classification Manual.

SUGAR

In addition to the sugar consumed in manufacturing establishments, as shown in table 3c, substantial quantities are consumed in households, restaurants, hotels, retail bakeries, and wholesale trade establishments in making various food preparations.

DAIRY PRODUCTS

The data shown in table 3d represent only the quantity purchased (or transferred from one establishment to another). There is also a substantial production of skim milk produced and consumed in the same plant which is not reflected in these tables.

Table 3a. Grains Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	1977		1972		1977		1972	
		Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)
		WHEAT (011111)				CORN (011001, 011501, 011521, and 011522)			
	Total	(D)	(D)	(D)	(D)	986.4	2,355.3	(D)	(D)
2041	Flour and other grain mill products	605.2	1,845.1	573.2	1,365.3	83.4	188.5	87.1	121.1
2043	Cereal breakfast foods	9.4	33.4	9.2	20.6	-	-	(D)	(D)
2045	Blended and prepared flour	(D)	(D)	(D)	(D)	-	-	(Z)	(Z)
2046	Wet corn milling	-	-	-	-	379.5	852.0	261.8	337.0
2047	Dog, cat, and other pet food	9.4	26.6	6.0	11.4	46.5	118.4	31.2	40.6
2048	Prepared feeds, n.e.c.	*43.4	111.3	28.7	45.0	440.8	1,091.4	403.0	561.3
2082	Malt beverages	-	-	-	-	17.1	56.0	30.9	40.4
2085	Distilled liquor, except brandy	-	-	-	-	19.1	49.0	23.5	35.0
		OATS (011931)				BARLEY (011913)			
	Total	(D)	(D)	103.0	90.7	(D)	(D)	(D)	(D)
2041	Flour and other grain mill products	19.5	32.3	9.1	7.3	5.3	6.8	3.0	3.8
2043	Cereal breakfast foods	(D)	(D)	27.7	20.9	-	-	1.1	1.6
2047	Dog, cat, and other pet food	3.5	5.8	7.5	5.5	1.6	4.7	1.1	2.3
2048	Prepared feeds, n.e.c.	45.6	70.1	58.7	57.0	38.5	75.5	46.4	58.8
2082	Malt beverages	-	-	-	-	(D)	(D)	(D)	(D)
2083	Malt	-	-	-	-	118.2	332.5	99.1	143.8

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (Z) Less than half of the unit of measurement shown.

Table 3b. Wheat Flour, Semolina, and Durum Flour Consumed, by Selected Industry: 1977 and 1972

1977 code	Industry	Wheat flour, except semolina and durum (204110, 204116, 204117, 204118, and 204119)				Semolina and durum flour (204115)			
		1977		1972		1977		1972	
		Quantity (1,000 cwt.)	Delivered cost (million dollars)	Quantity (1,000 cwt.)	Delivered cost (million dollars)	Quantity (1,000 cwt.)	Delivered cost (million dollars)	Quantity (1,000 cwt.)	Delivered cost (million dollars)
	Total	177,762.7	1,357.9	53,165.8	992.6	15,933.7	144.3	11,905.7	90.7
2032	Canned specialties	1,996.7	18.6	2,371.5	15.8	-	-	-	-
2033	Canned fruits and vegetables	(D)	(D)	(D)	(D)	-	-	-	-
2035	Pickles, sauces, and salad dressings	(D)	(D)	51.7	.7	-	-	-	-
2037	Frozen fruits and vegetables	(D)	(D)	42.2	.5	-	-	-	-
2038	Frozen specialties	(S)	87.1	5,645.4	35.9	-	-	-	-
2041	Flour and other grain mill products	9,588.2	69.9	7,726.2	47.0	-	-	-	-
2043	Cereal breakfast foods	(D)	(D)	(D)	(D)	-	-	-	-
2045	Rice milling	13,506.9	106.9	11,931.2	75.1	-	-	-	-
2047	Blended and prepared flour	2,421.1	14.8	1,671.4	5.9	-	-	-	-
2048	Prepared foods, n.e.c.	2,834.3	12.8	7,301.8	24.2	-	-	-	-
2051	Bread, cake, and related products	105,027.4	827.6	9,755.1	619.4	-	-	-	-
2052	Cookies and crackers	25,379.0	166.3	2,437.5	139.5	-	-	-	-
2098	Macaroni and spaghetti	657.2	5.4	1,378.6	9.4	*15,933.7	144.3	11,905.7	90.7
2099	Food preparations, n.e.c.	(D)	(D)	1,117.4	7.5	-	-	-	-

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards.

Table 3c. Refined Sugar (Cane and Beet-206011) Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	1977		1972		1977 code	Industry	1977		1972	
		Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)			Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)
	Total	139,582.6	2,176.3	152,555.2	1,679.8	2043	Cereal breakfast foods	6,703.5	108.1	4,197.9	49.2
						2045	Rice milling	4,063.8	65.9	4,506.8	53.2
2021	Creamery butter	-	-	(X)	(D)	2047	Blended and prepared flour	1,106.3	19.1	1,176.1	13.5
2022	Cheese, natural and processed	-	-	(D)	(D)	2048	Prepared foods, n.e.c.	*1,549.6	15.0	4,915.3	24.3
2023	Condensed and evaporated milk	1,957.7	32.0	1,476.9	16.4	2051	Bread, cake, and related products	9,468.5	146.1	15,058.0	160.0
2024	Ice cream and frozen desserts	4,031.3	56.8	4,280.5	45.2						
2026	Fluid milk	*6,134.0	79.0	5,620.8	62.8	2052	Cookies and crackers	6,068.8	99.7	7,063.0	83.8
2032	Canned specialties	2,372.3	28.2	2,125.1	25.3	2065	Confectionery products	10,470.4	194.6	13,059.7	156.1
2033	Canned fruits and vegetables	7,804.5	110.7	9,935.9	110.2	2066	Chocolate and cocoa products	6,472.2	114.5	6,855.4	82.0
2034	Dehydrated fruits, vegetables, soups	210.6	3.6	88.8	1.1	2067	Chewing gum	1,271.2	22.1	2,106.0	24.7
2035	Pickles, sauces, and salad dressings	(D)	(D)	2,902.5	34.9	2082	Malt beverages	(D)	(D)	(D)	(D)
						2086	Bottled and canned soft drinks	*30,752.0	473.7	32,475.7	341.0
2037	Frozen fruits and vegetables	(S)	28.7	1,607.1	18.6						
2038	Frozen specialties	(S)	39.1	1,603.4	20.4	2087	Flavoring extracts and sirups, n.e.c.	23,690.7	361.6	22,285.8	251.8
2041	Flour and other grain mill products	1,404.4	22.0	2,115.9	23.9	2099	Food preparations, n.e.c.	7,496.9	114.6	6,290.0	75.3

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards. (X) Not applicable.

Table 3d. Dairy Products Consumed by Selected Industry: 1977 and 1972

(The figures below represent purchased materials or materials transferred from other plants of same company; but exclude materials made and consumed in the same plant)

1977 code	Industry	Cheese, other than cottage (202210)				Ice cream and ice milk mix (202401)				Skim milk (fluid) (202612)			
		1977		1972		1977		1972		1977		1972	
		Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)	Quantity (1,000 cwt.)	Delivered cost (mil. dol.)
	Total	1,279.6	1,307.4	(D)	(D)	84.4	134.3	140.7	133.2	63.7	324.7	47.2	157.2
2021	Creamery butter	-	-	(D)	(D)	-	-	(D)	(D)	2.0	10.0	6.4	16.7
2022	Cheese, natural and processed	*1,279.6	1,307.4	1,416.3	860.9	-	-	(D)	(D)	13.7	72.6	5.9	18.3
2023	Condensed and evaporated milk	-	-	3.9	2.8	-	-	(D)	(D)	(S)	32.5	11.7	31.6
2024	Ice cream and frozen desserts	-	-	-	-	*40.3	73.7	66.9	71.0	(S)	13.9	1.3	6.9
2026	Fluid milk	-	-	14.8	8.9	44.1	60.6	65.6	51.6	*30.9	195.7	21.9	84.2

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (S) Withheld because the data did not meet publication standards.

Table 3e. Soybeans and Flaxseed Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	Soybeans (011611)				Flaxseed (011911)			
		1977		1972		1977		1972	
		Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)
	Total	(NA)	(D)	(NA)	(D)	(D)	(D)	611.0	49.4
2074	Cottonseed oil mills	(NA)	(D)	257.8	26.8	-	-	-	-
2075	Soybean oil mills	23,472.0	5,310.9	21,739.9	2,397.1	-	-	-	-
2076	Vegetable oil mills, n.e.c.	(D)	(D)	(NA)	(D)	(D)	(D)	611.0	49.4

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified.

Table 3f. **Grease and Inedible Tallow Consumed by Selected Industry: 1977 and 1972**

1977 code	Industry	Grease and inedible tallow (207711)			
		1977		1972	
		Quantity (million bushels)	Delivered cost (million dollars)	Quantity (million bushels)	Delivered cost (million dollars)
	Total	864.0	155.7	(X)	(X)
2841	Soap and other detergents	760.6	136.9	867.1	65.5
2842	Polishes and sanitation goods	*8.8	2.2	3.6	.7
2843	Surface active agents	94.6	16.6	(X)	(X)

*Indicates 10 to 19 percent estimated. (X) Not applicable.

Textiles

GENERAL

This chapter includes data on materials primarily consumed by establishments classified in Major Group 22, Textile Mill Products, and for broad woven fabrics primarily consumed by establishments classified in Major Group 23, Apparel and Other Textile Products, as well as other industries consuming significant quantities of piece goods.

FIBER CONSUMPTION

The fiber consumption data shown are based on information collected in the census of manufactures. All industries consuming significant amounts of fiber reported these data, except for Industry Group 225, Knitting Mills, and Industry Group 227, Floor Covering Mills. Detailed consumption figures are published in the monthly Current Industrial Reports series, M22D, Consumption on the Woolen and Worsted Systems, and M22P, Cotton, Manmade Fiber Staple, and Linters.

BROAD WOVEN FABRICS (PIECE GOODS)

The statistics shown in table 4c, were previously published in the final industry series, Table 7a, Materials Consumed by Kind. In each of the individual tables 7a, detailed materials data were collected for piece goods and other materials. However, in each industry, a portion of the total cost of materials was not specified by kind. Part of this portion was the total cost of materials for small establishments reporting on "short forms" where separate figures for individual materials consumed were not requested. The rest was the total cost of materials reported for those establishments which failed to report cost of individual materials on the "standard forms." The "cost of materials not specified by kind" would, therefore, include the quantity and cost of piece goods consumed by a number of establishments.

For some industries, the quantity data for relatively small costs of fabrics were not available. Those quantities were estimated based on the unit value reported by a closely related industry.

For some industries, the materials consumed inquiries requested separate data by type of fiber, such as cotton fabrics or rayon fabrics. For other industries, the breakdown was by kind of fabric, such as upholstery material or bed ticking. Because of this varying collection measure, it is not possible to obtain a breakdown of the total fabric consumption in all industries by type of fiber or fabric consumed.

Table 4a. **Raw Cotton and Manmade Fiber Staple Consumed by Selected Industry: 1977 and 1972**

1977 code	Industry	Raw cotton (013101)				1977 code	Industry	Manmade fiber staple (282425, 282305, and 282421)			
		1977		1972				1977		1972	
		Quantity (1,000 bales)	Delivered cost (million dollars)	Quantity (1,000 bales)	Delivered cost (million dollars)			Quantity (1,000 bales)	Delivered cost (million dollars)	Quantity (1,000 bales)	Delivered cost (million dollars)
	Total	6,359.5	2,287.8	7,724.9	1,290.4		Total	3,151.6	1,969.1	2,491.7	1,141.2
2211	Weaving mills, cotton	3,325.0	1,163.5	4,082.1	662.5	2211	Weaving mills, cotton	333.3	192.6	200.4	72.0
2221	Weaving mills, manmade fiber and silk	1,202.4	430.6	1,397.5	245.3	2221	Weaving mills, manmade fiber and silk	922.7	542.8	869.3	338.3
2257	Circular knit fabric mills	64.7	26.7	106.2	17.3	2231	Weaving and finishing mills, wool	22.4	18.1	24.1	14.2
2281	Yarn mills, except wool	1,654.8	620.6	1,988.4	335.6	2281	Yarn mills, except wool	1,831.0	1,205.7	1,365.6	696.4
2284	Thread mills	69.1	32.5	68.2	15.3	2283	Wool yarn mills	42.2	9.9	32.3	20.3
2296	Tire cord and fabric	43.5	13.9	82.5	14.4						

Table 4b. **Linters and Raw Wool Consumed by Selected Industry: 1977 and 1972**

1972 code	Industry	Linters (207431)				1972 code	Industry	Raw wool, tops, noils, and waste wool[1]			
		1977		1972				1977		1972	
		Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)			Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
	Total	422.6	74.2	693.5	57.9		Total	147.6	261.7	248.8	197.2
2293	Paddings and upholstery filling	*52.1	5.6	117.4	7.9	2221	Weaving mills, manmade fiber and silk	22.7	43.7	14.0	5.5
2512	Upholstered household furniture	(S)	10.8	104.5	15.0	2231	Weaving and finishing mills, wool	70.8	112.7	89.2	71.1
2515	Mattresses and bedsprings	(S)	13.8	205.5	19.5	2281	Yarn mills, except wool	15.3	35.3	43.2	37.5
2611	Pulpmill	315.4	22.6	230.7	7.8	2283	Wool yarn mills	*23.4	48.6	82.6	67.9
2621	Papermills, except building paper	33.1	10.3	23.2	3.6	2291	Felt goods, except woven felts and hats	15.4	21.4	19.8	15.2
3842	Surgical appliances and supplies	*22.0	11.1	12.2	4.1						

*Indicates 10 to 19 percent estimated. (NA) Not available. (S) Withheld because the data did not meet publication standards.

[1]Material codes 229931, 229933, and 999823.

Table 4c. **Broad Woven Fabrics (Piece Goods) Consumed by Selected Industry: 1977 and 1972**

1972 code	Industry	1977 Quantity (mil. lin. yd.)	1977 Delivered cost (mil. dol.)	1972 Quantity (mil. lin. yd.)	1972 Delivered cost (mil. dol.)
	Total	13,370.1	9,667.3	(NA)	6,328.2
2211	Weaving mills, cotton	401.0	323.8	363.1	162.2
2221	Weaving mills, manmade fiber and silk	236.9	214.8	279.6	145.5
2231	Weaving and finishing mills, wool	(D)	(D)	7.2	10.7
2512	Upholstered household furniture	(S)	403.8	(S)	286.7
2515	Mattresses and bedsprings	(S)	120.8	13.7	24.9
2261	Finishing plants, cotton	242.4	132.2	659.8	105.0
2262	Finishing plants, manmade fiber and silk	1,356.4	1,011.7	1,062.0	482.0
2295	Coated fabrics, not rubberized	**483.4	259.4	505.0	211.4
2311	Men's and boys' suits and coats	(S)	481.5	113.7	224.2
2342	Brassieres and allied garments	(S)	66.9	109.3	96.0
2321	Men's and boys' shirts and nightwear	**358.1	400.7	559.8	367.0
2322	Men's and boys' underwear	46.0	30.3	58.6	22.9
2323	Men's and boys' neckwear	**18.9	49.5	56.0	89.2
2327	Men's and boys' separate trousers	(S)	316.5	(X)	737.0
2328	Men's and boys' work clothing	706.3	1,194.5	595.1	521.7
2329	Women's and misses' outer wear, n.e.c.	(S)	180.8	132.9	142.1
2331	Women's and misses' blouses and waists	(S)	256.1	118.7	111.7
2335	Women's and misses' dresses	(S)	331.0	635.5	289.5
2337	Women's and misses' suits and coats	198.7	407.4	257.5	213.6
2339	Women's and misses' outerwear, n.e.c.	**319.2	495.2	213.7	201.4
2341	Women's and children's underwear	(S)	142.0	185.8	111.4
2361	Children's dresses and blouses	(S)	76.4	82.5	61.2
2363	Children's coats and suits	**28.0	21.9	22.7	27.3
2369	Children's outerwear, n.e.c.	**99.1	128.8	98.3	87.5
2381	Fabric dress and work gloves	**46.2	48.3	51.5	24.9
2384	Robes and dressing gowns	*56.0	77.4	77.0	54.1
2385	Waterproof outer garments	(S)	51.6	38.6	52.2
2386	Leather and sheep lined clothing	1.3	4.1	7.7	9.5
2387	Apparel belts	*3.0	4.3	6.9	5.5
2389	Apparel and accessories, n.e.c.	47.8	37.8	65.8	28.2
2391	Curtains and draperies	(S)	353.1	417.6	247.4
2392	Housefurnishings, n.e.c.	1,124.3	849.9	884.5	481.3
2393	Textile bags	328.7	91.5	497.1	89.1
2394	Canvas and related products	(S)	71.1	59.3	39.0
2396	Automotive and apparel trimmings	(D)	(D)	366.7	138.2
2399	Fabricated textile products, n.e.c.	323.9	195.2	185.9	83.3
3011	Tires and inner tubes	-	-	(D)	(D)
3021	Rubber and plastics footwear	50.3	65.0	45.7	39.8
3041	Rubber and plastics hose and belting	(S)	118.2	90.5	75.9
3069	Fabricated rubber products, n.e.c.	64.1	40.1	(NA)	48.6
3079	Miscellaneous plastics products	391.2	111.3	74.7	48.8
3143	Men's footwear, except athletic	-	-	(NA)	(D)
3144	Women's footwear, except athletic	-	-	(X)	(D)
3151	Leather gloves and mittens	4.2	4.1	(NA)	3.1
3161	Luggage	19.0	15.5	18.8	11.6
3171	Women's handbags and purses	(S)	12.1	7.7	7.7
3172	Personal leather goods, n.e.c.	(S)	6.2	8.0	5.1
3711	Motor vehicles and car bodies	(D)	(D)	.3	.3
3713	Truck and bus bodies	(D)	(D)	.9	2.2
3714	Motor vehicles parts and accessories	(D)	(D)	38.5	14.1
3715	Truck trailers	-	-	(D)	(D)
3721	Aircraft	(S)	19.2	(NA)	8.5
3841	Surgical and medical instruments	(S)	1.5	(NA)	(NA)
3842	Surgical appliances and supplies	(S)	90.7	9.7	31.6
3942	Dolls	(S)	33.6	(NA)	22.2
3944	Games, toys, and children's vehicles	(S)	14.8	10.6	5.7
3949	Sporting and athletic goods, n.e.c.	(S)	41.2	(NA)	15.5

Note: This table includes material codes 220123, 220126, 220127, 220128, 220129, 220149, 220211, 220234, 220239, 220241, 220312, 220313, 220315, 220319, 221101, 221103, 221141, 222101, 222102, 222103, 222104, 222105, 220311, and 221161.

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards. (X) Not applicable.

Table 4d. **Knitted Fabrics Consumed by Selected Industry: 1977 and 1972**

1972 code	Industry	1977 Quantity (mil. lb.)	1977 Delivered cost (mil. dol.)	1972 Quantity (mil. lb.)	1972 Delivered cost (mil. dol.)
	Total	(NA)	2,743.0	(NA)	(NA)
2251	Women's hosiery, except socks	(X)	77.6	(X)	157.3
2252	Hosiery, n.e.c.	(X)	134.8	(X)	79.7
2253	Knit outerwear mills	**37.7	90.4	8.0	16.4
2254	Knit underwear mills	(S)	7.5	(NA)	16.4
2257	Circular knit fabric mills	*206.9	290.1	36.1	65.2
2258	Warp knit fabric mills	29.4	43.2	31.0	56.9
2259	Knitting mills, n.e.c.	(D)	(D)	(D)	(D)
2311	Men's and boys' suits and coats	(S)	67.2	78.9	257.4
2321	Men's and boys' shirts and nightwear	**155.6	365.8	[1]175.4	268.8
2322	Men's and boys' underwear	64.1	112.4	67.8	64.6
2327	Men's and boys' separate trousers	(S)	94.5	114.9	310.2
2328	Men's and boys' work clothing	(S)	23.8	25.3	51.9
2329	Men's and boys' clothing, n.e.c.	**19.7	45.5	24.3	59.6
2331	Women's and misses' blouses and waists	**72.1	217.4	101.5	176.7
2335	Women's and misses' dresses	(S)	222.3	198.8	427.1
2337	Women's and misses' suits and coats	(S)	182.5	74.4	195.3
2339	Women's and misses' outerwear, n.e.c.	(S)	251.3	144.6	238.4
2341	Women's and children's underwear	**108.3	234.1	173.4	248.6
2361	Children's dresses and blouses	*24.0	69.9	52.8	83.8
2363	Children's coats and suits	(S)	11.3	22.7	27.3
2369	Children's outerwear, n.e.c.	(S)	52.1	38.1	63.0
2381	Fabric dress and work gloves	**20.7	27.9	(NA)	17.1
2384	Robes and dressing gowns	9.8	20.8	6.9	7.1
2385	Waterproof outergarments	(S)	3.3	3.2	6.7
2386	Leather and sheep lined clothing	2.8	2.7	.8	1.4
2387	Apparel belts	**1.6	1.7	(X)	(D)
2389	Apparel and accessories, n.e.c.	(D)	(D)	(NA)	1.0
2342	Brassieres and allied garments	(S)	87.6	26.4	49.7

Note: This table includes material codes 225011, 225021, and 225078.

*Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards. (X) Not applicable.

[1]10 to 29 percent of quantity was estimated.

Newsprint and Paperboard Containers

GENERAL

This chapter presents data on materials consumed by establishments classified in Major Group 26, Paper and Allied Products, and Major Group 27, Printing and Publishing industries, as well as data on industries consuming $1 million worth of boxes and containers. Comments on individual groups of materials are shown below. The two tables in this chapter have been prepared in the interest of presenting a more comprehensive picture of the consumption of "complete coverage" material.

NEWSPRINT

Table 5a shows the U.S. consumption of newsprint in 1977 and 1972 by industries and delivered cost. Where available, the corresponding tonnages purchased are also shown. Table 5a also presents newsprint consumed by the publishing industries as well as the book manufacturing industry during 1977 and 1972.

PAPER AND BOARD

Paper consumption statistics for the printing and publishing industries appear in the final industry series. Except for newsprint, grade detail was not collected from the printing industries, since printers generally have demonstrated their inability to furnish more detailed information. Therefore, with the exception of newsprint, quantity and cost information cannot be presented on a uniform basis for all consuming industries, for which consumption data were collected.

BOXES AND CONTAINERS

Table 5b presents the reported delivered cost of paperboard boxes and containers in 1977. Where available, the 1972 reported cost figures are also presented. The data in this table, which also appear in the final Industry series tables 7a, are shown in the interest of a more composite presentation of information on containers.

Table 5a. Newsprint (262111, 262112, 262113, 262114, and 262115) Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	Purchased quantity (short tons)		Delivered cost (million dollars)	
		1977	1972	1977	1972
	Total	8,241.4	(NA)	2,857.5	(NA)
2711	Newspapers	8,086.8	8,780.4	2,422.8	1,415.3
2721	Periodicals	**74.2	144.6	25.0	26.4
2731	Book publishing	32.2	70.1	11.5	13.1
2732	Book printing	(X)	(X)	5.8	3.7
2741	Miscellaneous publishing	(S)	(NA)	16.0	(NA)
2751	Commercial printing, letterpress	(X)	(X)	113.8	92.1
2752	Commercial printing, lithographic	(X)	(X)	190.0	92.6
2754	Commercial printing, gravure	(X)	(X)	65.9	56.5
2761	Manifold business forms	(X)	(X)	6.7	2.5

**Indicates 20 to 29 percent estimated. (NA) Not available. (S) Withheld because the data did not meet publication standards. (X) Not applicable.

Table 5b. Paperboard Boxes and Containers, Including Folding, Corrugated, and Setup, Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	Delivered cost (million dollars)		1977 code	Industry	Delivered cost (million dollars)	
		1977	1972			1977	1972
	Total	5,461.2	(NA)	2833	Medicinals and botanicals	10.9	3.3
				2834	Pharmaceutical preparations	167.1	104.4
2021	Creamery butter	8.1	(X)	2841	Soap and other detergents	188.4	123.8
2022	Cheese, natural and processed	62.0	(X)	2842	Polishes and sanitation goods	56.5	21.4
2023	Condensed and evaporated milk	48.2	(X)	2843	Surface active agents	5.6	(NA)
2024	Ice cream and frozen desserts	120.1	(X)	2851	Paints and allied products	41.0	23.0
2026	Fluid milk	403.3	(X)	2865	Cyclic crudes and intermediates	21.5	(D)
2032	Canned specialties	59.5	30.0	2869	Industrial organic chemicals, n.e.c	63.2	43.0
2033	Canned fruits and vegetables	108.3	53.9	2879	Agricultural chemicals, n.e.c	21.6	(D)
2034	Dehydrated fruits, vegetables, soups	47.6	(X)	2911	Petroleum refining	83.4	50.0
2035	Pickles, sauces, salad dressings	45.0	(D)				
2037	Frozen fruits and vegetables	168.0	79.6	2992	Lubricating oils and grease	47.1	18.3
				3079	Miscellaneous plastics products	317.9	129.0
2038	Frozen specialties	205.6	101.5	3211	Flat glass	24.1	(D)
2041	Flour and other grain mill products	16.7	7.0	3221	Glass containers	311.1	14.9
2043	Cereal breakfast foods	220.3	54.2	3229	Pressed and blown glass, n.e.c	63.7	37.0
2045	Blended and prepared flour	80.0	51.8	3231	Products of purchased glass	19.2	8.9
2047	Dog, cat, and other pet food	86.3	37.0	3296	Mineral wool	13.2	7.0
2048	Prepared feeds, n.e.c	6.5	1.0	3411	Metal cans	28.6	37.0
2065	Confectionery products	244.6	179.6	3429	Hardware, n.e.c	43.2	28.3
2066	Chocolate and cocoa products	35.5	44.1	3433	Heating equipment, except electric	9.5	9.0
2067	Chewing gum	41.0	36.8				
2082	Malt beverages	223.8	(D)	3441	Fabricated structural metal	1.5	(D)
				3443	Fabricated platework, boiler shop	2.1	26.0
2084	Wines, brandy, and brandy spirits	15.6	(D)	3444	Sheet metalwork	18.8	26.0
2085	Distilled liquor, except brandy	12.5	(D)	3451	Screw machine products	2.9	(D)
2086	Bottled and canned soft drinks	129.7	(D)	3452	Bolts, nuts, rivets, and washers	13.9	(D)
2095	Roasted coffee	67.1	(D)	3465	Automotive stampings	32.2	12.5
2098	Macaroni and spaghetti	39.7	(D)	3466	Crowns and closures	9.1	3.9
2099	Food preparations, n.e.c	186.3	(D)	3469	Metal stampings, n.e.c	37.8	22.8
2431	Millwork	9.6	8.4	3494	Valves and pipe fittings	14.8	19.0
2514	Upholstered household furniture	31.5	25.2	3564	Blowers and fans	5.6	(D)
2521	Wood office furniture	7.5	3.6				
2522	Metal office furniture	25.3	15.7	3573	Electronic computing equipment	26.2	(D)
				3574	Calculating, accounting machines	6.0	(D)
2531	Public building and related furniture	7.1	5.7	3576	Scales, balances, except laboratory	1.8	(D)
2541	Wood partitions and fixtures	7.7	2.9	3579	Office machines, typewriters, etc	15.8	10.0
2542	Metal partitions and fixtures	14.1	9.8	3621	Motors and generators	21.3	13.0
2599	Furniture and fixtures, n.e.c	4.2	1.5	3645	Residential lighting fixtures	19.6	(D)
2621	Papermills, except building paper	37.8	32.4	3646	Commercial lighting fixtures	17.9	(D)
2631	Paperboard mills	6.0	9.3	3647	Vehicular lighting equipment	8.9	(D)
2641	Paper coating and glazing	41.1	13.4	3648	Lighting equipment, n.e.c	8.4	(D)
2642	Envelopes	24.9	(D)	3694	Engine electrical equipment	17.9	11.0
2643	Bags, except textile bags	53.2	16.7	3841	Surgical and medical instruments	24.9	(X)
2645	Die-cut paper and board	14.9	(D)				
				3842	Surgical appliances and supplies	27.9	14.0
2646	Pressed and molded pulp goods	2.9	(D)	3843	Dental equipment and supplies	3.3	3.3
2647	Sanitary paper products	236.4	106.0	3861	Photographic equipment and supplies	49.1	28.0
2648	Stationery products	10.1	7.4	3873	Watches, clocks, and watchcases	10.5	11.0
2649	Converted paper products, n.e.c	20.6	8.2	3942	Dolls	7.5	5.3
2661	Building paper and board mills	.4	4.9	3944	Games, toys, children's vehicles	101.6	59.8
2771	Greeting card publishing	15.2	(S)	3949	Sporting and athletic goods, n.e.c	29.9	23.1
2812	Alkalies and chlorine	7.0	(D)	3951	Pens and mechanical pencils	18.8	(X)
2816	Inorganic pigments	5.6	(D)	3955	Carbon paper and inked ribbons	6.6	(X)
2819	Industrial inorganic chemicals, n.e.c	42.2	(D)	3993	Signs and advertising displays	12.4	17.0
2831	Biological products	11.7	4.3	3999	Manufacturing industries, n.e.c	31.1	(D)

Note: This table includes material codes 265001, 265021, 265022, 265522, and 970015.

(D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because data did not meet publication standards. (X) Not applicable.

Chemicals, Rubber, and Plastics

GENERAL

This chapter includes data on materials primarily produced by establishments classified in Major Group 28, Chemicals and Allied Products; Major Group 29, Petroleum and Coal Products; and Major Group 30, Rubber and Miscellaneous Plastics Products. Comments on individual materials or groups of materials are shown below.

SULFUR, NATIVE AND RECOVERED

The sulfur consumption data shown in table 6a are less than the "apparent consumption" figures published by the Bureau of Mines, Department of the Interior, because Census information was not requested from certain manufacturing establishments, principally those classified in Major Group 30, Rubber and Plastics, and Industry Group 283, Drugs.

CHEMICALS

Consumption data shown for the specified chemicals in table 6a represent a varying proportion of the U.S. total production. The coverage for ammonia is relatively low because Census figures exclude quantities used for direct application to the soil. Coverage for sodium hydroxide (caustic soda) is low because information was not collected from plants classified in the textile, rubber reclaiming, vegetable oil refineries, and other miscellaneous industries.

In making any comparison of the quantity consumed with total supply of a specified chemical, account should be taken of the factors discussed in the text covering the materials consumption tables. Also, consideration should be given to the variations in handling consumption data for chemicals produced and consumed in the same establishment. The statistics showing "consumption" by industry indicate purchases or receipts from other establishments separate from the quantities produced and consumed.

RUBBER

The figures for natural and synthetic rubber shown in table 6b are limited to the establishments classified in the specified industries. Estimates of total rubber consumption for all industries are published by the Census Bureau in Current Industrial Reports series M30A, Rubber, Supply and Distribution for the United States.

PLASTICS

The data for plastics resins and plastics products shown in tables 6c and 6d are limited to the establishments classified in the specified industries. These tables do not reflect the amount of plastics produced and consumed within the same establishment.

Table 6a. Chemicals Consumed by Selected Industry: 1977 and 1972

1977 code	Industry	1977 Purchased quantity (1,000 s. tons)	1977 Delivered cost (mil. dol.)	1972 Purchased quantity (1,000 s. tons)	1972 Delivered cost (mil. dol.)
	SULFUR, NATIVE AND RECOVERED[1] (147701)				
	Total	9,728.7	573.2	(NA)	(NA)
2611	Pulpmills	83.4	4.5	127.1	3.7
2621	Papermills, except building paper	138.2	10.3	169.6	5.2
2631	Paperboard mills	53.9	3.6	83.1	2.5
2812	Alkalies and chlorine	-	-	(D)	(D)
2816	Inorganic pigments	198.9	12.5	(NA)	(NA)
2819	Industrial inorganic chemicals, n.e.c.	1,561.8	79.0	1,691.9	43.6
2865	Cyclic crudes and intermediates	148.3	8.7	(NA)	(NA)
2869	Industrial organic chemicals, n.e.c.	745.4	45.5	462.7	13.1
2873	Nitrogenous fertilizers	244.8	12.2	(NA)	(NA)
2874	Phosphatic fertilizers	6,548.8	396.5	4,806.2	114.3
2875	Fertilizers, mixing only	5.2	.4	(NA)	(NA)
	SULFURIC ACID (281930, 281931, 281932, 281933)				
	Total	10,127.7	388.4	(NA)	(NA)
2812	Alkalies and chlorine	72.1	3.5	75.9	1.9
2816	Inorganic pigments	387.0	11.7	(NA)	(NA)
2819	Industrial inorganic chemicals, n.e.c.	1,354.0	49.6	(NA)	(NA)
2821	Plastics materials and resins	43.8	1.8	90.0	1.9
2822	Synthetic rubber	37.6	1.1	80.9	2.1
2823	Cellulosic manmade fibers	411.9	14.4	483.9	8.7
2824	Organic fibers, noncellulosic	(D)	(D)	(X)	(D)
2861	Gum and wood chemicals	1,507.1	68.9	(NA)	(NA)
2865	Cyclic crudes and intermediates	344.2	21.9	331.0	9.3
2869	Industrial organic chemicals, n.e.c.	1,158.6	46.9	1,202.1	25.3
2873	Nitrogenous fertilizers	(D)	(D)	29.5	.7
2874	Phosphatic fertilizers	1,876.8	44.0	1,248.7	17.7
2875	Fertilizers, mixing only	**178.9	6.7	123.9	2.4
2892	Explosives	47.1	1.3	(NA)	(NA)
2911	Petroleum refining	1,365.0	63.6	1,967.2	44.1
2992	Lubricating oils and greases	3.3	.2	10.9	.3
3312	Blast furnaces and steel mills	618.4	28.7	858.6	24.9
3315	Steel wire and related products	11.2	.7	16.0	.6
3691	Storage batteries	*354.2	13.2	(NA)	(NA)
3692	Primary batteries, dry and wet	(D)	(D)	(NA)	(NA)
	CHLORINE (281211)				
	Total	4,238.4	451.4	(NA)	(NA)
2611	Pulpmills	330.3	37.4	246.1	13.2
2621	Papermills, except building paper	670.3	73.6	579.7	32.8
2631	Paperboard mills	330.9	37.9	310.5	17.4
2812	Alkalies and chlorine	(D)	(D)	(D)	(D)
2816	Inorganic pigments	(D)	(D)	(NA)	(NA)
2819	Industrial inorganic chemicals, n.e.c.	**98.9	11.1	157.3	8.3
2841	Soap and other detergents	*18.8	8.3	(NA)	(NA)
2842	Polishes and sanitation goods	**111.3	16.2	131.5	7.4
2843	Surface active agents	(D)	(D)	(NA)	(NA)
2865	Cyclic crudes and intermediates	421.6	45.6	331.8	16.4
2869	Industrial organic chemicals, n.e.c.	1,801.6	170.6	1,789.3	76.4
	SODIUM HYDROXIDE (281238)				
	Total	(D)	(D)	(NA)	(NA)
2611	Pulpmills	564.0	70.8	446.8	24.1
2621	Papermills, except building paper	824.6	105.5	645.7	37.8
2631	Paperboard mills	638.1	79.6	594.1	31.3
2661	Building paper and board mills	1.7	.3	(NA)	(NA)
2812	Alkalies and chlorine	6.4	7.1	7.4	.4
2816	Inorganic pigments	46.6	6.0	(NA)	(NA)
2819	Industrial inorganic chemicals, n.e.c.	574.0	71.5	681.7	35.9
2823	Cellulosic manmade fibers	(D)	(D)	308.0	13.1
2824	Organic fibers, noncellulosic	72.3	8.0	(X)	(D)
2841	Soap and other detergents	521.7	53.7	395.4	31.6
2842	Polishes and sanitation goods	*116.2	18.0	123.1	9.1
2843	Surface active agents	*28.2	3.0	(NA)	(NA)
2861	Gum and wood chemicals	7.6	.7	(NA)	(NA)
2865	Cyclic crudes and intermediates	362.8	56.0	474.3	20.7
2869	Industrial organic chemicals, n.e.c.	1,033.1	179.9	793.6	38.3
2911	Petroleum refining	*371.0	50.6	330.4	22.1
2992	Lubricating oils and greases	15.9	1.4	(S)	.3
	SODIUM CARBONATE (281228)				
	Total	6,043.4	476.8	(NA)	(NA)
2621	Papermills, except building paper	48.4	4.9	68.6	3.2
2631	Paperboard mills	145.5	12.9	189.0	8.5
2812	Alkalies and chlorine	133.2	9.3	29.5	1.0
2816	Inorganic pigments	15.1	1.6	(NA)	(NA)
2819	Industrial inorganic chemicals, n.e.c.	1,215.2	98.8	1,541.6	56.8
2841	Soap and other detergents	468.2	31.6	321.1	13.3
2842	Polishes and sanitation goods	81.6	6.5	64.3	3.1
2843	Surface active agents	144.3	.4	(NA)	(NA)
2865	Cyclic crudes and intermediates	42.1	4.1	42.0	2.2
2869	Industrial organic chemicals, n.e.c.	63.6	5.8	(D)	(D)
3211	Flat glass	622.9	52.7	540.8	22.7
3221	Glass containers	2,866.4	231.5	2,640.8	110.4
3229	Pressed and blown glass, n.e.c.	196.9	16.7	253.0	10.6
	AMMONIA (287312)				
	Total	5,250.2	561.3	3,435.4	126.9
2812	Alkalies and chlorine	(D)	(D)	(D)	(D)
2816	Inorganic pigments	8.7	1.2	(X)	(X)
2819	Industrial inorganic chemicals, n.e.c.	167.8	20.1	(D)	(D)
2865	Cyclic crudes and intermediates	158.9	18.3	191.9	7.4
2869	Industrial organic chemicals, n.e.c.	971.8	116.0	640.0	25.4
2873	Nitrogenous fertilizers	2,045.0	191.3	960.4	31.0
2874	Phosphatic fertilizers	1,617.8	178.0	1,141.4	43.5
2875	Fertilizers, mixing only	144.3	19.3	135.3	6.5
2892	Explosives	(D)	(D)	(D)	(D)
	NITRIC ACID (287311)				
	Total	(D)	(D)	503.8	30.3
2812	Alkalies and chlorine	-	-	(D)	(D)
2816	Inorganic pigments	(D)	(D)	(X)	(X)
2819	Industrial inorganic chemicals, n.e.c.	*35.1	5.6	53.6	3.1
2865	Cyclic crudes and intermediates	257.3	31.5	101.4	7.2
2869	Industrial organic chemicals, n.e.c.	143.2	20.3	221.2	15.9
2873	Nitrogenous fertilizers	-	-	(D)	(D)
2892	Explosives	24.8	3.4	(D)	(D)

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because data did not meet publication standards. (X) Not applicable.

[1]Quantity shown in 1,000 long tons.

Table 6b. **Rubber Consumed by Selected Industry: 1977 and 1972**

1977 code	Industry	Natural rubber (084911, 084913, and 084915)				Synthetic rubber (282201, 282203, 282204, 282205, 282206, 282207, 282208, 282209, 282211, 282212, 282215, 282217, and 282219)			
		1977		1972		1977		1972	
		Quantity (1,000 long tons)	Value (million dollars)	Quantity (1,000 long tons)	Value (million dollars)	Quantity (1,000 long tons)	Value (million dollars)	Quantity (1,000 long tons)	Value (million dollars)
	Total	(NA)	709.7	(D)	(D)	(NA)	1,812.5	1,998.6	953.9
2891	Adhesives and sealants	-	-	(NA)	(NA)	**145.0	61.2	(NA)	(NA)
3011	Tires and inner tubes	(D)	(D)	466.2	186.7	(D)	(D)	1,541.2	651.5
3021	Rubber and plastics footwear	30.1	13.5	14.2	6.5	(S)	25.7	20.5	10.2
3031	Reclaimed rubber	-	-	124.3	61.9	-	-	348.4	217.0
3069	Fabricated rubber products, n.e.c.	235.7	119.0			807.3	398.0		
3041	Rubber and plastics hose and belting	*26.8	10.5	9.9	4.4	235.9	125.2	88.5	75.2
3292	Asbestos products	1.7	1.4	(NA)	(NA)	(D)	(D)	(NA)	(NA)
3293	Gaskets, packing, sealing devices	(S)	11.4	(NA)	(NA)	(S)	50.5	(NA)	(NA)
3357	Nonferrous wiredrawing and insulating	(D)	(D)	(D)	(D)	62.8	76.1	(X)	(X)

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards. (X) Not applicable.

Table 6c. **Plastics Resins Consumed by Selected Industry: 1977 and 1972**

1977 code	Industry	Plastics resins (282104, 282105, 282106, 282107, 282108, 282131, 282132, 282133, 282135, 282137, 282141, 282142, and 282143)			
		1977		1972	
		Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
	Total	(NA)	9,488.0	(NA)	(NA)
2026	Fluid milk	154.5	46.6	(X)	(X)
2291	Felt goods except woven felt, hats.	(D)	(D)	(X)	(X)
2293	Paddings and upholstery filling..	(D)	(D)	-	-
2295	Coated fabrics, not rubberized...	427.4	137.1	(X)	(X)
2297	Nonwoven fabrics	25.1	8.0	-	-
2393	Textile bags	14.1	4.6	-	-
2394	Canvas and related products	595.2	5.2	-	-
2396	Automotive and apparel trimmings.	8.0	22.6	-	-
2435	Hardwood veneer and plywood	1.8	.3	(X)	(X)
2436	Softwood veneer and plywood	45.1	6.0	(X)	(X)
2437	Structural wood members, n.e.c...	(S)	2.1	(X)	(X)
2441	Nailed wood boxes and shook	(D)	(D)	(X)	(X)
2449	Wood containers, n.e.c.	(D)	(D)	(X)	(X)
2452	Prefabricated wood buildings	(S)	1.3	(S)	.3
2492	Particleboard	(S)	(D)	(X)	(X)
2499	Wood products, n.e.c.	(S)	(D)	(X)	(X)
2511	Wood household furniture	(S)	3.4	(X)	(X)
2512	Upholstered household furniture..	(S)	.2	(X)	(X)
2517	Wood TV and radio cabinets	(D)	(D)	(X)	(X)
2519	Household furniture, n.e.c.	87.7	35.9	(X)	(X)
2599	Furniture and fixtures, n.e.c....	.2	.2	-	-
2641	Paper coating and glazing	(D)	(D)	298.1	51.6
2643	Bags, except textile bags	1,695.2	483.7	1,036.7	122.4
2647	Sanitary paper products	(D)	(D)	(X)	(X)
2648	Stationery products	(D)	(D)	(X)	(X)
2649	Converted paper products, n.e.c..	(S)	18.5	-	-
2812	Alkalies and chlorine	(D)	(D)	-	-
2816	Inorganic pigments	13.1	4.6	-	-
2819	Industrial inorganic chemicals, n.e.c.	13.1	6.3	-	-
2821	Plastics materials and resins....	839.0	268.2	572.8	86.8
2822	Synthetic rubber	(D)	(D)	(X)	(X)
2823	Cellulosic manmade fibers	(D)	(D)	(X)	(X)
2824	Organic fibers, noncellulosic....	1,166.4	415.6	-	-
2851	Paints and allied products	865.0	335.6	1,424.8	10.7
2865	Cyclic crudes and intermediates..	5.0	2.4	-	-
2869	Industrial organic chemicals, n.e.c.	92.7	24.0	(X)	37.0
2891	Adhesives and sealants	501.3	152.6	(X)	63.0
2893	Printing ink	91.3	47.1	(X)	(X)
3011	Tires and inner tubes	65.0	27.1	79.8	12.8
3021	Rubber and plastics footwear	12.8	3.9	(S)	17.7
3041	Rubber, plastics hose and belting	161.6	48.3	97.8	20.8
3069	Fabricated rubber products, n.e.c.	96.9	34.8	158.8	30.6
3079	Miscellaneous plastics products..	15,079.9	4,856.8	(X)	(X)
3142	House slippers	(D)	(D)	(X)	(X)
3143	Men's footwear, except athletic..	39.5	16.2	(X)	(X)
3144	Women's footwear, except athletic	(X)	8.2	(X)	(X)
3149	Footwear, except rubber, n.e.c...	23.6	10.4	(X)	(X)
3161	Luggage	32.1	13.7	(X)	(X)
3171	Women's handbags and purses	(D)	(D)	(X)	(X)
3172	Personal leather goods, n.e.c....	11.6	1.2	(X)	(X)
3292	Asbestos products	216.0	66.1	(X)	26.9
3293	Gaskets, packing, sealing devices	(S)	15.0	(X)	(X)
3296	Mineral wool	215.7	37.5	(X)	21.0
3357	Nonferrous wiredrawing, insulating	1,103.2	423.5	2,306.1	208.0
3411	Metal cans	(S)	11.1	(X)	(X)
3412	Metal barrels, drums, and pails..	(D)	(D)	(X)	(X)
3429	Hardware, n.e.c.	133.4	72.2	(X)	(X)
3451	Screw machine products	.4	.2	(X)	(X)
3452	Bolts, nuts, rivets, and washers.	1.5	2.1	(X)	(X)
3465	Automotive stampings	(S)	11.4	(X)	4.1
3466	Crowns and closures	64.5	24.7	22.4	4.4
3469	Metal stampings, n.e.c.	(S)	5.9	9.7	2.7
3482	Small arms ammunition	13.4	4.7	(X)	(X)
3483	Ammunition, except small arms, n.e.c.	.7	1.4	3.1	2.2
3484	Small arms	(D)	(D)	(X)	(X)
3489	Ordnance and accessories, n.e.c..	(D)	(D)	(X)	(X)
3498	Fabricated pipe and fittings	(X)	2.8	(X)	(X)
3499	Fabricated metal products, n.e.c.	24.3	8.9	(X)	(X)
3582	Commercial laundry equipment	(D)	(D)	(X)	(X)
3585	Refrigeration, heating equipment	(X)	43.8	(X)	(X)
3589	Service industry machinery, n.e.c.	(X)	9.1	(X)	10.0
3613	Switchgear, switchboard apparatus	(X)	21.5	(X)	14.5
3622	Industrial controls	(X)	8.8	(X)	9.5
3632	Household refrigerators, freezers	(X)	47.9	(X)	(X)
3633	Household laundry equipment	(X)	15.0	(X)	(X)
3634	Electric housewares and fans	(X)	47.5	(X)	34.0
3635	Household vacuum cleaners	(X)	18.1	(X)	(X)
3636	Sewing machines	(D)	(D)	(X)	(X)
3639	Household appliances, n.e.c.	(D)	(D)	(X)	7.0
3643	Current-carrying wiring devices.	70.9	41.7	70.1	21.8
3644	Noncurrent-carrying wiring devices	42.8	17.5	(S)	5.2
3645	Residential lighting fixtures...	(S)	.7	(S)	4.1
3646	Commercial lighting fixtures....	(X)	7.5	(X)	(X)
3647	Vehicular lighting equipment....	66.0	39.7	39.0	12.0
3648	Lighting equipment, n.e.c.	6.4	4.8	5.8	2.0
3651	Radio and TV receiving sets	(S)	10.4	(X)	(Z)
3652	Phonograph records, prerecorded tape	216.5	75.3	(NA)	(NA)
3661	Telephone and telegraph apparatus	(D)	(D)	(X)	(X)
3662	Radio and TV communication equipment	(X)	16.4	(X)	5.2
3671	Electron tubes, all types	(X)	2.2	(X)	(NA)
3674	Semiconductors, related devices.	(X)	10.4	1.0	1.4
3675	Electronic capacitors	(X)	4.6	(X)	3.1
3676	Electronic resistors	(X)	3.4	(X)	1.7
3677	Electronic coils and transformers	(X)	2.9	(X)	2.2
3678	Electronic connectors	(X)	12.1	(X)	9.3
3679	Electronic components, n.e.c....	(X)	28.3	(X)	17.9
3691	Storage batteries	(D)	(D)	(X)	(X)
3692	Primary batteries, dry and wet..	(D)	(D)	(X)	(X)
3693	X-ray apparatus and tubes	(X)	3.9	(NA)	(NA)
3694	Engine electrical equipment	43.0	28.5	(X)	16.0
3711	Motor vehicles and car bodies...	(D)	(D)	(X)	(X)
3713	Truck and bus bodies	(S)	1.1	3.1	1.1
3714	Motor vehicle parts, accessories	266.1	135.7	208.0	51.1
3715	Truck trailers	(D)	(D)	(X)	(X)
3716	Motor homes	(S)	2.1	-	-
3731	Ship building and repairing	11.0	4.8	(X)	(X)
3732	Boat building and repairing	(S)	65.0	140.1	28.3
3751	Motorcycles, bicycles, and parts	3.9	2.7	(X)	(X)
3795	Tanks and tank components	(D)	(D)	-	-
3799	Transportation equipment, n.e.c.	(D)	(D)	(X)	(X)
3811	Engineering, scientific instruments	2.0	1.3	(X)	(X)
3822	Environmental controls	(X)	5.2	(X)	(X)
3823	Process control instruments	(X)	.8	(X)	(X)
3824	Fluid meters and counting devices	(X)	7.3	(X)	(X)
3825	Instruments to measure electricity	(X)	7.4	(X)	(X)
3829	Measuring, controlling devices, n.e.c.	(X)	1.3	(X)	(X)
3832	Optical instruments and lenses..	(X)	4.5	(X)	(X)
3841	Surgical and medical instruments	(S)	25.5	(X)	(X)
3842	Surgical appliances and supplies	(S)	15.4	(X)	21.0
3843	Dental equipment and supplies...	(S)	1.8	(NA)	(NA)
3851	Ophthalmic goods	(S)	16.5	(X)	15.0
3861	Photographic equipment and supplies	100.5	42.5	(X)	(X)
3873	Watches, clocks, and watchcases.	13.0	6.6	(X)	10.0
3942	Dolls	(S)	11.0	(X)	2.2
3944	Games, toys, children's vehicles	(S)	139.3	(X)	66.8
3949	Sporting and athletic goods, n.e.c.	(S)	51.3	97.2	45.5
3963	Buttons	(S)	8.1	(X)	(X)
3964	Needles, pins, and fasteners....	16.1	5.6	(X)	(X)
3993	Signs and advertising displays..	(S)	7.2	(X)	(X)
3996	Hard surface floor coverings....	224.1	76.7	(X)	(X)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (S) Withheld because estimate did not meet publication standards. (X) Not applicable. (Z) Less than half the unit of measurement shown.

Table 6d. **Plastics Products (Fabricated) Consumed by Selected Industry: 1977 and 1972**

1977 code	Industry	Miscellaneous Plastics Products (307901, 307902, 307903, 307905, 307906, 307907, 307908, 307909, 307914, 307921, 307922, 307931, 307940, 307951, and 307965)		1977 code	Industry	Miscellaneous Plastics Products (307901, 307902, 307903, 307905, 307906, 307907, 307908, 307909, 307914, 307921, 307922, 307931, 307940, 307951, and 307965)	
		1977	1972			1977	1972
		Delivered cost (million dollars)	Delivered cost (million dollars)			Delivered cost (million dollars)	Delivered cost (million dollars)
	Total	5,431.1	(NA)	3431	Metal sanitary ware	(D)	(X)
				3432	Plumbing fittings and brass goods	(D)	(X)
2011	Meat packing plants	59.2	40.6	3451	Screw machine products	1.2	.7
2013	Sausages and other prepared meats	90.2	50.1	3452	Bolts, nuts, rivets, and washers	2.0	1.6
2022	Cheese, natural and processed	(D)	(X)	3465	Automotive stampings	23.9	(X)
2023	Condensed and evaporated milk	1.4	(X)	3466	Crowns and closures	2.9	(NA)
2024	Ice cream and frozen desserts	(D)	(X)	3469	Metal stampings, n.e.c.	26.1	(X)
2026	Fluid milk	187.7	(X)	3494	Valves and pipe fittings	17.2	7.0
2111	Cigarettes	(D)	(X)	3497	Metal foil and leaf	26.5	(X)
2121	Cigars	8.1	(X)	3499	Fabricated metal products, n.e.c.	12.5	(X)
2131	Chewing and smoking tobacco	1.2	(X)	3523	Farm machinery and equipment	24.8	(X)
2291	Felt goods, except woven felt, hats	(D)	(X)	3524	Lawn and garden equipment	25.9	(X)
2293	Paddings and upholstery filling	(D)	(X)	3531	Construction machinery	6.0	4.0
2295	Coated fabrics, not rubberized	7.9	-	3532	Mining machinery	.8	(X)
2297	Nonwoven fabrics	9.4	-	3533	Oilfield machinery	4.0	4.0
2391	Curtains and draperies	1.1	(X)	3536	Hoists, cranes, and monorails	1.1	(X)
2392	House furnishings, n.e.c.	26.8	(X)	3553	Woodworking machinery	(D)	(X)
2393	Textile bags	4.6	(X)	3561	Pumps and pumping equipment	15.6	8.0
2396	Automotive and apparel trimmings	22.6	(X)	3563	Air and gas compressors	7.0	(X)
2399	Fabricated textile products, n.e.c.	8.2	(X)	3573	Electronic computing equipment	62.9	(X)
				3574	Calculating, accounting machines	19.2	(X)
2431	Millwork	13.6	(X)	3576	Scales, balances, except laboratory	(D)	(X)
2452	Prefabricated wood buildings	4.2	1.2				
2511	Wood household furniture	56.9	(X)	3579	Office machines, typewriters, etc	26.0	4.0
2512	Upholstered household furniture	163.7	(X)	3581	Automatic merchandising machines	(D)	(X)
2514	Metal household furniture	49.5	(X)	3582	Commercial laundry equipment	(D)	(X)
2515	Mattresses and bedsprings	42.1	(X)	3585	Refrigeration, heating equipment	84.5	49.0
2517	Wood TV and radio cabinets	(D)	(X)	3586	Measuring and dispensing pumps	3.0	(X)
2519	Household furniture, n.e.c.	(D)	(X)	3589	Service industry machinery, n.e.c.	9.9	(X)
2521	Wood office furniture	9.2	-	3613	Swithgear, switchboard apparatus	32.9	34.0
2522	Metal office furniture	26.2	14.4	3622	Industrial controls	5.6	18.0
2531	Public building related furniture	22.7	18.7	3631	Household cooking equipment	18.7	5.0
2541	Wood partitions and fixtures	47.4	50.6	3632	Household refrigerators, freezers	124.9	(X)
2542	Metal partitions and fixtures	3.9	2.3	3633	Household laundry equipment	27.3	31.0
2591	Drapery hardware, blinds, shades	10.6	4.0	3634	Electric housewares and fans	70.3	47.0
2599	Furniture and fixtures, n.e.c.	11.8	5.9	3635	Household vacuum cleaners	1.9	(X)
2641	Paper coating and glazing	195.2	35.7	3636	Sewing machines	(D)	(X)
2642	Envelopes	7.5	7.1	3639	Household appliances, n.e.c.	10.6	5.0
2643	Bags, except textile bags	144.8	75.5	3643	Current-carrying wiring devices	24.5	(X)
				3644	Noncurrent-carrying wiring devices	4.5	(X)
2645	Die-cut paper and board	24.6	4.1	3645	Residential lighting fixtures	11.3	(X)
2646	Dressed and molded pulp goods	(D)	(X)	3646	Commercial lighting fixtures	25.5	(X)
2647	Sanitary paper products	(D)	(X)	3647	Vehicular lighting equipment	10.4	(X)
2648	Stationery products	5.9	2.1	3648	Lighting equipment, n.e.c.	12.7	(X)
2649	Converted paper products, n.e.c.	28.7	4.3	3651	Radio and TV receiving sets	22.7	48.0
2782	Blankbooks and looseleaf binders	14.4	-	3652	Phonograph records, prerecorded tape	36.2	(NA)
2789	Bookbinding and related work	1.5	1.2	3661	Telephone and telegraph apparatus	(D)	17.0
2819	Industrial inorganic chemicals, n.e.c.	(D)	-	3691	Storage batteries	94.5	(X)
2821	Plastics materials and resins	.3	-	3692	Primary batteries, dry and wet	(D)	(X)
2824	Organic fibers, noncellulosic	22.7	-	3693	X-ray apparatus and tubes	8.4	(NA)
2831	Biological products	14.3	2.0	3694	Engine electrical equipment	20.2	15.0
2833	Medicinalo and botanicals	1.3	1.7	3711	Motor vehicles and car bodies	(D)	(X)
2834	Pharmaceutical preparations	143.8	75.5	3713	Truck and bus bodies	3.6	(X)
2841	Soap and other detergents	146.4	85.0	3714	Motor vehicle parts, accessories	93.6	(X)
2842	Polishes and sanitation goods	157.5	46.2	3715	Truck trailers	10.7	(X)
2843	Surface active agents	1.9	(NA)	3716	Motor homes	9.2	(NA)
2844	Toilet preparations	278.5	201.3	3731	Ship building and repairing	3.7	(X)
2851	Paints and allied products	11.7	(X)	3732	Boat building and repairing	7.1	(X)
2861	Gum and wood chemicals	(D)	(X)	3751	Motorcycles, bicycles, and parts	15.4	(X)
2879	Agricultural chemicals, n.e.c.	12.1	(X)	3792	Travel trailers and campers	14.9	(X)
2891	Adhesives and sealants	10.0	2.0	3799	Transportation equipment, n.e.c.	2.6	(X)
2892	Explosives	5.0	(X)	3811	Engineering, scientific instruments	6.0	(X)
2893	Printing ink	2.5	(X)	3822	Environmental controls	7.1	5.0
3011	Tires and inner tubes	2.7	(X)	3823	Process control instruments	11.8	3.0
3021	Rubber and plastics footwear	3.1	(X)	3824	Fluid meters and counting devices	5.6	5.0
3041	Rubber, plastics hose and belting	11.7	(X)	3825	Instruments to measure electricity	10.6	5.0
3069	Fabricated rubber products, n.e.c.	20.3	(X)	3829	Measuring, controling devices, n.e.c.	4.7	(X)
3079	Miscellaneous plastics products	737.1	(X)	3832	Optical instruments and lenses	2.3	(X)
3142	House slippers	(D)	(X)	3841	Surgical and medical instruments	92.2	(NA)
3143	Men's footwear, except athletic	(D)	(X)	3842	Surgical appliances and supplies	33.1	9.0
3144	Women's footwear, except athletic	29.9	-	3843	Dental equipment and supplies	4.4	(NA)
3149	Footwear, except rubber, n.e.c.	8.5	-	3851	Ophthalmic goods	32.9	(X)
3161	Luggage	7.6	(X)	3861	Photographic equipment and supplies	63.7	(X)
3171	Women's handbags and purses	(D)	(X)	3873	Watches, clocks, and watchcases	16.7	18.0
3172	Personal leather goods, n.e.c.	14.2	(X)	3944	Games, toys, children's vehicle	65.4	86.0
3296	Mineral wool	12.7	11.0	3949	Sporting and athletic goods, n.e.c.	49.4	(X)
3411	Metal cans	7.0	(X)	3951	Pens and mechanical pencils	20.3	(NA)
3412	Metal barrels, drums, and pails	(D)	(X)	3993	Signs and advertising displays	56.2	(X)
3429	Hardwear, n.e.c.	57.6	(X)	3999	Manufacturing industries, n.e.c.	31.4	(X)

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. n.e.c. Not elsewhere classified. (X) Not applicable.

Metals

GENERAL

This chapter presents data on the consumption of selected metal mill shapes and forms, castings, forgings, refinery shapes, and scrap.

MILL SHAPES, CASTINGS, AND FORGINGS

The materials used by the metal fabricating industries in producing machinery, automobiles, and thousands of other products consist primarily of metal mill shapes and forms, castings, and forgings. The tables show the cost and quantity of consumption of the most important of these metals—iron and steel, aluminum and aluminum-base alloys, and copper and copper-base alloys. No data are available for copper and copper-base alloy forgings.

The steel mill shapes are shown separately for three grades of steel: carbon, alloy, and stainless. Carbon steel is subdivided into six shapes, alloy steel is divided in two shapes, while stainless steel is shown in total only.

The copper and copper-base alloy mill shapes are subdivided into bare wire for electrical conduction; insulated wire and cable; rod, bar, and mechanical wire; plate, sheet and strip; and pipe and tube. There is a degree of duplication in the consumption of copper and copper-base mill shapes because of the inclusion in these tables of both bare wire for electrical conduction and insulated wire and cable.

The aluminum and aluminum-base alloy mill shapes are subdivided into sheet, plate, and foil; extruded shapes; and all other mill shapes.

For castings, consumption data are shown separately for iron, steel, aluminum and aluminum-base alloy, and copper and copper-base alloy. Forgings are shown separately for iron and steel and aluminum and aluminum-base alloy.

PIG IRON, NONFERROUS REFINERY SHAPES, AND SCRAP

Consumption of materials by the primary metal industries is represented in the tables in this chapter by seven commodities: pig iron and iron and steel scrap (except home scrap), aluminum and aluminum-base alloy refinery shapes and scrap (except home scrap), copper and copper-base alloy refinery shapes and scrap (except home scrap), and zinc and zinc-base alloy refinery shapes. Consumption of these materials is also reported by metal fabricators which operate foundry departments or other activities involving such consumption.

INDUSTRY COVERAGE

The tables on consumption by industry include data for approximately 100 metal-fabricating industries. These represent all significant users of metal in manufacturing, and are covered by Major Group 34, Fabricated Metal Products, through Major Group 37, Transportation Equipment, and several additional miscellaneous industries, including Major Group 25, Furniture and Fixtures.

Although there were other metal consuming industries from which consumption data were either not collected or the quantities reported failed publication standards, the omission of these industries affects coverage only slightly.

To relieve very small metal consumers from reporting negligible amounts of total consumption, a minimum usage requirement was established: Expenditures of less than $10,000 for each shape or form were exempt.

When comparing consumption data with production figures, it should be noted that the consumption data cover manufacturing industries only. Consumption of these metal shapes in on-site construction, mining, farm uses, construction and maintenance of power lines, and in other nonmanufacturing areas, such as export, is not covered.

MILL SHAPES, CASTINGS, AND FORGINGS PRODUCED AND CONSUMED

Mill shapes and castings—Total consumption of mill shapes and forms, castings, and forgings in the manufacture of fabricated products must necessarily include the tonnages used by metal mills and foundries in their manufacture of fabricated products within the same establishment. These data on mill shapes and castings produced and consumed within the same establishment were obtained and are reported in quantity terms only. The consumption data on these items reported by producing establishments could not be shown either because of disclosure or because reporting was incomplete for some industries.

Forgings—To avoid duplication, data showing the consumption of iron and steel forgings are excluded from the totals for steel consumption since the quantities of forging stock, ingots, billets, and bars used by the forging plants are included in steel mill shapes and forms consumed.

DEFINITION OF METAL MILL SHAPES AND FORMS

Although the inquiry on metals consumed on the 1977 census schedules did not include a definition of the metal shapes specified, the metal fabricating companies' familiarity with the terms and their meaning provided a high degree of uniformity in reporting. The term "bars and bar shapes" appearing in the tables showing steel consumption, includes hot-rolled and cold-finished bars and tool-steel bars; "sheet and strip" includes hot- and cold-rolled, galvanized, and long ternes, but excludes tin plate, terne plate, and black plate; "wire and wire products" includes plain, galvanized, and other coated wire, as well as nails

and spikes and the like; "all other carbon steel mill shapes and forms" includes ingots, billets, wire rods, concrete reinforcing bars, tin plate, terne plate, black plate, pipe, tubing, and rails, but not forgings or materials fabricated beyond the steel mill level.

The terms copper and copper-base alloy and aluminum rolled, drawn, and extruded shapes are similar to the steel mill products listed above; i.e., sheets, bars, tubing, wire, etc. They do not include wire bars, ingots, or other unrolled forms of copper or aluminum.

The data for bare copper wire are limited to wire for electrical conduction. Data for nonelectrical copper wire are included with rod and bar. The data for copper and copper-base alloy place, sheet, and strip also include military cups and discs.

The castings (iron and steel, etc.) reported are only those in the rough and semifinished forms in which they are usually received from foundries. Castings, which had undergone extensive machining or other operations prior to their receipt at the consuming establishment, were considered as fabricated products rather than as rough castings, and are not included in these data. However, such castings are reported as consumed by the establishments performing the machining operations.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Total		Carbon steel							
				Bars and shapes, except concrete reinforcing bars (331010, 331011, and 331043)		Sheet and strip (331012)		Plates (331013)		Structural shapes (331015)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
	ALL INDUSTRIES, TOTAL. . . .	84 638.8	35788.2	8 978.3	3 764.0	37 729.7	13 577.9	8 816.0	3 144.3	5 092.9	1 808.3
24	LUMBER AND WOOD PRODUCTS . . .	224.0	92.0	12.4	3.2	20.4	9.9	-	-	106.3	33.2
245	WOOD BUILDINGS AND MOBILE HOMES.	224.0	92.0	12.4	3.2	20.4	9.9	-	-	106.3	33.2
2451	MOBILE HOMES	224.0	92.0	*12.4	3.2	20.4	9.9	-	-	*106.3	33.2
25	FURNITURE AND FIXTURES	2 323.5	846.7	15.3	5.1	1 714.3	586.0	3.8	1.2	17.9	5.8
251	HOUSEHOLD FURNITURE.	520.0	193.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2512	UPHOLSTERED HOUSEHOLD FURNITURE. .	(D)	(D)	-	-	(D)	(D)	-	-	-	-
2514	METAL HOUSEHOLD FURNITURE. . . .	445.3	162.2	(D)	(D)	221.1	80.6	(D)	(D)	(D)	(D)
2515	MATTRESSES AND BEDSPRINGS. . . .	(D)	(D)	-	-	(D)	(D)	-	-	-	-
252	OFFICE FURNITURE	615.8	211.7	(D)	(D)	556.3	182.3	-	-	(D)	(D)
2521	WOOD OFFICE FURNITURE.	20.6	9.3	-	-	(D)	(D)	-	-	-	-
2522	METAL OFFICE FURNITURE	595.1	202.5	(D)	(D)	(D)	(D)	-	-	(D)	(D)
2531	PUBLIC BLDG., RELATED FURNITURE.	*140.0	53.7	-	-	(D)	(D)	-	-	-	-
254	PARTITIONS AND FIXTURES.	810.1	287.8	12.7	4.0	660.0	217.7	3.8	1.2	14.9	4.5
2541	WOOD PARTITIONS AND FIXTURES . . .	17.9	10.2	-	-	8.3	3.4	-	-	-	-
2542	METAL PARTITIONS AND FIXTURES. . .	792.2	277.6	*12.7	4.0	651.7	214.3	*3.8	1.2	14.9	4.5
259	MISC. FURNITURE AND FIXTURES . .	237.6	99.7	1.1	.4	150.2	59.3	-	-	(D)	(D)
2591	DRAPERY HARDWARE, BLINDS, SHADES .	106.6	48.3	-	-	90.0	40.8	-	-	-	-
2599	FURNITURE AND FIXTURES, NEC. . . .	*131.1	51.4	1.1	.4	*60.1	18.4	-	-	(D)	(D)
26	PAPER AND ALLIED PRODUCTS. . .	175.5	82.8	-	-	175.5	82.8	-	-	-	-
265	PAPERBOARD CONTAINERS AND BOXES. .	175.5	82.8	-	-	175.5	82.8	-	-	-	-
2651	FOLDING PAPERBOARD BOXES	*9.5	4.5	-	-	*9.5	4.5	-	-	-	-
2652	SETUP PAPERBOARD BOXES	(D)	(D)	-	-	(D)	(D)	-	-	-	-
2653	CORRUGATED AND SOLID FIBER BOXES .	*6.4	4.1	-	-	*6.4	4.1	-	-	-	-
2654	SANITARY FOOD CONTAINERS	(D)	(D)	-	-	(D)	(D)	-	-	-	-
2655	FIBER CANS, DRUMS, SIMILAR PRODS .	150.8	70.6	-	-	150.8	70.6	-	-	-	-
30	RUBBER, MISC. PLASTICS PROD. .	404.2	309.6	(D)	(D)	(D)	(D)	(D)	(D)	.1	.1
3011	TIRES AND INNER TUBES.	186.0	145.0	-	-	-	-	-	-	-	-
3041	RUBBER, PLASTICS HOSE AND BELTING.	34.0	32.6	(D)	(D)	-	-	-	-	-	-
3069	FABRICATED RUBBER PRODUCTS, NEC.	153.9	121.4	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3079	MISCELLANEOUS PLASTICS PRODUCTS.	30.3	10.7	2.7	.9	(D)	(D)	(D)	(D)	.1	.1
32	STONE, CLAY, GLASS PRODUCTS. .	167.5	54.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
327	CONCRETE, GYPSUM, PLASTER PRODS.	137.4	36.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3271	CONCRETE BLOCK AND BRICK	*3.7	.9	-	-	-	-	-	-	-	-
3272	CONCRETE PRODUCTS, NEC	*133.7	35.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
329	MISC. NONMETALLIC MINERAL PRODS.	31.7	18.0	-	-	-	-	-	-	-	-
3292	ASBESTOS PRODUCTS.	(D)	(D)	-	-	-	-	-	-	-	-
3293	GASKETS, PACKING, SEALING DEVICES.	(D)	(D)	-	-	-	-	-	-	-	-
34	FABRICATED METAL PRODUCTS. . .	43 553.1	17 818.8	4 098.0	1 518.9	18 614.7	6 806.2	3 350.7	1 149.8	3 020.1	1 028.4
341	METAL CANS, SHIPPING CONTAINERS.	6 084.5	2 792.7	-	-	912.7	357.2	-	-	-	-
3411	METAL CANS	4 835.9	2 461.1	-	-	*165.5	84.6	-	-	-	-
3412	METAL BARRELS, DRUMS, AND PAILS. .	*1 248.6	331.6	-	-	747.2	272.6	-	-	-	-
342	CUTLERY, HANDTOOLS AND HARDWARE.	1 820.0	880.3	304.6	129.2	1 152.6	465.6	12.6	5.8	2.1	2.9
3421	CUTLERY.	35.6	34.5	6.6	5.8	15.4	9.3	-	-	-	-
3423	HAND AND EDGE TOOLS, NEC	430.1	205.1	162.9	69.5	128.2	50.3	1.8	1.7	(D)	(D)
3425	HANDSAWS AND SAW BLADES.	41.9	55.2	3.1	1.8	17.8	21.5	.8	.9	-	-
3429	HARDWARE, NEC.	1 312.4	585.6	*132.0	52.1	991.2	384.5	*10.0	3.2	(D)	(D)
343	PLUMBING, HEATING, EXCEPT ELEC .	338.9	181.1	8.6	3.3	231.7	94.6	21.9	7.1	(D)	(D)
3431	METAL SANITARY WARE.	91.7	61.1	(D)	(D)	61.6	24.3	(D)	(D)	-	-
3432	PLUMBING FITTINGS AND BRASS GOODS.	14.6	16.6	(D)	(D)	5.2	2.6	(D)	(D)	-	-
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	232.6	103.4	*8.2	3.0	164.8	67.6	21.6	7.0	(D)	(D)
344	FABRICATED STRUC. METAL PRODS. .	14 396.8	5 349.6	1 098.1	334.2	4 510.3	1 689.1	2 946.9	1 008.4	2 861.7	967.8
3441	FABRICATED STRUCTURAL METAL. . . .	4 530.8	1 573.2	285.6	97.8	479.6	170.8	925.6	327.2	2 279.3	778.8
3442	METAL DOORS, SASH, AND TRIM. . . .	352.3	160.0	10.0	4.2	307.7	129.6	2.5	.9	7.0	3.3
3443	FABRICATED PLATEWORK, BOILER SHOP.	3 303.7	1 487.3	140.8	48.4	549.2	184.4	1 691.2	571.3	268.4	91.8
3444	SHEET METALWORK.	2 051.9	803.7	*37.0	14.1	1 653.9	594.9	73.5	25.4	43.3	15.0
3446	ARCHITECTURAL METALWORK.	531.4	198.0	95.3	32.6	297.4	104.4	30.6	9.7	45.1	16.6
3448	PREFABRICATED METAL BUILDINGS. . .	1 487.2	609.7	97.1	35.8	1 024.0	429.1	206.7	68.4	78.8	28.0
3449	MISCELLANEOUS METALWORK.	2 139.4	517.7	432.2	101.3	198.6	75.9	16.8	5.4	139.9	34.3
345	SCREW MACHINE PROD., BOLTS, ETC.	2 114.5	1 027.9	636.9	301.0	236.5	87.5	22.3	5.8	-	-
3451	SCREW MACHINE PRODUCTS	419.4	261.8	300.1	171.8	16.0	6.2	*.1	.1	-	-
3452	BOLTS, NUTS, RIVETS, AND WASHERS .	1 695.0	766.1	336.7	129.2	220.5	81.3	22.2	5.7	-	-
346	METAL FORGINGS AND STAMPINGS . .	14 008.9	5 448.6	1 531.7	538.2	10 395.8	3 695.9	115.2	39.9	45.2	16.1
3462	IRON AND STEEL FORGINGS.	1 848.1	800.6	1 034.9	368.5	-	-	-	-	-	-
3463	NONFERROUS FORGINGS.	8.1	18.7	(D)	(D)	-	-	-	-	-	-
3465	AUTOMOTIVE STAMPINGS	9 908.7	3 623.1	404.0	137.2	8 911.7	3 142.8	42.2	16.1	*24.7	9.2
3466	CROWNS AND CLOSURES.	265.5	125.0	(D)	(D)	(D)	(D)	-	-	-	-
3469	METAL STAMPINGS, NEC	1 978.6	881.2	*92.4	32.3	(D)	(D)	*72.9	23.8	20.5	6.9
348	ORDNANCE AND ACCESSORIES, NEC. .	164.2	88.7	48.7	22.5	28.1	14.2	19.1	7.2	(D)	(D)
3482	SMALL ARMS AMMUNITION.	7.5	7.8	(D)	(D)	(D)	(D)	-	-	-	-
3483	AMMUNITION, EXC. SMALL ARMS, NEC .	110.5	52.9	33.6	14.5	(D)	(D)	(D)	(D)	(D)	(D)
3484	SMALL ARMS	31.6	20.6	12.7	6.7	(D)	(D)	-	-	-	-
3489	ORDNANCE AND ACCESSORIES NEC . . .	14.6	7.5	(D)	(D)	(D)	(D)	(D)	(D)	*.4	.2

See footnotes at end of table.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Carbon steel—Con.				Alloy steel				Stainless steel			
		Wire and wire products (331017)		All other mill shapes and forms (331001, 331009, 331018, 331019, 331041, & 331014)		Bar and bar shapes, except stainless (331021 and 331046)		All other mill shapes and forms, except stainless (331020, 331025, 331029, 331044, 331045, & 331026)		Sheet and strip (331033)		All other stainless steel mill shapes and forms (331031, 331047, 331048, 331049, 331036, & 331050)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
	ALL INDUSTRIES, TOTAL. . . .	2 993.6	1 506.2	13 612.4	5 959.1	2 962.1	1 670.9	3 179.7	1 992.1	744.7	1 241.5	529.4	1 123.7
24	LUMBER AND WOOD PRODUCTS . . .	-	-	62.4	29.8	(D)	(D)	19.8	15.0	-	-	(D)	(D)
245	WOOD BUILDINGS AND MOBILE HOMES.	-	-	62.4	29.8	(D)	(D)	19.8	15.0	-	-	(D)	(D)
2451	MOBILE HOMES	-	-	*62.4	29.8	(D)	(D)	*19.8	15.0	-	-	(D)	(D)
25	FURNITURE AND FIXTURES	15.8	5.8	479.2	186.2	29.0	.1	(D)	(D)	(D)	(D)	24.4	31.3
251	HOUSEHOLD FURNITURE.	.5	.2	266.7	97.7	(D)	(D)	3.5	1.8	(D)	(D)	.9	1.8
2512	UPHOLSTERED HOUSEHOLD FURNITURE. .	-	-	(D)	(D)	-	-	-	-	-	-	(D)	(D)
2514	METAL HOUSEHOLD FURNITURE. . . .	.5	.2	*219.0	77.7	(D)	(D)	*3.5	1.8	(D)	(D)	(D)	(D)
2515	MATTRESSES AND BEDSPRINGS. . . .	-	-	(D)	(D)	-	-	-	-	-	-	-	-
252	OFFICE FURNITURE	(D)	(D)	41.6	18.8	-	-	(D)	(D)	(D)	(D)	(D)	(D)
2521	WOOD OFFICE FURNITURE.	-	-	4.4	1.9	-	-	(D)	(D)	-	-	(D)	(D)
2522	METAL OFFICE FURNITURE	(D)	(D)	*37.2	16.9	-	-	*1.9	1.0	(D)	(D)	10.1	4.6
2531	PUBLIC BLDG., RELATED FURNITURE.	-	-	*37.4	15.6	-	-	(D)	(D)	-	-	(D)	(D)
254	PARTITIONS AND FIXTURES. . . .	14.9	5.4	93.8	37.2	(D)	(D)	5.0	8.0	(D)	(D)	4.7	9.2
2541	WOOD PARTITIONS AND FIXTURES . .	-	-	*5.7	3.5	-	-	(D)	(D)	(D)	(D)	*.6	1.2
2542	METAL PARTITIONS AND FIXTURES. .	*14.9	5.4	*88.1	33.7	(D)	(D)	(D)	(D)	*.2	.5	*4.1	7.9
259	MISC. FURNITURE AND FIXTURES . .	(D)	(D)	39.7	17.0	(D)	(D)	5.8	2.4	4.6	7.6	6.8	12.6
2591	DRAPERY HARDWARE, BLINDS, SHADES .	-	-	15.0	6.6	-	-	1.6	.8	-	-	-	-
2599	FURNITURE AND FIXTURES, NEC. . .	(D)	(D)	*24.7	10.3	(D)	(D)	4.2	1.6	*4.6	7.6	*6.8	12.6
26	PAPER AND ALLIED PRODUCTS. . .	-	-	-	-	-	-	-	-	-	-	-	-
265	PAPERBOARD CONTAINERS AND BOXES. .	-	-	-	-	-	-	-	-	-	-	-	-
2651	FOLDING PAPERBOARD BOXES	-	-	-	-	-	-	-	-	-	-	-	-
2652	SETUP PAPERBOARD BOXES	-	-	-	-	-	-	-	-	-	-	-	-
2653	CORRUGATED AND SOLID FIBER BOXES .	-	-	-	-	-	-	-	-	-	-	-	-
2654	SANITARY FOOD CONTAINERS	-	-	-	-	-	-	-	-	-	-	-	-
2655	FIBER CANS, DRUMS, SIMILAR PRODS .	-	-	-	-	-	-	-	-	-	-	-	-
30	RUBBER, MISC. PLASTICS PROD. .	237.4	187.7	150.4	114.8	(D)	(D)	.3	.3	.6	1.2	(D)	(D)
3011	TIRES AND INNER TUBES.	186.0	145.0	-	-	-	-	-	-	-	-	-	-
3041	RUBBER, PLASTICS HOSE AND BELTING.	33.3	32.3	(D)	(D)	(D)	(D)	-	-	-	-	-	-
3069	FABRICATED RUBBER PRODUCTS, NEC.	*17.1	10.0	134.2	110.4	-	-	-	-	(D)	(D)	(D)	(D)
3079	MISCELLANEOUS PLASTICS PRODUCTS.	*1.0	.5	(D)	(D)	(D)	(D)	.3	.3	(D)	(D)	(D)	(D)
32	STONE, CLAY, GLASS PRODUCTS. .	(D)	(D)	165.0	51.2	-	-	(D)	(D)	(D)	(D)	(D)	(D)
327	CONCRETE, GYPSUM, PLASTER PRODS.	(D)	(D)	136.7	36.2	-	-	-	-	-	-	-	-
3271	CONCRETE BLOCK AND BRICK	-	-	*3.7	.9	-	-	-	-	-	-	-	-
3272	CONCRETE PRODUCTS, NEC	(D)	(D)	*133.0	35.4	-	-	-	-	-	-	-	-
329	MISC. NONMETALLIC MINERAL PRODS.	(D)	(D)	28.2	15.0	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3292	ASBESTOS PRODUCTS.	-	-	(D)	(D)	-	-	-	-	-	-	-	-
3293	GASKETS, PACKING, SEALING DEVICES.	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
34	FABRICATED METAL PRODUCTS. . .	1 949.2	900.6	9 426.6	3 970.7	1 274.5	549.2	1 240.9	768.4	335.1	593.8	243.2	533.0
341	METAL CANS, SHIPPING CONTAINERS.	5.7	2.3	5 159.0	2 425.9	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3411	METAL CANS	*1.0	.7	4 668.7	2 374.8	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3412	METAL BARRELS, DRUMS, AND PAILS. .	4.7	1.7	*490.3	51.2	-	-	(D)	(D)	(D)	(D)	(D)	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE.	96.1	44.6	85.1	44.8	87.6	57.5	32.9	32.0	37.4	74.1	9.1	23.9
3421	CUTLERY.	(D)	(D)	1.6	.8	2.4	1.1	(D)	(D)	5.4	13.1	*1.1	2.2
3423	HAND AND EDGE TOOLS, NEC	*14.4	5.9	27.0	10.0	81.2	52.7	(D)	(D)	(D)	(D)	(D)	(D)
3425	HANDSAWS AND SAW BLADES.	(D)	(D)	*5.7	8.7	(D)	(D)	10.9	16.0	(D)	(D)	(D)	(D)
3429	HARDWARE, NEC.	77.8	35.9	*50.9	25.4	(D)	(D)	*10.1	6.7	30.1	56.7	*6.9	18.9
343	PLUMBING, HEATING, EXCEPT ELEC .	*1.9	1.0	34.3	14.6	(D)	(D)	6.1	3.6	26.1	46.6	4.6	8.7
3431	METAL SANITARY WARE.	-	-	(D)	(D)	-	-	(D)	(D)	18.6	28.4	2.3	3.8
3432	PLUMBING FITTINGS AND BRASS GOODS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	1.9	7.9	1.3	3.0
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	*1.9	1.0	*21.3	8.5	(D)	(D)	4.6	2.6	5.6	10.2	*1.0	1.9
344	FABRICATED STRUC. METAL PRODS. .	158.4	67.1	2 298.1	683.1	61.9	27.3	249.6	192.4	127.8	198.5	84.0	181.7
3441	FABRICATED STRUCTURAL METAL. . . .	*44.2	16.2	458.1	137.5	*20.9	9.4	*28.2	17.9	6.2	10.5	*3.0	7.1
3442	METAL DOORS, SASH, AND TRIM. . . .	5.7	5.0	*7.5	4.8	1.0	.8	6.0	3.0	4.6	7.8	*.3	.7
3443	FABRICATED PLATEWORK, BOILER SHOP.	*13.4	9.2	*363.0	174.6	8.7	7.1	*116.0	124.0	76.5	111.1	76.5	165.4
3444	SHEET METALWORK.	*15.0	6.9	117.5	51.2	*5.6	2.7	*76.1	35.2	*27.2	52.2	*2.9	6.0
3446	ARCHITECTURAL METALWORK.	20.9	10.0	36.3	16.7	*2.3	1.5	(D)	(D)	(D)	(D)	.6	1.4
3448	PREFABRICATED METAL BUILDINGS. . .	4.0	1.6	56.6	25.6	(D)	(D)	(D)	(D)	7.7	12.2	*.3	.7
3449	MISCELLANEOUS METALWORK.	55.1	18.2	1 259.0	272.8	(D)	(D)	(D)	(D)	(D)	(D)	.3	.5
345	SCREW MACHINE PROD., BOLTS, ETC.	662.1	319.7	248.2	89.2	99.0	62.6	171.9	77.2	6.1	14.3	31.6	70.5
3451	SCREW MACHINE PRODUCTS	49.8	23.9	*7.6	4.9	24.7	20.7	8.2	5.1	*1.3	2.8	11.6	26.3
3452	BOLTS, NUTS, RIVETS, AND WASHERS .	612.3	295.7	240.7	84.3	74.3	41.9	163.6	72.1	4.7	11.6	20.0	44.3
346	METAL FORGINGS AND STAMPINGS . .	72.5	33.7	594.6	262.9	498.3	252.6	605.8	331.4	106.6	194.9	43.4	82.8
3462	IRON AND STEEL FORGINGS.	-	-	(D)	(D)	479.9	235.2	298.0	158.0	-	-	(D)	(D)
3463	NONFERROUS FORGINGS.	-	-	-	-	1.9	2.4	(D)	(D)	-	-	(D)	(D)
3465	AUTOMOTIVE STAMPINGS	47.3	21.5	159.6	64.4	7.7	7.6	250.8	109.0	(D)	(D)	(D)	(D)
3466	CROWNS AND CLOSURES.	(D)	(D)	242.1	113.0	(Z)	(Z)	-	-	(D)	(D)	-	-
3469	METAL STAMPINGS, NEC	(D)	(D)	(D)	(D)	*8.8	7.4	(D)	(D)	54.3	99.7	9.3	22.1
348	ORDNANCE AND ACCESSORIES, NEC. .	5.6	2.2	28.6	14.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3482	SMALL ARMS AMMUNITION.	-	-	(D)	(D)	-	-	(D)	(D)	-	-	(D)	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC .	(D)	(D)	(D)	(D)	(D)	(D)	5.6	4.2	*.6	1.2	*.8	2.7
3484	SMALL ARMS	(D)	(D)	(D)	(D)	6.6	5.9	1.0	1.5	(D)	(D)	.2	.2
3489	ORDNANCE AND ACCESSORIES NEC . . .	-	-	.1	.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Total		Carbon steel							
				Bars and shapes, except concrete reinforcing bars (331010, 331011, and 331043)		Sheet and strip (331012)		Plates (331013)		Structural shapes (331015)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
349	MISC. FABRICATED METAL PRODUCTS.	4 407.2	2 050.0	469.4	190.4	1 147.1	402.2	212.7	75.7	106.4	39.3
3493	STEEL SPRINGS, EXCEPT WIRE	419.9	190.1	*109.3	40.9	15.6	10.4	-	-	(D)	(D)
3494	VALVES AND PIPE FITTINGS	442.1	272.2	205.1	88.6	30.3	11.7	*68.7	28.8	(D)	(D)
3495	WIRE SPRINGS	628.1	331.6	4.3	1.8	158.7	72.2	-	-	(D)	(D)
3496	MISC. FABRICATED WIRE PRODUCTS	660.0	288.9	38.4	11.6	55.2	20.1	-	-	(D)	(D)
3498	FABRICATED PIPE AND FITTINGS	1 069.4	510.7	*50.7	24.3	32.8	10.3	47.0	12.5	*(D)	(D)
3499	FABRICATED METAL PRODUCTS, NEC	1 187.7	456.4	*61.6	23.2	854.5	277.5	97.1	34.4	*28.9	11.5
35	MACHINERY, EXCEPT ELECTRICAL	13 233.8	6 688.3	2 428.2	1 163.7	3 448.0	1 309.4	3 102.2	1 163.7	1 030.4	405.3
351	ENGINES AND TURBINES	567.6	334.7	102.3	52.4	115.6	47.1	180.5	78.0	(D)	(D)
3511	TURBINES, TURBINE GENERATOR SETS	296.8	204.5	35.5	16.4	14.8	5.5	141.0	63.8	-	-
3519	INTERNAL COMBUSTION ENGINES, NEC	270.8	130.2	66.9	36.0	100.9	41.6	39.5	14.3	(D)	(D)
352	FARM AND GARDEN MACHINERY	2 529.7	954.3	607.0	240.2	1 091.2	361.1	252.8	90.8	181.3	64.4
3523	FARM MACHINERY AND EQUIPMENT	2 330.4	864.7	574.0	225.7	968.6	311.1	249.1	89.0	177.9	62.7
3524	LAWN AND GARDEN EQUIPMENT	199.4	89.6	32.9	14.6	122.7	49.9	*3.7	1.9	*3.4	1.7
353	CONSTRUCTION, RELATED MACHINERY	4 728.2	1 998.5	736.6	301.8	464.4	160.5	1 761.8	624.3	573.6	207.6
3531	CONSTRUCTION MACHINERY	2 712.4	1 064.9	328.2	131.3	270.0	91.3	1 306.3	462.5	321.5	111.9
3532	MINING MACHINERY	256.8	121.3	45.7	17.8	16.8	6.0	104.2	40.3	*20.1	7.8
3533	OILFIELD MACHINERY	710.6	402.5	119.7	65.3	*1.0	.5	74.7	29.2	65.5	24.4
3534	ELEVATORS AND MOVING STAIRWAYS	90.7	42.7	12.2	5.0	22.2	8.2	*11.1	4.9	26.5	10.4
3535	CONVEYORS AND CONVEYING EQUIPMENT	399.3	166.2	85.6	34.7	*104.1	36.4	67.5	23.0	70.8	25.5
3536	HOISTS, CRANES, AND MONORAILS	*145.5	62.6	19.2	8.6	*19.9	8.2	51.8	19.2	*32.3	13.3
3537	INDUSTRIAL TRUCKS AND TRACTORS	412.9	138.3	126.0	39.1	30.4	9.9	146.3	45.2	36.9	14.2
354	METALWORKING MACHINERY	798.3	592.8	198.2	137.8	111.2	52.8	229.7	96.5	31.1	17.3
3541	MACHINE TOOLS, METAL-CUTTING	*133.4	91.4	*35.8	25.9	*13.5	5.5	*40.6	18.0	*5.5	4.2
3542	MACHINE TOOLS, METAL-FORMING	151.7	71.2	24.5	14.2	13.9	6.4	74.4	26.1	*8.8	3.8
3544	SPECIAL DIES, TOOLS, JIGS, ETC	*218.4	180.1	*52.3	41.9	*35.7	16.2	*74.3	36.0	*4.7	2.9
3545	MACHINE TOOL ACCESSORIES	*117.8	147.3	*40.4	29.2	*2.8	2.3	(D)	(D)	(D)	(D)
3546	POWER DRIVEN HANDTOOLS	62.8	44.1	15.4	11.6	27.4	14.8	(D)	(D)	(D)	(D)
3547	ROLLING MILL MACHINERY	46.8	2'.3	8.2	3.8	*2.5	1.2	26.4	9.6	2.8	1.6
3549	METALWORKING MACHINERY, NEC	*67.5	37.3	*21.6	11.2	15.4	6.3	*11.2	4.8	*8.0	3.7
355	SPECIAL INDUSTRY MACHINERY	807.0	515.9	199.8	105.5	145.0	62.4	(D)	(D)	74.1	37.1
3551	FOOD PRODUCTS MACHINERY	*140.2	113.3	*29.6	13.5	30.8	13.7	*1.2	6.9	*8.6	3.6
3552	TEXTILE MACHINERY	*66.0	45.7	20.6	11.6	*13.3	6.4	(D)	(D)	11.4	5.4
3553	WOODWORKING MACHINERY	*72.5	34.7	*20.5	8.8	27.7	10.7	*8.9	3.9	(D)	(D)
3554	PAPER INDUSTRIES MACHINERY	*58.0	46.2	*19.9	11.7	*.2	.3	*20.6	10.5	.1	.1
3555	PRINTING TRADES MACHINERY	*32.6	27.9	*15.3	12.1	2.7	2.3	4.7	3.3	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC	437.8	248.0	94.0	47.8	70.3	29.1	154.1	61.2	*53.8	27.4
356	GENERAL INDUSTRIAL MACHINERY	1 768.2	1 114.8	265.5	148.6	444.4	181.5	281.4	109.5	80.1	35.5
3561	PUMPS AND PUMPING EQUIPMENT	193.5	123.9	*41.5	22.2	19.9	7.4	*40.1	16.0	*9.0	3.8
3562	BALL AND ROLLER BEARINGS	576.9	466.6	52.5	42.4	111.9	43.2	(D)	(D)	-	-
3563	AIR AND GAS COMPRESSORS	95.6	51.9	*13.6	6.8	27.0	10.4	27.3	11.7	9.4	4.6
3564	BLOWERS AND FANS	*289.4	118.0	*17.8	7.8	*126.1	47.3	90.2	30.8	*27.3	10.3
3565	INDUSTRIAL PATTERNS	*3.5	3.0	(D)	(D)	1.8	1.1	(D)	(D)	.2	.1
3566	SPEED CHANGERS, DRIVES, AND GEARS	*84.1	54.9	*32.2	18.8	*1.4	.8	*11.0	6.5	(D)	(D)
3567	INDUSTRIAL FURNACES AND OVENS	*71.1	45.6	*(D)	(D)	*24.1	9.6	*22.5	8.7	14.5	6.5
3568	POWER TRANSMISSION EQUIPMENT, NEC	263.6	129.7	69.9	32.1	86.2	38.3	42.5	15.1	(D)	(D)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	190.5	121.2	*36.9	17.8	46.0	23.4	40.4	16.2	19.6	10.1
357	OFFICE AND COMPUTING MACHINES	162.3	99.8	24.3	15.5	81.0	34.1	(D)	(D)	(D)	(D)
3573	ELECTRONIC COMPUTING EQUIPMENT	46.7	32.2	*4.2	2.6	21.4	8.7	-	-	*8.3	7.4
3574	CALCULATING, ACCOUNTING MACHINES	1.9	1.6	.2	.2	.5	.4	-	-	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY	*38.6	21.1	5.3	2.8	*19.0	7.9	(D)	(D)	12.8	6.9
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	75.0	44.9	14.6	9.9	40.1	17.1	-	-	(D)	(D)
358	REFRIGERATION AND SERVICE MACH	1 322.1	647.1	99.7	45.9	884.9	361.2	86.1	33.0	23.4	10.5
3581	AUTOMATIC MERCHANDISING MACHINES	72.6	35.1	(D)	(D)	59.2	23.8	(D)	(D)	(D)	(D)
3582	COMMERCIAL LAUNDRY EQUIPMENT	*20.2	11.9	(D)	(D)	9.7	3.7	*2.2	.9	*1.0	.4
3585	REFRIGERATION, HEATING EQUIPMENT	1 006.1	468.7	71.1	30.1	729.3	301.1	43.3	16.1	*10.2	4.9
3586	MEASURING AND DISPENSING PUMPS	31.5	19.4	11.1	7.8	11.8	4.7	(D)	(D)	(D)	(D)
3589	SERVICE INDUSTRY MACHINERY, NEC	191.8	112.0	*15.2	6.8	74.8	27.9	*38.6	13.9	*11.4	4.7
359	MISC. MACHINERY, EXC. ELEC	600.6	430.3	194.7	115.9	110.4	48.8	97.8	45.0	24.7	9.9
3592	CARBURETORS, PISTONS, RINGS, ETC	85.1	85.6	18.4	13.1	27.4	16.7	.2	.2	(D)	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	*515.5	344.8	*176.3	102.8	*83.0	32.1	*97.6	44.9	*(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP	6 667.6	2 796.6	451.2	207.6	4 242.3	1 592.1	121.4	44.2	139.1	34.5
361	ELECTRIC DISTRIBUTING EQUIPMENT	787.2	410.9	25.4	11.9	442.3	165.3	47.6	16.5	16.0	7.4
3612	TRANSFORMERS	514.2	299.7	6.5	2.3	228.1	87.3	35.1	11.7	6.9	4.0
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	273.0	111.2	*18.9	9.6	214.1	78.0	12.6	4.7	9.1	3.5
362	ELECTRICAL INDUSTRIAL APPARATUS	1 433.5	619.6	104.7	48.3	777.8	316.3	54.5	18.7	21.8	8.4
3621	MOTORS AND GENERATORS	870.4	369.6	73.2	33.1	620.1	249.7	51.8	17.5	(D)	(D)
3622	INDUSTRIAL CONTROLS	*86.7	47.2	*7.4	5.3	*46.5	19.9	*.9	.4	*9.9	3.2
3623	WELDING APPARATUS, ELECTRIC	447.2	187.1	23.5	9.5	109.3	45.9	(D)	(D)	*11.3	4.5
3624	CARBON AND GRAPHITE PRODUCTS	(D)	(D)	-	-	-	-	-	-	-	-
3629	ELEC. INDUSTRIAL APPARATUS, NEC	(D)	(D)	.6	.3	1.8	.9	(D)	(D)	(D)	(D)
363	HOUSEHOLD APPLIANCES	2 272.4	928.2	94.6	47.8	1 857.3	688.6	(D)	(D)	8.6	3.5
3631	HOUSEHOLD COOKING EQUIPMENT	385.9	174.1	19.3	8.0	316.5	120.7	(D)	(D)	-	-
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	595.1	232.6	(D)	(D)	538.3	195.6	-	-	(D)	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT	599.3	229.3	21.2	11.9	438.5	164.0	-	-	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS	175.7	93.2	*39.5	17.4	107.3	45.2	(D)	(D)	-	-
3635	HOUSEHOLD VACUUM CLEANERS	(D)	(D)	*3.2	2.0	(D)	(D)	-	-	(D)	(D)
3636	SEWING MACHINES	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-
3639	HOUSEHOLD APPLIANCES, NEC	465.3	173.1	1.8	1.3	426.1	149.8	2.2	.8	(D)	(D)
364	ELEC. LIGHTING, WIRING EQUIP	1 080.0	431.3	73.2	27.5	734.0	258.3	(D)	(D)	8.4	5.7
3643	CURRENT-CARRYING WIRING DEVICES	56.3	27.8	*1.3	1.3	30.9	13.3	(D)	(D)	-	-
3644	NONCURRENT-CARRYING WIR'G DEVICES	717.8	248.5	53.8	19.4	490.5	153.9	(D)	(D)	(D)	(D)
3645	RESIDENTIAL LIGHTING FIXTURES	*42.5	23.6	(D)	(D)	19.4	8.6	(D)	(D)	*3.5	3.2
3646	COMMERCIAL LIGHTING FIXTURES	*163.3	68.5	*1.5	.8	*144.6	53.6	*.1	.1	.6	.3

See footnotes at end of table.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Carbon steel--Con.				Alloy steel				Stainless steel			
		Wire and wire products (331017)		All other mill shapes and forms (331001, 331009, 331018, 331019, 331041, & 331014)		Bar and bar shapes, except stainless (331021 and 331046)		All other mill shapes and forms, except stainless (331020, 331025, 331029, 331044, 331045, & 331026)		Sheet and strip (331033)		All other stainless steel mill shapes and forms (331031, 331047, 331048, 331049, 331036, & 331050)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
349	MISC. FABRICATED METAL PRODUCTS.	947.0	430.2	978.7	436.0	286.7	135.7	160.4	117.3	29.5	61.8	69.3	161.5
3493	STEEL SPRINGS, EXCEPT WIRE	32.5	17.9	(D)	(D)	250.9	105.6	2.8	3.0	2.5	7.4	*.9	2.8
3494	VALVES AND PIPE FITTINGS	(D)	(D)	77.9	41.7	21.8	17.2	*7.9	10.5	5.3	13.0	24.4	59.9
3495	WIRE SPRINGS	406.1	201.6	(D)	(D)	3.7	2.9	4.7	6.3	3.0	7.5	3.1	9.7
3496	MISC. FABRICATED WIRE PRODUCTS	*490.8	199.4	(D)	(D)	.9	1.0	11.0	12.2	*1.3	3.4	*9.0	20.7
3498	FABRICATED PIPE AND FITTINGS	(D)	(D)	745.1	316.7	*2.2	2.5	109.0	64.8	*6.9	11.7	23.9	49.6
3499	FABRICATED METAL PRODUCTS, NEC	15.1	9.6	*79.9	35.8	*7.2	6.6	25.1	20.4	*10.5	18.7	*8.0	18.8
35	MACHINERY, EXCEPT ELECTRICAL	210.5	128.6	1 221.4	668.8	786.1	662.4	720.4	595.4	137.7	258.6	148.8	332.4
351	ENGINES AND TURBINES	(D)	(D)	71.4	32.6	31.8	34.3	24.0	32.4	4.9	9.2	20.8	42.5
3511	TURBINES, TURBINE GENERATOR SETS	-	-	(D)	(D)	11.9	21.8	19.4	29.8	2.6	4.8	(D)	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC	(D)	(D)	(D)	(D)	19.9	12.5	4.5	2.6	*2.4	4.4	(D)	(D)
352	FARM AND GARDEN MACHINERY	39.0	22.6	249.8	110.4	57.1	26.5	39.1	18.5	10.7	16.8	1.7	3.0
3523	FARM MACHINERY AND EQUIPMENT	32.1	18.6	238.1	104.2	56.3	25.5	(D)	(D)	(D)	(D)	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT	*6.9	4.0	*11.7	6.2	.8	1.0	(D)	(D)	(D)	(D)	(D)	(D)
353	CONSTRUCTION, RELATED MACHINERY	45.2	25.6	528.5	249.1	278.3	174.0	304.4	183.6	12.6	21.3	22.9	50.7
3531	CONSTRUCTION MACHINERY	*21.8	9.9	264.2	124.4	81.7	63.3	114.8	63.1	*1.4	2.2	*2.5	5.1
3532	MINING MACHINERY	10.2	4.8	*20.7	11.0	*18.7	13.8	18.0	13.5	.7	1.5	1.7	4.8
3533	OILFIELD MACHINERY	(D)	(D)	121.3	65.9	172.7	92.6	*143.1	90.7	(D)	(D)	*10.8	31.0
3534	ELEVATORS AND MOVING STAIRWAYS	(D)	(D)	*14.0	7.3	(Z)	(Z)	(D)	(D)	*2.6	4.9	(Z)	(Z)
3535	CONVEYORS AND CONVEYING EQUIPMENT	*11.9	6.9	40.1	17.4	(Z)	(Z)	*7.2	4.6	*5.5	9.2	6.8	8.3
3536	HOISTS, CRANES, AND MONORAILS	*2.8	2.0	*10.8	4.6	*4.4	3.9	(D)	(D)	(D)	(D)	(D)	(D)
3537	INDUSTRIAL TRUCKS AND TRACTORS	1.7	.9	57.4	18.5	.8	.4	12.8	9.1	(D)	(D)	(D)	(D)
354	METALWORKING MACHINERY	15.8	12.6	52.8	40.3	112.5	163.6	38.5	48.6	3.3	6.9	5.1	16.3
3541	MACHINE TOOLS, METAL-CUTTING	(D)	(D)	*14.7	11.4	20.0	20.5	2.2	2.7	(D)	(D)	.6	2.2
3542	MACHINE TOOLS, METAL-FORMING	.6	1.0	*8.4	6.8	*8.5	6.5	12.0	5.6	.1	.2	.4	.5
3544	SPECIAL DIES, TOOLS, JIGS, ETC	.5	.8	*5.6	5.9	*26.6	47.6	*15.7	21.4	*1.9	4.1	*1.3	3.2
3545	MACHINE TOOL ACCESSORIES	3.1	5.8	16.2	9.3	*41.9	73.5	*6.8	16.5	.7	1.0	(D)	(D)
3546	POWER DRIVEN HANDTOOLS	(D)	(D)	2.3	2.6	10.2	10.5	.4	.7	(D)	(D)	(D)	(D)
3547	ROLLING MILL MACHINERY	(D)	(D)	*2.7	1.7	3.7	2.8	.2	.2	(D)	(D)	*.1	.2
3549	METALWORKING MACHINERY, NEC	4.7	1.5	*2.9	2.5	1.6	2.3	*1.1	1.4	.1	.4	.9	3.2
355	SPECIAL INDUSTRY MACHINERY	(D)	(D)	56.8	37.1	(D)	(D)	34.4	43.1	(D)	(D)	24.5	60.0
3551	FOOD PRODUCTS MACHINERY	(D)	(D)	*12.0	5.7	(D)	(D)	10.4	10.4	16.2	32.9	11.4	26.5
3552	TEXTILE MACHINERY	*9.8	9.1	*3.4	3.2	*.2	.3	*1.1	1.4	(D)	(D)	3.6	7.2
3553	WOODWORKING MACHINERY	-	-	*7.5	3.1	(D)	(D)	7.4	5.1	(D)	(D)	(D)	(D)
3554	PAPER INDUSTRIES MACHINERY	(D)	(D)	*9.7	6.8	(D)	(D)	*3.3	4.3	*1.4	3.4	*2.7	9.1
3555	PRINTING TRADES MACHINERY	(D)	(D)	4.1	3.3	*3.7	3.3	*1.1	1.5	(D)	(D)	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC	*7.9	3.2	20.2	15.0	*12.9	13.3	11.1	20.4	*7.4	14.7	*6.3	15.8
356	GENERAL INDUSTRIAL MACHINERY	47.8	26.3	131.4	87.0	238.4	196.4	234.9	223.4	19.9	45.0	24.5	61.5
3561	PUMPS AND PUMPING EQUIPMENT	*-	-	27.2	14.7	31.9	24.2	11.3	6.8	2.8	6.2	9.8	22.6
3562	BALL AND ROLLER BEARINGS	24.3	14.6	46.4	43.7	131.1	119.5	201.1	192.9	(D)	(D)	2.1	5.7
3563	AIR AND GAS COMPRESSORS	(D)	(D)	*4.5	4.6	6.6	5.3	2.3	2.1	(D)	(D)	*2.1	4.4
3564	BLOWERS AND FANS	*3.7	2.5	*13.5	5.7	(D)	(D)	*6.1	4.5	*3.5	6.8	(D)	(D)
3565	INDUSTRIAL PATTERNS	(D)	(D)	*.2	.3	(D)	(D)	*.2	.2	(D)	(D)	(D)	(D)
3566	SPEED CHANGERS, DRIVES, AND GEARS	(D)	(D)	1.5	2.7	*34.5	21.3	*2.1	1.3	(D)	(D)	*1.0	2.8
3567	INDUSTRIAL FURNACES AND OVENS	(D)	(D)	*3.2	1.8	-	-	1.6	4.8	3.6	10.7	*1.3	3.4
3568	POWER TRANSMISSION EQUIPMENT, NEC	10.1	4.5	14.2	6.7	*30.4	19.7	7.2	6.1	(D)	(D)	*1.2	3.1
3569	GENERAL INDUSTRIAL MACHINERY, NEC	7.4	3.7	20.7	7.0	3.7	6.0	3.0	4.7	*6.7	14.9	*6.0	17.3
357	OFFICE AND COMPUTING MACHINES	10.5	6.5	7.9	10.3	(D)	(D)	5.7	6.9	(D)	(D)	4.2	5.8
3573	ELECTRONIC COMPUTING EQUIPMENT	(D)	(D)	*2.4	2.3	(Z)	(Z)	4.7	5.4	(D)	(D)	2.9	3.2
3574	CALCULATING, ACCOUNTING MACHINES	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3579	OFFICE MACHINES, TYPEWRITERS, ETC	*8.1	3.9	5.0	7.6	-	-	*1.0	1.4	(D)	(D)	1.0	1.4
358	REFRIGERATION AND SERVICE MACH	20.0	14.0	128.2	60.3	1.0	.4	23.2	21.0	46.6	80.2	9.1	20.6
3581	AUTOMATIC MERCHANDISING MACHINES	1.8	2.6	(D)	(D)	-	-	(D)	(D)	1.8	3.4	(D)	(D)
3582	COMMERCIAL LAUNDRY EQUIPMENT	(D)	(D)	*3.4	1.9	-	-	(D)	(D)	1.5	2.8	*.5	1.3
3585	REFRIGERATION, HEATING EQUIPMENT	*15.1	9.1	91.3	42.0	-	-	19.7	17.9	23.6	42.9	2.4	4.6
3586	MEASURING AND DISPENSING PUMPS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9	1.8	(D)	(D)
3589	SERVICE INDUSTRY MACHINERY, NEC	(D)	(D)	21.6	11.1	(D)	(D)	2.6	2.5	18.8	29.3	*5.8	13.7
359	MISC. MACHINERY, EXC. ELEC	10.6	8.4	48.5	41.5	49.8	47.6	16.2	17.9	11.8	23.2	36.0	72.0
3592	CARBURETORS, PISTONS, RINGS, ETC	(D)	(D)	(D)	(D)	12.4	13.1	2.2	3.3	.7	1.8	15.5	28.4
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	(D)	(D)	(D)	(D)	*37.4	34.5	*14.1	14.6	*11.1	21.4	20.5	43.6
36	ELECTRIC, ELECTRONIC EQUIP	362.0	147.0	805.7	311.9	12.0	11.1	445.8	285.3	59.9	93.6	28.2	69.2
361	ELECTRIC DISTRIBUTING EQUIPMENT	-	-	80.1	66.5	(D)	(D)	170.5	133.4	(D)	(D)	2.7	4.9
3612	TRANSFORMERS	-	-	69.7	61.2	-	-	166.0	130.4	-	-	2.0	2.9
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	-	-	*10.5	5.3	(D)	(D)	4.5	3.0	(D)	(D)	.8	2.1
362	ELECTRICAL INDUSTRIAL APPARATUS	250.5	82.2	111.2	55.5	(D)	(D)	81.8	43.9	22.3	21.8	(D)	(D)
3621	MOTORS AND GENERATORS	(D)	(D)	62.8	31.2	(D)	(D)	53.8	25.5	2.8	5.2	2.6	5.5
3622	INDUSTRIAL CONTROLS	(D)	(D)	(D)	(D)	*.1	.2	*14.4	9.9	(D)	(D)	*1.0	2.8
3623	WELDING APPARATUS, ELECTRIC	*247.2	80.6	17.7	8.5	(D)	(D)	13.3	8.1	18.1	13.6	5.0	15.8
3624	CARBON AND GRAPHITE PRODUCTS	-	-	(D)	(D)	-	-	-	-	-	-	-	-
3629	ELEC. INDUSTRIAL APPARATUS, NEC	-	-	15.7	8.7	(D)	(D)	.3	.4	(D)	(D)	(D)	(D)
363	HOUSEHOLD APPLIANCES	46.4	23.8	199.5	77.9	(D)	(D)	35.0	35.6	22.6	40.7	3.2	7.1
3631	HOUSEHOLD COOKING EQUIPMENT	21.3	9.5	10.5	4.9	(D)	(D)	*2.0	19.6	3.5	8.0	.6	1.8
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	*6.3	5.8	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(Z)	(Z)
3633	HOUSEHOLD LAUNDRY EQUIPMENT	5.8	2.8	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS	4.1	2.1	5.6	3.0	(D)	(D)	*10.8	11.1	7.5	12.9	*.4	1.2
3635	HOUSEHOLD VACUUM CLEANERS	(D)	(D)	6.6	4.3	(D)	(D)	-	-	(D)	(D)	(D)	(D)
3636	SEWING MACHINES	(D)	(D)	-	-	(D)	(D)	(D)	(D)	-	-	-	-
3639	HOUSEHOLD APPLIANCES, NEC	(D)	(D)	*11.9	6.2	-	-	(D)	(D)	7.8	8.4	*.4	1.1
364	ELEC. LIGHTING, WIRING EQUIP	33.1	16.3	178.0	78.3	(D)	(D)	31.6	16.5	8.8	17.4	2.7	6.3
3643	CURRENT-CARRYING WIRING DEVICES	19.2	6.5	(D)	(D)	-	-	*2.5	2.1	*1.2	2.7	*.3	1.0
3644	NONCURRENT-CARRYING WIRING DEVICES	8.0	5.5	152.8	62.9	-	-	*11.4	5.0	.7	1.2	.2	.4
3645	RESIDENTIAL LIGHTING FIXTURES	*4.3	2.7	*5.5	3.6	(D)	(D)	*2.9	1.9	(D)	(D)	.1	.1
3646	COMMERCIAL LIGHTING FIXTURES	.1	.1	6.9	3.3	-	-	5.3	2.1	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Total		Carbon steel							
				Bars and shapes, except concrete reinforcing bars (331010, 331011, and 331043)		Sheet and strip (331012)		Plates (331013)		Structural shapes (331015)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
3647	VEHICULAR LIGHTING EQUIPMENT	49.2	37.1	(D)	(D)	25.6	19.6	(D)	(D)	(D)	(D)
3648	LIGHTING EQUIPMENT, NEC	*50.9	25.7	*2.4	.8	*23.1	9.4	8.8	3.9	*3.4	1.9
365	RADIO, TV RECEIVING EQUIPMENT	49.7	19.9	6.0	2.4	31.3	9.3	-	-	(D)	(D)
3651	RADIO AND TV RECEIVING SETS	49.7	19.9	6.0	2.4	31.3	9.3	-	-	(D)	(D)
366	COMMUNICATION EQUIPMENT	163.5	90.9	18.0	7.2	92.4	35.1	(D)	(D)	7.0	2.7
3661	TELEPHONE AND TELEGRAPH APPARATUS	*82.1	44.3	4.7	2.5	*59.1	23.8	-	-	(D)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	81.4	46.7	13.3	4.7	33.2	11.2	(D)	(D)	(D)	(D)
367	ELECTRONIC COMPONENTS, ACCESS.	153.1	80.7	13.3	7.0	20.5	11.1	(D)	(D)	(D)	(D)
3671	ELECTRON TUBES, RECEIVING TYPE	10.7	7.8	(D)	(D)	.1	.2	-	-	(D)	(D)
3674	SEMICONDUCTORS, RELATED DEVICES.	7.0	10.5	*.3	.2	1.2	.7	-	-	(D)	(D)
3675	ELECTRONIC CAPACITORS	1.1	1.4	-	-	(D)	(D)	-	-	-	-
3676	ELECTRONIC RESISTORS	6.4	5.7	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3677	ELECTRONIC COILS AND TRANSFORMERS.	86.3	15.5	.6	.3	2.0	1.1	-	-	(D)	(D)
3678	ELECTRONIC CONNECTORS	*12.7	12.7	(D)	(D)	2.3	1.1	-	-	-	-
3679	ELECTRONIC COMPONENTS, NEC	*28.6	27.1	*2.6	2.2	11.0	6.0	(D)	(D)	(D)	(D)
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	517.6	215.0	115.9	55.7	249.5	108.2	4.7	2.2	-	-
3691	STORAGE BATTERIES	(D)	(D)	-	-	(D)	(D)	-	-	-	-
3692	PRIMARY BATTERIES, DRY AND WET	(D)	(D)	-	-	(D)	(D)	-	-	-	-
3694	ENGINE ELECTRICAL EQUIPMENT	418.7	188.5	(D)	(D)	232.3	91.7	4.7	2.2	-	-
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	82.5	10.2	(D)	(D)	(D)	(D)	-	-	-	-
37	TRANSPORTATION EQUIPMENT	16 827.5	6 603.2	1 944.7	848.3	9 401.1	3 146.8	2 231.2	780.9	773.2	297.0
371	MOTOR VEHICLES AND EQUIPMENT	13 170.0	5 008.2	1 662.6	720.9	8 778.9	2 920.5	487.5	152.0	218.5	88.7
3711	MOTOR VEHICLES AND CAR BODIES	1 463.1	554.9	(D)	(D)	(D)	(D)	(D)	(D)	*10.1	3.7
3713	TRUCK AND BUS BODIES	430.4	167.1	*30.7	11.8	274.4	104.3	47.6	15.5	24.3	7.8
3714	MOTOR VEHICLE PARTS, ACCESSORIES	10 704.3	4 029.1	1 418.7	627.0	7 170.8	2 336.8	339.5	101.0	*70.4	31.9
3715	TRUCK TRAILERS	471.8	211.9	*43.8	18.3	*143.2	45.9	78.4	27.7	108.1	41.2
3716	MOTOR HOMES	*100.4	45.2	(D)	(D)	(D)	(D)	(D)	(D)	*5.5	4.0
372	AIRCRAFT AND PARTS	161.5	224.8	23.7	18.3	18.0	11.3	13.7	7.4	19.4	20.1
3721	AIRCRAFT	*45.3	55.4	*6.0	6.5	*8.8	4.9	4.4	2.4	(D)	(D)
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	54.0	106.8	5.2	3.8	6.4	4.6	3.5	1.8	(D)	(D)
3728	AIRCRAFT EQUIPMENT, NEC	62.2	62.6	*12.5	8.0	2.7	1.7	*5.8	3.3	1.0	.5
373	SHIP, BOAT BUILDING, REPAIRING	1 413.0	535.5	61.2	23.6	21.0	8.7	1 049.1	372.3	203.5	71.5
3731	SHIP BUILDING AND REPAIRING	1 386.5	522.5	58.3	22.4	18.2	7.6	1 037.4	367.8	198.1	69.1
3732	BOAT BUILDING AND REPAIRING	*26.4	13.1	*2.9	1.3	*2.8	1.0	*11.8	4.5	*5.4	2.4
3743	RAILROAD EQUIPMENT	1 333.2	510.9	93.7	36.4	288.2	98.1	622.9	227.3	217.8	77.0
3751	MOTORCYCLES, BICYCLES, AND PARTS	170.1	70.6	6.5	3.3	120.2	44.7	(D)	(D)	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES.	34.0	22.1	6.5	3.0	3.4	1.5	(D)	(D)	(D)	(D)
3761	GUIDED MISSILES, SPACE VEHICLES.	*15.1	10.1	(D)	(D)	(D)	(D)	3.6	3.0	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS	*12.9	8.2	*2.5	1.1	*2.4	1.1	(D)	(D)	(D)	(D)
3769	SPACE VEHICLE EQUIPMENT, NEC	6.0	3.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
379	MISC. TRANSPORTATION EQUIPMENT	545.7	231.1	90.4	42.6	171.4	62.1	44.0	15.5	110.6	38.2
3792	TRAVEL TRAILERS AND CAMPERS	119.0	44.7	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3795	TANKS AND TANK COMPONENTS	235.1	108.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3799	TRANSPORTATION EQUIPMENT, NEC	*191.5	78.5	*31.3	13.3	79.9	29.2	(D)	(D)	*35.6	14.1
38	INSTRUMENTS, RELATED PRODUCTS.	499.1	193.9	23.0	15.4	95.4	38.9	6.3	4.4	(D)	(D)
3811	ENGINEERING, SCIENTIFIC INSTRU	35.9	22.9	*2.1	1.8	*25.0	9.1	(D)	(D)	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	144.4	118.5	20.7	13.4	68.5	29.0	5.9	4.0	(D)	(D)
3822	ENVIRONMENTAL CONTROLS	56.6	32.4	4.0	2.5	29.9	11.4	1.5	.6	(D)	(D)
3823	PROCESS CONTROL INSTRUMENTS	*24.8	33.2	*4.1	3.2	*7.4	3.0	*2.0	1.4	*(D)	(D)
3824	FLUID METERS AND COUNTING DEVICES.	9.7	10.6	3.4	2.1	(D)	(D)	(D)	(D)	-	-
3825	INSTRU. TO MEASURE ELECTRICITY	*33.2	23.6	*2.2	1.6	(D)	(D)	(D)	(D)	*1.1	.4
3829	MEASUR'G, CONTROL'G DEVICES, NEC	20.0	18.6	*6.9	4.0	*3.5	1.8	2.0	1.6	2.0	1.2
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	*50.3	46.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3873	WATCHES, CLOCKS, AND WATCHCASES.	8.5	5.7	(D)	(D)	(D)	(D)	-	-	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	563.1	301.7	1.8	.8	6.7	2.6	(D)	(D)	(D)	(D)
391	JEWELRY, SILVER AND PLATED WARE.	14.7	22.0	(D)	(D)	-	-	-	-	-	-
3914	SILVERWARE AND PLATED WARE	14.7	22.0	(D)	(D)	-	-	-	-	-	-
3931	MUSICAL INSTRUMENTS	(Z)	(Z)	(Z)	(Z)	-	-	-	-	-	-
394	TOYS AND SPORTING GOODS	256.0	139.1	1.1	.5	6.7	2.6	(D)	(D)	(D)	(D)
3942	DOLLS	(D)	(D)	-	-	-	-	-	-	-	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-
3949	SPORTING AND ATHLETIC GOODS, NEC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS	37.8	26.5	-	-	-	-	-	-	-	-
3962	ARTIFICIAL FLOWERS	(D)	(D)	-	-	-	-	-	-	-	-
3963	BUTTONS	(D)	(D)	-	-	-	-	-	-	-	-
3964	NEEDLES, PINS, AND FASTENERS	27.0	20.2	-	-	-	-	-	-	-	-
399	MISCELLANEOUS MANUFACTURES	254.5	114.1	-	-	-	-	-	-	-	-
3995	BURIAL CASKETS	*140.5	48.2	-	-	-	-	-	-	-	-
3999	MANUFACTURING INDUSTRIES, NEC	*114.1	65.9	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 7a. **Steel Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Carbon steel--Con.				Alloy steel				Stainless steel			
		Wire and wire products (331017)		All other mill shapes and forms (331001, 331009, 331018, 331019, 331041, & 331014)		Bar and bar shapes, except stainless (331021 and 331046)		All other mill shapes and forms, except stainless (331020, 331025, 331029, 331044, 331045, & 331026)		Sheet and strip (331033)		All other stainless steel mill shapes and forms (331031, 331047, 331048, 331049, 331036, & 331050)	
		Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)	Quantity (1,000 short tons)	Delivered cost (mil. dol.)
3647	VEHICULAR LIGHTING EQUIPMENT	.9	.4	(D)	(D)	-	-	1.8	.6	3.7	7.2	*.1	.2
3648	LIGHTING EQUIPMENT, NEC	*.5	1.1	(D)	(D)	(D)	(D)	7.6	4.9	*.6	1.1	(D)	(D)
365	RADIO, TV RECEIVING EQUIPMENT	(D)	(D)	4.2	1.6	(D)	(D)	7.8	5.4	.3	.7	(D)	(D)
3651	RADIO AND TV RECEIVING SETS	(D)	(D)	*4.2	1.6	(D)	(D)	7.8	5.4	*.3	.7	(D)	(D)
366	COMMUNICATION EQUIPMENT	(D)	(D)	11.2	6.8	(D)	(D)	17.1	17.8	1.6	4.0	7.4	11.3
3661	TELEPHONE AND TELEGRAPH APPARATUS	(D)	(D)	(D)	(D)	(D)	(D)	*10.8	11.2	*.6	1.3	(D)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP	*3.3	1.7	(D)	(D)	*2.9	3.0	*6.3	6.6	*1.0	2.6	(D)	(D)
367	ELECTRONIC COMPONENTS, ACCESS.	4.8	7.1	5.1	5.3	4.7	4.1	20.2	23.0	1.9	4.2	4.6	12.0
3671	ELECTRON TUBES, RECEIVING TYPE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	*.3	.7	(D)	(D)
3674	SEMICONDUCTORS, RELATED DEVICES	(D)	(D)	.4	1.2	(D)	(D)	.1	.1	(Z)	(Z)	(D)	(D)
3675	ELECTRONIC CAPACITORS	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3676	ELECTRONIC RESISTORS	(D)	(D)	.1	.2	.3	.3	(D)	(D)	(D)	(D)	*.1	.4
3677	ELECTRONIC COILS AND TRANSFORMERS	.1	.2	*1.2	1.6	.1	.1	*5.5	5.2	(D)	(D)	(D)	(D)
3678	ELECTRONIC CONNECTORS	(D)	(D)	(D)	(D)	*.2	.2	(D)	(D)	*.2	.5	*.7	1.6
3679	ELECTRONIC COMPONENTS, NEC	2.7	4.2	*2.6	1.9	*.5	.5	*7.2	8.4	.8	1.4	*1.0	2.2
369	MISC. ELEC. EQUIPMENT, SUPPLIES	24.7	15.6	39.5	19.9	(D)	(D)	81.4	9.7	(D)	(D)	1.1	3.0
3691	STORAGE BATTERIES	-	-	-	-	-	-	-	-	-	-	-	-
3692	PRIMARY BATTERIES, DRY AND WET	-	-	-	-	-	-	-	-	-	-	-	-
3694	ENGINE ELECTRICAL EQUIPMENT	24.7	15.6	32.6	15.0	(D)	(D)	6.7	5.3	(D)	(D)	.9	2.4
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	-	-	6.9	4.9	-	-	74.7	4.4	(D)	(D)	.1	.6
37	TRANSPORTATION EQUIPMENT	212.4	131.7	811.4	405.3	852.0	441.9	391.1	242.6	158.3	212.9	52.0	95.9
371	MOTOR VEHICLES AND EQUIPMENT	167.7	108.8	581.1	289.2	765.7	351.6	333.5	163.9	139.6	164.0	35.0	48.7
3711	MOTOR VEHICLES AND CAR BODIES	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.6	3.4	(D)	(D)
3713	TRUCK AND BUS BODIES	(D)	(D)	*35.2	16.0	3.1	1.6	12.6	5.4	(D)	(D)	*.1	.3
3714	MOTOR VEHICLE PARTS, ACCESSORIES	*162.7	104.9	479.7	244.7	633.3	292.9	296.4	140.1	122.0	132.1	10.9	17.8
3715	TRUCK TRAILERS	(D)	(D)	*20.7	9.8	25.9	10.1	*18.8	12.0	*12.9	25.4	(D)	(D)
3716	MOTOR HOMES	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
372	AIRCRAFT AND PARTS	1.5	1.0	12.8	8.4	37.9	62.3	14.1	35.0	9.4	28.6	11.0	32.4
3721	AIRCRAFT	(D)	(D)	.8	.9	*3.5	5.2	2.2	3.0	*1.5	5.8	*2.2	9.3
3724	AIRCRAFT ENGINES AND ENGINE PARTS	(D)	(D)	3.1	3.1	19.6	40.0	4.0	23.2	3.8	13.8	*5.2	14.0
3728	AIRCRAFT EQUIPMENT, NEC	.7	.5	8.9	4.5	14.8	17.1	7.9	8.8	*4.1	9.1	*3.7	9.1
373	SHIP, BOAT BUILDING, REPAIRING	5.6	5.4	41.8	18.2	(D)	(D)	26.0	24.0	(D)	(D)	3.1	8.0
3731	SHIP BUILDING AND REPAIRING	5.3	5.2	39.6	17.4	(D)	(D)	25.7	23.6	(D)	(D)	2.5	6.1
3732	BOAT BUILDING AND REPAIRING	*.2	.2	*2.2	.8	-	-	*.3	.5	*.1	.4	*.6	1.9
3743	RAILROAD EQUIPMENT	6.1	5.2	89.7	44.2	-	-	7.4	6.7	*6.4	13.7	*.8	2.4
3751	MOTORCYCLES, BICYCLES, AND PARTS	4.5	2.2	32.1	17.8	-	-	(D)	(D)	-	-	-	-
376	GUIDED MISSILES, SPACE VEHICLES	(D)	(D)	8.6	4.4	.7	1.9	(D)	(D)	.6	1.4	(D)	(D)
3761	GUIDED MISSILES, SPACE VEHICLES	(D)	(D)	(D)	(D)	(D)	(D)	*.5	.4	.3	.7	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS	(D)	(D)	(D)	(D)	*.3	1.4	(D)	(D)	*.3	.5	*.2	.6
3769	SPACE VEHICLE EQUIPMENT, NEC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	.2	1.1	1.4
379	MISC. TRANSPORTATION EQUIPMENT	(D)	(D)	45.3	23.2	(D)	(D)	8.2	11.4	(D)	(D)	(D)	(D)
3792	TRAVEL TRAILERS AND CAMPERS	-	-	(D)	(D)	(D)	(D)	1.8	4.1	-	-	.3	.4
3795	TANKS AND TANK COMPONENTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3799	TRANSPORTATION EQUIPMENT, NEC	(D)	(D)	*29.2	15.5	(D)	(D)	(D)	(D)	(D)	(D)	-	-
38	INSTRUMENTS, RELATED PRODUCTS	6.0	4.8	44.0	29.7	(D)	(D)	271.0	18.3	29.1	40.5	13.2	33.1
3811	ENGINEERING, SCIENTIFIC INSTRU	1.3	(D)	*.6	.7	.3	.8	.8	1.0	4.1	6.4	*.8	2.4
382	MEASURING, CONTROLLING DEVICES	(D)	(D)	4.8	4.6	2.8	4.4	5.5	9.0	16.7	20.3	9.9	25.6
3822	ENVIRONMENTAL CONTROLS	(D)	(D)	2.3	1.6	(D)	(D)	(D)	(D)	11.2	6.8	3.9	6.6
3823	PROCESS CONTROL INSTRUMENTS	(D)	(D)	*1.3	1.8	*.5	.8	*1.0	2.3	*2.3	6.7	*3.4	11.3
3824	FLUID METERS AND COUNTING DEVICES	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.4	3.1	.3	1.1
3825	INSTRU. TO MEASURE ELECTRICITY	*1.7	1.6	(D)	(D)	*.1	.6	*.6	3.3	.7	1.4	*1.3	3.1
3829	MEASURING, CONTROLLING DEVICES, NEC	.3	.3	.8	.5	1.8	2.1	.8	1.4	1.0	2.4	.9	3.4
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	-	-	*31.6	19.4	(D)	(D)	7.4	8.3	*8.4	13.7	*2.6	5.2
3873	WATCHES, CLOCKS, AND WATCHCASES	-	-	6.8	4.9	-	-	-	-	-	-	-	-
39	MISC. MANUFACTURING INDUSTRIES	(D)	(D)	446.3	190.9	(D)	(D)	71.3	48.2	18.8	32.5	17.4	26.4
391	JEWELRY, SILVER AND PLATED WARE	-	-	(D)	(D)	-	-	1.5	1.8	9.8	16.1	1.8	3.3
3914	SILVERWARE AND PLATED WARE	-	-	(D)	(D)	-	-	1.5	1.8	9.8	16.1	1.8	3.3
3931	MUSICAL INSTRUMENTS	-	-	-	-	-	-	-	-	-	-	-	-
394	TOYS AND SPORTING GOODS	(D)	(D)	(D)	(D)	(D)	(D)	57.7	34.3	2.3	2.7	13.8	18.2
3942	DOLLS	-	-	(D)	(D)	-	-	-	-	-	-	-	-
3944	GAMES, TOYS, CHILDREN'S VEHICLES	-	-	(D)	(D)	-	-	15.4	6.0	*1.0	.3	5.8	6.2
3949	SPORTING AND ATHLETIC GOODS, NEC	(D)	(D)	*95.2	49.1	(D)	(D)	*42.3	28.2	*1.3	2.4	8.0	12.0
396	COSTUME JEWELRY AND NOTIONS	-	-	32.9	21.3	-	-	4.1	2.5	-	-	.9	2.6
3962	ARTIFICIAL FLOWERS	-	-	(D)	(D)	-	-	(D)	(D)	-	-	-	-
3963	BUTTONS	-	-	(D)	(D)	-	-	(D)	(D)	-	-	(D)	(D)
3964	NEEDLES, PINS, AND FASTENERS	-	-	22.5	15.5	-	-	(D)	(D)	-	-	(D)	(D)
399	MISCELLANEOUS MANUFACTURES	-	-	239.0	88.4	-	-	7.9	9.6	6.8	13.8	.9	2.3
3995	BURIAL CASKETS	-	-	*140.5	48.2	-	-	-	-	-	-	-	-
3999	MANUFACTURING INDUSTRIES, NEC	-	-	*98.5	40.2	-	-	*7.9	9.6	*6.8	13.8	*.9	2.3

- Represents zero. *Indicates more than 30 percent of the data has been estimated based on quantity-cost relationships of reported data. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. (Z) Less than half the unit of measure specified.

Table 7b. **Copper and Copper-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Bare wire for electrical conduction (335725 & 335728)		Insulated wire and cable (copper content) (335792 & 335794)		Brass mill shapes							
						Total		Rod, bar, and mechanical wire (335102)		Plate, sheet, and strip (335100, 335105, 335109, & 335143)		Pipe and tube (335152)	
		Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
	ALL INDUSTRIES, TOTAL. . . .	490.2	465.9	450.4	603.4	2 335.4	2 302.4	998.9	853.3	848.4	907.1	488.1	542.0
24	LUMBER AND WOOD PRODUCTS . . .	3.3	1.9	(D)	(D)	2.3	2.3	(D)	(D)	-	-	(D)	(D)
245	WOOD BUILDINGS AND MOBILE HOMES.	3.3	1.9	(D)	(D)	2.3	2.3	(D)	(D)	-	-	(D)	(D)
2451	MOBILE HOMES	*3.3	1.9	(D)	(D)	*2.3	2.3	(D)	(D)	-	-	(D)	(D)
28	CHEMICALS AND ALLIED PRODUCTS.	-	-	-	-	7.0	5.7	-	-	7.0	5.7	-	-
289	MISCELLANEOUS CHEMICAL PRODUCTS.	-	-	-	-	7.0	5.7	-	-	7.0	5.7	-	-
2892	EXPLOSIVES	-	-	-	-	7.0	5.7	-	-	7.0	5.7	-	-
33	PRIMARY METAL INDUSTRIES . . .	329.0	268.2	33.5	30.3	55.9	61.4	-	-	55.9	61.4	-	-
335	NONFERROUS ROLLING AND DRAWING .	329.0	268.2	33.5	30.3	55.9	61.4	-	-	55.9	61.4	-	-
3357	NONFERROUS WIREDRAW'G, INSULATING.	329.0	268.2	*33.5	30.3	55.9	61.4	-	-	55.9	61.4	-	-
34	FABRICATED METAL PRODUCTS. . .	4.0	4.5	3.2	6.2	839.8	760.1	476.4	356.5	204.9	234.1	158.5	169.6
342	CUTLERY, HANDTOOLS AND HARDWARE.	.3	.5	.4	.9	81.4	81.0	(D)	(D)	47.9	47.7	(D)	(D)
3421	CUTLERY.	-	-	-	-	2.8	4.8	(D)	(D)	(D)	(D)	(D)	(D)
3423	HAND AND EDGE TOOLS, NEC	-	-	(D)	(D)	2.8	3.5	(D)	(D)	(D)	(D)	(D)	(D)
3429	HARDWARE, NEC.	.3	.5	(D)	(D)	75.8	72.7	26.5	26.1	45.2	43.0	4.1	3.7
343	PLUMBING, HEATING, EXCEPT ELEC .	-	-	-	-	193.6	162.5	123.5	77.2	16.4	17.5	53.7	67.8
3431	METAL SANITARY WARE.	-	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS.	-	-	-	-	175.0	140.4	116.4	70.4	*15.7	16.4	42.9	53.7
3433	HEATING EQUIPMENT, EXC. ELECTRIC .	-	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
344	FABRICATED STRUC. METAL PRODS. .	(D)	(D)	(D)	(D)	56.0	72.6	6.7	8.9	18.4	27.0	30.9	36.7
3441	FABRICATED STRUCTURAL METAL. . . .	(D)	(D)	-	-	*6.7	8.4	.9	2.7	2.2	4.4	*3.6	1.3
3442	METAL DOORS, SASH, AND TRIM. . . .	(D)	(D)	(D)	(D)	*2.8	2.1	.5	.5	(D)	(D)	(D)	(D)
3443	FABRICATED PLATEWORK, BOILER SHOP.	-	-	(D)	(D)	23.3	37.2	1.8	1.4	2.6	6.8	*18.8	29.0
3444	SHEET METALWORK.	-	-	-	-	*18.2	20.3	2.1	3.0	*12.6	14.1	3.4	3.2
3446	ARCHITECTURAL METALWORK.	-	-	-	-	*.6	1.4	(Z)	(Z)	(D)	(D)	(D)	(D)
3448	PREFABRICATED METAL BUILDINGS. . .	-	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3449	MISCELLANEOUS METALWORK.	-	-	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC.	3.3	3.4	-	-	145.0	117.2	124.2	95.1	15.3	18.9	5.4	3.1
3451	SCREW MACHINE PRODUCTS	(D)	(D)	-	-	102.2	71.9	93.9	68.6	(D)	(D)	(D)	(D)
3452	BOLTS, NUTS, RIVETS, AND WASHERS .	(D)	(D)	-	-	42.8	45.3	25.3	26.6	(D)	(D)	(D)	(D)
346	METAL FORGINGS AND STAMPINGS . .	.3	.4	(D)	(D)	73.0	88.4	4.0	5.8	56.4	74.0	12.6	8.5
3465	AUTOMOTIVE STAMPINGS	*.1	.2	-	-	(D)	(D)	(D)	(D)	6.5	8.4	(D)	(D)
3466	CROWNS AND CLOSURES.	-	-	-	-	(D)	(D)	(D)	(D)	-	-	-	-
3469	METAL STAMPINGS, NEC	.2	.2	(D)	(D)	56.1	73.6	(D)	(D)	49.8	65.6	(D)	(D)
348	ORDNANCE AND ACCESSORIES, NEC. .	-	-	(D)	(D)	42.1	44.7	(D)	(D)	35.2	37.1	(D)	(D)
3482	SMALL ARMS AMMUNITION.	-	-	-	-	39.7	42.1	5.0	5.6	34.7	36.6	-	-
3483	AMMUNITION, EXC. SMALL ARMS, NEC .	-	-	(D)	(D)	1.8	2.1	(D)	(D)	(D)	(D)	-	-
3484	SMALL ARMS	-	-	-	-	(D)	(D)	(D)	(D)	-	-	-	-
3489	ORDNANCE AND ACCESSORIES NEC . . .	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
349	MISC. FABRICATED METAL PRODUCTS.	(D)	(D)	2.3	4.5	248.7	193.9	182.0	132.6	15.3	11.9	51.4	49.4
3493	STEEL SPRINGS, EXCEPT WIRE	-	-	-	-	.5	1.3	(D)	(D)	(D)	(D)	-	-
3494	VALVES AND PIPE FITTINGS	(D)	(D)	(D)	(D)	211.4	155.4	170.9	119.5	2.6	2.4	37.9	33.5
3495	WIRE SPRINGS	-	-	-	-	1.9	3.0	(D)	(D)	(D)	(D)	-	-
3496	MISC. FABRICATED WIRE PRODUCTS . .	-	-	-	-	*4.7	5.7	*3.7	4.4	.5	1.0	*.4	.2
3498	FABRICATED PIPE AND FITTINGS . . .	-	-	(D)	(D)	14.4	16.8	1.6	1.7	*1.1	2.0	11.7	13.1
3499	FABRICATED METAL PRODUCTS, NEC . .	(D)	(D)	.2	.8	15.7	11.8	*4.1	4.2	10.2	5.0	*1.4	2.5
35	MACHINERY, EXCEPT ELECTRICAL .	18.4	29.4	65.9	88.2	493.1	501.1	91.6	99.7	168.6	142.4	232.8	259.0
351	ENGINES AND TURBINES	3.6	6.7	19.1	16.1	59.4	67.0	11.9	13.5	29.4	28.8	18.1	24.7
3511	TURBINES, TURBINE GENERATOR SETS .	(D)	(D)	(D)	(D)	39.4	47.5	10.2	11.5	(D)	(D)	(D)	(D)
3519	INTERNAL COMBUSTION ENGINES, NEC .	(D)	(D)	(D)	(D)	20.0	19.5	1.7	2.0	(D)	(D)	(D)	(D)
352	FARM AND GARDEN MACHINERY. . . .	-	-	(D)	(D)	18.5	19.8	(D)	(D)	(D)	(D)	11.1	13.8
3523	FARM MACHINERY AND EQUIPMENT . . .	-	-	(D)	(D)	16.4	18.7	(D)	(D)	(D)	(D)	(D)	(D)
3524	LAWN AND GARDEN EQUIPMENT.	-	-	-	-	2.1	1.1	(D)	(D)	-	-	(D)	(D)
353	CONSTRUCTION, RELATED MACHINERY.	(D)	(D)	13.7	18.5	19.0	19.7	4.8	6.1	3.3	4.2	10.9	9.4
3531	CONSTRUCTION MACHINERY	-	-	3.7	4.6	6.2	6.7	*1.9	1.7	*.2	.2	4.1	4.8
3532	MINING MACHINERY	-	-	3.2	6.6	*2.5	3.2	*1.5	1.9	*.4	.6	*.6	.7
3533	OILFIELD MACHINERY	-	-	-	-	2.8	3.0	(D)	(D)	2.3	2.7	(D)	(D)
3534	ELEVATORS AND MOVING STAIRWAYS . .	-	-	1.9	1.8	.9	2.0	(D)	(D)	.3	.5	(D)	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT.	-	-	*.4	.6	3.8	1.8	(Z)	(Z)	(Z)	(Z)	3.8	1.7
3536	HOISTS, CRANES, AND MONORAILS. . .	(D)	(D)	*2.9	1.5	1.2	.8	(D)	(D)	(D)	(D)	*.8	.5
3537	INDUSTRIAL TRUCKS AND TRACTORS . .	-	-	1.6	3.5	*1.5	2.0	(D)	(D)	(D)	(D)	*1.2	1.5
354	METALWORKING MACHINERY	.6	.9	8.2	10.6	19.7	23.2	13.9	14.0	3.7	7.0	2.1	2.2
3541	MACHINE TOOLS, METAL-CUTTING . . .	.2	.1	3.6	3.7	2.1	3.3	*.5	1.1	(D)	(D)	(D)	(D)
3542	MACHINE TOOLS, METAL-FORMING . . .	(D)	(D)	.8	.8	1.7	1.5	.8	1.2	(D)	(D)	(D)	(D)
3544	SPECIAL DIES, TOOLS, JIGS, ETC . .	(D)	(D)	(Z)	(Z)	*3.2	6.3	*1.1	1.4	*2.0	4.7	*.1	.2
3545	MACHINE TOOL ACCESSORIES	-	-	(Z)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3546	POWER DRIVEN HANDTOOLS	-	-	2.6	4.9	-	-	-	-	-	-	-	-
3547	ROLLING MILL MACHINERY	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3549	METALWORKING MACHINERY, NEC. . . .	*.2	.6	(D)	(D)	12.0	11.4	11.1	10.0	.2	.2	.8	1.2
355	SPECIAL INDUSTRY MACHINERY . . .	(D)	(D)	(D)	(D)	9.8	13.2	3.2	3.9	3.5	4.8	3.0	4.5
3551	FOOD PRODUCTS MACHINERY.	-	-	(D)	(D)	*1.3	2.1	(D)	(D)	*1.3	2.0	(D)	(D)
3552	TEXTILE MACHINERY.	-	-	(D)	(D)	.5	.6	(Z)	(Z)	(D)	(D)	(D)	(D)
3554	PAPER INDUSTRIES MACHINERY	(D)	(D)	-	-	*2.2	2.7	(D)	(D)	(D)	(D)	*.4	1.1
3555	PRINTING TRADES MACHINERY.	*.1	.1	1.3	1.0	1.5	1.7	(D)	(D)	1.0	.7	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC. .	(D)	(D)	.3	.4	*4.3	6.1	*1.6	2.2	.4	.8	*2.3	3.2
356	GENERAL INDUSTRIAL MACHINERY . .	(D)	(D)	1.8	2.9	36.9	50.3	20.2	28.1	8.4	10.0	8.2	12.3
3561	PUMPS AND PUMPING EQUIPMENT. . . .	-	-	*.4	.8	7.8	15.0	5.0	9.7	1.0	1.9	1.8	*3.3
3562	BALL AND ROLLER BEARINGS	-	-	-	-	3.0	3.9	1.8	2.5	(D)	(D)	(D)	(D)
3563	AIR AND GAS COMPRESSORS.	-	-	.4	1.3	*4.4	4.6	*3.1	2.9	.2	.3	1.1	*1.4
3564	BLOWERS AND FANS	-	-	(D)	(D)	*1.8	2.6	*.3	1.0	*.2	.2	*1.2	1.3

See footnotes at end of table.

Table 7b. **Copper and Copper-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Bare wire for electrical conduction (335725 & 335728)		Insulated wire and cable (copper content) (335792 & 335794)		Brass mill shapes							
						Total		Rod, bar, and mechanical wire (335102)		Plate, sheet, and strip (335100, 335105, 335109, & 335143)		Pipe and tube (335152)	
		Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
3565	INDUSTRIAL PATTERNS.	-	-	-	-	(D)	(D)	*.1	.1	(D)	(D)	(Z)	(Z)
3566	SPEED CHANGERS, DRIVES, AND GEARS.	-	-	(D)	(D)	1.4	2.2	1.1	1.4	(D)	(D)	(D)	(D)
3567	INDUSTRIAL FURNACES AND OVENS. . .	(D)	(D)	(D)	(D)	4.3	6.3	*1.8	2.7	*.3	.6	*2.2	3.1
3568	POWER TRANSMISSION EQUIPMENT, NEC.	-	-	-	-	(D)	(D)	3.1	3.6	(D)	(D)	*.5	.5
3569	GENERAL INDUSTRIAL MACHINERY, NEC.	(D)	(D)	*.1	.2	*5.4	7.0	*4.0	4.2	*.4	1.0	*.9	1.9
357	OFFICE AND COMPUTING MACHINES. .	6.1	9.3	14.7	29.7	4.6	6.3	1.1	1.6	1.6	3.4	1.9	1.4
3573	ELECTRONIC COMPUTING EQUIPMENT . .	(D)	(D)	*14.3	28.0	*3.6	4.6	.6	.9	*1.2	2.4	*1.7	1.3
3574	CALCULATING, ACCOUNTING MACHINES .	-	-	.1	.4	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY.	(D)	(D)	*.1	.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3579	OFFICE MACHINES, TYPEWRITERS, ETC.	(Z)	(Z)	*.2	1.1	.9	1.5	(D)	(D)	(D)	(D)	.1	.1
358	REFRIGERATION AND SERVICE MACH .	8.0	12.2	5.5	8.1	307.3	281.5	(D)	(D)	(D)	(D)	173.9	185.9
3581	AUTOMATIC MERCHANDISING MACHINES .	-	-	-	-	(D)	(D)	-	-	.2	.2	(D)	(D)
3582	COMMERCIAL LAUNDRY EQUIPMENT . . .	-	-	-	-	*.2	.2	-	-	*.2	.2	-	-
3585	REFRIGERATION, HEATING EQUIPMENT .	8.0	12.2	(D)	(D)	303.8	278.1	(D)	(D)	(D)	(D)	173.7	185.6
3586	MEASURING AND DISPENSING PUMPS . .	-	-	(D)	(D)	(D)	(D)	1.0	.8	(D)	(D)	.1	.1
3589	SERVICE INDUSTRY MACHINERY, NEC. .	-	-	(D)	(D)	1.8	2.0	(D)	(D)	.7	.8	(D)	(D)
359	MISC. MACHINERY, EXC. ELEC . . .	-	-	.1	.3	18.1	20.0	12.4	11.9	2.0	3.4	3.7	4.8
3592	CARBURETORS, PISTONS, RINGS, ETC .	-	-	-	-	4.3	3.4	2.7	2.2	(D)	(D)	(D)	(D)
3599	MACHINERY, EXCEPT ELECTRICAL, NEC.	-	-	.1	.3	*13.9	16.6	*9.7	9.6	(D)	(D)	(D)	(D)
36	ELECTRIC, ELECTRONIC EQUIP . .	102.3	118.1	227.3	341.5	427.6	479.6	220.2	229.7	162.8	196.5	44.6	53.4
361	ELECTRIC DISTRIBUTING EQUIPMENT.	27.0	25.7	25.3	25.4	73.1	75.2	50.3	50.4	19.5	20.9	3.2	3.9
3612	TRANSFORMERS	19.8	18.3	18.5	18.1	12.9	12.3	9.6	8.6	2.8	3.1	.5	.6
3613	SWITCHGEAR, SWITCHBOARD APPARATUS.	7.2	7.4	*6.8	7.3	60.1	62.9	40.7	41.8	16.7	17.9	*2.7	3.3
362	ELECTRICAL INDUSTRIAL APPARATUS.	30.4	36.7	32.7	48.5	53.9	66.3	39.5	47.3	12.4	15.9	2.0	3.0
3621	MOTORS AND GENERATORS.	19.3	20.4	21.5	31.0	23.5	25.7	18.6	19.3	4.6	5.9	.3	.5
3622	INDUSTRIAL CONTROLS.	*4.4	5.3	*4.8	7.8	11.7	15.9	*5.4	8.1	5.7	7.2	.5	.6
3623	WELDING APPARATUS, ELECTRIC. . . .	1.8	2.7	3.1	3.8	16.4	21.5	14.4	18.7	*.8	1.0	1.2	1.8
3624	CARBON AND GRAPHITE PRODUCTS . . .	(D)	(D)	(Z)	(Z)	.9	1.4	(D)	(D)	.7	1.1	(D)	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC. .	(D)	(D)	*3.2	5.8	1.4	1.7	(D)	(D)	.5	.7	(D)	(D)
363	HOUSEHOLD APPLIANCES	8.5	9.6	13.7	21.4	34.3	37.2	5.9	5.1	4.0	4.0	24.5	28.1
3631	HOUSEHOLD COOKING EQUIPMENT. . . .	(D)	(D)	*5.7	8.5	3.8	3.7	(D)	(D)	-	-	(D)	(D)
3632	HOUSEHOLD REFRIGERATORS, FREEZERS.	(D)	(D)	(D)	(D)	19.3	21.8	(D)	(D)	(D)	(D)	18.9	21.3
3633	HOUSEHOLD LAUNDRY EQUIPMENT. . . .	(D)	(D)	.7	.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS . . .	5.2	5.8	3.9	7.7	3.1	3.4	2.5	2.4	.5	.9	.1	.1
3635	HOUSEHOLD VACUUM CLEANERS.	*1.2	.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3636	SEWING MACHINES.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3639	HOUSEHOLD APPLIANCES, NEC.	(D)	(D)	*2.5	3.0	*5.5	5.7	(D)	(D)	(D)	(D)	*3.0	3.7
364	ELEC. LIGHTING, WIRING EQUIP . .	8.5	8.4	23.5	43.6	99.6	111.5	17.5	22.7	77.5	82.8	4.6	6.0
3641	ELECTRIC LAMPS	-	-	-	-	*8.1	7.6	-	-	*8.1	7.6	-	-
3643	CURRENT-CARRYING WIRING DEVICES. .	6.5	6.6	9.5	26.1	*78.6	87.5	13.2	16.0	*62.4	67.3	*3.0	4.2
3644	NONCURRENT-CARRYING WIRING DEVICES.	(D)	(D)	1.4	2.1	*3.0	3.8	1.3	1.9	*1.5	1.5	*.1	.3
3645	RESIDENTIAL LIGHTING FIXTURES. . .	*.8	.9	*4.4	6.1	*5.9	6.4	*1.1	1.5	*3.6	3.7	1.2	1.1
3646	COMMERCIAL LIGHTING FIXTURES . . .	*.2	.4	*2.8	2.4	*.3	.5	*.2	.3	(D)	(D)	(D)	(D)
3647	VEHICULAR LIGHTING EQUIPMENT . . .	(D)	(D)	*2.2	4.0	2.2	3.8	1.6	2.9	(D)	(D)	(D)	(D)
3648	LIGHTING EQUIPMENT, NEC.	(D)	(D)	3.3	2.9	*1.5	1.9	*.1	.1	*1.3	1.6	*.2	.2
365	RADIO, TV RECEIVING EQUIPMENT. .	.8	1.3	6.7	15.2	-	-	-	-	-	-	-	-
3651	RADIO AND TV RECEIVING SETS. . . .	.8	1.3	*6.7	15.2	-	-	-	-	-	-	-	-
366	COMMUNICATION EQUIPMENT.	3.8	5.7	46.3	90.3	41.2	52.6	28.2	32.7	9.3	14.4	3.7	5.5
3661	TELEPHONE AND TELEGRAPH APPARATUS.	*1.6	2.8	29.3	55.7	*33.1	40.3	(D)	(D)	7.6	11.3	(D)	(D)
3662	RADIO AND TV COMMUNICATION EQUIP .	2.2	2.9	*17.0	34.6	8.1	12.3	(D)	(D)	1.7	3.1	(D)	(D)
367	ELECTRONIC COMPONENTS, ACCESS. .	11.3	18.1	14.0	26.4	80.0	97.7	51.7	49.5	(D)	(D)	(D)	(D)
3671	ELECTRON TUBES, RECEIVING TYPE . .	(D)	(D)	.2	.3	3.1	4.8	2.0	2.7	.9	1.3	*.3	.8
3674	SEMICONDUCTORS, RELATED DEVICES. .	.7	2.1	*.6	.9	7.6	10.4	5.1	7.7	2.5	2.6	(Z)	(Z)
3675	ELECTRONIC CAPACITORS.	1.3	2.2	.2	.2	.9	1.3	(D)	(D)	(D)	(D)	(D)	(D)
3676	ELECTRONIC RESISTORS	*3.4	5.0	.3	.4	4.7	6.0	2.8	3.1	(D)	(D)	(D)	(D)
3677	ELECTRONIC COILS AND TRANSFORMERS.	1.8	3.5	5.0	5.2	.7	.9	.3	.5	.4	.4	-	-
3678	ELECTRONIC CONNECTORS.	(D)	(D)	*.5	3.1	*36.1	40.8	(D)	(D)	*10.5	20.0	(D)	(D)
3679	ELECTRONIC COMPONENTS, NEC	3.8	5.2	*7.2	16.3	26.7	33.6	16.7	15.1	9.3	17.5	*.7	1.0
369	MISC. ELEC. EQUIPMENT, SUPPLIES.	12.1	12.6	65.1	70.9	45.6	39.2	27.1	21.9	(D)	(D)	(D)	(D)
3694	ENGINE ELECTRICAL EQUIPMENT. . . .	9.2	9.5	*37.2	37.1	41.5	34.6	(D)	(D)	(D)	(D)	(D)	(D)
3699	ELECTRICAL EQUIP., SUPPLIES, NEC .	*2.8	3.2	27.9	33.8	4.1	4.6	(D)	(D)	3.4	3.8	(D)	(D)
37	TRANSPORTATION EQUIPMENT . . .	27.0	35.4	99.3	113.5	384.1	359.2	183.0	144.9	165.9	174.4	35.2	39.9
371	MOTOR VEHICLES AND EQUIPMENT . .	11.3	17.3	71.7	63.7	351.0	322.0	168.9	127.2	161.5	168.7	20.6	26.1
3711	MOTOR VEHICLES AND CAR BODIES. . .	(D)	(D)	*4.0	8.0	(D)	(D)	(D)	(D)	(D)	(D)	2.3	2.1
3713	TRUCK AND BUS BODIES	(D)	(D)	*3.9	4.3	*.8	.8	(D)	(D)	(D)	(D)	*.5	.5
3714	MOTOR VEHICLE PARTS, ACCESSORIES .	*7.3	11.8	58.4	45.4	339.7	313.1	164.8	123.7	161.3	168.5	13.6	21.0
3715	TRUCK TRAILERS	(D)	(D)	2.3	2.6	(D)	(D)	(D)	(D)	-	-	*.4	.5
3716	MOTOR HOMES.	(D)	(D)	*3.0	3.5	*4.3	2.5	*.4	.4	.1	.1	*3.8	2.0
372	AIRCRAFT AND PARTS	.7	1.0	10.9	24.9	5.0	6.6	2.3	3.3	1.6	1.6	1.1	1.7
3721	AIRCRAFT	*.4	.7	*9.3	21.7	*2.8	3.3	*1.4	1.7	(D)	(D)	(D)	(D)
3724	AIRCRAFT ENGINES AND ENGINE PARTS.	(D)	(D)	.9	1.5	1.0	1.0	*.2	.2	(D)	(D)	(D)	(D)
3728	AIRCRAFT EQUIPMENT, NEC.	(D)	(D)	.6	1.6	1.2	2.4	.7	1.4	(D)	(D)	(D)	(D)
373	SHIP, BOAT BUILDING, REPAIRING .	4.2	2.9	12.8	18.9	10.2	12.8	1.1	2.1	2.1	2.6	7.0	8.1
3731	SHIP BUILDING AND REPAIRING. . . .	3.9	2.5	12.1	17.2	9.4	11.7	.9	1.8	1.9	2.3	6.5	7.6
3732	BOAT BUILDING AND REPAIRING. . . .	.3	.4	*.7	1.7	*.8	1.1	*.2	.3	*.1	.3	*.5	.5
3743	RAILROAD EQUIPMENT	10.6	13.8	(D)	(D)	12.9	12.6	(D)	(D)	(D)	(D)	4.8	2.7
376	GUIDED MISSILES, SPACE VEHICLES.	(D)	(D)	(D)	(D)	.5	.9	(D)	(D)	(D)	(D)	(D)	(D)
3761	GUIDED MISSILES, SPACE VEHICLES. .	(D)	(D)	(D)	(D)	*.1	.1	(D)	(D)	(D)	(D)	(D)	(D)
3764	SPACE PROPULSION UNITS AND PARTS .	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3769	SPACE VEHICLE EQUIPMENT, NEC . . .	(Z)	(Z)	.1	.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 7b. **Copper and Copper-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Bare wire for electrical conduction (335725 & 335728)		Insulated wire and cable (copper content) (335792 & 335794)		Brass mill shapes							
						Total		Rod, bar, and mechanical wire (335102)		Plate, sheet, and strip (335100, 335105, 335109, & 335143)		Pipe and tube (335152)	
		Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
379	MISC. TRANSPORTATION EQUIPMENT .	(D)	(D)	3.2	3.3	4.5	4.4	2.4	2.2	(D)	(D)	(D)	(D)
3792	TRAVEL TRAILERS AND CAMPERS. . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3795	TANKS AND TANK COMPONENTS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
38	INSTRUMENTS, RELATED PRODUCTS.	6.2	8.5	4.2	11.9	65.4	67.9	27.5	22.4	(D)	(D)	(D)	(D)
3811	ENGINEERING, SCIENTIFIC INSTRU .	*.3	.3	.2	1.2	*2.6	3.2	*1.0	1.1	.1	.2	1.5	1.8
382	MEASURING, CONTROLLING DEVICES .	5.5	7.7	3.9	10.7	58.3	59.5	26.5	21.3	(D)	(D)	(D)	(D)
3822	ENVIRONMENTAL CONTROLS	(D)	(D)	1.2	1.8	33.9	32.9	11.1	8.9	(D)	(D)	(D)	(D)
3823	PROCESS CONTROL INSTRUMENTS. . . .	*.7	1.1	*.8	1.2	5.1	5.9	*3.8	3.5	.4	.6	.8	1.8
3824	FLUID METERS AND COUNTING DEVICES.	(D)	(D)	*.1	.5	7.8	7.1	(D)	(D)	(D)	(D)	(Z)	(Z)
3825	INSTRU. TO MEASURE ELECTRICITY . .	2.4	3.3	*1.3	3.9	5.5	6.7	(D)	(D)	3.8	4.8	(D)	(D)
3829	MEASUR'G, CONTROL'G DEVICES, NEC .	(Z)	(Z)	.5	3.4	5.9	6.9	3.7	3.1	(D)	(D)	(D)	(D)
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	(D)	(D)	(D)	(D)	1.3	2.0	-	-	1.3	2.0	-	-
3873	WATCHES, CLOCKS, AND WATCHCASES.	(D)	(D)	(D)	(D)	3.2	3.3	-	-	3.2	3.3	-	-
39	MISC. MANUFACTUR'G INDUSTRIES.	-	-	(D)	(D)	60.2	65.0	(D)	(D)	(D)	(D)	-	-
391	JEWELRY, SILVER AND PLATED WARE.	-	-	-	-	11.8	13.7	-	-	11.8	13.7	-	-
3914	SILVERWARE AND PLATED WARE	-	-	-	-	11.8	13.7	-	-	11.8	13.7	-	-
394	TOYS AND SPORTING GOODS.	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3949	SPORTING AND ATHLETIC GOODS, NEC .	-	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-
396	COSTUME JEWELRY AND NOTIONS. . .	-	-	-	-	33.2	36.1	-	-	33.2	36.1	-	-
3963	BUTTONS.	-	-	-	-	1.0	.9	-	-	1.0	.9	-	-
3964	NEEDLES, PINS, AND FASTENERS . . .	-	-	-	-	32.2	35.1	-	-	32.2	35.1	-	-
399	MISCELLANEOUS MANUFACTURES . . .	-	-	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-
3999	MANUFACTURING INDUSTRIES, NEC. . .	-	-	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-

*Indicates more than 30 percent of the data has been estimated based on quantity-cost relationships of reported data. - Represents zero.
(D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.
(Z) Less than half the unit of measure specified.

Table 7c. **Aluminum and Aluminum-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Total		Sheet, plate, and foil (335301, 335303, and 335335)		Extruded shapes (335405)		All other aluminum mill shapes and forms (335001, 335007, and 335008)	
		Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)
	ALL INDUSTRIES, TOTAL.	7 489.5	5 787.2	4 727.1	3 571.7	1 486.0	1 257.3	1 276.4	958.2
25	FURNITURE AND FIXTURES	208.5	136.1	30.4	22.7	98.3	47.2	79.8	66.2
251	HOUSEHOLD FURNITURE.	96.6	65.3	14.1	9.9	53.3	34.7	29.2	20.7
2514	METAL HOUSEHOLD FURNITURE.	96.6	65.3	*14.1	9.9	53.3	34.7	29.2	20.7
252	OFFICE FURNITURE	12.7	10.2	(D)	(D)	(D)	(D)	(D)	(D)
2521	WOOD OFFICE FURNITURE.	*7.7	6.2	-	-	-	-	*7.7	6.2
2522	METAL OFFICE FURNITURE	*5.0	4.0	(D)	(D)	(D)	(D)	(D)	(D)
2531	PUBLIC BLDG., RELATED FURNITURE.	12.3	10.1	(D)	(D)	(D)	(D)	8.5	7.3
254	PARTITIONS AND FIXTURES.	19.5	17.4	(Z)	(Z)	(D)	(D)	(D)	(D)
2541	WOOD PARTITIONS AND FIXTURES	4.0	3.7	-	-	(D)	(D)	(D)	(D)
2542	METAL PARTITIONS AND FIXTURES.	*15.5	13.7	(Z)	(Z)	(D)	(D)	(D)	(D)
259	MISC. FURNITURE AND FIXTURES	37.5	33.1	(D)	(D)	(D)	(D)	10.9	11.4
2591	DRAPERY HARDWARE, BLINDS, SHADES	*30.0	24.6	(D)	(D)	10.3	8.9	(D)	(D)
2599	FURNITURE AND FIXTURES, NEC.	7.5	8.5	(Z)	(Z)	(D)	(D)	(D)	(D)
26	PAPER AND ALLIED PRODUCTS.	77.9	71.3	(D)	(D)	(D)	(D)	-	-
264	MISC. CONVERTED PAPER PRODUCTS	36.7	35.0	(D)	(D)	(D)	(D)	-	-
2641	PAPER COATING AND GLAZING.	22.9	22.4	(D)	(D)	(D)	(D)	-	-
2643	BAGS, EXCEPT TEXTILE BAGS.	8.0	7.9	8.0	7.9	-	-	-	-
2649	CONVERTED PAPER PRODUCTS, NEC.	5.8	4.7	5.8	4.7	-	-	-	-
265	PAPERBOARD CONTAINERS AND BOXES.	41.2	36.3	41.2	36.3	-	-	-	-
2651	FOLDING PAPERBOARD BOXES	6.5	7.7	6.5	7.7	-	-	-	-
2652	SETUP PAPERBOARD BOXES	(D)	(D)	(D)	(D)	-	-	-	-
2653	CORRUGATED AND SOLID FIBER BOXES	1.1	1.1	1.1	1.1	-	-	-	-
2654	SANITARY FOOD CONTAINERS	(D)	(D)	(D)	(D)	-	-	-	-
2655	FIBER CANS, DRUMS, SIMILAR PRODS	32.3	26.3	32.3	26.3	-	-	-	-
32	STONE, CLAY, GLASS PRODUCTS.	20.4	11.2	(D)	(D)	-	-	(D)	(D)
329	MISC. NONMETALLIC MINERAL PRODS.	20.4	11.2	(D)	(D)	-	-	(D)	(D)
3296	MINERAL WOOL	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3299	NONMETALLIC MINERAL PRODUCTS, NEC.	(D)	(D)	(D)	(D)	-	-	-	-
33	PRIMARY METAL INDUSTRIES	62.0	41.8	-	-	-	-	62.0	41.8
335	NONFERROUS ROLLING AND DRAWING	62.0	41.8	-	-	-	-	62.0	41.8
3357	NONFERROUS WIREDRAW'G, INSULATING.	62.0	41.8	-	-	-	-	62.0	41.8
34	FABRICATED METAL PRODUCTS.	4 710.6	3 393.2	3 313.7	2 318.7	735.2	592.8	661.7	481.7
341	METAL CANS, SHIPPING CONTAINERS.	1 902.9	1 214.9	1 489.6	926.4	-	-	413.2	288.5
3411	METAL CANS	1 899.7	1 211.7	(D)	(D)	-	-	(D)	(D)
3412	METAL BARRELS, DRUMS, AND PAILS.	*3.1	3.2	(D)	(D)	-	-	(D)	(D)
342	CUTLERY, HANDTOOLS AND HARDWARE.	96.6	96.8	66.4	66.7	22.0	21.3	8.1	8.8
3421	CUTLERY.	3.7	3.8	(D)	(D)	-	-	(D)	(D)
3423	HAND AND EDGE TOOLS, NEC	9.2	9.2	(D)	(D)	(D)	(D)	*3.8	4.2
3425	HANDSAWS AND SAW BLADES.	.5	.3	(D)	(D)	-	-	(D)	(D)
3429	HARDWARE, NEC.	83.1	83.5	(D)	(D)	(D)	(D)	2.9	3.1
343	PLUMBING, HEATING, EXCEPT ELEC	16.8	15.7	10.2	8.2	1.2	1.3	5.4	6.2
3431	METAL SANITARY WARE.	(D)	(D)	-	-	(D)	(D)	(D)	(D)
3432	PLUMBING FITTINGS AND BRASS GOODS.	(D)	(D)	-	-	(D)	(D)	(D)	(D)
3433	HEATING EQUIPMENT, EXC. ELECTRIC	14.1	12.9	*10.2	8.2	-	-	3.9	4.6
344	FABRICATED STRUC. METAL PRODS.	1 754.2	1 263.5	1 062.6	734.9	573.4	443.0	118.2	85.6
3441	FABRICATED STRUCTURAL METAL.	*20.4	16.9	*11.2	10.0	*8.8	6.5	*.4	.5
3442	METAL DOORS, SASH, AND TRIM.	566.9	427.4	99.9	72.2	449.8	340.0	*17.2	15.3
3443	FABRICATED PLATEWORK, BOILER SHOP.	48.5	45.7	*25.3	23.5	18.4	18.0	4.7	4.2
3444	SHEET METALWORK.	855.1	579.2	774.5	518.7	34.1	28.1	46.4	32.3
3446	ARCHITECTURAL METALWORK.	53.2	43.4	*12.0	10.4	37.7	29.1	3.4	4.0
3448	PREFABRICATED METAL BUILDINGS.	142.4	102.0	(D)	(D)	12.5	10.3	(D)	(D)
3449	MISCELLANEOUS METALWORK.	67.8	48.9	(D)	(D)	12.0	11.0	(D)	(D)
345	SCREW MACHINE PROD., BOLTS, ETC.	48.1	42.1	7.0	2.4	18.9	18.1	22.2	21.6
3451	SCREW MACHINE PRODUCTS	29.2	22.2	4.8	.4	15.9	15.0	8.5	6.8
3452	BOLTS, NUTS, RIVETS, AND WASHERS	18.9	19.9	2.2	2.0	3.0	3.1	13.7	14.8
346	METAL FORGINGS AND STAMPINGS	449.8	385.0	377.7	328.9	17.8	24.1	54.2	32.0
3462	IRON AND STEEL FORGINGS.	1.2	1.3	-	-	-	-	1.2	1.3
3463	NONFERROUS FORGINGS.	23.9	17.0	-	-	-	-	23.9	17.0
3465	AUTOMOTIVE STAMPINGS	140.5	138.9	(D)	(D)	(D)	(D)	8.4	5.9
3466	CROWNS AND CLOSURES.	52.3	40.5	(D)	(D)	(D)	(D)	-	-
3469	METAL STAMPINGS, NEC	231.9	187.3	*206.0	174.3	5.1	5.2	20.7	7.8
348	ORDNANCE AND ACCESSORIES, NEC.	19.3	21.1	4.3	2.8	11.2	12.1	3.8	6.1
3482	SMALL ARMS AMMUNITION.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3483	AMMUNITION, EXC. SMALL ARMS, NEC	(D)	(D)	(D)	(D)	(D)	(D)	2.3	2.4
3484	SMALL ARMS	1.2	1.7	(D)	(D)	(D)	(D)	(D)	(D)
3489	ORDNANCE AND ACCESSORIES NEC	*3.9	6.2	*.8	1.4	*2.0	3.3	1.1	1.5
349	MISC. FABRICATED METAL PRODUCTS.	422.9	354.0	295.8	248.3	90.6	73.0	36.6	32.8
3493	STEEL SPRINGS, EXCEPT WIRE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3494	VALVES AND PIPE FITTINGS	15.7	15.5	(D)	(D)	13.7	12.9	(D)	(D)
3495	WIRE SPRINGS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3496	MISC. FABRICATED WIRE PRODUCTS	16.4	14.7	*.4	.3	.4	.4	15.7	14.0
3497	METAL FOIL AND LEAF.	253.0	212.6	(D)	(D)	-	-	(D)	(D)
3498	FABRICATED PIPE AND FITTINGS	9.9	13.4	*1.1	1.0	7.2	8.7	1.6	3.8
3499	FABRICATED METAL PRODUCTS, NEC	125.6	95.0	41.4	34.6	68.1	49.8	*16.1	10.6
35	MACHINERY, EXCEPT ELECTRICAL	709.8	582.5	372.1	305.1	162.2	141.3	175.5	136.1
351	ENGINES AND TURBINES	6.0	5.9	(D)	(D)	(D)	(D)	5.4	5.3
3511	TURBINES, TURBINE GENERATOR SETS	1.5	1.7	-	-	-	-	1.5	1.7
3519	INTERNAL COMBUSTION ENGINES, NEC	4.5	4.2	(D)	(D)	(D)	(D)	3.9	3.6

See footnotes at end of table.

Table 7c. **Aluminum and Aluminum-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Total		Sheet, plate, and foil (335301, 335303, and 335335)		Extruded shapes (335405)		All other aluminum mill shapes and forms (335001, 335007, and 335008)	
		Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)
352	FARM AND GARDEN MACHINERY	41.0	32.8	(D)	(D)	(D)	(D)	8.0	9.7
3523	FARM MACHINERY AND EQUIPMENT	27.9	21.5	9.8	6.7	14.5	10.7	*3.6	4.1
3524	LAWN AND GARDEN EQUIPMENT	*13.2	11.3	(D)	(D)	(D)	(D)	*4.5	5.6
353	CONSTRUCTION, RELATED MACHINERY	49.4	41.7	16.5	15.2	12.2	11.4	20.7	15.1
3531	CONSTRUCTION MACHINERY	(D)	(D)	1.9	1.8	(D)	(D)	(D)	(D)
3532	MINING MACHINERY	*.9	1.0	*.4	.4	.2	.2	*.3	.4
3533	OILFIELD MACHINERY	4.1	2.6	(D)	(D)	(D)	(D)	(D)	(D)
3534	ELEVATORS AND MOVING STAIRWAYS	(D)	(D)	(D)	(D)	*3.7	3.2	(D)	(D)
3535	CONVEYORS AND CONVEYING EQUIPMENT	5.3	5.9	3.0	3.5	*2.0	2.1	.3	.3
3536	HOISTS, CRANES, AND MONORAILS	1.3	1.9	.3	.3	(D)	(D)	(D)	(D)
3537	INDUSTRIAL TRUCKS AND TRACTORS	5.5	4.1	2.6	1.9	*2.4	1.7	.5	.4
354	METALWORKING MACHINERY	29.7	32.3	7.0	9.1	5.2	6.3	17.6	16.9
3541	MACHINE TOOLS, METAL-CUTTING	*1.3	1.7	*.7	.8	*.3	.5	.3	.4
3542	MACHINE TOOLS, METAL-FORMING	2.7	2.6	(D)	(D)	.9	1.1	(D)	(D)
3544	SPECIAL DIES, TOOLS, JIGS, ETC	(D)	(D)	(D)	(D)	*1.9	2.2	*1.9	2.2
3545	MACHINE TOOL ACCESSORIES	1.4	1.6	*.4	.6	.9	.9	*.1	.1
3546	POWER DRIVEN HANDTOOLS	(D)	(D)	(D)	(D)	-	-	(D)	(D)
3547	ROLLING MILL MACHINERY	.2	.2	*.1	.1	.1	.1	-	-
3549	METALWORKING MACHINERY, NEC	1.8	2.8	.2	.6	1.1	1.6	.5	.6
355	SPECIAL INDUSTRY MACHINERY	35.4	38.8	19.5	23.5	5.8	5.4	10.1	9.9
3551	FOOD PRODUCTS MACHINERY	*7.4	8.2	*3.0	3.7	.1	.1	*4.4	4.4
3552	TEXTILE MACHINERY	10.4	7.1	5.5	3.8	3.5	2.8	1.3	.6
3553	WOODWORKING MACHINERY	*.9	.8	-	-	-	-	*.9	.8
3555	PRINTING TRADES MACHINERY	*8.9	13.9	*7.3	12.3	(D)	(D)	(D)	(D)
3559	SPECIAL INDUSTRY MACHINERY, NEC	*7.8	8.7	*3.6	3.8	(D)	(D)	(D)	(D)
356	GENERAL INDUSTRIAL MACHINERY	43.7	38.7	19.8	18.1	10.5	9.4	13.4	11.2
3561	PUMPS AND PUMPING EQUIPMENT	*5.3	3.5	-	-	3.1	1.3	*2.2	2.2
3563	AIR AND GAS COMPRESSORS	*3.0	3.7	(D)	(D)	(D)	(D)	*2.0	2.5
3564	BLOWERS AND FANS	*16.6	13.3	11.7	9.8	(D)	(D)	(D)	(D)
3565	INDUSTRIAL PATTERNS	.6	.5	*.1	.2	(Z)	(Z)	.4	.2
3567	INDUSTRIAL FURNACES AND OVENS	2.9	1.5	(D)	(D)	(D)	(D)	(D)	(D)
3569	GENERAL INDUSTRIAL MACHINERY, NEC	*15.4	16.2	6.9	6.9	*6.5	7.0	*2.0	2.3
357	OFFICE AND COMPUTING MACHINES	26.4	22.9	12.5	11.6	9.4	8.1	4.5	3.3
3573	ELECTRONIC COMPUTING EQUIPMENT	*19.4	16.0	*10.3	9.5	6.4	4.7	2.8	1.8
3574	CALCULATING, ACCOUNTING MACHINES	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3576	SCALES, BALANCES, EXC. LABORATORY	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3579	OFFICE MACHINES, TYPEWRITERS, ETC	6.0	6.0	1.9	1.8	2.6	3.0	1.5	1.3
358	REFRIGERATION AND SERVICE MACH	394.4	307.0	262.5	200.5	76.2	65.0	55.7	41.6
3581	AUTOMATIC MERCHANDISING MACHINES	*3.7	4.1	(D)	(D)	(D)	(D)	*3.0	2.8
3582	COMMERCIAL LAUNDRY EQUIPMENT	*.2	.4	(D)	(D)	-	-	(D)	(D)
3585	REFRIGERATION, HEATING EQUIPMENT	381.8	291.7	258.6	196.5	74.8	64.2	48.4	31.1
3586	MEASURING AND DISPENSING PUMPS	1.5	1.0	-	-	1.3	.8	*.2	.2
3589	SERVICE INDUSTRY MACHINERY, NEC	*7.0	9.9	*3.0	2.5	(D)	(D)	(D)	(D)
359	MISC. MACHINERY, EXC. ELEC	79.5	62.3	16.3	15.5	27.5	23.5	35.7	23.2
3592	CARBURETORS, PISTONS, RINGS, ETC	40.1	24.2	(D)	(D)	(D)	(D)	27.8	16.7
3599	MACHINERY, EXCEPT ELECTRICAL, NEC	*39.4	38.0	(D)	(D)	(D)	(D)	*7.9	6.5
36	ELECTRIC, ELECTRONIC EQUIP	571.1	471.2	246.2	225.1	146.9	133.7	178.0	112.4
361	ELECTRIC DISTRIBUTING EQUIPMENT	89.4	71.8	37.8	30.4	23.4	18.2	28.2	23.2
3612	TRANSFORMERS	55.7	43.9	29.2	22.6	-	-	26.6	21.3
3613	SWITCHGEAR, SWITCHBOARD APPARATUS	33.7	28.0	8.6	7.9	23.4	18.2	1.6	1.9
362	ELECTRICAL INDUSTRIAL APPARATUS	49.5	42.9	9.5	11.2	8.3	7.9	31.7	23.9
3621	MOTORS AND GENERATORS	19.4	12.1	(D)	(D)	(D)	(D)	13.9	7.6
3622	INDUSTRIAL CONTROLS	*5.1	5.8	*2.5	2.6	*2.2	2.8	.4	.5
3623	WELDING APPARATUS, ELECTRIC	7.8	10.0	(D)	(D)	-	-	(D)	(D)
3624	CARBON AND GRAPHITE PRODUCTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3629	ELEC. INDUSTRIAL APPARATUS, NEC	(D)	(D)	6.5	8.0	1.1	1.2	(D)	(D)
363	HOUSEHOLD APPLIANCES	146.2	115.3	89.7	73.4	28.3	24.4	28.2	17.5
3631	HOUSEHOLD COOKING EQUIPMENT	11.1	10.8	4.2	3.2	4.9	5.6	2.0	2.0
3632	HOUSEHOLD REFRIGERATORS, FREEZERS	33.6	32.0	25.1	24.4	(D)	(D)	(D)	(D)
3633	HOUSEHOLD LAUNDRY EQUIPMENT	8.8	7.6	2.1	2.4	(D)	(D)	(D)	(D)
3634	ELECTRIC HOUSEWARES AND FANS	*76.5	52.8	*56.3	41.8	*5.3	4.1	15.0	7.0
3635	HOUSEHOLD VACUUM CLEANERS	(D)	(D)	(D)	(D)	*2.5	2.9	(D)	(D)
3636	SEWING MACHINES	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3639	HOUSEHOLD APPLIANCES, NEC	4.1	3.3	(D)	(D)	2.6	2.1	(D)	(D)
364	ELEC. LIGHTING, WIRING EQUIP	150.1	97.9	46.0	40.9	44.8	40.8	59.3	16.2
3643	CURRENT-CARRYING WIRING DEVICES	16.7	17.5	6.5	6.4	8.4	8.8	1.9	2.2
3644	NONCURRENT-CARRYING WIRING DEVICES	59.5	14.2	2.1	1.9	7.6	5.7	49.9	6.6
3645	RESIDENTIAL LIGHTING FIXTURES	4.6	4.5	*2.0	2.1	1.9	1.6	.7	.7
3646	COMMERCIAL LIGHTING FIXTURES	*16.4	15.4	(D)	(D)	(D)	(D)	(D)	(D)
3647	VEHICULAR LIGHTING EQUIPMENT	17.9	15.1	(D)	(D)	(D)	(D)	(D)	(D)
3648	LIGHTING EQUIPMENT, NEC	*35.0	31.1	*15.2	13.2	*18.2	17.0	1.5	.9
365	RADIO, TV RECEIVING EQUIPMENT	7.2	6.8	(D)	(D)	(D)	(D)	.4	.4
3651	RADIO AND TV RECEIVING SETS	7.2	6.8	(D)	(D)	(D)	(D)	.4	.4
366	COMMUNICATION EQUIPMENT	58.9	56.5	29.9	27.0	20.5	21.0	8.5	8.5
3661	TELEPHONE AND TELEGRAPH APPARATUS	9.0	9.3	3.4	3.0	*3.0	3.6	*2.6	2.6
3662	RADIO AND TV COMMUNICATION EQUIP	49.8	47.2	26.5	24.0	17.4	17.4	5.9	5.8
367	ELECTRONIC COMPONENTS, ACCESS	52.9	64.9	28.0	37.3	18.3	18.2	6.5	9.4
3671	ELECTRON TUBES, RECEIVING TYPE	*.1	.4	(D)	(D)	(D)	(D)	(D)	(D)
3674	SEMICONDUCTORS, RELATED DEVICES	6.1	5.5	1.0	.7	4.5	4.0	*.6	.8
3675	ELECTRONIC CAPACITORS	*19.0	27.0	*14.7	24.9	3.8	1.8	.5	.3
3676	ELECTRONIC RESISTORS	*1.0	1.2	(D)	(D)	(D)	(D)	(D)	(D)
3677	ELECTRONIC COILS AND TRANSFORMERS	.7	.8	.1	.1	*.3	.4	.3	.3
3678	ELECTRONIC CONNECTORS	*9.2	11.4	(D)	(D)	5.0	7.0	(D)	(D)
3679	ELECTRONIC COMPONENTS, NEC	*16.7	18.5	8.5	7.5	*3.9	4.0	*4.3	7.0

See footnotes at end of table.

Table 7c. **Aluminum and Aluminum-Base Alloy Mill Shapes and Forms Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Total		Sheet, plate, and foil (335301, 335303, and 335335)		Extruded shapes (335405)		All other aluminum mill shapes and forms (335001, 335007, and 335008)	
		Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)	Quantity (million pounds)	Delivered cost (million dollars)
369	MISC. ELEC. EQUIPMENT, SUPPLIES	17.1	15.1	(D)	(D)	(D)	(D)	15.2	13.3
3694	ENGINE ELECTRICAL EQUIPMENT	8.2	7.1	(D)	(D)	(D)	(D)	6.5	5.5
3699	ELECTRICAL EQUIP., SUPPLIES, NEC	8.9	8.0	(D)	(D)	(D)	(D)	8.7	7.8
37	TRANSPORTATION EQUIPMENT	993.9	936.5	638.7	585.8	312.1	304.6	43.2	46.1
371	MOTOR VEHICLES AND EQUIPMENT	630.7	523.0	401.7	340.7	207.7	161.6	21.4	20.7
3711	MOTOR VEHICLES AND CAR BODIES	95.0	75.2	67.6	53.7	(D)	(D)	(D)	(D)
3713	TRUCK AND BUS BODIES	69.1	56.3	44.7	37.8	(D)	(D)	(D)	(D)
3714	MOTOR VEHICLE PARTS, ACCESSORIES	*186.4	166.8	*128.2	116.0	44.4	37.7	13.8	13.1
3715	TRUCK TRAILERS	230.6	181.9	*117.1	96.8	112.0	83.5	1.6	1.7
3716	MOTOR HOMES	*49.6	42.8	*44.1	36.4	*3.7	4.3	1.8	2.1
372	AIRCRAFT AND PARTS	169.1	237.5	100.0	123.3	57.5	100.0	11.6	14.2
3721	AIRCRAFT	118.3	170.1	80.9	99.1	30.6	63.2	6.8	7.9
3724	AIRCRAFT ENGINES AND ENGINE PARTS	8.9	9.9	1.8	1.8	6.2	7.0	*.8	1.1
3728	AIRCRAFT EQUIPMENT, NEC	*41.9	57.5	*17.3	22.4	*20.7	29.8	4.0	5.3
373	SHIP, BOAT BUILDING, REPAIRING	59.3	57.1	40.4	37.5	17.4	17.7	1.5	1.9
3731	SHIP BUILDING AND REPAIRING	23.3	26.1	15.8	17.9	6.7	7.1	.8	1.2
3732	BOAT BUILDING AND REPAIRING	36.0	31.0	24.5	19.6	*10.8	10.7	.7	.7
3743	RAILROAD EQUIPMENT	8.0	8.5	4.6	4.7	(D)	(D)	(D)	(D)
3751	MOTORCYCLES, BICYCLES, AND PARTS	2.3	2.7	1.2	.9	(D)	(D)	(D)	(D)
376	GUIDED MISSILES, SPACE VEHICLES	18.5	19.4	13.4	14.3	3.2	3.1	1.9	2.0
3761	GUIDED MISSILES, SPACE VEHICLES	4.6	4.9	2.6	3.3	1.9	1.4	.2	.2
3764	SPACE PROPULSION UNITS AND PARTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3769	SPACE VEHICLE EQUIPMENT, NEC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
379	MISC. TRANSPORTATION EQUIPMENT	105.9	88.3	77.4	64.4	22.6	18.1	5.9	5.8
3792	TRAVEL TRAILERS AND CAMPERS	*59.0	48.4	*44.2	36.3	12.9	10.1	2.0	2.0
3795	TANKS AND TANK COMPONENTS	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3799	TRANSPORTATION EQUIPMENT, NEC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
38	INSTRUMENTS, RELATED PRODUCTS	62.5	70.7	(D)	(D)	(D)	(D)	(D)	(D)
3811	ENGINEERING, SCIENTIFIC INSTRU	*4.6	5.6	(D)	(D)	(D)	(D)	(D)	(D)
382	MEASURING, CONTROLLING DEVICES	35.8	37.4	16.4	16.6	11.8	13.5	7.6	7.3
3822	ENVIRONMENTAL CONTROLS	*11.0	9.6	*5.2	4.5	4.4	3.7	1.4	1.5
3823	PROCESS CONTROL INSTRUMENTS	*3.8	4.5	*2.2	2.1	*1.3	1.7	*.3	.7
3824	FLUID METERS AND COUNTING DEVICES	6.7	5.8	*1.8	1.8	(D)	(D)	(D)	(D)
3825	INSTRU. TO MEASURE ELECTRICITY	*11.9	13.4	5.9	6.0	*5.3	6.5	.6	.8
3829	MEASURING, CONTROLLING DEVICES, NEC	*2.4	4.1	*1.3	2.2	(D)	(D)	(D)	(D)
3861	PHOTOGRAPHIC EQUIP. AND SUPPLIES	22.1	27.7	(D)	(D)	(D)	(D)	(D)	(D)
39	MISC. MANUFACTURING INDUSTRIES	72.7	72.6	4.1	5.0	17.3	21.3	51.3	46.2
394	TOYS AND SPORTING GOODS	31.3	35.5	4.1	5.0	17.3	21.3	9.8	9.2
3942	DOLLS	(D)	(D)	-	-	-	-	(D)	(D)
3944	GAMES, TOYS, CHILDREN'S VEHICLES	(D)	(D)	-	-	(D)	(D)	(D)	(D)
3949	SPORTING AND ATHLETIC GOODS, NEC	24.8	30.0	4.1	5.0	(D)	(D)	(D)	(D)
396	COSTUME JEWELRY AND NOTIONS	12.4	11.6	-	-	-	-	12.4	11.6
3962	ARTIFICIAL FLOWERS	(D)	(D)	-	-	-	-	(D)	(D)
3963	BUTTONS	(D)	(D)	-	-	-	-	(D)	(D)
3964	NEEDLES, PINS, AND FASTENERS	*8.1	8.3	-	-	-	-	*8.1	8.3
399	MISCELLANEOUS MANUFACTURES	29.0	25.4	-	-	-	-	29.0	25.4
3999	MANUFACTURING INDUSTRIES, NEC	29.0	25.4	-	-	-	-	29.0	25.4

*Indicates more than 30 percent of the data has been estimated based on quantity-cost relationships of reported data. - Represents zero.
(D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.
(Z) Less than half the unit of measure specified.

Table 7d. **Selected Castings and Forgings Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Castings--rough and semifinished								Forgings				Metal powder (339915)	
		Iron--gray and malleable (332001 and 332011)		Steel (332045)		Aluminum and aluminum-base alloy (336100)		Copper and copper-base alloy (336200)		Iron and steel (346200, 346201, and 346209)		Aluminum and aluminum-base alloy (346310)			
		Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
	All industries.....	9,539.9	6,277.6	1,427.1	1,961.9	1,914.8	1,948.5	263.5	367.3	2,822.3	2,891.9	182.8	154.8	537.0	371.5
24	Lumber and wood products	-	-	(S)	2.7	(S)	.8	-	-	-	-	-	-	-	-
245	Wood buildings and mobile homes.....	-	-	(S)	2.7	(S)	.8	-	-	-	-	-	-	-	-
2451	Mobile homes.....	-	-	(S)	2.7	(S)	.8	-	-	-	-	-	-	-	-
30	Rubber, miscellaneous plastics products.....	1,055.2	32.3	-	-	-	-	-	-	-	-	-	-	-	-
3011	Tires and inner tubes.....	(S)	.5	-	-	-	-	-	-	-	-	-	-	-	-
3069	Fabricated rubber products, n.e.c.....	1,023.7	31.8	-	-	-	-	-	-	-	-	-	-	-	-
34	Fabricated metal products	686.5	322.0	232.5	272.4	145.8	92.3	114.0	147.5	179.2	184.6	8.8	9.2	(D)	(D)
342	Cutlery, handtools, and hardware.....	67.3	63.9	(D)	(D)	37.0	19.6	(S)	11.6	(D)	(D)	-	-	(S)	3.7
3421	Cutlery.....	(D)	(D)	-	-	(D)	(D)	-	-	1.0	2.4	-	-	-	-
3423	Hand and edge tools, n.e.c.	20.0	21.5	(S)	6.5	(S)	10.1	-	-	**17.4	20.9	-	-	-	-
3425	Handsaws and saw blades....	(D)	(D)	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-	-	-
3429	Hardware, n.e.c.....	*17.1	40.7	(S)	11.5	**6.6	7.1	(S)	11.6	-	-	-	-	(S)	3.7
343	Plumbing and heating, except electric.....	(D)	(D)	.3	1.3	3.4	6.0	(D)	(D)	(D)	(D)	-	-	-	-
3431	Metal sanitary ware.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-
3432	Plumbing fittings and brass goods.....	6.8	5.6	(D)	(D)	(D)	(D)	**35.0	46.4	(D)	(D)	-	-	-	-
3433	Heating equipment, except electric.....	*41.4	31.4	-	-	*2.1	3.4	.8	1.0	-	-	-	-	-	-
344	Fabricated structural metal products.....	(D)	(D)	86.1	54.1	(D)	(D)	-	-	-	-	-	-	-	-
3441	Fabricated structural metal	(S)	2.3	(D)	(D)	1.0	.9	-	-	-	-	-	-	-	-
3442	Metal doors, sash, and trim	(S)	3.0	(S)	.6	*16.6	7.6	-	-	-	-	-	-	-	-
3443	Fabricated platework (boiler shops).....	39.0	32.1	(S)	23.2	*2.2	6.8	-	-	-	-	-	-	-	-
3444	Sheet metalwork.....	**.1	.1	(S)	1.1	42.8	2.1	-	-	-	-	-	-	-	-
3446	Architectural metalwork....	**1.3	1.1	**.1	.3	4.4	1.2	-	-	-	-	-	-	-	-
3448	Prefabricated metal buildings.....	.7	1.7	(D)	(D)	(S)	.5	-	-	-	-	-	-	-	-
3449	Miscellaneous metalwork....	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-
345	Screw machine products, bolts, etc.....	7.7	6.7	(D)	(D)	-	-	-	-	9.0	10.7	-	-	-	-
3451	Screw machine products.....	**1.4	1.2	(D)	(D)	-	-	-	-	(D)	(D)	-	-	-	-
3452	Bolts, nuts, rivets, and washers.....	6.3	5.5	(S)	1.6	-	-	-	-	(D)	(D)	-	-	-	-
346	Metal forgings and stampings.	23.8	20.0	-	-	5.6	6.7	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3462	Iron and steel forgings....	-	-	-	-	-	-	-	-	(S)	18.3	(D)	(D)	-	-
3463	Nonferrous forgings.....	-	-	-	-	-	-	-	-	(D)	(D)	(D)	(D)	-	-
3465	Automotive stampings.....	(D)	(D)	-	-	*.2	.3	(D)	(D)	-	-	-	-	-	-
3466	Crowns and closures.....	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-	-
3469	Metal stampings, n.e.c.....	(S)	3.1	-	-	5.4	6.4	1.7	1.7	-	-	-	-	-	-
348	Ordance and accessories, n.e.c.....	333.0	2.4	(D)	(D)	(D)	(D)	-	-	10.0	12.7	(D)	(D)	(D)	(D)
3483	Ammunition, except small arms, n.e.c.....	(D)	(D)	(D)	(D)	(D)	(D)	-	-	4.5	2.7	5.1	5.8	(D)	(D)
3484	Small arms.....	.6	1.1	(S)	17.0	(S)	3.9	-	-	*4.7	6.8	(D)	(D)	-	-
3489	Ordance and accessories, n.e.c.....	(D)	(D)	(S)	2.7	(D)	(D)	-	-	.8	3.2	*.2	.7	-	-
3482	Small arms ammunition.....	-	-	-	-	-	-	-	-	-	-	-	-	(D)	(D)
349	Miscellaneous fabricated metal products.....	158.6	150.4	(D)	(D)	29.3	35.9	67.2	86.1	80.3	96.7	(D)	(D)	-	-
3493	Steel springs, except wire.	-	-	1.7	1.5	-	-	-	-	-	-	-	-	-	-
3494	Valves and pipe fittings...	**139.8	126.0	*71.8	164.8	25.0	32.3	*63.7	80.1	74.1	88.8	-	-	-	-
3495	Wire springs.....	-	-	(D)	(D)	-	-	-	-	-	-	-	-	-	-
3496	Miscellaneous fabricated wire products.....	-	-	(S)	3.4	-	-	-	-	-	-	-	-	-	-
3498	Fabricated pipe and fittings.....	**3.3	5.0	2.1	1.9	.3	.5	1.5	2.6	(S)	6.5	(D)	(D)	-	-
3499	Fabricated metal products, n.e.c.....	*15.5	19.4	(S)	4.2	**4.0	3.1	*2.0	3.4	(S)	1.4	(S)	.9	-	-

See footnotes at end of table.

Table 7d. **Selected Castings and Forgings Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Castings--rough and semifinished						Forgings				Metal powder (339915)	
		Iron--gray and malleable (332001 and 332011)		Steel (332045)		Aluminum and aluminum-base alloy (336100)		Copper and copper-base alloy (336200)		Iron and steel (346200, 346201, and 346209)		Aluminum and aluminum-base alloy (346310)			
		Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
35	Machinery, except electrical	2,580.6	2,500.3	494.7	947.9	650.6	712.6	89.3	130.3	947.8	1,211.1	-	-	149.2	262.1
351	Engines and turbines	583.8	577.3	40.0	93.3	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-
3511	Turbines and turbines generator sets	*16.2	29.6	27.0	52.9	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-
3519	Internal combustion engines, n.e.c.	567.6	547.7	13.0	40.4	239.6	237.3	*8.3	8.7	*135.3	188.6	-	-	-	-
352	Farm and garden machinery	442.5	387.7	19.0	21.5	42.7	36.0	-	-	(S)	99.8	-	-	22.0	10.8
3523	Farm machinery and equipment	421.2	371.4	18.0	20.7	(S)	15.9	-	-	*99.0	96.9	-	-	16.0	3.5
3524	Lawn and garden equipment	(S)	16.3	1.0	.8	31.0	20.1	-	-	(S)	2.9	-	-	6.0	7.3
353	Construction and related machinery	403.0	467.9	283.8	503.5	68.6	57.0	5.4	9.4	427.5	441.2	-	-	(D)	(D)
3531	Construction machinery	*270.2	344.8	*188.6	347.9	56.3	42.2	(S)	3.3	342.5	337.7	-	-	17.2	9.9
3532	Mining machinery	**16.5	22.8	(S)	39.1	(S)	.8	*.7	2.6	(S)	23.9	-	-	4.7	56.2
3533	Oilfield machinery	29.1	33.7	46.1	77.7	-	-	(S)	3.0	48.0	57.4	-	-	(S)	18.2
3534	Elevators and moving stairways	*14.0	7.0	**3.8	4.7	**4.2	4.0	-	-	(Z)	(Z)	-	-	(Z)	(Z)
3535	Conveyors and conveying equipment	(S)	17.8	(S)	4.8	(S)	3.9	-	-	(S)	10.6	-	-	(S)	.1
3536	Hoists, cranes, and monorails	*7.0	7.5	(S)	9.9	2.7	3.3	(S)	.5	**2.3	2.7	-	-	(Z)	(Z)
3537	Industrial trucks and tractors	48.4	34.3	**12.6	19.4	(S)	2.8	-	-	8.1	8.9	-	-	(D)	(D)
354	Metalworking machinery	175.5	173.5	29.0	45.8	(D)	(D)	(D)	(D)	(S)	49.4	-	-	(D)	(D)
3541	Machine tools, metal cutting types	**77.9	84.5	(S)	8.7	(S)	6.0	**1.7	2.5	*5.9	8.7	-	-	(S)	.2
3542	Machine tools, metal forming types	(S)	29.4	*12.4	18.8	*2.6	(S)	.9	1.5	**8.2	11.3	-	-	(Z)	(Z)
3544	Special dies, tools, jigs, and fixtures	**48.0	37.4	(S)	7.0	(S)	7.9	.3	1.0	**1.9	3.8	-	-	*1.1	9.8
3545	Machine tool accessories	10.2	8.9	(S)	1.6	.6	1.5	(S)	.4	(S)	2.2	-	-	11.0	134.2
3546	Power driven handtools	3.5	4.8	**1.9	3.3	**25.6	36.5	-	-	10.7	9.2	-	-	-	-
3547	Rolling mill machinery	2.0	2.6	*3.7	5.6	(D)	(D)	(D)	(D)	16.0	13.7	-	-	-	-
3549	Metalworking machinery, n.e.c.	(S)	5.9	.4	.8	2.2	4.4	2.4	4.2	.4	.5	-	-	(D)	(D)
355	Special industry machinery	142.0	159.5	34.9	50.7	42.0	51.2	2.8	5.0	(Z)	.1	-	-	-	-
3551	Food products machinery	13.6	15.9	**6.1	9.9	17.0	22.4	(S)	1.5	-	-	-	-	-	-
3552	Textile machinery	**21.1	26.6	-	-	**5.8	5.5	-	-	-	-	-	-	-	-
3553	Woodworking machinery	28.6	17.5	*2.6	7.2	11.8	12.1	-	-	(Z)	.1	-	-	-	-
3554	Paper industries machinery	*14.6	26.0	(S)	7.4	-	-	-	-	-	-	-	-	-	-
3555	Printing trades machinery	(S)	23.3	-	-	(S)	6.4	-	-	-	-	-	-	-	-
3559	Special industry machinery, n.e.c.	(S)	50.0	(S)	26.2	(S)	4.7	(S)	3.5	-	-	-	-	-	-
356	General industrial machinery	484.8	418.6	46.7	165.7	(D)	(D)	31.7	63.1	178.3	214.2	-	-	(D)	(D)
3561	Pumps and pumping equipment	**207.6	163.9	**21.8	118.2	**16.8	24.6	(S)	34.4	(S)	23.9	-	-	(S)	1.1
3562	Ball and roller bearings	29.7	25.3	*1.7	3.0	(D)	(D)	3.0	5.2	42.0	64.5	-	-	(D)	(D)
3563	Air and gas compressors	*73.5	70.1	(S)	11.9	**10.1	15.5	(S)	3.4	*7.7	18.5	-	-	(S)	.6
3564	Blowers and fans	(S)	14.6	-	-	(S)	6.8	(S)	.1	-	-	-	-	-	-
3565	Industrial patterns	**3.0	4.1	(S)	1.3	(S)	2.1	(Z)	(Z)	-	-	-	-	-	-
3566	Speed changes, drives, and gears	**48.4	47.2	(S)	10.6	(S)	5.0	*3.7	8.5	(S)	55.3	-	-	(S)	.1
3567	Industrial furnaces and ovens	(Z)	(Z)	.9	2.4	-	-	-	-	-	-	-	-	-	-
3568	Power transmission equipment, n.e.c.	77.5	66.4	(S)	6.8	*5.1	7.2	(S)	5.6	**62.8	52.0	-	-	(S)	4.3
3569	General industrial machinery, n.e.c.	**28.6	26.8	(S)	11.5	(S)	13.4	**3.7	5.8	-	-	-	-	-	-
357	Office and computing machines	-	-	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-
3573	Electronic computing equipment	-	-	(S)	18.8	**30.1	39.5	-	-	-	-	-	-	-	-
3574	Calculating and accounting machines	-	-	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-
3576	Scales and balances, except laboratory	-	-	(S)	7.1	*3.0	2.8	-	-	-	-	-	-	-	-
3579	Office machines, n.e.c. (combined with 3572)	-	-	(S)	4.1	(S)	19.1	-	-	-	-	-	-	-	-
358	Refrigeration and service machinery	258.5	209.5	(D)	(D)	70.7	91.3	26.3	21.9	(D)	(D)	-	-	8.2	8.3
3581	Automatic merchandising machines	(D)	(D)	-	-	(D)	(D)	(D)	(D)	-	-	-	-	(D)	(D)
3582	Commercial laundry equipment	(S)	2.2	-	-	(D)	(D)	(D)	(D)	-	-	-	-	-	-

See footnotes at end of table.

Table 7d. **Selected Castings and Forgings Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Castings--rough and semifinished						Forgings				Metal powder (339915)	
		Iron--gray and malleable (332001 and 332011)		Steel (332045)		Aluminum and aluminum-base alloy (336100)		Copper and copper-base alloy (336200)		Iron and steel (346200, 346201, and 346209)		Aluminum and aluminum-base alloy (346310)			
		Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
35	Machinery, except electrical--Con.														
358	Refrigeration and service machinery--Con.														
3585	Refrigeration and heating equipment	*232.3	185.2	8.0	7.6	54.0	72.6	22.6	19.2	(D)	(D)	-	-	(D)	(D)
3586	Measuring and dispensing pumps	(D)	(D)	(D)	(D)	3.2	4.8	(Z)	(Z)	(D)	(D)	-	-	(Z)	(Z)
3589	Service industry machinery, n.e.c	**12.5	14.1	(D)	(D)	12.8	12.2	3.1	2.5	-	-	-	-	(Z)	(Z)
359	Miscellaneous machinery, except electrical	90.5	106.3	21.0	28.6	51.5	39.1	6.1	8.8	-	-	-	-	-	-
3592	Carburetors, pistons, rings, and valves	*42.3	59.0	*3.6	3.7	**37 2	21.8	(S)	2.0	-	-	-	-	-	-
3599	Machinery, except electrical, n.e.c	(S)	47.2	(S)	24.9	(S)	17.2	(S)	6.8	-	-	-	-	-	-
36	Electric and electronic equipment	209.1	141.9	22.7	45.3	326.7	316.4	31.5	39.0	8.0	9.2	-	-	164.3	30.8
361	Electric distributing equipment	-	-	(S)	3.5	(S)	12.5	(S)	11.8	-	-	-	-	-	-
3613	Switchgear and switchboard apparatus	-	-	(S)	3.5	(S)	12.5	(S)	11.8	-	-	-	-	-	-
362	Electrical industrial apparatus	86.2	64.9	10.0	17.1	41.6	45.9	3.0	4.3	8.0	9.2	-	-	-	-
3621	Motors and generators	86.2	64.9	(S)	6.9	35.9	40.9	*2.3	3.3	**8.0	9.2	-	-	-	-
3622	Industrial controls	-	-	(S)	10.2	(S)	5.0	(S)	1.0	-	-	-	-	-	-
363	Household appliances	(D)	(D)	-	-	110.0	77.5	-	-	-	-	-	-	31.0	7.8
3631	Household cooking equipment	**.6	.8	-	-	**6.9	6.6	-	-	-	-	-	-	(D)	(D)
3632	Household refrigerators and freezers	(D)	(D)	-	-	13.6	8.3	-	-	-	-	-	-	(D)	(D)
3633	Household laundry equipment	*41.3	17.6	-	-	30.9	17.6	-	-	-	-	-	-	(S)	1.6
3634	Electric housewares and fans	*.6	.6	-	-	*40.2	29.0	-	-	-	-	-	-	**8.5	4.4
3635	Household vacuum cleaners	(D)	(D)	-	-	*16.7	13.2							(D)	(D)
3639	Household appliances, n.e.c	2.6	3.4	-	-	1.7	2.8	-	-	-	-	-	-	(D)	(D)
364	Electric lighting and wiring equipment	(D)	(D)	2.3	6.7	64.4	55.7	6.3	11.7	-	-	-	-	-	-
3643	Current-carrying wiring devices	*.5	.8	-	-	(S)	7.1	**2.6	5.8	-	-	-	-	-	-
3644	Noncurrent-carrying wiring devices	(S)	10.2	-	-	(S)	14.6	(D)	(D)	-	-	-	-	-	-
3645	Residential lighting fixtures	(S)	4.4	(S)	2.8	**8.4	6.1	(S)	3.2	-	-	-	-	-	-
3646	Commercial lighting fixtures	(S)	.8	(D)	(D)	(S)	5.0	(D)	(D)	-	-	-	-	-	-
3647	Vehicular lighting equipment	(D)	(D)	(D)	(D)	.8	1.2	(D)	(D)	-	-	-	-	-	-
3648	Lighting equipment, n.e.c	*.4	.6	(S)	.8	(S)	21.7	(S)	.8	-	-	-	-	-	-
365	Radio and TV receiving equipment	-	-	-	-	*1.8	2.7	-	-	-	-	-	-	-	-
3651	Radio and TV receiving sets	-	-	-	-	*1.8	2.7	-	-	-	-	-	-	-	-
366	Communication equipment	-	-	**4.2	12.5	31.9	60.6	(S)	2.9	-	-	-	-	.5	.6
3661	Telephone and telegraph apparatus	-	-	-	-	(S)	9.2	-	-	-	-	-	-	-	-
3662	Radio and TV communication equipment	-	-	**4.2	12.5	(S)	51.4	(S)	2.9	-	-	-	-	.5	.6
367	Electronic components and accessories	-	-	3.0	5.3	7.7	10.3	(D)	(D)	-	-	-	-	132.8	22.4
3671	Electron tubes, receiving type	-	-	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	-	(D)	(D)
3674	Semiconductors and related devices	-	-	(D)	(D)	(D)	(D)	7.0	1.8	-	-	-	-	(D)	(D)
3675	Electronic capacitors	-	-	-	-	-	-	-	-	-	-	-	-	(D)	(D)
3676	Electronic resistors	-	-	-	-	-	-	-	-	-	-	-	-	(S)	.4
3677	Electronic coils and transformers	-	-	-	-	-	-	-	-	-	-	-	-	(S)	.3
3678	Electronic connectors	-	-	(D)	(D)	.7	1.2	(D)	(D)	-	-	-	-	(Z)	(Z)
3679	Electronic components, n.e.c	-	-	**2.6	4.5	*6.7	8.7	(S)	.8	-	-	-	-	9.1	6.8
369	Miscellaneous electrical equipment and supplies	32.3	30.9	-	-	61.6	51.2	(D)	(D)	-	-	-	-	-	-
3694	Engine electrical equipment	32.3	30.9	-	-	61.6	51.2	(D)	(D)	-	-	-	-	-	-

See footnotes at end of table.

Table 7d. **Selected Castings and Forgings Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Castings--rough and semifinished								Forgings					
		Iron--gray and malleable (332001 and 332011)		Steel (332045)		Aluminum and aluminum-base alloy (336100)		Copper and copper-base alloy (336200)		Iron and steel (346200, 346201, and 346209)		Aluminum and aluminum-base alloy (346310)		Metal powder (339915)	
		Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (1,000 s. tons)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)	Quantity (mil. lb.)	Delivered cost (mil. dol.)
37	Transportation equipment.	5,008.5	3,281.1	649.0	666.2	750.6	774.8	12.4	22.7	1,695.3	1,496.2	174.0	145.6	211.6	68.8
371	Motor vehicles and equipment.	(D)	(D)	302.0	229.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3711	Motor vehicles and car bodies.....	(D)	(D)	117.3	60.4	89.7	97.0	(D)	(D)	(D)	(D)	(D)	(D)	-	-
3713	Truck and bus bodies.....	(S)	2.1	.9	1.4	.4	.7	(D)	(D)	(S)	.4	(D)	(D)	-	-
3714	Motor vehicle parts and accessories.....	4,416.3	2,756.6	*174.7	158.8	*495.1	536.1	*6.0	10.5	1,317.5	997.3	36.4	46.2	195.0	56.8
3715	Truck trailers.....	*8.5	9.3	*9.0	8.2	.4	.8	(D)	(D)	2.3	3.6	(D)	(D)	-	-
3716	Motor homes.....	(D)	(D)	(S)	.5	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	(D)
372	Aircraft and parts.....	-	-	57.6	135.0	149.2	111.4	2.2	6.8	(S)	165.9	24.6	80.9	12.2	7.5
3721	Aircraft.....	-	-	(S)	5.5	**8.7	34.2	(S)	.3	(S)	27.9	**7.9	45.5	(D)	(D)
3724	Aircraft engines and engine parts.....	-	-	47.3	112.4	*29.8	57.3	.8	3.7	30.5	106.1	(S)	4.6	9.2	4.5
3728	Aircraft equipment, n.e.c..	-	-	**10.3	17.1	(S)	19.9	(S)	2.8	21.8	31.9	(S)	30.8	(D)	(D)
373	Ship and boat building and repairing.....	-	-	10.2	13.1	5.2	4.5	1.5	2.4	-	-	-	-	-	-
3731	Ship building and repairing	-	-	*9.3	12.2	1.6	1.2	1.2	1.6	-	-	-	-	-	-
3732	Boat building and repairing	-	-	(S)	.9	(S)	3.2	(S)	.8	-	-	-	-	-	-
374	Railroad equipment.....	*43.6	59.3	(S)	259.5	(S)	5.5	-	-	(D)	(D)	-	-	-	-
3743	Railroad equipment.....	*43.6	59.3	(S)	259.5	(S)	5.5	-	-	(D)	(D)	-	-	-	-
375	Motorcycles, bicycles, and parts.....	-	-	(D)	(D)	2.2	4.0	-	-	4.8	9.4	-	-	-	-
3751	Motorcycles, bicycles, and parts.....	-	-	(D)	(D)	2.2	4.0	-	-	4.8	9.4	-	-	-	-
376	Guided missiles, space vehicles, and parts.....	-	-	1.3	5.9	2.6	6.9	(D)	(D)	(S)	8.9	(S)	6.5	(D)	(D)
3761	Guided missiles and space vehicles.....	-	-	(S)	1.5	**1.8	4.2	(D)	(D)	3.2	.8	6.4	1.8	(D)	(D)
3764	Space propulsion units and parts.....	-	-	(D)	(D)	(S)	1.5	(D)	(D)	(S)	6.7	(S)	3.3	(D)	(D)
3769	Space vehicle equipment, n.e.c.....	-	-	(D)	(D)	.3	1.2	-	-	.3	1.4	.2	1.4	-	-
379	Miscellaneous transportation equipment.....	(D)	(D)	(D)	(D)	(D)	(D)	-	-	46.4	33.4	(D)	(D)	(D)	(D)
3792	Travel trailers and campers	-	-	(D)	(D)	(S)	1.1	-	-	-	-	-	-	-	-
3795	Tanks and tank components..	(D)	(D)	**3.4	10.9	(D)	(D)	-	-	(S)	32.6	(D)	(D)	(D)	(D)
3799	Transportation equipment, n.e.c.....	-	-	1.9	1.6	(S)	3.4	-	-	(S)	.8	-	-	(D)	(D)
38	Instruments and related products.....	-	-	20.5	27.4	40.5	51.6	13.4	18.6	-	-	-	-	-	-
381	Enginneering and scientific instruments.....	-	-	1.1	3.8	(S)	7.4	.3	.8	-	-	-	-	-	-
3811	Engineering and scientific instruments.....	-	-	1.1	3.8	(S)	7.4	.3	.8	-	-	-	-	-	-
382	Measuring and controlling devices.....	-	-	19.4	23.6	28.9	36.3	13.1	17.8	-	-	-	-	-	-
3822	Environmental controls.....	-	-	.2	.7	9.1	4.6	2.7	3.2	-	-	-	-	-	-
3823	Process control instruments	-	-	9.2	11.9	10.2	13.3	3.6	5.4	-	-	-	-	-	-
3824	Fluid meters and counting devices.....	-	-	*7.6	7.6	6.8	11.7	6.2	8.7	-	-	-	-	-	-
3825	Instruments to measure electricity.....	-	-	(S)	.8	(S)	4.1	(S)	.1	-	-	-	-	-	-
3829	Measuring and controlling devices, n.e.c.....	-	-	2.0	2.5	.8	2.5	.4	.5	-	-	-	-	-	-
386	Photographic equipment and supplies.....	-	-	-	-	(S)	7.3	-	-	-	-	-	-	-	-
3861	Photographic equipment and supplies.....	-	-	-	-	(S)	7.3	-	-	-	-	-	-	-	-
39	Miscellaneous manufacturing industries	-	-	-	-	-	-	(D)	(D)	-	-	-	-	-	-
399	Miscellaneous manufactures...	-	-	-	-	-	-	(D)	(D)	-	-	-	-	-	-
3999	Manufacturing industries, n.e.c.....	-	-	-	-	-	-	(D)	(D)	-	-	-	-	-	-

- Represents zero. *Represents 0 to 19 percent estimated. **Represents 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because the data did meet publication standards. (Z) Less than half the unit of measure specified.

Table 7e. **Pig Iron and Nonferrous Refinery Shapes Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Pig iron (331051)		Nonferrous refinery shapes					
				Copper and copper-base alloy (333102, 333113, 333121, 333122, 333123, 333124, 333125, 333126, 333127, 333128, 333129, and 334123)		Zinc and zinc-base alloy (333341 and 333348)		Aluminum and aluminum-base alloy (333401, 333402, 333404, 333405, and 333471)	
		Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)
	All industries	7,457.6	1,033.3	2,014.7	2,477.3	903.6	653.0	6,041.1	5,799.0
28	Chemicals and allied products	-	-	-	-	44.6	32.6	-	-
281	Industrial inorganic chemicals	-	-	-	-	37.6	26.6	-	-
2816	Inorganic pigments	-	-	-	-	37.1	21.6	-	-
2819	Industrial inorganic chemicals, n.e.c.	-	-	-	-	**5.2	5.0	-	-
33	Primary metal industries	7,257.6	993.7	1,907.8	2,331.7	686.6	491.8	5,565.4	5,311.2
331	Blast furnace and basic steel products	5,154.6	624.3	8.8	12.7	272.0	197.3	92.4	93.1
3312	Blast furnaces and steel mills	5,154.9	624.3	6.8	9.3	242.1	176.5	82.3	82.3
3315	Steel wire and related products	-	-	1.2	2.1	23.8	16.3	-	-
332	Iron and steel foundries	2,046.2	359.7	17.2	25.5	.5	.4	30.1	9.8
3321	Gray iron foundries	1,957.3	343.3	(S)	7.8	(D)	(D)	*4.7	5.1
3322	Malleable iron foundries	(S)	6.2	(D)	(D)	(D)	(D)	(D)	(D)
3324	Steel investment foundries	(S)	2.3	(D)	(D)	-	-	(D)	(D)
3325	Steel foundries, n.e.c.	(S)	8.2	(S)	13.1	-	-	2.6	2.7
335	Nonferrous rolling and drawing	-	-	1,788.8	2,168.2	204.3	136.3	4,764.1	4,533.1
3351	Copper rolling and drawing	-	-	1,120.7	1,459.1	104.3	69.8	(D)	(D)
3353	Aluminum sheet, plate, and foil	-	-	10.9	13.3	6.4	5.7	3,163.6	2,914.4
3354	Aluminum extruded products	-	-	(D)	(D)	2.1	1.4	885.7	882.6
3355	Aluminum rolling and drawing, n.e.c.	-	-	-	-	-	-	544.0	507.1
3356	Nonferrous rolling and drawing, n.e.c.	-	-	(D)	(D)	64.6	40.8	(D)	(D)
3357	Nonferrous wiredrawing and insulating	-	-	970.0	652.1	-	-	-	-
336	Nonferrous foundries	56.8	9.7	93.0	125.2	209.7	157.8	678.7	655.2
3361	Aluminum foundries	(D)	(D)	9.9	13.8	63.3	41.6	646.8	621.7
3362	Brass, bronze, and copper foundries	(D)	(D)	(S)	107.7	1.1	.7	13.5	14.7
3369	Nonferrous foundries, n.e.c.	-	-	2.1	3.5	147.2	115.5	21.8	21.0
34	Fabricated metal products	77.0	14.0	68.9	88.8	153.0	114.3	247.0	273.9
342	Cutlery, handtools, and hardware	-	-	(S)	12.4	*79.1	59.8	(S)	1.9
3429	Hardware, n.e.c.	-	-	(S)	12.4	*79.1	59.8	(S)	1.9
343	Plumbing and heating, except electric	22.3	4.2	23.3	28.1	-	-	(D)	(D)
3431	Metal sanitary ware	(D)	(D)	(D)	(D)	-	-	-	-
3432	Plumbing fittings and brass goods	-	-	(D)	(D)	-	-	(D)	(D)
3433	Heating equipment, except electric	(D)	(D)	-	-	-	-	-	-
344	Fabricated structural metal products	-	-	-	-	31.1	18.5	169.9	165.9
3441	Fabricated structural metal	-	-	-	-	11.6	7.9	(S)	3.5
3442	Metal doors, sash, and trim	-	-	-	-	(S)	.8	**111.4	107.1
3443	Fabricated platework (boiler shops)	-	-	-	-	1.5	1.1	-	-
3444	Sheet metalwork	-	-	-	-	15.5	7.7	*45.0	36.8
3446	Architectural metalwork	-	-	-	-	(D)	(D)	(D)	(D)
3448	Prefabricated metal buildings	-	-	-	-	-	-	-	-
3449	Miscellaneous metalwork	-	-	-	-	(D)	(D)	(D)	(D)
346	Metal forgings and stampings	-	-	-	-	34.4	31.2	-	-
3465	Automotive stampings	-	-	-	-	(S)	27.9	-	-
3466	Crowns and closures	-	-	-	-	(D)	(D)	-	-
3469	Metal stampings, n.e.c.	-	-	-	-	(D)	(D)	-	-
349	Miscellaneous fabricated metal products	(S)	9.3	34.6	44.8	-	-	(D)	(D)
3494	Valves and pipe fittings	(S)	9.3	*34.6	44.8	-	-	(D)	(D)
3496	Miscellaneous fabricated wire products	-	-	-	-	-	-	-	-
3499	Fabricated metal products, n.e.c.	-	-	-	-	-	-	-	-
35	Machinery, except electrical	80.8	16.0	25.3	36.9	-	-	(D)	(D)
351	Engines and turbines	-	-	-	-	-	-	(D)	(D)
3519	Internal combustion engines, n.e.c.	-	-	-	-	-	-	(D)	(D)
352	Farm and garden machinery	31.4	5.9	-	-	-	-	-	-
3523	Farm machinery and equipment	31.3	5.9	-	-	-	-	-	-
353	Construction and related machinery	5.2	1.0	-	-	-	-	-	-
3531	Construction machinery	3.0	.6	-	-	-	-	-	-
3532	Mining machinery	*2.2	.4	-	-	-	-	-	-
355	Special industry machinery	20.1	3.8	-	-	-	-	-	-
3551	Food products machinery	-	-	-	-	-	-	-	-
3552	Textile machinery	(D)	(D)	-	-	-	-	-	-
3554	Paper industries machinery	(D)	(D)	-	-	-	-	-	-
3559	Special industry machinery, n.e.c.	9.2	1.7	-	-	-	-	-	-

See footnotes at end of table.

Table 7e. **Pig Iron and Nonferrous Refinery Shapes Consumed by Selected Industry Group and Industry: 1977**—Con.

1977 code	Industry group and industry	Pig iron (331051)		Nonferrous refinery shapes					
				Copper and copper-base alloy (333122, 333113, 333121, 333122, 333123, 333124, 333125, 333126, 333127, 333128, 333129, and 334123)		Zinc and zinc-base alloy (333341 and 333348)		Aluminum and aluminum-base alloy (333401, 333402, 333404, 333405, and 333471)	
		Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)
35	Machinery, except electrical--Con.								
356	General industrial machinery	24.0	5.3	25.2	36.6	-	-	-	-
3561	Pumps and pumping equipment	*17.7	3.9	(S)	4.6	-	-	-	-
3562	Ball and roller bearings	-	-	(D)	(D)	-	-	-	-
3563	Air and gas compressors	(D)	(D)	(D)	(D)	-	-	-	-
3566	Speed changers, drives, and gears	-	-	(D)	(D)	-	-	-	-
3568	Power transmission equipment, n.e.c.	-	-	6.4	10.3	-	-	-	-
3569	General industrial machinery, n.e.c.	(D)	(D)	-	-	-	-	-	-
36	Electric and electronic equipment	-	-	11.6	17.9	17.8	13.1	(D)	(D)
361	Electric distributing equipment	-	-	-	-	-	-	(S)	2.0
3612	Transformers	-	-	-	-	-	-	(S)	2.0
362	Electrical industrial apparatus	-	-	(S)	4.2	-	-	**32.5	30.1
3621	Motors and generators	-	-	(S)	4.2	-	-	**32.5	30.1
364	Electric lighting and wiring equipment	-	-	7.7	12.1	17.3	12.7	(D)	(D)
3643	Current-carrying wire devices	-	-	(D)	(D)	(D)	(D)	(D)	(D)
3644	Noncurrent-carrying wiring devices	-	-	(D)	(D)	(D)	(D)	1.8	1.1
3645	Residential lighting fixtures	-	-	-	-	-	-	(S)	.1
3646	Commercial lighting fixtures	-	-	-	-	-	-	2.1	2.0
3648	Lighting equipment, n.e.c.	-	-	-	-	-	-	6.5	5.4
369	Miscellaneous electrical equipment and supplies	-	-	-	-	-	-	(D)	(D)
3694	Engine electrical equipment	-	-	-	-	-	-	(D)	(D)
37	Transportation equipment	48.5	8.9	-	-	-	-	110.5	108.6
371	Motor vehicles and equipment	46.9	7.4	-	-	-	-	110.5	108.6
3711	Motor vehicles and car bodies	(D)	(D)	-	-	-	-	(D)	(D)
3713	Truck and bus bodies	-	-	-	-	-	-	(D)	(D)
3714	Motor vehicle parts and accessories	(D)	(D)	-	-	-	-	(S)	93.8

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards. (Z) Less than half the unit of measure specified.

Table 7f. **Metal Scrap Consumed by Selected Industry Group and Industry: 1977**

1977 code	Industry group and industry	Iron and steel (999811)		Copper and copper-base alloy (999812)		Aluminum and aluminum-base alloy (999808, 999809, and 999810)	
		Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)
	All industries	49,124.8	3,301.9	1,379.4	1,150.5	1,827.9	1,258.8
33	Primary metal industries	46,893.1	3,110.2	1,355.6	1,126.9	1,733.3	1,221.7
331	Blast furnace and basic steel products	34,923.2	2,202.4	-	-	(D)	(D)
3312	Blast furnaces and steel mills	34,503.5	2,183.6	-	-	(D)	(D)
3313	Electrometallurgical products	407.0	18.2	-	-	-	-
332	Iron and steel foundries	11,957.1	906.1	1.5	1.9	(D)	(D)
3321	Gray iron foundries	9,252.9	688.2	.3	.5	*.6	.2
3322	Malleable iron foundries	808.5	61.3	.1	.1	-	-
3324	Steel investment foundries	(S)	6.2	(D)	(D)	-	-
3325	Steel foundries, n.e.c.	1,844.1	154.0	(D)	(D)	(D)	(D)
333	Primary nonferrous metals	-	-	(D)	(D)	34.9	25.4
3331	Primary copper	-	-	(D)	(D)	-	-
3334	Primary aluminum	-	-	-	-	29.0	21.0
334	Secondary nonferrous metals	-	-	659.2	433.5	1,026.6	654.3
3341	Secondary nonferrous metals	-	-	659.2	433.5	**1,026.6	654.3
335	Nonferrous rolling and drawing	-	-	581.8	625.6	572.3	474.2
3351	Copper rolling and drawing	-	-	565.9	610.4	(D)	(D)
3353	Aluminum sheet, plate, and foil	-	-	(D)	(D)	371.4	312.1
3354	Aluminum extruded products	-	-	(D)	(D)	120.2	104.2
3355	Aluminum rolling and drawing, n.e.c.	-	-	-	-	46.8	25.9
3356	Nonferrous rolling and drawing, n.e.c.	-	-	(D)	(D)	(D)	(D)
3357	Nonferrous wiredrawing and insulating	-	-	(D)	(D)	-	-
336	Nonferrous foundries	12.8	1.8	30.0	32.2	94.4	63.7
3361	Aluminum foundries	3.6	.5	.5	.5	96.4	63.5
3362	Brass, bronze, and copper foundries	(S)	1.3	29.5	31.7	.5	.2

See footnotes at end of table.

Table 7f. **Metal Scrap Consumed by Selected Industry Group and Industry: 1977** – Con.

1977 code	Industry group and industry	Iron and steel (999811)		Copper and copper-base alloy (999812)		Aluminum and aluminum-base alloy (999808, 999809, and 999810)	
		Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)	Quantity (1,000 short tons)	Delivered cost (million dollars)
34	Fabricated metal products	989.9	80.4	19.0	20.2	23.1	16.2
343	Plumbing and heating, except electric	193.3	21.2	(D)	(D)	-	-
3431	Metal sanitary ware	(D)	(D)	-	-	-	-
3432	Plumbing fittings and brass goods	-	-	(D)	(D)	-	-
3433	Heating equipment, except electric	(D)	(D)	-	-	-	-
344	Fabricated structural metal products	409.2	22.0	-	-	22.8	16.2
3441	Fabricated structural metal	(D)	(D)	-	-	(D)	(D)
3442	Metal doors, sash, and trim	(S)	.4	-	-	12.9	2.4
3443	Fabricated platework (boiler shops)	(S)	8.1	-	-	-	-
3444	Sheet metalwork	(D)	(D)	-	-	(D)	(D)
3446	Architectural metalwork	(S)	.3	-	-	(D)	(D)
3448	Prefabricated metal buildings	(D)	(D)	-	-	(D)	(D)
3449	Miscellaneous metalwork	*236.1	11.5	-	-	(D)	(D)
349	Miscellaneous fabricated metal products	330.5	28.7	(D)	(D)	-	-
3494	Valves and pipe fittings	**315.5	27.2	(D)	(D)	-	-
3499	Fabricated metal products, n.e.c	-	-	-	-	-	-
35	Machinery, except electrical	528.2	60.2	(D)	(D)	-	-
352	Farm and garden machinery	166.6	19.0	-	-	-	-
3523	Farm machinery and equipment	(D)	(D)	-	-	-	-
3524	Lawn and garden equipment	(D)	(D)	-	-	-	-
353	Construction and related machinery	98.9	10.9	-	-	-	-
3531	Construction machinery	82.8	9.8	-	-	-	-
3532	Mining machinery	(S)	.9	-	-	-	-
354	Metalworking machinery	91.4	11.5	-	-	-	-
3541	Machine tools, metal cutting types	6.5	1.1	-	-	-	-
3542	Machine tools, metal forming types	(S)	.7	-	-	-	-
3544	Special dies, tools, jigs, etc	(S)	.2	-	-	-	-
3545	Machine tool accessories	(Z)	(Z)	-	-	-	-
3547	Rolling mill machinery	(D)	(D)	-	-	-	-
3549	Metalworking machinery, n.e.c	(D)	(D)	-	-	-	-
355	Special industry machinery	80.1	7.1	-	-	-	-
3552	Textile machinery	(D)	(D)	-	-	-	-
3554	Paper industries machinery	(D)	(D)	-	-	-	-
3559	Special industry machinery, n.e.c	49.0	3.7	-	-	-	-
356	General industrial machinery	87.1	10.1	(D)	(D)	-	-
3561	Pumps and pumping equipment	*43.4	4.0	-	-	-	-
3562	Ball and roller bearings	(S)	.8	-	-	-	-
3563	Air and gas compressors	3.4	.5	-	-	-	-
3564	Blowers and fans	(D)	(D)	-	-	-	-
3566	Speed changers, drives, and gears	(S)	1.3	.2	.2	-	-
3568	Power transmission equipment, n.e.c	(D)	(D)	(D)	(D)	-	-
3569	General industrial machinery, n.e.c	(D)	(D)	-	-	-	-
36	Electric and electronic equipment	-	-	(D)	(D)	(D)	(D)
363	Household appliances	-	-	-	-	(D)	(D)
3633	Household laundry equipment	-	-	-	-	(D)	(D)
364	Electric lighting and wiring equipment	-	-	(D)	(D)	(D)	(D)
3643	Current-carrying wiring devices	-	-	(D)	(D)	(D)	(D)
3644	Noncurrent-carrying wiring devices	-	-	(D)	(D)	(S)	2.6
37	Transportation equipment	689.0	49.5	-	-	55.0	8.7
371	Motor vehicles and equipment	689.0	49.5	-	-	55.0	8.7
3711	Motor vehicles and car bodies	(D)	(D)	-	-	(D)	(D)
3713	Truck and bus bodies	**.2	.1	-	-	(D)	(D)
3714	Motor vehicle parts and accessories	*473.6	38.1	-	-	51.4	6.3
3715	Truck trailers	(D)	(D)	-	-	(D)	(D)
3716	Motor homes	-	-	-	-	(D)	(D)

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards. (Z) Less than half the unit of measure specified.

Engines, Motors, Bearings, Electron Tubes, and Semiconductors

This chapter presents data on gasoline and diesel engines, motors, and generators (timing, synchronous, subsynchronous, fractional, and integral horsepower), ball bearings, roller bearings, electron tubes, and solid state semiconductors consumed. The tables present data for consumption of these components by industry.

The consumption of parts and components account for most of the amounts used by establishments classified in manufacturing. The shipments figures for these items, however, also include amounts for exports, for use in nonmanufacturing activities, and for replacement and repair.

Table 8a. Internal Combustion Engines Consumed by Selected Industry: 1977

1977 code	Industry	Gasoline engines (351901)		Diesel engines (351920)	
		Number (1,000)	Delivered cost (mil. dol.)	Number (1,000)	Delivered cost (mil. dol.)
	All industries	(D)	(D)	(D)	(D)
35	Machinery, except electrical	5,133.6	455.7	315.0	1,029.9
352	Farm and garden machinery	4,881.9	327.7	(D)	(D)
3523	Farm machinery and equipment	163.9	42.7	199.6	432.3
3524	Lawn and garden equipment	4,718.0	285.0	(D)	(D)
353	Construction and related machinery	138.7	101.4	(D)	(D)
3531	Construction machinery	*91.4	51.8	100.0	493.6
3532	Mining machinery	7.0	1.1	*1.5	8.7
3533	Oilfield machinery	-	-	4.8	47.6
3534	Elevators and moving stairways	-	-	-	-
3535	Conveyors and conveying equipment	*.7	.4	-	-
3536	Hoists, cranes, and monorails	**2.7	1.8	(D)	(D)
3537	Industrial trucks and tractors	36.8	46.3	-	-
356	General industrial machinery	(S)	26.3	8.8	46.9
3561	Pumps and pumping equipment	(S)	10.5	*1.0	8.6
3563	Air and gas compressors	(S)	15.8	**7.7	38.3
358	Refrigeration and service machinery	-	-	-	-
3586	Measuring and dispensing pumps	-	-	-	-
36	Electric and electronic equipment	99.0	14.2	12.2	31.7
362	Electric industrial apparatus	99.0	14.2	12.2	31.7
3621	Motors and generators	99.0	14.2	12.2	31.7
37	Transportation equipment	(D)	(D)	(D)	(D)
373	Ship and boat building and repairing	76.4	158.8	7.3	90.2
3731	Ship building and repairing	*3.3	12.3	3.3	71.9
3732	Boat building and repairing	*73.1	146.6	**4.0	18.3
374	Railroad equipment	-	-	(D)	(D)
3743	Railroad equipment	-	-	(D)	(D)
375	Motorcycles, bicycles, and parts	(S)	105.1	-	-
3751	Motorcycles, bicycles, and parts	(S)	105.1	-	-
379	Miscellaneous transportation equipment	(D)	(D)	-	-
3799	Transportation equipment, n.e.c.	(D)	(D)	-	-

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because the data did not meet publication standards.

Table 8b. Roller and Ball Bearings Consumed by Selected Industry: 1977

1977 code	Industry	Delivered cost (million dollars)		
		Total	Roller bearings (356200, 356201, and 356228)	Ball bearings (356218)
	All industries	1,335.3	722.3	615.3
34	Fabricated metal products	(D)	(D)	(D)
343	Plumbing and heating, except electric	(D)	(D)	.1
3433	Heating equipment, except electric	(D)	(D)	.1
348	Ordnance and accessories, n.e.c.	2.2	.3	1.9
3482	Small arms ammunition	(D)	-	(D)
3483	Ammunition, except for small arms, n.e.c.	.3	-	.3
3484	Small arms	(D)	(D)	(D)
3489	Ordnance and accessories, n.e.c.	(D)	.3	(D)
35	Machinery, except electrical	(D)	(D)	(D)
351	Engines and turbines	(D)	(D)	(D)
3511	Turbines and turbine generator sets	(D)	(D)	(D)
3519	Internal combustion engines, n.e.c.	43.8	20.0	23.9
352	Farm and garden machinery	109.8	46.9	63.0
3523	Farm machinery and equipment	100.7	43.2	57.5
3524	Lawn and garden equipment	9.1	3.6	5.5
353	Construction and related machinery	199.9	122.7	77.2
3531	Construction machinery	119.8	69.7	50.0
3532	Mining machinery	24.6	19.5	5.1
3533	Oilfield machinery	18.6	13.8	4.8
3534	Elevators and moving stairways	2.4	1.4	1.0
3535	Conveyors and conveying equipment	18.7	8.5	10.2
3536	Hoists, cranes, and monorails	6.0	3.4	2.6
3537	Industrial trucks and tractors	9.9	6.3	3.7
35	Machinery, except electrical--Con.			
354	Metalworking machinery	58.9	23.5	35.4
3541	Machine tools, metal cutting types	18.6	6.8	11.8
3542	Machine tools, metal forming types	7.6	3.8	3.8
3544	Special dies, tools, jigs, and fixtures	1.3	.7	.6
3545	Machine tool accessories	3.1	1.7	1.4
3546	Power driven handtools	20.0	4.3	15.7
3547	Rolling mill machinery	5.6	4.9	.7
3549	Metalworking machinery, n.e.c.	2.7	1.4	1.4
355	Special industry machinery	52.8	21.8	31.0
3551	Food products machinery	9.2	3.1	6.1
3552	Textile machinery	7.2	2.7	4.5
3553	Woodworking machinery	5.1	1.2	4.0
3554	Paper industries machinery	8.9	4.9	3.9
3555	Printing trades machinery	6.4	2.7	3.6
3559	Special industry machinery, n.e.c.	16.0	7.2	8.8
356	General industrial machinery	130.8	66.9	63.9
3561	Pumps and pumping equipment	27.0	13.0	14.0
3562	Ball and roller bearings	36.8	21.5	15.3
3563	Air and gas compressors	8.4	3.4	5.0
3564	Blowers and fans	8.4	2.7	5.7
3566	Speed changers, drives, and gears	21.5	14.0	7.5
3568	Power transmission equipment, n.e.c.	24.0	10.3	13.7
3569	General industrial machinery, n.e.c.	4.7	2.1	2.6
357	Office and computing machines	17.2	5.7	11.5
3573	Electronic computing equipment	11.3	2.7	8.6
3574	Calculating and accounting machines	.5	.3	.2

See footnotes at end of table.

Table 8b. **Roller and Ball Bearings Consumed by Selected Industry: 1977**—Con.

1977 code	Industry	Delivered cost (million dollars)			1977 code	Industry	Delivered cost (million dollars)		
		Total	Roller bearings (356200, 356201, and 356228)	Ball bearings (356218)			Total	Roller bearings (356200, 356201, and 356228)	Ball bearings (356218)
35	Machinery, except electrical--Con.					Transportation equipment--Con.			
357	Office and computing machines--Con.				373	Ship and boat building and repairing....	5.9	5.9	-
3576	Scales and balances, except laboratory	.6	.2	.4	3731	Ship and boat building and repairing..	5.9	5.9	-
3579	Office machines, n.e.c. (combined with 3572).....	4.8	2.5	2.3	374	Railroad equipment.....	54.7	53.8	.9
358	Refrigeration and service machinery.....	50.3	12.3	37.9	3743	Railroad equipment.....	54.7	53.8	.9
3585	Refrigeration and heating equipment...	49.4	12.2	37.1	375	Motorcycles, bicycles, and parts.....	2.4	(Z)	2.4
3586	Measuring and dispensing pumps.....	.9	.1	.8	3751	Motorcycles, bicycles, and parts.....	2.4	(Z)	2.4
36	Electric and electronic equipment...	(D)	(D)	(D)	376	Guided missiles, space vehicles, and parts.....	14.2	6.4	7.8
362	Electrical industrial apparatus.....	34.0	4.0	30.0	3761	Guided missiles and space vehicles....	1.5	.5	1.1
3621	Motors and generators.....	34.0	4.0	30.0	3764	Space propulsion units and parts.....	(D)	(D)	(D)
363	Household appliances.....	(D)	(D)	(D)	3769	Space vehicle equipment, n.e.c.....	(D)	(D)	(D)
3632	Household refrigerators, freezers.....	(D)	(D)	(D)	379	Miscellaneous transportation equipment..	(D)	5.0	(D)
369	Miscellaneous electrical equipment and supplies.....	18.7	5.4	13.4	3795	Tanks and tank components.....	(D)	2.4	(D)
3694	Engine electrical equipment.....	18.7	5.4	13.4	3799	Transportation equipment, n.e.c.....	4.2	2.6	1.6
37	Transportation equipment.....	(D)	(D)	(D)	38	Instruments, related products.....	9.4	.8	8.6
371	Motor vehicles and equipment.....	(D)	(D)	(D)	381	Engineering and scientific instruments..	5.6	.2	5.4
3711	Motor vehicles and car bodies.....	83.4	55.2	28.2	3811	Engineering and scientific instruments	5.6	.2	5.4
3713	Truck and bus bodies.....	.5	.2	.3	382	Measuring and controlling devices.....	3.8	.6	3.2
3714	Motor vehicle parts and accessories...	330.0	213.1	116.9	3822	Environmental controls.....	(D)	(D)	(D)
3715	Truck trailers.....	6.0	5.3	.8	3823	Process control instruments.....	.5	.1	.4
3716	Motor homes.....	(D)	(D)	(D)	3824	Fluid meters and counting devices.....	(D)	(D)	(D)
372	Aircraft and parts.....	81.9	34.1	47.8	3825	Instruments to measure electricity....	.7	.2	.5
3721	Aircraft.....	23.3	8.3	15.0	3829	Measuring and controlling devices, n.e.c.....	1.1	.2	.9
3724	Aircraft engines and engine parts.....	45.4	21.9	23.5					
3728	Aircraft equipment, n.e.c.....	13.2	3.9	9.3					

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified.
(Z) Less than half of the unit of measure shown.

Table 8c. **Electric Motors and Generators Consumed by Selected Industry: 1977**

1977 code	Industry	Timing motors, synchronous and subsynchronous (362110)		All other fractional horsepower motors (362115)		Integral horsepower motors and generators (362120)	
		Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)
	All industries.....	27,376.5	227.0	109,337.7	1,082.0	11,333.1	1,108.0
34	Fabricated metal products.....	202.5	9.9	1,769.2	35.8	117.4	11.3
343	Plumbing and heating, except electric.....	(S)	.8	1,769.2	35.7	(S)	11.3
3433	Heating equipment, except electric.....	(S)	.8	1,769.2	35.7	(S)	11.3
348	Ordnance and accessories, n.e.c.....	(D)	(D)	(Z)	(Z)	(Z)	(Z)
3483	Ammunition, except small arms, n.e.c.....	(D)	(D)	-	-	-	-
3489	Ordnance and accessories, n.e.c.....	(D)	(D)	(Z)	(Z)	(Z)	(Z)
349	Miscellaneous fabricated metal products.....	**122.9	6.5	-	-	-	-
3494	Valves and pipe fittings.....	**122.9	6.5	-	-	-	-
35	Machinery, except electrical.....	7,006.6	116.3	41,796.5	637.8	8,709.7	966.8
351	Engines and turbines.....	-	-	-	-	(D)	(D)
3511	Turbines and turbine generator sets.....	-	-	-	-	(S)	12.5
3519	Internal combustion engines, n.e.c.....	-	-	-	-	(D)	(D)
352	Farm and garden machinery.....	-	-	3,584.5	23.3	(D)	(D)
3523	Farm machinery and equipment.....	-	-	**226.6	11.1	*205.1	23.0
3524	Lawn and garden equipment.....	-	-	3,358.0	12.2	(D)	(D)
353	Construction and related machinery.....	-	-	(D)	(D)	(D)	(D)
3531	Construction machinery.....	-	-	-	-	**64.7	88.7
3532	Mining machinery.....	-	-	-	-	(S)	35.4
3534	Elevators and moving stairways.....	-	-	*39.8	1.5	*20.3	9.5
3535	Conveyors and conveying equipment.....	-	-	(S)	8.0	(S)	13.9
3536	Hoists, cranes, and monorails.....	-	-	-	-	*52.7	13.6
3537	Industrial trucks and tractors.....	-	-	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8c. **Electric Motors and Generators Consumed by Selected Industry: 1977**—Con.

1977 code	Industry	Timing motors, synchronous and subsynchronous (362110)		All other fractional horsepower motors (362115)		Integral horsepower motors and generators (362120)	
		Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)
35	Machinery, except electrical--Con.						
354	Metalworking machinery	(D)	(D)	1,664.2	21.2	265.4	51.5
3541	Machine tools, metal cutting types	**1.9	1.1	(S)	5.9	(S)	26.3
3542	Machine tools, metal forming types	1.9	1.0	(S)	1.7	(S)	12.6
3544	Special dies, tools, jigs and fixtures	(S)	.3	(S)	.4	(S)	.6
3545	Machine tool accessories	(Z)	(Z)	*14.6	1.0	**3.4	1.1
3546	Power driven handtools	(D)	(D)	(S)	8.5	(S)	3.1
3547	Rolling mill machinery	-	-	(Z)	(Z)	1.5	2.0
3549	Metalworking machinery, n.e.c.	(S)	.6	(X)	3.6	**36.5	5.8
355	Special industry machinery	-	-	343.2	22.8	636.5	102.4
3551	Food products machinery	-	-	*178.4	8.7	(S)	18.8
3552	Textile machinery	-	-	-	-	(S)	10.2
3553	Woodworking machinery	-	-	-	-	*409.6	17.2
3554	Paper industries machinery	-	-	-	-	(S)	6.7
3555	Printing trades machinery	-	-	*50.7	6.0	(S)	10.5
3559	Special industry machinery, n.e.c.	-	-	(S)	8.1	(S)	39.1
356	General industrial machinery	(S)	.7	3,734.9	122.9	(S)	201.1
3561	Pumps and pumping equipment	-	-	(S)	68.0	(S)	115.2
3563	Air and gas compressors	-	-	823.4	27.4	(S)	48.5
3564	Blowers and fans	(S)	.7	**639.9	14.8	(S)	23.1
3569	General industrial machinery, n.e.c.	-	-	(S)	12.6	(S)	14.3
357	Office and computing machines	(D)	(D)	(D)	(D)	(D)	(D)
3573	Electronic computing equipment	(S)	22.9	(S)	27.7	(S)	4.3
3574	Calculating and accounting machines	(D)	(D)	(S)	6.7	-	-
3576	Scales and balances, except laboratory	(S)	.2	(S)	(D)	(S)	(D)
3579	Office machines, etc. (combined with 3572)	296.9	4.2	1,704.0	23.6	(S)	.8
358	Refrigeration and service machinery	(S)	84.5	28,196.1	374.4	(S)	202.8
3581	Automatic merchandising machines	(S)	2.1	(S)	10.4	-	-
3582	Commercial laundry equipment	*17.9	.3	(S)	1.8	(S)	2.6
3585	Refrigeration and heating equipment	3,439.7	72.1	25,531.8	330.7	5,949.2	189.8
3586	Measuring and dispensing pumps	-	-	**189.8	6.6	4.7	.4
3589	Service industry machinery, n.e.c.	*770.2	10.0	*1,202.3	24.8	**98.1	10.0
36	Electric and electronic equipment	10,520.9	67.3	51,145.1	364.0	2,447.8	45.3
362	Electrical industrial apparatus	-	-	-	-	(S)	27.8
3621	Motors and generators	-	-	-	-	(S)	27.8
363	Household appliances	(D)	(D)	48,349.6	332.0	2,425.7	17.5
3631	Household cooking equipment	*1,585.3	6.5	*2,680.6	9.6	(D)	(D)
3632	Household refrigerators and freezers	2,757.7	8.5	**15,764.5	100.1	-	-
3633	Household laundry equipment	(S)	12.7	*10,729.9	129.1	-	-
3634	Electric housewares and fans	(S)	6.6	**13,578.3	50.6	(S)	(Z)
3635	Household vacuum cleaners	-	-	*2,511.0	11.7	(S)	16.6
3636	Sewing machines	-	-	-	-	-	-
3639	Household appliances, n.e.c.	(D)	(D)	*3,085.3	30.9	(D)	(D)
365	Radio and TV receiving equipment	869.4	7.2	*1,090.5	7.9	-	-
3651	Radio and TV receiving sets	869.4	7.2	*1,090.5	7.9	-	-
366	Communication equipment	(S)	16.3	(S)	20.8	-	-
3662	Radio and TV communication equipment	(S)	16.3	(S)	20.8	-	-
367	Electronic components and accessories	70.6	5.9	54.4	1.4	-	-
3671	Electron tubes	(D)	(D)	(D)	(D)	-	-
3674	Semiconductors, related devices	(D)	(D)	(D)	(D)	-	-
3679	Electronic components, n.e.c.	(S)	4.8	(S)	1.0	-	-
37	Transportation equipment	59.8	5.8	6,046.8	65.8	58.2	84.6
371	Motor vehicles and equipment	-	-	5,969.5	56.7	-	-
3711	Motor vehicles and car bodies	-	-	(D)	(D)	-	-
3713	Truck and bus bodies	-	-	34.7	.5	-	-
3714	Motor vehicle parts and accessories	-	-	5,002.9	41.3	-	-
3715	Truck trailers	-	-	(D)	(D)	-	-
372	Aircraft and parts	(D)	(D)	(D)	(D)	31.3	30.0
3721	Aircraft	(S)	.5	**22.7	3.6	(D)	(D)
3724	Aircraft engines and engine parts	(S)	2.7	(D)	(D)	(D)	(D)
3728	Aircraft equipment, n.e.c.	(D)	(D)	(S)	2.0	(S)	3.3
373	Ship and boat building and repairing	-	-	-	-	(S)	25.7
3731	Ship building and repairing	-	-	-	-	(S)	18.3
3732	Boat building and repairing	-	-	-	-	3.9	7.4
374	Railroad equipment	-	-	-	-	(D)	(D)
3743	Railroad equipment	-	-	-	-	(D)	(D)
376	Guided missiles, space vehicles, and parts	(D)	(D)	(D)	(D)	(D)	(D)
3761	Guided missiles, space vehicles	**11.1	1.5	(D)	(D)	-	-
3764	Space propulsion units and parts	-	-	-	-	(D)	(D)
3769	Space vehicle equipment, n.e.c.	(D)	(D)	(D)	(D)	-	-

See footnotes at end of table.

Table 8c. **Electric Motors and Generators Consumed by Selected Industry: 1977**—Con.

1977 code	Industry	Timing motors, synchronous and subsynchronous (362110)		All other fractional horsepower motors (362115)		Integral horsepower motors and generators (362120)	
		Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)	Number (1,000)	Value (million dollars)
37	Transportation equipment--Con.						
379	Miscellaneous transportation equipment.....	(D)	(D)	-	-	(D)	(D)
3795	Tanks and tank components.....	(D)	(D)	-	-	-	-
38	Instruments and related products.....	9,586.6	27.8	2,494.8	32.2	-	-
381	Engineering and scientific instruments.....	(S)	4.8	(S)	6.6	-	-
3811	Engineering and scientific instruments.....	(S)	4.8	(S)	6.6	-	-
382	Measuring and controlling devices.....	4,384.1	16.7	473.7	9.1	-	-
3822	Environmental controls.....	(D)	(D)	146.6	.9	-	-
3823	Process control instruments.....	166.8	4.1	62.1	1.8	-	-
3824	Fluid meters and counting devices.....	(D)	(D)	(D)	(D)	-	-
3825	Instruments to measure electricity.....	(S)	4.5	(S)	5.1	-	-
3829	Measuring and controlling devices, n.e.c....	(S)	2.6	(S)	1.0	-	-
386	Photographic equipment and supplies.....	(S)	3.5	1,278.8	15.2	-	-
3861	Photographic equipment and supplies.....	(S)	3.5	1,278.8	15.2	-	-
387	Watches, clocks, and watchcases.....	(D)	(D)	(D)	(D)	-	-
3873	Watches, clocks, and watchcases.....	(D)	(D)	(D)	(D)	-	-
39	Miscellaneous manufacturing industries....	-	-	6,704.1	9.7	-	-
394	Toys and sporting goods.....	-	-	6,704.1	9.7	-	-
3944	Games, toys, and children's vehicles.....	-	-	(S)	5.7	-	-
3949	Sporting and athletic goods, n.e.c.....	-	-	(S)	4.1	-	-

- Represents zero. *Indicates 10 to 19 percent estimated. **Indicates 20 to 29 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because data did not meet publication standards. (X) Not applicable. (Z) Less than half of the unit of measure shown.

Table 8d. **Electron Tubes (Except X-Ray) and Solid State Semiconductors Consumed by Selected Industry: 1977**

1977 code	Industry	Electron tubes, except X-ray (367010, 367012, and 367200)		Solid state semiconductors, transistors, diodes, etc. (367400, 367408, 367411)	
		Quantity (mil. units)	Cost (mil. dol.)	Quantity (mil. units)	Cost (mil. dol.)
	All industries	(X)	558.0	(X)	1,976.9
35	Machinery, except electrical	(X)	27.2	(X)	589.6
357	Office and computing machines	(X)	27.2	(X)	589.6
3573	Electronic computing equipment	(X)	25.3	(X)	513.7
3574	Calculating and accounting machines	(X)	(D)	(X)	60.1
3576	Scales and balances, except laboratory	(X)	(D)	(X)	3.4
3579	Office machines, etc. (combined with 3572)	(X)	1.7	(X)	12.4
36	Electric and electronic equipment	(X)	520.2	(X)	1,203.6
362	Electrical industrial apparatus	-	-	26.6	14.0
3621	Motors and generators	-	-	*7.6	4.8
3629	Electrical industrial apparatus, n.e.c.	-	-	19.0	9.1
364	Electric lighting and wiring equipment	-	-	(D)	(D)
3643	Current-carrying wiring devices	-	-	19.3	9.1
3644	Noncurrent-carrying wiring devices	-	-	(D)	(D)
365	Radio and TV receiving equipment	(X)	403.5	(X)	82.0
3651	Radio and TV receiving sets	(X)	403.5	(X)	82.0
366	Communication equipment	(D)	(D)	(D)	(D)
3661	Telephone and telegraph apparatus	(D)	(D)	(D)	(D)
3662	Radio and TV communication equipment	(S)	84.5	(S)	441.5
367	Electronic components and accessories	(X)	(D)	(X)	185.8
3671	Electron tubes	(S)	9.0	(S)	5.8
3674	Semiconductors and related devices	(D)	(D)	(S)	95.4
3675	Electronic capacitors	-	-	-	-
3676	Electronic resistors	-	-	(D)	(D)
3677	Electronic coils and transformers	(X)	(Z)	(D)	(D)
3678	Electronic connectors	(X)	(Z)	(D)	(D)
3679	Electronic components, n.e.c.	(X)	10.3	(S)	79.1
36	Electric and electronic equipment--Con.				
369	Miscellaneous electronic equipment, supplies	-	-	(X)	26.6
3693	X-ray apparatus and tubes	-	-	(X)	26.6
38	Instruments and related products	(X)	10.6	(X)	183.7
381	Engineering and scientific instruments	1.7	2.0	28.5	18.8
3811	Engineering and scientific instruments	1.7	2.0	28.5	18.8
382	Measuring and controlling devices	681.7	7.5	1,769.8	92.0
3822	Environmental controls	(D)	(D)	(D)	(D)
3823	Process control instruments	653.4	1.9	15.9	13.4
3824	Fluid meters and counting devices	(D)	(D)	(D)	(D)
3825	Instruments to measure electricity	(S)	4.1	(S)	53.7
3829	Measuring and controlling devices, n.e.c.	(S)	1.2	(S)	9.0
383	Optical instruments and lenses	-	-	(S)	18.6
3832	Optical instruments and lenses	-	-	(S)	18.6
384	Medical instruments, supplies	-	-	(X)	3.2
3841	Surgical and medical instruments	-	-	(X)	2.4
3842	Surgical appliances and supplies	-	-	(X)	.8
385	Ophthalmic goods	-	-	(D)	(D)
3851	Ophthalmic goods	-	-	(D)	(D)
386	Photographic equipment and supplies	(X)	.8	(X)	22.3
3861	Photographic equipment and supplies	(X)	.8	(X)	22.3
387	Watches, clocks, and watchcases	-	-	(S)	27.5
3873	Watches, clocks, and watchcases	-	-	(S)	27.5

- Represents zero. *Indicates 10 to 19 percent estimated. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (S) Withheld because data did not meet publication standards. (X) Not applicable. (Z) Less than half of the unit of measure shown.

SELECTED MATERIALS CONSUMED BY KIND

Selected Materials Consumed in Manufacturing by Kind

GENERAL

The tables in this chapter present information on consumption of materials by manufacturing establishments in 1977 and 1972. The data are based on information obtained in a sample survey, MA-131, Consumption of Materials, Parts, Containers, and Supplies During 1977, and serve to supplement the data previously published in table 7 of the 1977 Census of Manufactures. The data are obtained, primarily, to facilitate the work of the Bureau of Economic Analysis, Department of Commerce, on national accounts and input-output studies. They also provide answers, in part, to increased demands for more detailed information on consumption of materials in the manufacturing sector of the economy.

SUMMARY DATA

As shown in the summary table 1a, the 19 manufacturing industries selected for this survey accounted for $149.9 billion of materials consumed or 21.6 percent of the total of $693.8 billion of materials consumed by all manufacturing establishments in 1977. Of this $149.9 billion, the category "all other materials, parts, containers, and supplies consumed" (code 970099), amounted to $88.4 billion or 59 percent. It was this latter figure which is distributed in table 1b, by class of material, on the basis of the data reported in the supplemental survey on form MA-131. As table 1 also indicates, the proportion of this cost of "all other materials" to "total cost of materials specified by kind" was reduced from approximately 61 to 7 percent as a result of the data obtained in this supplemental survey.

SAMPLE DESIGN

The 1977 MA-131 survey is a sample which includes only those establishments that account for 85 to 95 percent of the value of each industry's "all other materials consumed," (census code 970099) of item 17B. For industry 2899, where no item 17B detail was requested on the census form, the MA-131 survey sample included those establishments that accounted for 85 to 95 percent of the total materials, parts, containers, and supplies consumed (census item 5a). The response rate on this voluntary survey was approximately 75 percent.

COMPARABILITY OF DATA

Comparability of the 1972 and 1977 data presented in this report is approximate due to a difference in sample designs. The 1972 MA-131 survey was a probability survey and was collected from a smaller sample of establishments and tabulated on a "weighted sample basis." This sample resulted in the certainty selection of all plants reporting more than $4,200 thousand in unspecified materials costs. Other establishments were sampled with probabilities of 1.000 to .005 in accordance with the mathematical theory for optimum allocation of the sample. The sampling procedure for 1977, along with the expansion in census item 17B data, insured a marked increase in the accuracy of the specific material data, since both the census item 17B data and the MA-131 data would be tabulated on an "unweighted" basis.

The following industries are those for which data were obtained in the 1977 Census of Manufactures Supplemental Inquiry: MA-131, Consumption of Materials, Parts, Containers, and Supplies During 1977, and are shown in table 1b of this chapter:

2451	Mobile homes
2834	Pharmaceutical preparations
2843	Surface active agents
2869	Industrial organic chemicals, n.e.c.
2899	Chemical preparations, n.e.c.
3079	Miscellaneous plastics products
3312	Blast furnaces and steel mills
3662	Radio and TV communication equipment
3711	Motor vehicles and car bodies
3713	Truck and bus bodies
3714	Motor vehicle parts and accessories
3715	Truck trailers
3716	Mobile homes
3721	Aircraft
3724	Aircraft engines and engine parts
3728	Aircraft equipment, n.e.c.
3731	Ship building and repairing
3732	Boat building and repairing
3761	Guided missile and space vehicles

Table 1a. **Cost of Materials, Parts, Containers, and Supplies Consumed by Manufacturing Establishments, by Selected Industry: 1977 and 1972**

(Data are in millions of dollars except percent columns)

SIC code	Selected industry and year	Based on census of manufactures							Column indicated below as a percent of column G		
		Cost of materials, parts, containers, and supplies			Cost of all other materials, parts, containers, and supplies (code 970099)	Materials specified as a result of the MA-131 survey	Percent of column D reported by sampled establishments in MA-131 survey (E/D)	Cost of materials specified by kind plus code 970099 in census of manufactures (C+D)	Materials specified by kind in census of manufactures (C/G)	Materials estimates as specified in MA-131 survey (E/G)	Remaining unspecified materials (100 - (H+I))
		Total	Not specified by kind	Specified by kind							
		A	B	C	D	E	F	G	H	I	J
	1977 sampled industries.....1977..	149,944	5,903	55,664	88,377	77,564	88	144,041	39	54	7
	1972..	77,744	2,111	22,616	53,017	42,128	79	75,632	30	56	14
2451	Mobile homes.....1977..	2,142	412	1,278	452	267	59	1,730	74	15	11
	1972..	2,173	158	710	1,305	(1)	(1)	2,014	35	(1)	65
2834	Pharmaceutical preparations.....1977..	2,831	226	1,288	1,317	920	70	2,605	49	35	16
	1972..	1,372	52	546	774	658	85	1,320	41	47	12
2843	Surface active agents.....1977..	542	34	124	384	297	77	508	24	58	18
	1972..	225	(2)	(2)	225	59	26	225	(2)	26	74
2869	Industrial organic chemicals, n.e.c..1977..	10,972	95	4,879	5,998	4,567	76	10,877	45	42	13
	1972..	3,437	105	1,235	2,097	1,720	82	3,332	37	51	12
2899	Chemical preparations, n.e.c.....1977..	1,876	(2)	(2)	1,876	1,462	80	1,876	(2)	80	20
	1972..	913	(2)	(2)	913	438	48	913	(2)	48	52
3079	Miscellaneous plastics products.....1977..	10,992	2,190	6,554	2,248	1,470	65	8,802	74	17	9
	1972..	4,329	779	2,315	1,235	506	41	3,551	65	29	6
3312	Blast furnaces and steel mills.....1977..	21,841	261	17,796	3,784	2,052	54	21,580	82	10	8
	1972..	12,293	65	8,948	3,280	(1)	(1)	12,228	73	(1)	27
3662	Radio and TV communication equipment.1977..	4,573	717	1,995	1,861	1,817	98	3,856	52	47	1
	1972..	2,999	228	574	2,197	1,450	66	2,771	21	70	9
3711	Motor vehicles and car bodies.....1977..	57,415	154	6,011	51,250	47,718	93	57,261	10	83	7
	1972..	30,793	36	1,456	29,301	29,008	99	30,757	5	93	2
3713	Truck and bus bodies.....1977..	989	209	297	483	388	80	780	38	50	12
	1972..	884	93	178	613	356	58	791	23	70	7
3714	Motor vehicle parts and accessories..1977..	18,907	551	10,805	7,551	6,772	90	18,356	59	37	4
	1972..	8,922	251	4,876	3,795	3,302	87	8,671	56	38	6
3715	Truck trailers.....1977..	1,241	99	591	551	340	62	1,142	52	30	18
	1972..	641	28	248	365	212	58	613	41	48	11
3716	Mobile homes.....1977..	1,103	208	189	706	561	79	895	21	63	16
	1972..	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
3721	Aircraft.....1977..	6,092	88	1,528	4,476	4,318	96	6,004	25	72	3
	1972..	3,686	43	245	3,398	2,786	82	3,642	7	82	11
3724	Aircraft engines and engine parts....1977..	2,233	55	602	1,576	1,453	92	2,178	28	67	5
	1972..	1,451	26	343	1,082	1,028	95	1,425	24	70	6
3728	Aircraft equipment, n.e.c.....1977..	1,470	163	344	963	863	90	1,307	26	66	8
	1972..	869	45	284	540	243	45	824	34	59	7
3731	Ship building and repairing.....1977..	2,416	145	820	1,451	1,137	78	2,271	36	50	14
	1972..	1,312	42	400	870	(1)	(1)	1,270	31	(1)	69
3732	Boat building and repairing.....1977..	940	273	403	264	149	56	667	60	22	18
	1972..	522	153	203	166	(1)	(1)	369	55	(1)	45
3761	Guided missiles and space vehicles...1977..	1,369	23	160	1,186	1,013	85	1,346	12	75	13
	1972..	923	7	55	861	362	42	916	6	82	12

[1]Industry not sampled for the 1972 MA-131 survey
[2]Item 17B detail not requested on census form.
[3]Newly defined industry for 1977.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 2451, MOBILE HOMES		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	2,142	(NA)
	Specified by kind	1,278	(NA)
	Not specified by kind (census code 97600)	412	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	452	(NA)
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	452	(NA)
	Materials requested on report form:		
22700	Floor coverings, textile	37	(NA)
24310	Millwork, including molding, doors, windows, and other structural wood members	47	(NA)
24340	Kitchen cabinets, wood	10	(NA)
25100	Household-type furniture, including tables, sofas, beds, mattresses, etc	44	(NA)
28510	Paints, varnishes, lacquers, enamels, and shellacs	6	(NA)
30790	Fabricated plastics products, including construction plastics products	8	(NA)
34294	Builders' hardware	12	(NA)
34310	Metal sanitary ware	2	(NA)
35850	Air conditioning, compressors, fin coils, etc	3	(NA)
39960	Linoleum and other hard-surfaced floor covering	12	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
2391-	Curtains and draperies, n.e.c.[2]	4	(NA)
24---	Lumber and wood products, except furniture, n.e.c.[2]	7	(NA)
2421-	Lumber (rough, sawed, or planed), n.e.c.[2]	6	(NA)
243--	Millwork, veneer, plywood, and structural wood members, n.e.c.[2]	6	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	6	(NA)
32751	Gypsum building materials	3	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	9	(NA)
3479-	Coating, engraving, and allied services, n.e.c.[2]	2	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	15	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	213	(NA)
	INDUSTRY 2834, PHARMACEUTICAL PREPARATIONS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	2,831	1,372
	Specified by kind	1,288	546
	Not specified by kind (census code 97600)	226	52
	All other materials, parts, containers, and supplies (census code 970099)	1,317	774
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,317	774
	Materials requested on report form:		
20480	Feed supplements and concentrates	73	(20-50)
26000	Paper and paperboard products (except paperboard boxes and containers)	20	21
28190	Industrial inorganic chemicals (including salts of sodium, calcium, etc.) (except medicinal)	45	32
28337	All other medicinal and botanical drugs (in bulk, uncompounded) (except antibiotics, sulfa drugs, vitamins, acetylsalicylic acid, alkaloids, and hormones)	457	143
28652	Cyclic crudes and intermediates; organic colors	13	12
30790	Fabricated plastics products (except plastic containers)	19	15
34660	Metal closures and crowns for glass or plastic containers	13	16
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
20---	Food and kindred products, n.e.c.[2]	6	(30-50)
28---	Chemicals and allied products, n.e.c.[2]	52	(230-250)
283--	Drugs, n.e.c.[2]	24	(100-115)
2869-	Industrial organic chemicals, n.e.c.[2]	28	85
3069-	Fabricated rubber products, n.e.c.[2]	10	-
3221-	Glass containers, n.e.c.[2]	(10-20)	(NA)
33---	Primary metal products, n.e.c.[2]	(2-5)	(2-5)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	4	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	(2-5)	(NA)
384--	Surgical, medical, and dental instruments and supplies, n.e.c.[2]	(10-20)	13
90005	Packing supplies	(2-5)	(NA)
90008	Operating supplies	(10-20)	5
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	505	163

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars)	
		1977	1972
	INDUSTRY 2843, SURFACE ACTIVE AGENTS, FINISHING AGENTS, SULFONATED OILS AND ASSISTANTS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	542	225
	Specified by kind	124	(NA)
	Not specified by kind (census code 97600)	34	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	384	225
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	384	225
	Materials requested on report form:		
28415	Finished synthetic organic detergents (in bulk) for further processing	15	9
28692	All other synthetic organic chemicals (alcohols, DDT, halogenated hydrocarbons, insecticide and pesticide chemicals, etc.)	20	41
28993	Essential oils (natural)	(10-20)	30
28994	Fatty acids (stearic, oleic, palmitic, etc.)	29	15
29000	Refined petroleum products (including mineral oil, naphtha solvents, petrolatum, etc.)	37	48
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
207--	Fats and oils, n.e.c.[2]	(10-20)	(NA)
28---	Chemicals and allied products, n.e.c.[2]	7	30
281--	Industrial inorganic chemicals, n.e.c.[2]	23	30
2821-	Plastics materials, synthetic resins, and nonvulcanizable elastomers, n.e.c.[2]	7	(NA)
284--	Soap, detergents, and cleaning preparations, perfumes, cosmetics, and other toilet preparations, n.e.c.[2]	39	(NA)
286--	Industrial organic chemicals, n.e.c.[2]	15	(NA)
2869-	Industrial organic chemicals, n.e.c.[2]	38	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	(2-5)	(NA)
99999	All other materials, parts, containers, and supplies not specified by kind[3]	121	100
	INDUSTRY 2869, INDUSTRIAL ORGANIC CHEMICALS, N.E.C.		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	10,972	3,437
	Specified by kind	4,879	1,235
	Not specified by kind (census code 97600)	95	105
	All other materials, parts, containers, and supplies (census code 970099)	5,998	2,097
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	5,998	2,097
	Materials requested on report form:		
10010	Iron and ferroalloy ores (including tungsten, chromite, nickel, manganese, molybdenum, and cobalt)	6	11
10020	Nonferrous metal ores (copper, mercury, vanadium, titanium, rutile, platinum, etc., but excluding bauxite)	56	24
13111	Crude petroleum (used as raw material)	(200-500)	(50-100)
14700	Crude chemical nonmetallic minerals (barite, borate, potash, flourspar, rock salt, etc., but excluding phosphate rock, sulfur, and pyrites)	30	35
26112	Wood pulp	(10-20)	42
28190	Other inorganic chemicals, except medicinal (excluding hydrochloric, hydrofluoric, and sulfuric acids; elemental phosphorus, and sulfuric acid sludge (decomposition acid))	405	179
28601	Acetone (natural and synthetic)	130	17
28692	Other synthetic organic chemicals, except alcohols and formaldehyde (purchased)	1,873	552
28994	Fatty acids (including stearic, oleic, palmitic, etc.)	42	31
33300	Nonferrous metal smelter and refinery shapes (except zinc)	(20-50)	122
33991	Metal powders, flakes, and paste (ferrous and nonferrous)	13	16
34902	Fabricated metal pipe, valves, and pipe fittings (except plumbers')	39	13
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
01120	Rice	(2-5)	(NA)
01150	Corn	(5-10)	(2-5)
1311-	Crude petroleum and natural gas, n.e.c.[2]	(50-100)	(NA)
20---	Food and kindred products, n.e.c.[2]	4	(35-40)
204--	Grain mill products, n.e.c.[2]	12	11
206--	Sugar and confectionery products, n.e.c.[2]	36	(5-10)
207--	Fats and oils, n.e.c.[2]	22	9
28---	Chemicals and allied products, n.e.c.[2]	37	(338-374)
281--	Industrial inorganic chemicals, n.e.c.[2]	13	55
282--	Plastics materials and synthetic resins, synthetic rubber, synthetic and other man-made fibers, except glass, n.e.c.[2]	10	38
28349	Pharmaceutical preparations for veterinary use	(5-10)	(NA)
2841-	Soap and other detergents, except specialty cleaners, n.e.c.[2]	(2-5)	(NA)
2843-	Surface active agents, finishing agents, sulfonated oils and assistants, n.e.c.[2]	(5-10)	(NA)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 2869, INDUSTRIAL ORGANIC CHEMICALS, N.E.C.--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more)--Con.		
286--	Industrial organic chemicals, n.e.c.[2]	249	(227-257)
28612	Other gum and wood chemicals	2	(NA)
2865-	Cyclic (coal tar) crudes, and cyclic intermediates, dyes, and organic pigments (lakes and toners), n.e.c.[2]	163	(226-256)
2869-	Industrial organic chemicals, n.e.c.[2]	100	(NA)
28693	Synthetic organic chemicals, n.e.c. (except bulk surface active agents)	48	(NA)
28695	Ethyl alcohol and other industrial organic chemicals, n.e.c	53	(NA)
28697	Miscellaneous cyclic and acyclic chemicals and chemical products	72	(NA)
2873-	Nitrogenous fertilizers, n.e.c.[2]	8	2
2899-	Chemicals and chemical preparations, n.e.c.[2]	22	(14-17)
28995	Essential oils, fireworks and pyrotechnics, sizes, and chemical preparations, n.e.c	6	(NA)
29---	Refined petroleum products, n.e.c.[2]	160	65
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	8	12
3295-	Minerals and earths, ground or otherwise treated, n.e.c.[2]	7	5
33---	Primary metal products, n.e.c.[2]	117	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	12	43
35---	Machinery, except electrical, n.e.c.[2]	14	(NA)
36---	Electrical and electronic machinery, equipment and supplies, n.e.c.[2]	(2-5)	(NA)
38---	Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks, n.e.c.[2]	(5-10)	(NA)
90001	Metal scrap	(2-5)	(NA)
90005	Packing supplies	(5-10)	(5-10)
90006	Shipping supplies	(5-10)	(NA)
90007	Maintenance on machinery	47	17
90008	Operating supplies	41	7
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	1,660	(455-466)
	INDUSTRY 2899, CHEMICALS AND CHEMICAL PREPARATIONS, N.E.C.		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	1,876	913
	Specified by kind	(4)	(NA)
	Not specified by kind (census code 97600)	(4)	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	1,876	913
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,876	913
	Materials requested on report form:		
14010	Crude nonmetallic minerals (clays, sand, gypsum, etc.) (except chemical)	85	35
20110	Clue stock and killing floor offal, scrap, and bones	14	54
20702	Fats, oils, greases, and tallow (animal, vegetable, and marine)	105	107
26000	Paper and paperboard products (except paperboard boxes and containers)	38	29
26500	Paperboard boxes and cabinets (including folding, corrugated, fiber, and set-up)	24	34
28120	Alkalies and chlorine	24	12
28160	Inorganic pigments	14	9
28190	Industrial inorganic chemicals (acids, sodium compounds, anhydrous ammonia, etc.) (except medicinals)	188	155
28210	Plastics and resin materials (synthetic)	76	42
28610	Wood rosin, turpentine, and other wood chemicals (including tall oil)	66	38
28692	Other synthetic organic chemicals	155	103
29000	Refined petroleum products (including naptha solvents, petrolatum, waxes, etc.)	103	42
34010	Metal containers (except collapsible tubes)	64	40
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
10---	Metal mining products, n.e.c.[2]	5	(12-25)
1111-	Anthracite, n.e.c.[2]	(2-5)	(NA)
14---	Mining and quarrying of nonmetallic minerals products, except fuels, n.e.c.[2]	(10-20)	(NA)
27---	Printing and publishing products, n.e.c.[2]	(5-10)	(NA)
28---	Chemicals and allied products, n.e.c.[2]	19	(65-75)
284--	Soap, detergents, and cleaning preparations, perfumes, cosmetics, and other toilet preparations, n.e.c.[2]	7	(under 2)
286--	Industrial organic chemicals, n.e.c.[2]	16	(10-15)
287--	Agricultural chemicals, n.e.c.[2]	2	(NA)
2899-	Products of petroleum and coal, n.e.c.[2]	29	43
28992	Fatty acids	24	(NA)
28995	Essential oils, fireworks and pyrotechnics, sizes, and chemical preparations, n.e.c	60	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	9	(4-10)
33---	Primary metal products, n.e.c.[2]	96	(2-5)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	4	(2-5)
349--	Miscellaneous fabricated metal products, n.e.c.[2]	3	(NA)
90001	Metal scrap	(5-10)	(NA)
90007	Maintenance on machinery	6	9
90008	Operating supplies	2	3
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	612	101

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3079, MISCELLANEOUS PLASTICS PRODUCTS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	10,992	4,329
	Specified by kind	6,554	2,315
	Not specified by kind (census code 97600)	2,190	779
	All other materials, parts, containers, and supplies (census code 970099)	2,248	1,235
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	2,248	1,235
	Materials requested on report form:		
24991	Hard-pressed fiberboard (purchased hardboard)	25	14
28100	Industrial inorganic chemicals, except inorganic pigments	52	(NA)
28160	Inorganic pigments	52	30
28600	Industrial organic and synthetic organic chemicals, except synthetic dyes, pigments, lakes, and toners	309	14
28654	Synthetic dyes, pigments, lakes, and toners	17	42
30799	Custom compounded resins (purchased)	107	74
35593	Parts and attachments specially designed for plastics-working machinery	48	35
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
14---	Nonmetallic minerals products, except fuels, n.e.c.[2]	3	(NA)
22---	Textile mill products, n.e.c.[2]	17	23
2269-	Finishers of textile products, n.e.c.[2]	3	(NA)
229--	Miscellaneous textile goods, n.e.c.[2]	6	(NA)
239--	Miscellaneous fabricated textile products, n.e.c.[2]	(5-10)	(under 2)
24---	Lumber and wood products, except furniture, n.e.c.[2]	2	12
242--	Sawmill and planing mills products, n.e.c.[2]	4	(NA)
24315	Other wood doors, including garage, screen, storm, and combination screen and storm, and louvre	(2-5)	(NA)
249--	Miscellaneous wood products, n.e.c.[2]	2	4
26---	Paper and allied products, n.e.c.[2]	7	254
26112	Other pulp, including papermill byproducts, except tall oil	(20-50)	(NA)
2621-	Paper mills products, except building paper, n.e.c.[2]	(5-10)	(NA)
264--	Converted paper and paperboard products, except containers and boxes, n.e.c.[2]	6	(NA)
2641-	Paper coating and glazing, n.e.c.[2]	11	(NA)
265--	Paperboard containers and boxes, n.e.c.[2]	12	129
28---	Chemicals and allied products, n.e.c.[2]	14	(219-222)
282--	Plastics materials and synthetic resins, synthetic rubber, synthetic and other man-made fibers, except glass, n.e.c.[2]	18	49
28213	Thermoplastic resins and plastics materials	43	(NA)
2822-	Synthetic rubber (vulcanizable elastomers), n.e.c.[2]	38	19
2851-	Paints; varnishes, lacquers, enamels, and allied products, n.e.c.[2]	9	5
289--	Miscellaneous chemical products, n.e.c.[2]	4	14
2891-	Adhesives and sealants, n.e.c.[2]	5	5
28914	Synthetic resin and rubber adhesives, including all types of bonding and laminating adhesives	19	(NA)
2899-	Chemicals and chemical preparations, n.e.c.[2]	6	3
28995	Essential oils, fireworks and pyrotechnics, sizes, and chemical preparations, n.e.c.	3	(NA)
29---	Refined petroleum products and related industries, n.e.c.[2]	4	1
3069-	Fabricated rubber products, n.e.c.[2]	18	18
3079-	Miscellaneous plastics products, n.e.c.[2]	76	101
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	13	17
3229-	Pressed and blown glass and glassware, n.e.c.[2]	6	(NA)
329--	Nonmetallic mineral products, n.e.c.[2]	14	7
33---	Primary metal products, n.e.c.[2]	20	42
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	19	18
3312-	Blast furnaces (including coke ovens), steel works, and rolling mills, n.e.c.[2]	14	(NA)
333--	Primary smelting and refining of nonferrous metal products, n.e.c.[2]	7	(NA)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	5	16
3351-	Rolling, drawing, and extruding of copper, n.e.c.[2]	16	9
3353-	Aluminum sheet, plate, and foil, n.e.c.[2]	7	7
3357-	Drawing and insulating of nonferrous wire, n.e.c.[2]	2	(NA)
336--	Nonferrous foundry castings, n.e.c.[2]	3	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	33	52
342--	Cutlery, hand tools, and general hardware, n.e.c.[2]	8	2
3429-	Hardware, n.e.c.[2]	6	(NA)
345--	Screw machine products, and bolts, nuts, screws, rivets, and washers, n.e.c.[2]	3	4
34511	Automotive screw machine products	5	(NA)
346--	Iron and steel forgings, n.e.c.[2]	2	16
3469-	Metal stampings, n.e.c.[2]	17	16
349--	Miscellaneous fabricated metal products, n.e.c.[2]	14	9
3497-	Metal foil and leaf, n.e.c.[2]	22	9
3519-	Internal combustion engines, n.e.c.[2]	5	(NA)
354--	Machine tools, metal cutting types, n.e.c.[2]	4	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	4	17
362--	Electrical industrial apparatus, n.e.c.[2]	4	(NA)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3079, MISCELLANEOUS PLASTICS PRODUCTS--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more)--Con.		
367--	Electronic components and accessories, n.e.c.[2]	2	(NA)
3679-	Electronic components, n.e.c.[2]	2	(NA)
38---	Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks, n.e.c.[2]	9	(NA)
39---	Miscellaneous manufactured products, n.e.c.[2]	3	5
90002	Scrap, other than metal	(2-5)	(NA)
90005	Packing supplies	16	4
90006	Shipping supplies	5	2
90007	Maintenance on machinery	18	13
90008	Operating supplies	16	14
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	939	(266-275)
	INDUSTRY 3312, BLAST FURNACES (INCLUDING COKE OVENS), STEEL WORKS, AND ROLLING MILLS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	21,841	(NA)
	Specified by kind	17,796	(NA)
	Not specified by kind (census code 97600)	261	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	3,784	(NA)
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	3,784	(NA)
	Materials requested on report form:		
10600	Ferroalloy ores, excluding manganese	35	(NA)
28000	Industrial organic and inorganic chemicals, except sulfuric acid and oxygen	67	(NA)
29110	Lubricating oil and greases and other petroleum products	86	(NA)
34902	Fabricated metal pipe, valves, and pipe fittings	23	(NA)
36220	Industrial controls, including crane and hoist and metal mill controls	16	(NA)
36240	Carbon and graphite electrodes	132	(NA)
35440	Industrial dies, molds, jigs, and fixtures	46	(NA)
35600	Pumps and compressors	15	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
1011-	Iron ores, n.e.c.[2]	(20-50)	(NA)
1211-	Bituminous coal and lignite, n.e.c.[2]	(10-20)	(NA)
1311-	Crude petroleum and natural gas, n.e.c.[2]	(20-50)	(NA)
24---	Lumber and wood products, except furniture, n.e.c.[2]	4	(NA)
264--	Converted paper and paperboard products, except containers and boxes, n.e.c.[2]	(2-5)	(NA)
3255-	Clay refractories, n.e.c.[2]	26	(NA)
329--	Abrasive, asbestos, and miscellaneous nonmetallic mineral products, n.e.c.[2]	19	(NA)
3291-	Abrasive products, n.e.c.[2]	5	(NA)
33---	Primary metal industries, n.e.c.[2]	16	(NA)
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	154	(NA)
332--	Iron and steel foundry products, n.e.c.[2]	55	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	6	(NA)
35---	Machinery, except electrical, n.e.c.[2]	84	(NA)
3842-	Orthopedic, prosthetic, and surgical appliances and supplies, n.e.c.[2]	2	(NA)
49410	Water supply	3	(NA)
90001	Metal scrap	82	(NA)
90005	Packing supplies	3	(NA)
90006	Shipping supplies	7	(NA)
90007	Maintenance on machinery	278	(NA)
90008	Operating supplies	164	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	2,375	(NA)
	INDUSTRY 3662, RADIO AND TELEVISION TRANSMITTING, SIGNALING, AND DETECTION EQUIPMENT AND APPARATUS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	4,573	2,999
	Specified by kind	1,995	574
	Not specified by kind (census code 97600)	717	228
	All other materials, parts, containers, and supplies (census code 970099)	1,861	2,197

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3662, RADIO AND TELEVISION TRANSMITTING, SIGNALING, AND DETECTION EQUIPMENT AND APPARATUS--Con.		
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,861	2,197
	Materials requested on report form:		
30790	Fabricated plastics products (including TV masks, knobs, etc., but excluding cabinets and gaskets)	39	26
36440	Noncurrent-carrying wiring devices (including boxes and covers, insulating bushings, nipples, and jacks)	13	14
36510	Loudspeakers, microphones, and tuners (all types)	30	14
36622	Radio and television transmitting, signaling, and detection equipment and apparatus (purchased)	105	475
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
251--	Household furniture, n.e.c.[2]	(5-10)	(NA)
2517-	Wood television, radio, phonograph, and sewing machine cabinets, n.e.c.[2]	(20-50)	(NA)
28---	Chemicals and allied products, n.e.c.[2]	22	(NA)
282--	Plastics materials and synthetic resins, synthetic rubber, synthetic and other man-made fibers, except glass, n.e.c.[2]	5	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	(2-5)	(NA)
3229-	Pressed and blown glass and glassware, n.e.c.[2]	9	(NA)
3264-	Porcelain electrical supplies, n.e.c.[2]	2	(NA)
33---	Primary metal products, n.e.c.[2]	5	7
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	4	(NA)
332--	Iron and steel foundry products, n.e.c.[2]	6	(NA)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	33	(NA)
3353-	Aluminum sheet, plate and foil, n.e.c.[2]	4	(NA)
336--	Nonferrous foundry products (castings), n.e.c.[2]	4	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	64	(155-160)
344--	Fabricated structural metal products, n.e.c.[2]	18	(5-10)
346--	Iron and steel forgings, n.e.c.[2]	7	72
35---	Machinery, except electrical, n.e.c.[2]	41	(67-72)
354--	Metalworking machinery and equipment, n.e.c.[2]	9	46
356--	General industrial machinery and equipment, n.e.c.[2]	15	(NA)
3573-	Electronic computing equipment, n.e.c.[2]	7	16
35732	Peripheral equipment for electronic computers	33	(NA)
36---	Electrical and electronic machinery, equipment and supplies, n.e.c.[2]	47	928
362--	Electrical industrial apparatus, n.e.c.[2]	4	(NA)
3621-	Motors and generators, n.e.c.[2]	8	(NA)
3643-	Current-carrying wiring devices, n.e.c.[2]	9	54
3662-	Radio and television transmitting, signaling, and detection equipment and apparatus, n.e.c.[2]	20	(NA)
36621	Communication systems and equipment	19	(NA)
36625	Search and detection, navigation and guidance systems and equipment	71	(NA)
36627	Electronic systems and equipment, n.e.c.	38	(NA)
367--	Electronic components and accessories, n.e.c.[2]	51	873
3674-	Semiconductors and related devices, n.e.c.[2]	57	(NA)
36749	Other semiconductor devices	5	(NA)
3675-	Electronic capacitors, n.e.c.[2]	3	(NA)
3679-	Electronic components, n.e.c.[2]	723	(NA)
3714-	Motor vehicle parts and accessories, n.e.c.[2]	25	(NA)
3811-	Engineering, laboratory, scientific, and research instruments and associated equipment, n.e.c.[2]	(10-20)	(NA)
382--	Measuring and controlling instruments, n.e.c.[2]	6	64
3823-	Instruments for measuring and testing of electrical signals, n.e.c.[2]	12	(NA)
38252	Test equipment for testing electrical, radio, and communication circuits, and motors	11	(NA)
3832-	Optical instruments and lenses, n.e.c.[2]	3	3
38325	Optical instruments and lenses, except sighting, tracking, and fire control equipment	(20-50)	(NA)
90003	Office supplies	3	(NA)
90004	Plating supplies	(2-5)	(NA)
90006	Shipping supplies	4	(NA)
90007	Maintenance on machinery	5	(NA)
90008	Operating supplies	6	(5-10)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	168	428
	INDUSTRY 3711, MOTOR VEHICLES AND PASSENGER CAR BODIES		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	57,415	30,792
	Specified by kind	6,011	1,455
	Not specified by kind (census code 97600)	154	36
	All other materials, parts, containers, and supplies (census code 970099)	51,250	29,301
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	51,250	29,301
	Materials requested on report form:		
22701	Automotive carpeting	240	159
23962	Automotive trimmings, textile (panels, headliners, etc.)	844	1,380

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3711, MOTOR VEHICLES AND PASSENGER CAR BODIES--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Material requested on report form--Con.		
23990	Seat covers, seat belts, and shoulder harnesses	1,463	(NA)
25311	Seats (purchased separately) for autos, trucks, or buses	162	(NA)
28910	Glues and adhesives	(100-200)	(20-50)
32920	Gaskets, packing and sealing devices	200	(NA)
34296	Motor vehicle metal hardware (lock units, door and window handles, hinges, license plate brackets, panel knobs, etc.)	1,613	(NA)
34650	Automotive stampings, including body parts, hub caps, fenders, etc	6,638	(NA)
34901	Mechanical wire springs (including seat and back springs)	331	(NA)
34930	Steel springs (including leaf, helical, and torsion bar)	527	463
35192	Diesel engines and parts specially designed for diesel engines	895	543
35850	Refrigeration compressors, compressor units, condensing units, fin coils, and other refrigeration, air conditioning and heat-transfer equipment	(over 1,000)	143
35900	Pistons, piston rings, carburetors, and intake and exhaust valves	(200-500)	358
36410	Automotive lamps	(50-100)	(50-100)
36470	Motor vehicle lighting fixtures, including headlights, tail lights, and dome fixtures (except automotive lamps)	449	266
36510	Automotive radios, loudspeakers, microphones, and tuners	(500-1,000)	385
36910	Storage batteries	212	179
36940	Engine electrical equipment (spark plugs, generators, starting motors, distributors, ignition coils, ignition harness and cable sets, switches, etc.)	1,613	(NA)
37115	Passenger car bodies, not produced in same establishment	(over 1,000)	(NA)
37140	Other motor vehicle parts and accessories (except those listed elsewhere), not produced in same establishment	5,319	(NA)
37141	Gasoline engines and parts specially designed for gasoline engines, not produced in same establishment	7,152	4,704
37142	Fuel, water, and oil pumps, radiators, exhaust systems, and radiators, not produced in same establishment	(over 1,000)	(NA)
37149	Metal motor vehicle parts (except parts listed elsewhere) including axels, brakes, rims, wheels, shock absorbers, etc., not produced in same establishment	9,150	(2,000-5,000)
38244	Motor vehicle meters and gauges (except electrical) including speedometers, fuel level, oil pressure, etc., not produced in same establishment	413	224
38731	Automotive clocks and clock movements	(20-50)	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
2851-	Paints and allied products, n.e.c.[2]	(100-200)	186
29---	Refined petroleum and related products, n.e.c.[2]	(2-5)	(10-20)
30111	Passenger car pneumatic tires (casings)	108	(NA)
3079-	Miscellaneous plastics products, n.e.c.[2]	(2-5)	(200-500)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	268	(839-842)
332--	Iron and steel foundry products, n.e.c.[2]	(2-5)	(NA)
3361-	Aluminum foundry products (castings), n.e.c.[2]	(10-20)	(NA)
34446	Other sheet metal work	(2-5)	(NA)
34511	Automotive screw machine products	(10-20)	(NA)
35---	Machinery, except electrical, n.e.c.[2]	88	(520-1050)
3622-	Industrial controls, n.e.c.[2]	(5-10)	(NA)
371--	Transportation equipment, n.e.c.[2]	105	(5,763-6,293)
90006	Shipping supplies	(5-10)	(NA)
90008	Operating supplies	(200-500)	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	4,979	(8,833-13,453)
	INDUSTRY 3713, TRUCK AND BUS BODIES		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	989	884
	Specified by kind	297	178
	Not specified by kind (census code 97600)	209	93
	All other materials, parts, containers, and supplies (census code 970099)	483	613
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	483	613
	Materials requested on report form:		
24210	Rough and dressed lumber	2	14
24300	Veneer and plywood	8	21
25311	Seats for conveyances (purchased separately)	3	10
34290	Metal hardware for transportation equipment (handles, hinges, locks, etc.)	6	40
34601	Metal stampings (including automotive job stampings)	(50-100)	13
34930	Steel springs (including helical, leaf, and torsion bar)	(under 2)	1
35850	Refrigeration compressors, compressor units, and condensing units, fin coils, and other refrigeration, air conditioning, and heat-transfer equipment	8	44
37110	Purchased chassis for vehicles (except passenger car chassis)	50	188
37141	Axels, brakes, drums, rims, wheels, and other metal motor vehicle parts	21	39

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3713, TRUCK AND BUS BODIES--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
30---	Rubber and miscellaneous plastics products, n.e.c.[2]	7	15
33---	Primary metal products, n.e.c.[2]	11	(NA)
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	4	(NA)
3312-	Blast furnaces (including coke ovens), steel works, and rolling and finishing mills products, n.e.c.[2]	4	(NA)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	3	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	3	(24-29)
35---	Machinery, except electrical, n.e.c.[2]	7	(7-10)
353--	Construction, mining, and materials handling machinery and equipment, n.e.c.[2]	6	(NA)
3531-	Construction machinery and equipment, n.e.c.[2]	13	(NA)
3561-	Pumps and pumping equipment, n.e.c.[2]	5	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	6	22
371--	Motor vehicles and motor vehicle equipment, n.e.c.[2]	15	(31-34)
3713-	Truck and bus bodies, n.e.c.[2]	4	13
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	218	(137-143)
	INDUSTRY 3714, MOTOR VEHICLE PARTS AND ACCESSORIES		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	18,907	8,922
	Specified by kind	10,805	4,876
	Not specified by kind (census code 97600)	551	251
	All other materials, parts, containers, and supplies (census code 970099)	7,551	3,795
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	7,551	3,795
	Materials requested on report form:		
22701	Automotive carpeting	(under 2)	(NA)
23962	Automotive trimmings, textile (panels, headliners, etc.)	(under 2)	2
23990	Seat covers, seat belts, and shoulder harnesses	(under 2)	(NA)
25311	Seats (purchased separately) for autos, trucks, or buses	-	(NA)
28910	Glues and adhesives	27	(NA)
32930	Gaskets, packing and sealing devices	23	21
34296	Motor vehicle metal hardware (lock units, door and window handles, hinges, license plate brackets, panel knobs, etc.)	(5-10)	(NA)
34650	Automotive stampings, including body parts, hub caps, fenders, etc	79	(NA)
34901	Mechanical wire springs (including seat and back springs)	9	31
34930	Steel springs (including leaf, helical, and torsion bar)	13	10
35192	Diesel engines and parts specially designed for diesel engines	(20-50)	3
35850	Refrigeration compressors, compressor units, condensing units, fin coils, and other refrigeration, air conditioning and heat-transfer equipment	(5-10)	(NA)
35900	Pistons, piston rings, carburetors, and intake and exhaust valves	316	214
36410	Automotive lamps	(10-20)	(NA)
36470	Motor vehicle lighting fixtures, including headlights, tail lights, and dome fixtures (except automotive lamps)	(5-10)	1
36510	Automotive radios, loudspeakers, microphones, and tuners	(under 2)	(NA)
36910	Storage batteries	(under 2)	(NA)
36940	Engine electrical equipment (spark plugs, generators, starting motors, distributors, ignition coils, ignition harness and cable sets, switches, etc.)	254	(NA)
37115	Passenger car bodies, not produced in same establishment	-	(NA)
37140	Other motor vehicle parts and accessories (except those listed elsewhere) not produced in same establishment	455	(NA)
37141	Gasoline engines and parts specially designed for gasoline engines, not produced in same establishment	1,996	493
37142	Fuel, water, and oil pumps, radiators, exhaust systems, and radiators, not produced in same establishment	114	(NA)
37149	Metal motor vehicle parts (except parts listed elsewhere) including axels, brakes, rims, wheels, shock absorbers, etc., not produced in same establishment	867	128
38244	Motor vehicle meters and gauges (except electrical) including speedometers, fuel level, oil pressure, etc., not produced in same establishment	(20-50)	(10-20)
38731	Automotive clocks and clock movements	(2-5)	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
14---	Mining and quarrying of nonmetallic minerals, except fuels, n.e.c.[2]	(2-5)	(NA)
22---	Textile mill products, n.e.c.[2]	(2-5)	12
249--	Miscellaneous wood products, n.e.c.[2]	(5-10)	(NA)
26---	Paper and allied products, n.e.c.[2]	11	40
2621-	Paper mills, except building paper mills products, n.e.c.[2]	16	12
264--	Converted paper and paperboard products, except containers and boxes, n.e.c.[2]	6	(NA)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3714, MOTOR VEHICLE PARTS AND ACCESSORIES--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total cost of $2 million or more):--Con.		
265--	Paperboard containers and boxes, n.e.c.[2]	3	18
28---	Chemicals and allied products, n.e.c.[2]	9	73
2813-	Industrial gases, n.e.c.[2]	(2-5)	(NA)
2819-	Industrial inorganic chemicals, n.e.c.[2]	15	(NA)
2821-	Plastics materials, synthetic resins, and nonvulcanizable elastomers, n.e.c.[2]	(20-50)	(NA)
2851-	Paints, varnishes, lacquers, enamels, and allied products, n.e.c.[2]	6	29
2899-	Chemicals and chemical preparations, n.e.c.[2]	17	43
29---	Refined petroleum and related products, n.e.c.[2]	(2-5)	24
2911-	Refined petroleum, n.e.c.[2]	9	(NA)
2992-	Lubricating oils and greases, n.e.c.[2]	36	24
3011-	Tires and inner tubes, n.e.c.[2]	(2-5)	(NA)
3069-	Fabricated rubber products, n.e.c.[2]	18	92
3079-	Miscellaneous plastics products, n.e.c.[2]	13	50
329--	Abrasive, asbestos, and miscellaneous nonmetallic mineral products, n.e.c.[2]	44	96
33---	Primary metal products, n.e.c.[2]	43	(39-42)
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	(100-200)	(NA)
332--	Iron and steel foundry products, n.e.c.[2]	(50-100)	(2-5)
333--	Primary, smelting and refining of nonferrous metals, n.e.c.[2]	42	11
3341-	Secondary smelting and refining of nonferrous metals, n.e.c.[2]	(20-50)	(NA)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	18	19
336--	Nonferrous foundry products (castings), n.e.c.[2]	5	7
339--	Miscellaneous primary metal products, n.e.c.[2]	3	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	5	592
34231	Mechanics' hand service tools	16	(NA)
345--	Screw machine products, and bolts, nuts, screws, rivets, and washers, n.e.c.[2]	(20-50)	275
3452-	Bolts, nuts, screws, rivets, and washers, n.e.c.[2]	19	(NA)
346--	Iron and steel forgings, n.e.c.[2]	78	291
349--	Miscellaneous fabricated metal products, n.e.c.[2]	16	8
35---	Machinery, except electrical, n.e.c.[2]	3	262
354--	Metalworking machinery and equipment, n.e.c.[2]	(5-10)	260
3541-	Machine tools, metal cutting tools, n.e.c.[2]	23	(under 2)
3544-	Special dies and tools, die sets, jigs and fixtures, and industrial molds, n.e.c.[2]	57	166
3545-	Machine tool accessories and measuring devices, n.e.c.[2]	30	93
356--	General industrial machinery and equipment, n.e.c.[2]	259	2
3562-	Ball and roller bearings, n.e.c.[2]	23	(NA)
3586-	Measuring and dispensing pumps, n.e.c.[2]	(20-50)	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	(2-5)	128
362--	Electrical industrial apparatus, n.e.c.[2]	10	(NA)
367--	Electronic components and accessories, n.e.c.[2]	42	(NA)
37143	Rebuilt engines and parts for motor vehicles, except carburetors (passenger cars, trucks, and buses)	120	662
38---	Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks, n.e.c.[2]	2	(under 2)
3822-	Automatic controls for regulating residential and commercial environments and appliances[2]	(20-50)	(NA)
90001	Metal scrap	10	4
90004	Plating supplies	(5-10)	(NA)
90005	Packing supplies	36	29
90006	Shipping supplies	(20-50)	10
90007	Maintenance supplies	(100-200)	98
90008	Operating supplies	(10-20)	15
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	1,549	(640-643)
	INDUSTRY 3715, TRUCK TRAILERS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	1,241	641
	Specified by kind	591	248
	Not specified by kind (census code 97600)	99	28
	All other materials, parts, containers, and supplies (census code 970099)	551	365
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	551	365
	Materials requested on report form:		
24210	Rough and dressed lumber	26	26
24300	Veneer and plywood	22	8
25311	Seats for conveyances (purchased separately)	(under 2)	(NA)
34290	Metal hardware for transporation equipment (handles, hinges, locks, etc.)	10	12
34601	Metal stampings (including automotive job stampings)	(5-10)	11
34930	Steel springs (including helical, leaf, and torsion bar)	14	10
35850	Refrigeration compressors, compressor units, and condensing units, fin coils, and other refrigeration, air conditioning, and heat-transfer equipment	(5-10)	8
37110	Purchased chassis for vehicles (except passenger car chassis)	3	(NA)
37141	Axels, brakes, drums, rims, wheels, and other metal motor vehicle parts	142	125

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars)	
		1977	1972
	INDUSTRY 3715, TRUCK TRAILERS--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
24261	Hardwood flooring	(2-5)	(NA)
2499-	Wood products, n.e.c.[2]	(2-5)	(NA)
3011-	Tires and inner tubes, n.e.c.[2]	14	(X)
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	(2-5)	(NA)
332--	Iron and steel foundry products, n.e.c.[2]	10	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	9	26
35---	Machinery, except electrical, n.e.c.[2]	3	10
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	4	1
371--	Motor vehicles and motor vehicle equipment, n.e.c.[2]	3	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	268	126
	INDUSTRY 3716, MOTOR HOMES PRODUCED ON PURCHASED CHASSIS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	1,103	(NA)
	Specified by kind	189	(NA)
	Not specified by kind (census code 97600)	208	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	706	(NA)
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	706	(NA)
	Materials requested on report form:		
24210	Rough and dressed lumber	13	(NA)
24300	Veneer and plywood	30	(NA)
25311	Seats for conveyances (purchased separately)	11	(NA)
34290	Metal hardware for transportation equipment (handles, hinges, locks, etc.)	(5-10)	(NA)
34601	Metal stampings (including automotive job stampings)	(under 2)	(NA)
34930	Steel springs (including helical, leaf, and torsion bar)	(under 2)	(NA)
35850	Refrigeration compressors, compressor units, and condensing units, fin coils, and other refrigeration, air conditioning, and heat-transfer equipment	31	(NA)
37110	Purchased chassis for vehicles (except passenger car chassis)	180	(NA)
37141	Axels, brakes, drums, rims, wheels, and other metal motor vehicle parts	(50-100)	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
22---	Textile mill products, n.e.c.[2]	(20-50)	(NA)
2391-	Curtains and draperies, n.e.c.[2]	(2-5)	(NA)
24---	Lumber and wood products, except furniture, n.e.c.[2]	(2-5)	(NA)
2439-	Structural wood members, n.e.c.[2]	(5-10)	(NA)
2851-	Paints, varnishes, lacquers, enamels, and allied products, n.e.c.[2]	(10-20)	(NA)
2891-	Sealants and adhesives, n.e.c.[2]	(10-20)	(NA)
3011-	Tires and inner tubes, n.e.c.[2]	(5-10)	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	2	(NA)
33---	Primary metal products, n.e.c.[2]	(10-20)	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	37	(NA)
3519-	Internal combustion engines, n.e.c.[2]	(2-5)	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	52	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	188	(NA)
	INDUSTRY 3721, AIRCRAFT		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	6,092	3,686
	Specified by kind	1,528	245
	Not specified by kind (census code 97600)	88	43
	All other materials, parts, containers, and supplies (census code 970099)	4,476	3,398
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	4,476	3,398
	Materials requested on report form:		
33690	Nonferrous metal castings (except copper and aluminum)	31	6
34290	Aircraft metal hardware, except electrical (handles, locks, hinges, etc.)	64	47
35440	Special dies, tools, die sets, jigs, and fixtures (except cutting tools for machine tools)	54	20
35450	Cutting tools for machine tools	21	17
36941	Engine electrical equipment (including spark plugs, magnetos, generators, starters, etc.)	59	35

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars)	
		1977	1972
	INDUSTRY 3721, AIRCRAFT--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Materials requested on report form--Con.		
37240	Aircraft engines (purchased)	860	397
37244	Parts specially designed for aircraft engines (except pistons, piston rings, carburetors, and valves) (purchased)	36	28
37281	Parts specially designed for aircraft (including subassemblies, fuel systems, landing gear, and machined parts subcontracted to specifications) (purchased)	2,055	1,199
37285	Aircraft propellers, blades, and parts (purchased)	59	39
37648	Parts specially designed for guided missile engines (space propulsion units)	-	(NA)
37692	Parts specially designed for space vehicles and for guided missiles (including subassemblies, fuel systems, and machined parts subcontracted to specifications)	(5-10)	10
38111	Aircraft flight instruments (including altimeters, automatic pilots, and gyroscopes)	70	52
38291	Aircraft engine instruments (except flight instruments), including thrust power indicators, tachometers, etc.	146	23
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
25312	Public building and related furniture, except school furniture	(2-5)	6
28---	Chemicals and allied products, n.e.c.[2]	(2-5)	45
3079-	Miscellaneous plastics products, n.e.c.[2]	(2-5)	7
3231-	Products made from purchased glass, n.e.c.[2]	(2-5)	(NA)
33---	Primary metal products, n.e.c.[2]	(50-100)	2
3441-	Fabricated structural metal, n.e.c.[2]	(20-50)	(NA)
345--	Screw machine products, n.e.c.[2]	(5-10)	65
3544-	Special dies, tools, jigs, and fixtures, n.e.c.[2]	(20-50)	(NA)
3622-	Industrial controls, n.e.c.[2]	(10-20)	(NA)
36625	Search and detection, navigation and guidance systems, and equipment	(200-500)	(NA)
3728-	Aircraft equipment, n.e.c.[2]	(50-100)	(NA)
37283	Research and development on aircraft parts	(50-100)	(NA)
38324	Sighting, tracking, and fire control equipment, optical type	(10-20)	53
3861-	Photographic equipment and supplies, n.e.c.[2]	(5-10)	(under 2)
90008	Operating supplies	(20-50)	59
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	426	(1,277-1,293)
	INDUSTRY 3724, AIRCRAFT ENGINES AND ENGINE PARTS		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	2,233	1,451
	Specified by kind	602	343
	Not specified by kind (census code 97600)	55	26
	All other materials, parts, containers, and supplies (census code 970099)	1,576	1,082
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,576	1,082
	Materials requested on report form:		
33690	Nonferrous metal castings (except copper and aluminum)	(50-100)	(100-200)
34290	Aircraft metal hardware, except electrical (handles, locks, hinges, etc.)	(5-10)	(5-10)
35440	Special dies, tools, die sets, jigs, and fixtures (except cutting tools for machine tools)	27	34
35450	Cutting tools for machine tools	38	17
36941	Engine electrical equipment (including spark plugs, magnetos, generators, starters, etc.)	(5-10)	27
37240	Aircraft engines (purchased)	(50-100)	5-10)
37244	Parts specially designed for aircraft engines (except pistons, piston rings, carburetors, and valves) (purchased)	(200-500)	534
37281	Parts specially designed for aircraft (including subassemblies, fuel systems, landing gear, and machined parts subcontracted to specifications) (purchased)	(20-50)	(50-100)
37285	Aircraft propellers, blades, and parts (purchased)	-	(5-10)
37648	Parts specially designed for guided missile engines (space propulsion units)	-	-
37692	Parts specially designed for space vehicles and for guided missiles (including subassemblies, fuel systems, and machined part subcontracted to specifications)	-	(under 2)
38111	Aircraft flight instruments (including altimeters, automatic pilots, and gyroscopes)	-	-
38291	Aircraft engine instruments (except flight instruments), including thrust power indicators, tachometers, etc.)	-	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
33---	Primary metal products, n.e.c.[2]	3	(10-20)
33561	Nickle and nickle-base alloy mill shapes (including nickle-copper alloys)	(10-20)	(NA)
34231	Mechanic's hand service tools	(20-50)	(NA)
34627	Seamless rolled ring forgings (ferrous)	(100-200)	(NA)
367--	Electronic components and accessories, n.e.c.[2]	(50-100)	2
37243	Aeronautical services on aircraft engines	(20-50)	(20-50)
3728-	Aircraft equipment, n.e.c.[2]	(200-500)	(NA)
90006	Shipping supplies	(20-50)	(NA)
90008	Operating supplies	47	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	298	(169-223)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3728, AIRCRAFT PARTS AND AUXILIARY EQUIPMENT, N.E.C.		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	1,470	869
	Specified by kind	344	284
	Not specified by kind (census code 97600)	163	45
	All other materials, parts, containers, and supplies (census code 970099)	963	540
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	963	540
	Materials requested on report form:		
33690	Nonferrous metal castings (except copper and aluminum)	10	(10-20)
34290	Aircraft metal hardware, except electrical (handles, locks, hinges, etc.)	15	11
35440	Special dies, tools, die sets, jigs, and fixtures (except cutting tools for machine tools)	18	25
35450	Cutting tools for machine tools	13	12
36941	Engine electrical equipment (including spark plugs, magnetos, generators, starters, etc.)	3	(2-5)
37240	Aircraft engines (purchased)	(2-5)	(2-5)
37244	Parts specially designed for aircraft engines (except pistons, piston rings, carburetors, and valves) (purchased)	23	31
37281	Parts specially designed for aircraft (including subassemblies, fuel systems, landing gear, and machined parts subcontracted to specifications) (purchased)	252	178
37285	Aircraft propellers, blades, and parts (purchased)	(5-10)	(10-20)
37648	Parts specially designed for guided missile engines (space propulsion units)	(20-50)	(5-10)
37692	Parts specially designed for space vehicles and for guided missiles (including subassemblies, fuel systems, and machined parts subcontracted to specifications)	(200-500)	18
38111	Aircraft flight instruments (including altimeters, automatic pilots, and gyroscopes)	(2-5)	(NA)
38291	Aircraft engine instruments (except flight instruments), including thrust power indicators, tachometers, etc.)	(under 2)	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
22---	Textile mill products, n.e.c.[2]	(2-5)	(NA)
2221-	Broad woven fabric mill products, man-made fiber and silk, n.e.c.[2]	(2-5)	(NA)
28---	Chemicals and allied products, n.e.c.[2]	5	(17-22)
32913	Nonmetallic coated abrasive products and buffing wheels, polishing wheels and laps	(5-10)	(NA)
32922	Asbestos friction materials	(5-10)	(5-10)
33---	Primary metal products, n.e.c.[2]	4	(5-10)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	23	48
35---	Machinery, except electrical, n.e.c.[2]	8	(Z)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	5	(50-63)
3728-	Aircraft parts and auxiliary equipment, n.e.c.[2]	(50-100)	(NA)
38324	Sighting, tracking, and fire control equipment, optical type	(20-50)	(NA)
90007	Maintenance on machinery	(5-10)	(NA)
90008	Operating supplies	(2-5)	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	166	(97-102)
	INDUSTRY 3731, SHIP BUILDING AND REPAIRING		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	2,416	(NA)
	Specified by kind	820	(NA)
	Not specified by kind (census code 97600)	145	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	1,451	(NA)
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,451	(NA)
	Materials requested on report form:		
34413	Fabricated structural metal	112	(NA)
34430	Boilers; condensers and parts, sold separately	32	(NA)
34940	Valves and pipe fittings	81	(NA)
35112	Steam engines and turbines	59	(NA)
35310	Construction machinery and parts, including ship winches, cranes, derricks, and capstans	81	(NA)
36220	Industrial controls	51	(NA)
36620	Electronic communication equipment	(100-200)	(NA)
38111	Nautical and navigational instruments, all types	25	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
2599-	Furniture and fixtures, n.e.c.[2]	(50-100)	(NA)
28516	Industrial product finishes, except lacquers	(5-10)	(NA)
3041-	Rubber and plastics hose and belting, n.e.c.[2]	(2-5)	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[2]	2	(NA)
331--	Blast furnaces, steel works, and rolling and finishing mills products, n.e.c.[2]	(50-100)	(NA)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	6	(NA)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars)	
		1977	1972
	INDUSTRY 3731, SHIP BUILDING AND REPAIRING--Con.		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more)--Con.		
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	3	(NA)
3429-	Hardware, n.e.c.[2]	(2-5)	(NA)
3449-	Miscellaneous metalwork, n.e.c.[2]	(2-5)	(NA)
349--	Miscellaneous fabricated metal products, n.e.c.[2]	(5-10)	(NA)
351--	Engines and turbines, n.e.c.[2]	13	(NA)
356--	General industrial machinery, n.e.c.[2]	(10-20)	(NA)
3585-	Refrigeration and heating equipment, n.e.c.[2]	9	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	6	(NA)
362--	Electrical industrial apparatus, n.e.c.[2]	6	(NA)
36232	Arc welding electrodes, metal	2	(NA)
369--	Miscellaneous electrical equipment and supplies, n.e.c.[2]	3	(NA)
37---	Transportation equipment, n.e.c.[2]	15	(NA)
90007	Maintenance on machinery	(20-50)	(NA)
90008	Operating supplies	15	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	575	(NA)
	INDUSTRY 3732, BOAT BUILDING AND REPAIRING		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	940	(NA)
	Specified by kind	403	(NA)
	Not specified by kind (census code 97600)	273	(NA)
	All other materials, parts, containers, and supplies (census code 970099)	149	(NA)
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	149	(NA)
	Materials requested on report form:		
22700	Carpeting	10	(NA)
22980	Cordage and twine	2	(NA)
23940	Canvas products	10	(NA)
24310	Millwork	7	(NA)
34290	Metal hardware	17	(NA)
36470	Lighting fixtures	3	(NA)
36620	Electronic communications equipment	1	(NA)
36911	Storage batteries	2	(NA)
38111	Nautical and navigational instruments	4	(NA)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
2295-	Coated fabrics, not rubberized, n.e.c.[2]	(5-10)	(NA)
25---	Furniture and fixtures, n.e.c.[2]	2	(NA)
28---	Chemicals and allied products, n.e.c.[2]	4	(NA)
3069-	Fabricated rubber products, n.e.c.[2]	5	(NA)
3079-	Miscellaneous plastics products, n.e.c.[2]	6	(NA)
3229-	Pressed and blown glass, n.e.c.[2]	4	(NA)
3231-	Products made of purchased glass, n.e.c.[2]	4	(NA)
33---	Primary metal products, n.e.c.[2]	6	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[2]	12	(NA)
3519-	Internal combustion engines, n.e.c.[2]	7	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[2]	3	(NA)
37---	Transportation equipment, n.e.c.[2]	3	(NA)
3714-	Motor vehicle parts and accessories, n.e.c.[2]	3	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	27	(NA)
	INDUSTRY 3761, GUIDED MISSILES AND SPACE VEHICLES		
	Census of Manufactures		
	Materials, parts, containers, and supplies[1]	1,369	923
	Specified by kind	160	55
	Not specified by kind (census code 97600)	23	7
	All other materials, parts, containers, and supplies (census code 970099)	1,186	861
	MA-131 Survey		
	All other materials, parts, containers, and supplies (same as census code 970099 above)	1,186	861
	Materials requested on report form:		
33690	Nonferrous metal castings (except copper and aluminum)	(2-5)	8
34290	Aircraft metal hardware, except electrical (handles, locks, hinges, etc.)	(under 2)	(5-10)

See footnotes at end of table.

Table 1b. **Materials Consumed, by Kind, for Selected Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 code	Industry and material	Delivered cost (million dollars) 1977	1972
	INDUSTRY 3761, GUIDED MISSILES AND SPACE VEHICLES		
	MA-131 Survey--Con.		
	All other materials, parts, containers, and supplies (same as census code 970099 above)--Con.		
	Materials requested on report form--Con.		
35440	Special dies, tools, die sets, jigs, and fixtures (except cutting tools for machine tools)	8	7
35450	Cutting tools for machine tools	(under 2)	(under 2)
36941	Engine electrical equipment (including spark plugs, magnetos, generators, starters, etc.)	-	(NA)
37240	Aircraft engines (purchased)	-	(under 2)
37244	Parts specially designed for aircraft engines (except pistons, piston rings, carburetors, and valves) (purchased)	-	(NA)
37281	Parts specially designed for aircraft (including subassemblies, fuel systems, landing gear, and machined parts subcontracted to specifications) (purchased)	19	47
37258	Aircraft propellers, blades, and parts (purchased)	-	(NA)
37648	Parts specially designed for guided missile engines (space propulsion units)	15	(20-50)
37692	Parts specially designed for space vehicles and for guided missiles (including subassemblies, fuel systems, and machined parts subcontracted to specifications)	863	340
38111	Aircraft flight instruments (including altimeters, automatic pilots, and gyroscopes)	(2-5)	28
38291	Aircraft engine instruments (except flight instruments), including thrust power indicators, tachometers, etc		(2-5)
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
28---	Chemicals and allied products, n.e.c.[2]	4	(6-9)
335--	Rolling, drawing, and extruding of nonferrous metals, n.e.c.[2]	(10-20)	2
35---	Machinery, except electrical, n.e.c.[2]	(2-5)	(under 2)
367--	Electronic components and accessories, n.e.c.[2]	(20-50)	93
369--	Miscellaneous electrical machinery, equipment, and supplies, n.e.c.[2]	(2-5)	(NA)
3728-	Aircraft parts and auxiliary equipment, n.e.c.[2]	(10-20)	(NA)
38252	Test equipment for testing electrical, radio, and communication circuits, and motors	(2-5)	(NA)
99999	All other materials, parts, components, containers, and supplies not specified by kind[3]	194	(280-300)

- Represents materials data requested on the MA-131 survey but no data reported. (NA) Not available. N.E.C. Not elsewhere classified.
(Z) Represents materials data requested on the MA-131 survey but less than $500,000 reported.

[1]As published in table 7 of the 1977 Census of Manufactures industry series.

[2]Represents data that have been reported at a finer level of detail in the MA-131 survey but which have been aggregated to avoid disclosing operations of individual companies. This aggregated total excludes any data published at a finer level of detail in either the census or the MA-131 survey.

[3]Includes data for those material codes that were specified by kind but totaled less than $2 million. Also includes data for a small number of establishments whose reports were not received at the time the MA-131 data were tabulated.

[4]Detailed materials data (item 17B) not requested on census form.

Supplies Consumed in Mineral Industries by Kind

GENERAL

The tables in this chapter present information on consumption of supplies by mineral establishments in 1977 and 1972. The data are based on information obtained in a sample survey, MA-131, Consumption of Materials, Parts, Containers, and Supplies During 1977, and serve to supplement the data previously published in table 7 of the 1977 Census of Mineral Industries. The data are obtained, primarily, to facilitate the work of the Bureau of Economic Analysis, Department of Commerce, on national accounts and input-output studies. They also provide answers, in part, to increased demands for more detailed information on consumption of supplies in the mining sector of the economy.

SUMMARY DATA

As shown in the summary table 2a, the 6 mineral industries selected for this survey accounted for $17.3 billion of supplies consumed or 37.5 percent of the total of $46.1 billion of supplies consumed by all mineral establishments in 1977. Of this $17.3 billion, the category "all other supplies used" (code 970099), amounted to $5.1 billion. It is this latter figure which is distributed in table 2b by type of supply on the basis of the data reported in the supplemental survey on form MA-131. As table 1 also indicates, the proportion of this cost of "all other supplies" to "total cost of supplies specified by kind" was reduced from approximately 65 to 27 percent as a result of the data obtained in this supplemental survey.

SAMPLE DESIGN

The 1977 MA-131 survey is a sample which includes only those establishments that accounted for 85 to 95 percent of the value of each industry's "all other supplies used," (census code 970099) of Item 17B. The response rate on this voluntary survey was approximately 60 percent.

COMPARABILITY OF DATA

Comparability of the 1972 and 1977 data presented in this report is approximate due to a difference in sample designs. The 1972 MA-131 survey was a probability survey and was collected from a smaller sample of establishments and tabulated on a "weighted sample basis." This sample resulted in the certainty selection of all plants reporting more than $1,300 thousand in unspecified supply costs. Other establishments were sampled with probabilities of 1.000 to .005 in accordance with the mathematical theory for optimum allocation of the sample. The sampling procedure for 1977, along with the expansion in census item 17B data, insured a marked increase in the accuracy of the specific supplies consumed data, since both the census item 17B data and the MA-131 data are tabulated on an "unweighted" basis.

The following industries are those for which data were obtained in the 1977 Census of Mineral Industries Supplemental Inquiry: MA-131, Consumption of Materials, Parts, Containers, and Supplies During 1977, and are shown in table 2b of this chapter:

1011	Iron ores
1021	Copper ores
1211	Bituminous coal
1311	Crude petroleum and natural gas
1381	Drilling oil and gas wells
1389	Oil and gas field services, n.e.c.

Table 2a. **Cost of Supplies, Minerals Received for Preparation, and Purchased Machinery Installed by Mineral Industries, by Selected Industry: 1977 and 1972**

SIC code	Selected industry and year	Cost of supplies, minerals received for preparation, and purchased machinery installed, based on census of mineral industries						Supplies specified as a result of the MA-131 survey	Percent of column F reported by sampled establishments in MA-131 survey (G/F)	Cost of supplies specified by kind including code 970099 in census of mineral industries (E+F)	Cost of supplies used as a percent of column F		
		Total	Supplies not specified by kind	Minerals received for preparation	Purchased machinery installed	Supplies specified by kind	All other supplies used (code 970099)				Specified by kind in census of mineral industries (E/I)	Estimates as specified in MA-131 survey (G/I)	Remaining unspecified supplies (100-(J+K))
		A	B	C	D	E	F	G	H	I	J	K	L
	1977 sampled industries...1977..	17,320	870	[1]2,116	6,460	2,737	[1]5,137	2,962	58	[1]7,874	35	38	27
	1972..	5,737	311	[2]777	1,653	858	[2]2,138	(NA)	(NA)	[2]2,996	(NA)	(NA)	(NA)
1011	Iron ores.....1977..	735	4	([3])	322	59	[3]350	155	44	[3]409	15	38	47
	1972..	323	3	([3])	41	58	[3]221	(D)	(NA)	[3]279	(D)	(D)	(D)
1021	Copper ores.....1977..	764	1	([3])	216	114	[3]433	242	56	[3]547	21	44	35
	1972..	637	4	220	147	52	214	165	77	266	20	68	12
1211	Bituminous coal.....1977..	6,653	320	2,116	2,447	534	1,236	603	49	1,770	30	34	36
	1972..	1,996	71	557	549	226	593	374	63	819	30	56	14
1311	Crude petroleum and natural gas...1977..	6,253	243	(X)	1,992	1,826	2,192	1,379	63	4,018	45	34	21
	1972..	1,941	106	-	604	460	771	617	80	1,231	37	56	7
1381	Drilling oil and gas wells.....1977..	1,728	140	(X)	1,017	175	396	183	46	571	31	32	37
	1972..	471	58	(X)	201	48	164	64	39	212	23	69	8
1389	Oil and gas field services, n.e.c...1977..	1,187	162	(X)	466	29	530	400	75	559	5	72	23
	1972..	369	69	(X)	111	14	175	91	52	189	7	87	6

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (NA) Not available. (X) Not applicable.

[1]Data for "minerals received for preparation" are included with data for "all other supplies used," census code 970099, for industries 1011 and 1021.
[2]Data for "minerals received for preparation" are included with data for "all other supplies used," census code 970099, for industry 1011.
[3]Data for "minerals received for preparation" are included with data for "all other supplies used," census code 970099.

Table 2b. Supplies Consumed, by Kind, for Selected Mineral Industries: 1977 and 1972

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 Code	Industry and supplies consumed	Delivered cost (million dollars) 1977	1972
	INDUSTRY 1011, IRON ORES		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	735	323
	Minerals received for preparation	(Z)	(Z)
	Purchased machinery installed (census code 353011)	322	41
	Specified by kind	60	58
	Not specified by kind (census code 974000)	4	3
	All other supplies (census code 970099)	[2]350	[2]221
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	672	262
	Supplies and purchased machinery installed requested on report form:		
14500	Bentonite and other clay nonmetallic minerals	17	11
28011	Industrial chemicals (chemical reagents, calcium chloride, fatty acids, etc.)	10	4
29000	Lubricating oils and greases (including hydraulic oils)	5	3
30110	Tires and inner tubes	17	10
32040	Refractories (clay and nonclay)	(Z)	(Z)
33090	Steel castings, steel forgings (including grinding rods and ball), and metallic grinding media	24	33
33500	Nonferrous metal mill shapes and forms	2	(Z)
35302	Purchased machinery installed, including mobile loading and transportation equipment	210	
35303	Parts and attachments (except those listed elsewhere) for construction, mining, and conveying equipment; and for mineral preparation machinery and equipment	67	41
35331	Drill bits and reamers	8	4
	Other important supplies not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
3321-	Gray iron foundry products, n.s.k.[3]	(2-5)	(NA)
35---	Machinery, except electrical, n.s.k.[3]	11	(20-50)
90007	Maintenance on machinery	(2-5)	(5-10)
99999	All other supplies and machinery not specified by kind[4]	291	(NA)
	INDUSTRY 1021, COPPER ORES		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	764	637
	Minerals received for preparation	(2)	220
	Purchased machinery installed (census code 353011)	216	147
	Specified by kind	114	52
	Not specified by kind (census code 974000)	1	4
	All other supplies (census code 970099)	[2]433	214
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	649	361
	Supplies and purchased machinery installed requested on report form:		
28198	Chemical reagents	26	24
30110	Tires and tubes	28	21
32740	Lime (including quicklime and hydrated lime) and dead-burned dolomite	13	8
33090	Steel castings, steel forgings (including grinding rods and balls), and metallic grinding media	31	31
33500	Nonferrous metal mill shapes and forms	(D)	8
35302	Purchased machinery installed, including mobile loading and transportation equipment	70	
35303	Parts and attachments (except those listed elsewhere) for construction, mining, and conveying equipment; and for mineral preparation machinery and equipment	48	147
35331	Drill bits and reamers	10	3
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
28---	Chemicals and allied products, n.e.c.[3]	14	(NA)
29---	Petroleum products, n.e.c.[3]	11	3
32---	Stone, clay, glass, and concrete products, n.e.c.[3]	(5-10)	(NA)
33---	Primary metals, n.e.c.[3]	(2-5)	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[3]	(5-10)	(NA)
35---	Machinery, except electrical, n.e.c.[3]	(2-5)	(NA)
353--	Construction, mining, and materials handling machinery and equipment, n.e.c.[3]	(10-20)	(NA)
90001	Metal scrap	(5-10)	(20-50)
90008	Operating supplies	(10-20)	(NA)
99999	All other supplies and machinery not specified by kind[4]	361	(NA)

See footnotes at end of table.

Table 2b. **Supplies Consumed, by Kind, for Selected Mineral Industries: 1977 and 1972**—Con.

(Data shown parenthetically are ranges expressed in millions of dollars)

1977 Code	Industry and supplies consumed	Delivered cost (million dollars) 1977	1972
	INDUSTRY 1211, BITUMINOUS COAL AND LIGNITE		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	6,653	1,996
	Minerals received for preparation	2,116	557
	Purchased machinery installed (census code 353011)	2,447	549
	Specified by kind	534	226
	Not specified by kind (census code 974000)	320	71
	All other supplies (census code 970099)	1,235	593
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	3,682	1,142
	Supplies and purchased machinery installed requested on report form:		
22110	Filter and brattice cloth	8	12
29000	Lubricating oils and greases (including hydraulic oils)	35	31
30110	Tires and inner tubes	26	21
30600	Rubber and plastic products (hose, conveyor belting, etc.) (except tires, tubes, and gaskets)	24	22
32701	Concrete products	7	10
32951	Nonmetallic mineral products (rock dust, other prepared nonmetallic minerals and earths, etc.)	19	25
33570	Nonferrous metal wire (including trolley wire)	15	15
34901	Wire rope, cable, springs, and other fabricated wire products	20	19
35302	Purchased machinery installed, including mobile loading and transportation equipment	564	
35303	Parts and attachments (except those listed elsewhere) for construction, mining, and conveying equipment; and for mineral preparation machinery and equipment	173	549
35331	Drill bits and reamers	31	28
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
28---	Chemicals and allied products, n.e.c.[3]	9	(NA)
29---	Petroleum products, n.e.c.[3]	14	(NA)
33---	Primary metal products, n.e.c.[3]	2	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[3]	4	
3452-	Bolts, nuts, screws, rivets, and washers, n.e.c.[3]	14	2
35---	Machinery, except electrical, n.e.c.[3]	8	1
353--	Construction, mining, and materials handling machinery and equipment, n.e.c.[3]	40	(NA)
36---	Electrical and electronic machinery, equipment, and supplies, n.e.c.[3]	3	
362--	Electrical industrial apparatus, n.e.c.[3]	13	2
38---	Measuring, analyzing, and controling instruments; photographic, medical, and optical goods; watches and clocks, n.e.c.[3]	2	1
90007	Maintenance on machinery	53	[4]5
90008	Operating supplies	15	(NA)
99999	All other supplies and machinery not specified by kind[4]	2,583	(NA)
	INDUSTRY 1311, CRUDE PETROLEUM AND NATURAL GAS		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	6,253	1,941
	Minerals received for preparation	-	-
	Purchased machinery installed (census code 353011)	1,992	604
	Specified by kind	1,826	460
	Not specified by kind (census code 974000)	243	106
	All other supplies (census code 970099)	2,192	771
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	4,184	1,375
	Supplies and purchased machinery installed requested on report form:		
28011	Industrial chemicals (except drilling fluids)	87	71
28991	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers)	342	164
29000	Lubricating oils and grease (including hydraulic oils)	33	19
32410	Cement	167	87
34902	Valves and pipe fittings	143	84
35331	Drill bits and reamers	99	42
35302	Purchased machinery installed, including equipment installed at the operation as well as mobile equipment. (Also includes such equipment as exploration and well survey machinery, drilling rigs, derricks, flow tanks, oil and gas separators, pumping equipment, Christmas trees, gauges, gas traps, control equipment, chokes, and trucks and cars for use on lease.)	662	
35303	Parts and attachments for renewals and repairs	91	604
49410	Water purchased	42	24
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
138--	Oil and gas field services, n.e.c.[3]	175	(NA)
28---	Chemicals and allied products, n.e.c.[3]	(20-50)	(NA)
2911-	Petroleum refinery products, n.e.c.[3]	(5-10)	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[3]	(2-5)	(NA)
353--	Construction, mining, and materials handling machinery and equipment, n.e.c.[3]	43	(NA)
3546-	Power driven hand tools, n.e.c.[3]	(5-10)	(NA)
90007	Maintenance on machinery	8	(NA)
90008	Operating supplies	26	(NA)
99999	All other supplies and machinery not specified by kind[4]	2,212	(NA)

See footnotes at end of table.

Table 2b. **Supplies Consumed, by Kind, for Selected Mineral Industries: 1977 and 1972**—Con.

(Data shown parenthelically are ranges expressed in millions of dollars)

1977 Code	Industry and supplies consumed	Delivered cost (million dollars) 1977	1972
	INDUSTRY 1381, DRILLING OIL AND GAS WELLS		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	1,728	471
	Minerals received preparation	-	(NA)
	Purchased machinery installed (census code 353011)	1,017	201
	Specified by kind	684	48
	Not specified by kind (census code 974000)	13	58
	All other supplies (census code 970099)	396	164
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	1,413	365
	Supplies and purchased machinery installed requested on report form:		
28011	Industrial chemicals (except drilling fluids)	3	2
28991	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers)	16	17
29000	Lubricating oils and grease (including hydraulic oils)	12	10
32410	Cement	5	7
34902	Valves and pipe fittings	9	7
35331	Drills bits and reamers	45	40
35302	Purchased machinery installed, including installed at the operation as well as mobile equipment. (Also includes such equipment as exploration and well survey machinery, drilling rigs, derricks, flow tanks, oil and gas separators, pumping equipment, Christmas trees, gauges, gas traps, control equipment, chokes, and trucks and cars for use on lease.)	238	201
35303	Parts and attachments for renewals and repairs	51	
49410	Water purchased	5	7
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
138--	Oil and gas field services, n.e.c.[3]	12	(NA)
353--	Construction, mining, and materials handling machinery and equipment, n.e.c.[3]	7	(NA)
90007	Maintenance on machinery	9	(NA)
99999	All other supplies and machinery not specified by kind[4]	1,001	(NA)
	INDUSTRY 1389, OIL AND GAS FIELD SERVICES, N.E.C.		
	Census of Mineral Industries		
	Selected supplies, minerals received for preparation, and purchased machinery installed:[1]	1,187	369
	Minerals received for preparation	-	(NA)
	Purchased machinery installed (census code 353011)	466	111
	Specified by kind	28	14
	Not specified by kind (census code 974000)	162	69
	All other supplies (census code 970099)	530	175
	MA-131 Survey		
	All other supplies (same as census code 970099 above) and purchased machinery installed (same as census code 353011 above)	996	286
	Supplies and purchased machinery installed requested on report form:		
28011	Industrial chemicals (except drilling fluids)	(50-100)	33
28991	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers	(50-100)	5
29000	Lubricating oils and grease (including hydraulic oils)	6	6
32410	Cement	95	45
34902	Valves and pipe fittings	2	3
35331	Drill bits and reamers	3	6
35302	Purchased machinery installed, including equipment installed at the operation as well as mobile, equipment. (Also includes such equipment as exploration and well survey machinery, drilling rigs, derricks, flow tanks, oil and gas separators, pumping equipment, Christmas trees, gauges, gas traps, control equipment, chokes, and trucks and cars for use on lease.)	191	111
35303	Parts and attachments for renewals and repairs	11	
49410	Water purchased	(Z)	1
	Other important materials not specifically requested on report form, but identified by respondents (total costs of $2 million or more):		
1389-	Oil and gas field services, n.e.c.[3]	3	(NA)
144--	Sand and gravel, n.e.c.[3]	(2-5)	(2-5)
242--	Sawmill and planing mill products, n.e.c.[3]	3	(NA)
2819-	Industrial inorganic chemicals, n.e.c.[3]	(5-10)	(NA)
284--	Soap, detergents, and cleaning preparations, perfumes, cosmetics, and other toilet preparations, n.e.c.[3]	(2-5)	(NA)
2899-	Chemicals and chemical preparations, n.e.c.[3]	(5-10)	(NA)
32---	Stone, clay, glass, and concrete products, n.e.c.[3]	2	(NA)
34---	Fabricated metal products, except machinery and transportation equipment, n.e.c.[3]	2	(NA)
35---	Machinery, except electrical, n.e.c.[3]	4	(NA)
90007	Maintenance on machinery	6	(NA)
90008	Operating supplies	64	(NA)
99999	All other supplies and machinery not specified by kind[4]	421	(NA)

Footnotes are on next page.

Table 2b. **Supplies Consumed, by Kind, for Selected Mineral Industries: 1977 and 1972**—Con.

n.e.c. Not elsewhere classified. (Z) Represents supplies data requested in the MA-131 survey but less than $500,000 reported.

[1]As published in table 7 of the 1977 Census of Mineral Industries industry series.

[2]Not published separately; included with census code 970099.

[3]Represents data that have been reported at a finer level of detail in the MA-131 survey, but which have been aggregated to avoid disclosing operations of individual companies. This aggregated total excludes any data published at a finer level of detail in either the census or the MA-131 survey.

[4]Includes data for those supplies codes that were specified by kind but totaled less than $2 million. Also includes data for a small number of establishments whose reports were not received at the time the MA-131 data were tabulated.

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SUMMARY OF SURVEY RESULTS

General

There were 3.3 million jobs in the U.S. in 1977 related to the exports of manufactured goods. This accounts for 3.6 percent of the total civilian employment (4.4 percent of the private sector employment). Of the 3.3 million jobs, 2 million are included in manufacturing plants and 1.3 million in nonmanufacturing activities.

Within the manufacturing sector, exports accounted for 10 percent of total manufacturing employment. This included 1.1 million jobs producing products in manufacturing plants for direct export and 900 thousand jobs in manufacturing plants and administrative offices furnishing material inputs and administrative services to the exporting plants. The 1.3 million employees in nonmanufacturing industries that supply materials and services supporting manufactured exports included, employment in trade, business, transportation, communication and utilities, agriculture, mining, and other industries. Trade industries (wholesale and retail) accounted for half of a million jobs supporting the export of manufactured products, and business services accounted for one quarter of a million jobs. (See chart 1 for the number of export-related jobs by sector to the total U.S. employment related to manufactured exports.) The data shown do not include the jobs involved in the export of nonmanufactured goods, such as farm products or minerals, or of various services sold to foreigners, such as transportation, hotels, insurance, motion pictures, or financial services.

The 3.3 million jobs were generated by $85.8 billion of manufactured products exported in 1977, or 6.3 percent of manufacturers' total shipments. The value of exports ($85.8 billion) is the f.o.b. plant value. These data were derived from the official 1977 Foreign Trade figures which showed the port value of manufactured exports was $94.8 billion. The port values were adjusted to remove estimates of freight and other transportation costs, excise taxes, and insurance (see appendix K).

State Estimates

Of the 3.3 million jobs related to the exports of manufactured products, 329 thousand were in California, which had the largest number of export-related jobs. New York was second with 234 thousand jobs. Ohio, Illinois, and Pennsylvania were next in rank with 231 thousand, 221 thousand, and 221 thousand, respectively.

Although California had the largest number of jobs related to manufactured exports in 1977, export-related jobs accounted for only 3.6 percent of the State's civilian employment. Michigan and Connecticut led in the rate of such employment with 5.3 percent of its civilian employment, each involved directly or indirectly in manufactured exports in 1977. Other States with high export employment rates were Ohio, 5.2 percent; Indiana, 5.0 percent; Pennsylvania, 4.7 percent; and Illinois, 4.5 percent. (Maps showing the importance of each State's total export-related employment, manufacturing and nonmanufacturing, (chart 2) and total export-related manufacturing employment (chart 3) are shown on the following pages.)

The proportion of private sector jobs (civilian employment less all government jobs) involved in the export of manufactured goods is shown in table 2. In Connecticut, Michigan, and Ohio, more than 6 percent of private-sector employment was related to manufactured exports. In Indiana, Illinois, Massachusetts, Pennsylvania, and South Carolina, the proportion was 5 percent or higher.

Major Industry Group Estimates

Of the 20 major industry groups classified in manufacturing, Major Group 35, Machinery, Except Electrical, had the largest number of export-related jobs with 384 thousand. Major Group 37, Transportation Equipment, ranked second with 248 thousand, followed closely by Major Group 36, Electric, Electronic Equipment, with 244 thousand.

The major industry group with the largest percentage of its employment associated with manufactured exports was, again, Major Group 35, Machinery, Except Electrical, with 18.4 percent. Others with large rates of export-related employment to total manufacturing employment were Major Group 12, Tobacco Products, with 17.8 percent; Major Group 38, Instruments and Related Products, with 17.6 percent; and Major Group 33, Primary Metal Industries with 15.4 percent.

The industry group most affected by the indirect estimates being included was Major Group 33, Primary Metal Industries. Employment directly related to exports accounted for 28 thousand employees. However, the employment supporting manufactured exports was five times higher (145 thousand) resulting in a total of 173 thousand export-related employees for the group.

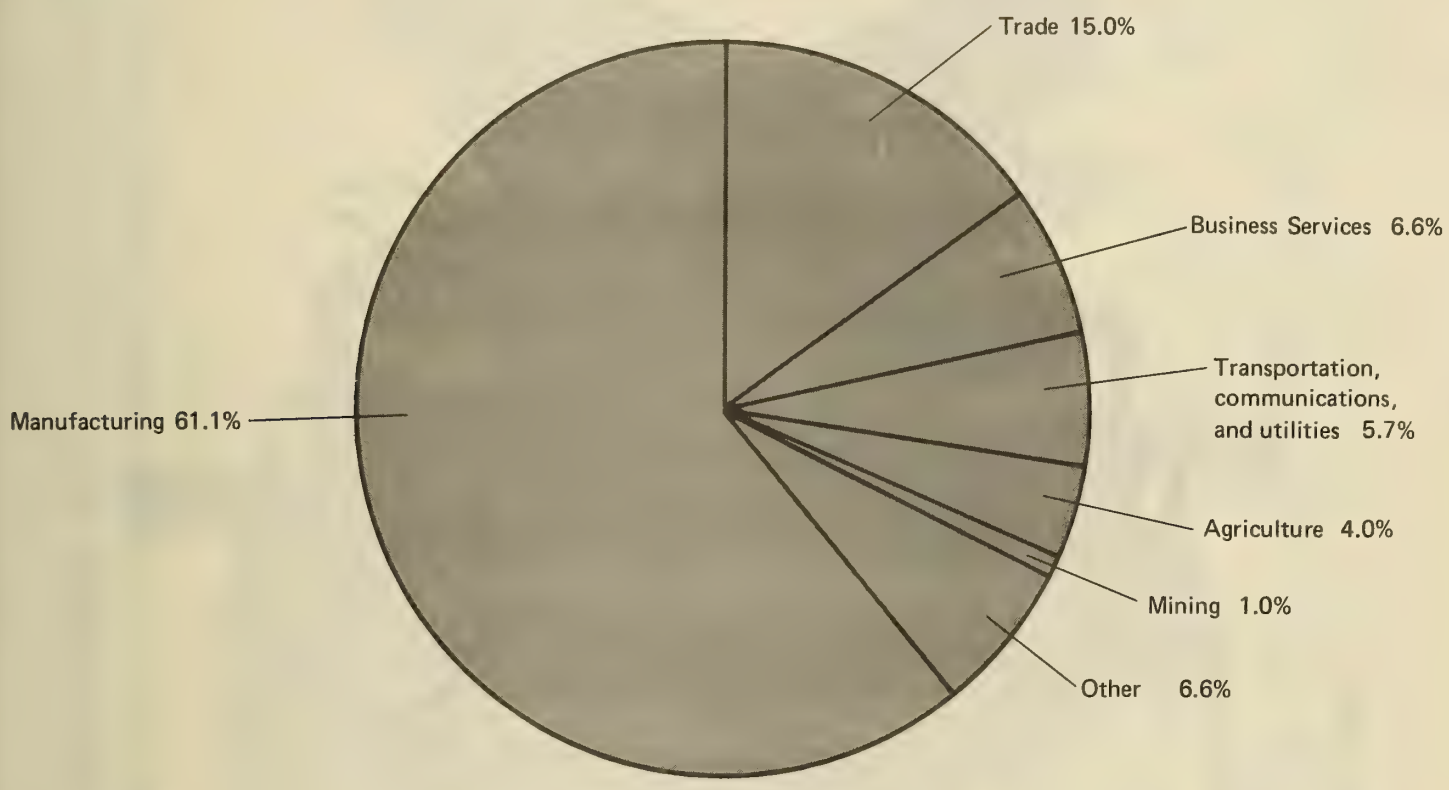
Relative Importance of Export Trade

The direct export data shown in this report represent actual exports as reported or estimated by manufacturers. However, these estimates tend to underestimate the importance of export

CHART 1.

Employment Related to Manufactured Exports by Major Economic Sector: 1977

A. Contribution of each sector



B. Number of export-related jobs by sector

Sector	Number (1,000)	Sector	Number (1,000)
Manufacturing	1,990	Agriculture	129
Trade	489	Mining	34
Business services	215	Other	216
Transportation, communications, and utilities	185	Total	3,258

CHART 2.

Employment Related to Manufactured Exports for States: 1977

(Shading indicates export-related employment as a percentage of civilian employment. Numbers are export-related employment in thousands)

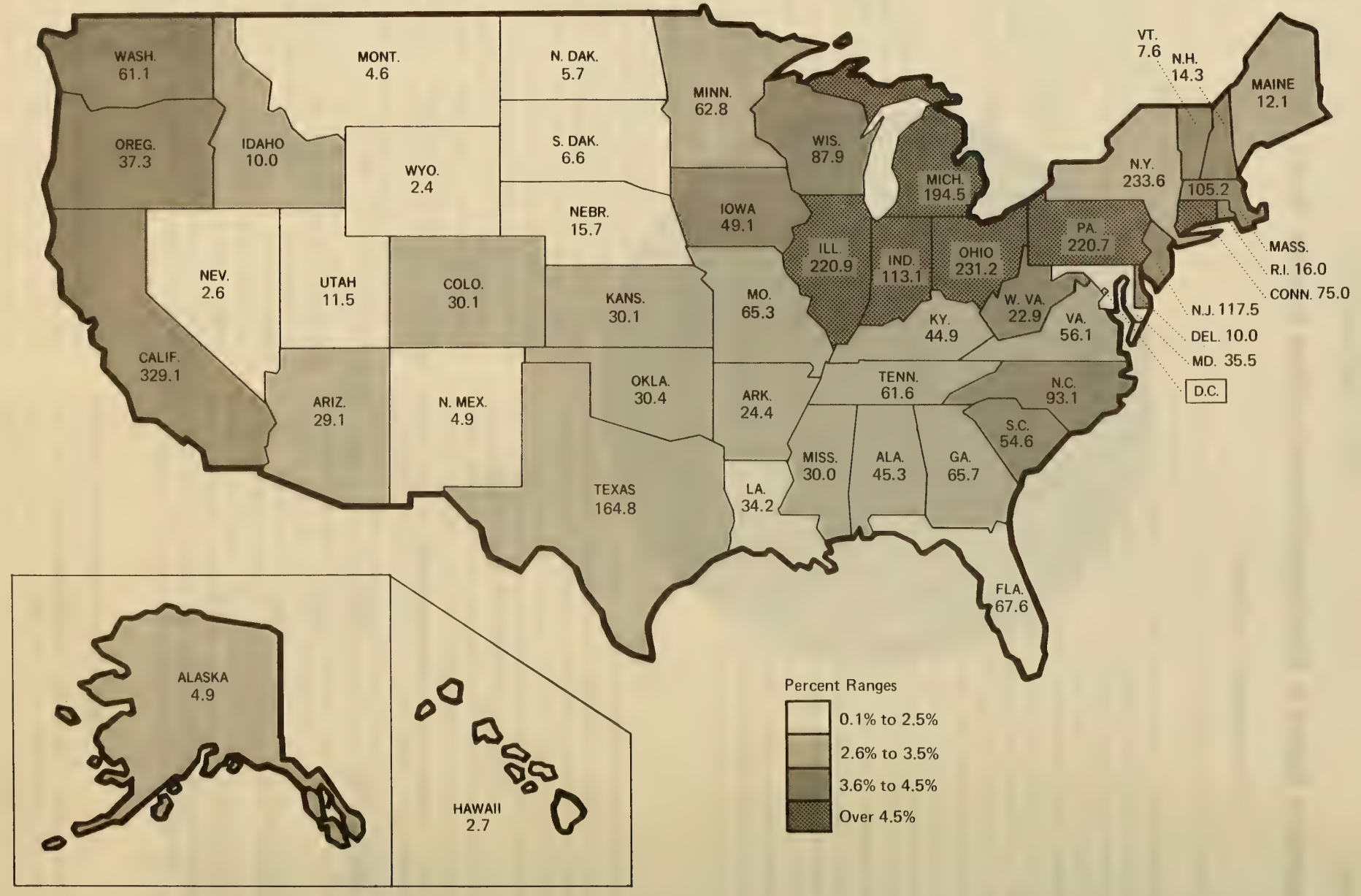


CHART 3.

Manufacturing Employment Related to Manufactured Exports for States: 1977

(Shading indicates export-related employment as a percentage of manufacturing employment. Numbers are export-related employment in thousands)

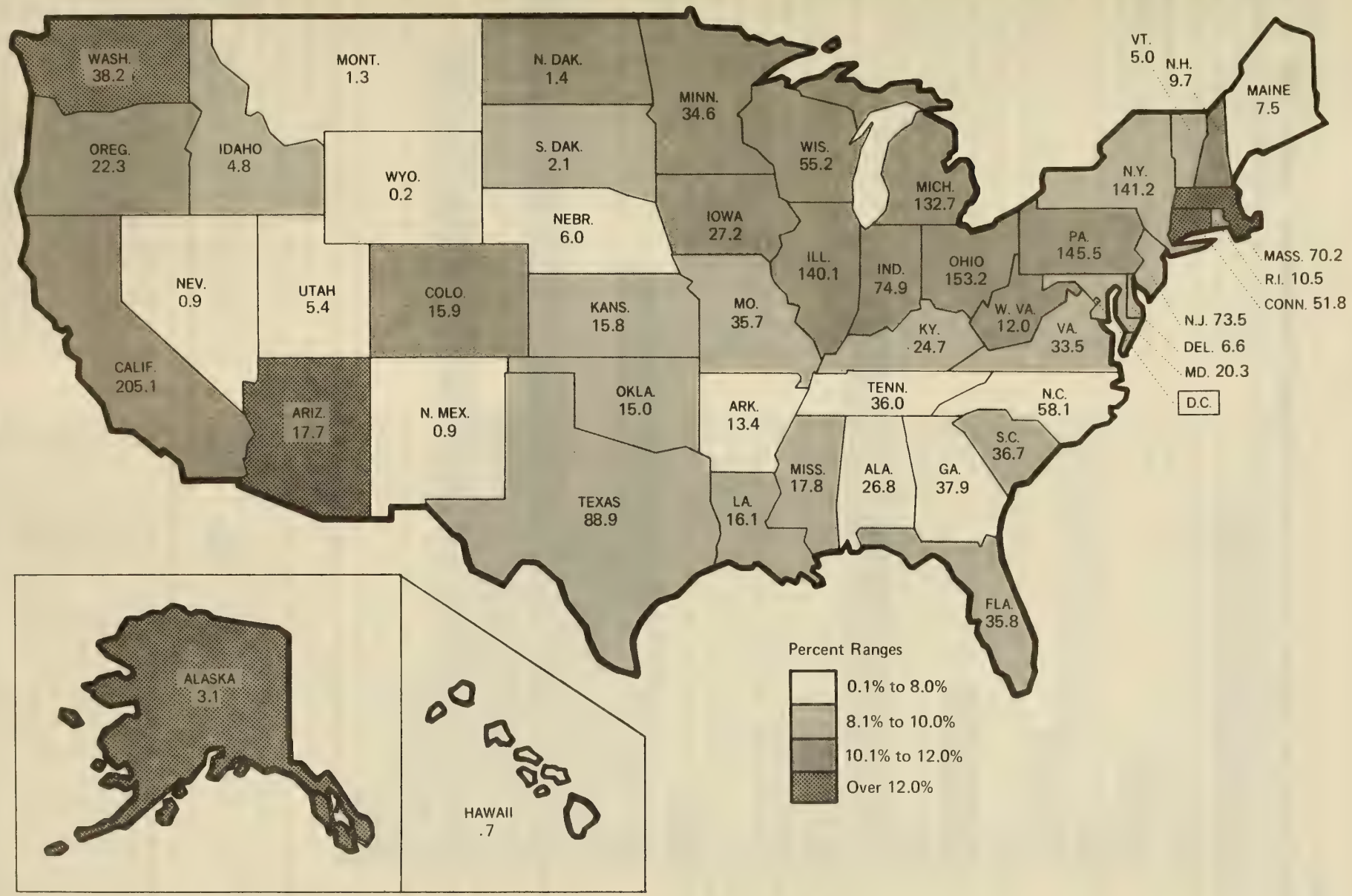
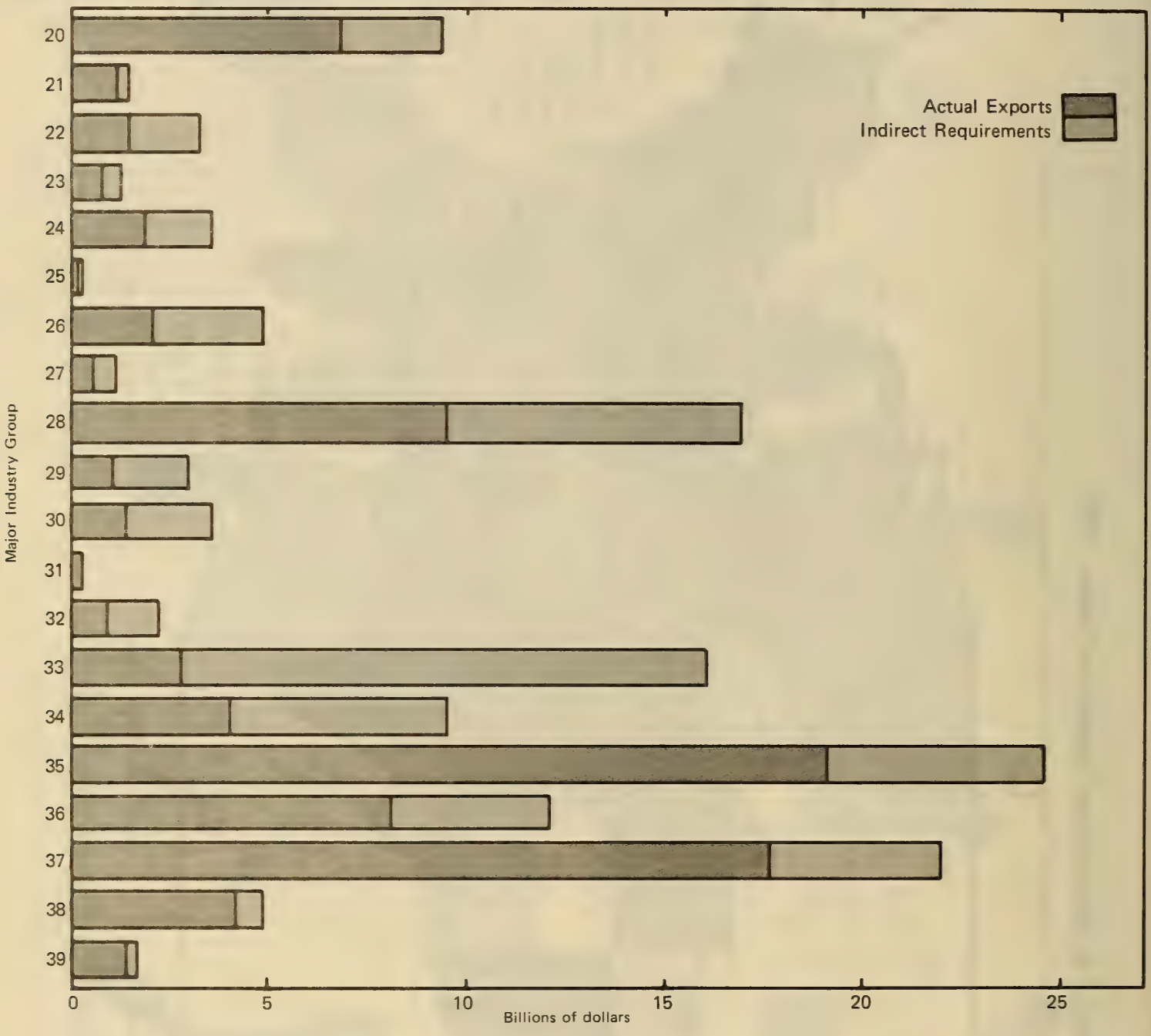


CHART 4.

Direct Exports and Indirect Requirements to Support Manufactured Exports: 1977



Major industry group	Direct exports	Indirect requirements	Total export related requirements
	Billions of dollars		
20 Food and kindred products	6.9	2.6	9.4
21 Tobacco products	1.2	0.3	1.5
22 Textile mill products	1.5	1.8	3.3
23 Apparel, other textile products	0.8	0.5	1.3
24 Lumber and wood products	1.9	1.7	3.6
25 Furniture and fixtures	0.2	0.1	0.3
26 Paper and allied products	2.1	2.8	4.9
27 Printing and publishing	0.6	0.5	1.2
28 Chemicals and allied products	9.5	7.5	17.0
29 Petroleum and coal products	1.1	1.9	3.0
30 Rubber, misc. plastic products	1.4	2.2	3.6
31 Leather and leather products	0.3	(Z)	0.3
32 Stone, clay, glass products	1.0	1.3	2.3
33 Primary metal industries	2.8	13.3	16.1
34 Fabricated metal products	4.1	5.4	9.5
35 Machinery, except electrical	19.1	5.5	24.6
36 Electric, electronic equipment	8.1	4.0	12.1
37 Transportation equipment	17.7	4.3	22.0
38 Instruments, related products	4.2	0.7	4.9
39 Misc. manufacturing industries	1.4	0.2	1.7

trade for the domestic economy when compared to the total value of shipments of all manufacturers. The direct export figures exclude the output of the supplying establishments that furnish parts or materials to the manufacturer producing the exported product. For example, while the automobile manufacturers reported their exports of cars, the establishments supplying the auto industry with steel, windshields, transmissions, etc., would not report these products as exports. Therefore, for these supplying industries, exports were more important in the domestic economy than indicated by the direct export data.

In order to put the importance of exports into proper perspective relative to their impact on all manufacturing industries, the value of the exports as reported by the industry performing the final stages of fabrication of the product was analyzed using the input/output information compiled by the Bureau of Economic Analysis (BEA). (In addition to making the computer runs, BEA also provided valuable technical assistance at various stages of the project. A comprehensive explanation of the BEA input-output model appears in the Input-Output Structure of the U.S. Economy, 1972 by Philip M. Ritz, Survey of Current Business, February 1979.)

The input-output analysis showed that the value of direct exports ($85.8 billion) required an additional $56.6 billion of supporting shipments from other manufacturing establishments. (A breakdown of the total $142.4 billion by major industry group is shown in chart 4.) As already noted, the impact on employment levels indicates an increase from the 1.1 million jobs estimated to be directly export-related, to a total of 2.0 million jobs directly and indirectly related to exports in manufacturing industries.

In addition to including employment in manufacturing establishments that supply materials and parts for the production of manufactured exports, the indirect estimates in this report include employees in nonmanufacturing; such as farms and mines that provide materials inputs to manufacturing, plus various types of services required of nonmanufacturing industries in producing the manufactured goods to be exported; such as electricity, repair services, business services, transportation, utilities, etc.

Also taken into account, as a result of the input-output analysis, are employees associated with inputs to the businesses supplying these goods and services to the final manufacturers of the exported goods, and so on. Thus, the indirect estimates include the employment associated with steel and electricity entering the production of an automobile for export, the coal used by the steel mill and electric utility, the transportation of the coal, the fuel and repair services used in transportation, the electricity required by the repair shops, etc. The data also include estimates of employment associated with transporting the manufactured goods from "plant to port" and the employment of exporting establishments that purchase and resell the goods to foreigners or arrange their sale abroad. It should be emphasized again that the employment estimates relate only to the export of manufactured goods and exclude employment related to the export of other goods and services. They do not, therefore, measure the full employment effect of all U.S. exports.

The indirect employment requirements could only be developed by an analytical approach, which is not typical of other census reports. Although a number of economic assumptions believed to be reasonable were used, the estimates are not considered to be as precise as customary census statistics. The various assumptions and further comments on the quality of the estimates are included in the detailed discussion that follows.

DETAILED DESCRIPTION OF SURVEY METHODS AND ESTIMATING PROCEDURES

The sections that follow describe the survey and other sources by which the estimates of the employment effect of manufactured exports on the whole economy and by State were derived. A description of the survey appears in appendix B. The methods used to derive the direct export data appear in the section Description of Survey. This is followed by a discussion of the input-output (I-O) calculations which provided dollar value estimates of the purchased goods and services required by each I-O industry to support the production of the manufactured goods exported. Next, the method by which these values, generally referred to as the indirect requirements, were converted to jobs is described. Then, the method of allocating jobs to States is discussed. These various steps are explained by showing samples of the actual calculations taken from worksheets. The text concludes with a discussion of the problems and shortcomings of the estimates.

Description of Survey

Directly Reported Exports—Manufacturers reporting on the more detailed ASM form in the census of manufactures were requested to report the value of products shipped for export, include direct exports and products shipped to exporters or others for export, and exclude products shipped for further manufacture, assembly, or fabrication in the United States. Such directly reported exports understate the true value of all exports because many respondents do not know the final destination of the products produced in their plants. This included cases where the export was actually made by an independent exporting firm, or where the actual shipments of the products are made from company-operated warehouses or other distribution points which did not allocate the export sales back to individual establishments. In addition, establishments exporting less than $25 thousand of exports were not asked to report their actual export sales.

Estimated Value of Exports—In order to provide a more complete measure of the overall importance of exports industrially and geographically, the directly reported values have been inflated to include estimates for the underreporting of exports, including exports of manufactured products by wholesalers, exporters, etc. Estimates for exports valued at the port of exportation were derived from official export data compiled by the Foreign Trade Division of the Bureau of the Census based on shippers' export declarations. These data are repre-

sented in column A of appendix K. The adjustments in column B are made to compensate for differences between the classification of products in the foreign trade statistics and the domestic Standard Industrial Classification system. Column C of appendix K shows the adjusted totals. These adjusted port values were reduced to f.o.b. plant values through the use of adjustment factors applied at the 3-digit SIC level. The implicit factor by 2-digit group is shown in column D. These adjustments account for such items as freight and transportation costs and trade margin, and were developed by the Bureau of Economic Analysis (BEA), Department of Commerce. The resulting estimated totals appear in column E. The total value of 85.8 billion includes the directly reported total (67.4 billion) of column F, as well as estimates of exports not reported in this survey.

The differences between these national estimates of export shipments and reported export shipments of manufacturing establishments (column F) were then allocated to geographic areas (see Allocation of Unreported Value of Exports), and added to the reported data to develop estimates of total f.o.b. value of exports of manufacturing establishments by State.

It should be noted that the official export data as compiled from the shippers' export declarations represent exports of commodities that have been regrouped into 2- and 3-digit SIC categories. The origin of export data were compiled on an industry basis. Each respondent in the survey reported a single value of exports for each plant. This export value was classified according to the primary manufacturing activity of the plant, although some products classified in other industries were probably also exported. While this may have affected the SIC classification of the exports for a specific area, it would probably not have an appreciable impact on any of the area totals. However, classification differences could result in apparent inconsistencies where the reported exports exceed the official export value.

Allocation of Unreported Values of Exports—Differences between the directly reported exports and the national export estimates f.o.b. plant have been allocated at 3-digit SIC levels to States. The estimating procedure assumes that export shipments not reported by manufacturing establishments are directly related to the geographic distribution of the total employment of the industry and the export shipments reported for specific States. For a more detailed description of this estimating technique, see Appendix J, Technical Notes. There are no measures available regarding the possible range of error associated with this estimating technique. To the extent that directly reported exports are a large proportion of the total exports, the geographic distribution of the total will be good. However, where the directly reported exports are a relatively small portion of total exports, then the geographic distribution may be subject to considerable error if the basic assumptions are not valid for a specific industry.

Estimating Direct Export-Related Employment

Employment related to direct exports was not reported in the ASM. However, the total value of shipments, as well as total employment, is reported for each establishment. Employment related to direct exports was then calculated for each establishment by multiplying the total employment by the ratio of export shipments to total shipments. These calculated export employment figures were then aggregated by industry and area to produce the directly reported export employment estimates that appear in the report. Since this estimate has the same weaknesses in underreporting as the export-shipment data, it was necessary to estimate total export employment by a procedure similar to the one employed in deriving export shipments. (See Appendix J, Technical Notes.)

Indirect Requirements for Manufactured Exports

The previous section and the related appendix K, describe how estimates of the f.o.b. plant value of exported manufactured goods were made, were converted to number of employees, and both the value and employment were allocated by State. This section describes how the indirect inputs to these exports were estimated and allocated by State. Also included is a description of how estimates of employment in the United States required to move the manufactured products from factory to port and of export wholesalers were made.

The Meaning of Indirect Requirements—Indirect requirements refer to all of the inputs acquired by the manufacturing establishments to produce the product being exported and the requirements of these suppliers, and so on. As an example, the export value of engines and turbines in 1977 amounted to $2.0 billion as goods left the manufacturing plant. To produce the $2.0 billion of engines and turbines, it was necessary for these plants to purchase steel and additional metals from other plants, various other materials, containers for shipping, electric energy from utility firms, oil and lubricants for maintenance, a variety of business and professional services, and so forth.

Producers of the various inputs and services, which are sold to engine and turbine producers, must also purchase inputs and various services from farms, mines, factories, utilities, transportation, and so forth. These secondary suppliers must, in turn, purchase inputs from their suppliers; and so on.

This lengthy chain of transactions, leading to production of engines and turbines, are referred to in aggregate as the indirect requirements. Estimates of these indirect requirements for engines and turbines (or for other final products) may be made by application of BEA's input-ouput model to the procduts for which a solution is sought.

Estimating Indirect Requirements for Manufactured Exports—The 1972 input-output matrix (I-O) was used to estimate the indirect requirements for the products of U.S. manufacturing establishments which were exported. The first step in this procedure was to reorganize the value of exports at the factory to the industrial coding structure of the I-O. The 85 industry level (51 manufacturing industries) of the I-O was used for this purpose. This was essentially an aggregation process of adding up the 3-digit SIC industry data on exports to the 51 I-O manufacturing industries, although in a few minor cases some 4-digit estimates of exports were required to arrive at the 51 I-O industries.

Exhibit A. Domestic Indirect Requirements for U.S. Manufactured Exports: 1977

(Values in millions)

Industry number and title	Related Census-SIC codes (1972 edition)	Domestic indirect requirements
Agriculture, forestry, and fishing		
1. Livestock and livestock products	pt. 01, pt. 02	2,375.0
2. Other agricultural products	pt. 01, pt. 02	2,050.0
3. Forestry and fishery products	081-4, 091, 097	306.8
4. Agricultural, forestry, and fishery services	0254, 07 (excl. 074), 085, 092	212.2
Mining		
5. Iron and ferroalloy ores mining	101, 106	334.3
6. Nonferrous metal ores mining	102-5, pt. 108, 109	474.3
7. Coal mining	1111, pt. 1112, 1211, pt. 1212	646.9
8. Crude petroleum and natural gas	131, 132, pt. 138	1,282.4
9. Stone and clay mining and quarrying	141-5, pt. 148, 149	175.5
10. Chemical and fertilizer mineral mining	147	132.6
Construction		
11. New construction	pt. 15-17, pt. 108, pt. 1112, pt. 1212, pt. 148	(NA)
12. Maintenance and repair construction	pt. 15-17, pt. 138	1,287.7
Manufacturing		
13. Ordnance and accessories	3482-4, 3489, 3761, 3795	54.0
14. Food and kindred products	20	2,570.4
15. Tobacco manufactures	21	358.7
16. Broad and narrow fabrics, yarn and thread mills	221-4, 226, 228	1,373.9
17. Miscellaneous textile goods and floor coverings	227, 229	326.3
18. Apparel	225, 231-8, 39996	301.3
19. Miscellaneous fabricated textile products	239	270.8
20. Lumber and wood products, except containers	2452, 241-3, 2448, 249	1,647.2
21. Wood containers	2441, 2449	67.5
22. Household furniture	251	65.0
23. Other furniture and fixtures	252-4, 259	57.9
24. Paper and allied products, except containers and boxes	261-4, 266	1,916.6
25. Paperboard containers and boxes	265	893.7
26. Printing and publishing	27	507.3
27. Chemicals and selected chemical products	281, 286-7, 289	5,447.8
28. Plastics and synthetic materials	282	1,545.9
29. Drugs, cleaning, and toilet preparations	283-4	225.2
30. Paints and allied products	285	288.7
31. Petroleum refining and related industries	29	1,886.2
32. Rubber and miscellaneous plastics products	30	2,163.9
33. Leather tanning and finishing	311	50.4
34. Footwear and other leather products	313-7, 319	16.5
35. Glass and glass products	321-3	626.5
36. Stone and clay products	324-9	668.7
37. Primary iron and steel manufacturing	331-2, 339, 3462	8,585.6
38. Primary nonferrous metals manufacturing	333-6, 3463	5,457.0
39. Metal containers	341	506.7
40. Heating, plumbing, and fabricated structural metal products	343-4	335.2
41. Screw machine products and stampings	345,3465-6, 3469	2,255.6
42. Other fabricated metal products	342, 347, 349	1,812.6
43. Engines and turbines	351	740.6
44. Farm and garden machinery	352	103.4
45. Construction and mining machinery	3531-3	382.3
46. Materials handling machinery and equipment	3534-7	57.7
47. Metalworking machinery and equipment	354	771.8
Manufacturing--Con.		
48. Special industry machinery and equipment	355	246.7
49. General industrial machinery and equipment	356	1,295.0
50. Miscellaneous machinery, except electrical	359	1,031.9
51. Office, computing, and accounting machines	357	572.1
52. Service industry machines	358	249.9
53. Electrical transmission and distribution equipment and industrial apparatus	361-2, 3825	1,208.3
54. Household appliances	363	34.2
55. Electric lighting and wiring equipment	364	326.1
56. Radio, TV, and communication equipment	365-6	577.4
57. Electronic components and accessories	367	1,616.1
58. Miscellaneous electrical machinery, equipment, and supplies	369	396.8
59. Motor vehicles and equipment	371	2,714.3
60. Aircraft and parts	3764, 3769, 372	1,475.0
61. Other transportation equipment	373-5, 3792, 3799, 2451	103.1
62. Professional, scientific, and controlling instruments and supplies	381, 3822-4, 3829; 384, 387	344.9
63. Optical, ophthalmic, and photographic equipment and supplies	383, 385-6	158.3
64. Miscellaneous manufacturing	39	233.2
Transportation, communication, and utilities		
65. Transportation and warehousing	40-2, 44-7	4,095.0
66. Communications, except radio and TV	481-2, 489	644.9
67. Radio and TV broadcasting	483	0.3
68. Electric, gas, water, and sanitary services	49	3,050.6
Wholesale and retail trade		
69. Wholesale and retail trade	50-57, 59, 7396, 8042	5,011.8
Finance, insurance, and real estate		
70. Finance and insurance	60-64, 67	1,451.8
71. Real estate and rental	65-6, pt. 1531	2,648.5
Services		
72. Hotels and lodging, personal and repair services (except auto)	70-72, 762-4, pt. 7699	1,023.9
73. Business services	73 (excl. 7396), 7692, 7694, pt. 7699	4,808.8
74. Eating and drinking places	58	1,179.1
75. Automobile repair and services	75	635.6
76. Amusements	78-9	129.3
77. Health, educational, and social services and nonprofit organizations	074, 80 (excl. 8042), 82-84, 86, 8922	295.2
Government enterprises		
78. Federal Government enterprises	(NA)	327.1
79. State and local government enterprises		54.3
Dummy and special industries		
80. Noncomparable imports	(NA)	(NA)
81. Scrap, used, and secondhand goods	(NA)	(NA)
82. Government industry	(NA)	(NA)
83. Rest of the world industry	(NA)	(NA)
84. Household industry	(NA)	(NA)
85. Inventory valuation adjustment	(NA)	(NA)

Source: Supplied by BEA computer calculations using input-output model.

(NA) Not available.

These 51 values, referred to in I-O terminology as a bill of goods, were run by BEA against the inverse I-O matrix to derive the aggregate indirect requirements. A dual run was necessary to remove competitive imports in arriving at domestic indirect requirements. To explain, suppose that engine and turbines manufacturers purchased $200 million of steel as inputs, and that when the inputs of steel for all manufacturing industries were accumulated there was a requirement for $10 billion worth of steel products. Some of this was imported so it was necessary to remove imports of steel and the iron ore, coal, and other materials required to make the steel, the indirect requirements for mining the iron ore, the transportation to move the ore to the steel mill, and so on. The resulting estimates are the domestic indirect requirements after imports are removed.

The BEA I-O work related to 1972 and the bill of goods was in 1977 values. Before entering the computer process, BEA staff deflated the bill of goods to 1972 prices and the computer output of indirect requirements was then reflated back to 1977 prices. Similarly, the I-O import proportions of total supply for each I-O manufacturing industry related to 1972, and it was necessary to update these import proportions to 1977. The latter step was based upon 1977 Census of Manufactures data and the 1977 census import figures.

The indirect requirements for the 85 I-O industries provided to Census by BEA appear as Exhibit A, which also includes a reconciliation of I-O and SIC codes. It should be noted that indirect requirements include the demands of an industry upon itself. Thus, the producer of a turbine may purchase components from another plant in the engine and turbine industry, or a cold rolling steel plant may purchase hot rolled sheet from another plant in primary iron and steel manufacturing.

Allocating Indirect Requirements on Manufacturing Industries by State—To describe this estimation process we are reproducing as Exhibit B, a part of the actual worksheet for I-O Industry 35, Glass and Glass Products. To simplify, only two States are shown, but the same process was applied to the other States. In lines A, B, and C, a ratio of about 7 percent is obtained for the industry, that is, after subtracting direct exports for the entire industry, about 7 percent of the supply is required to support of further exports.

On line D, the total shipments from each State in 1977 are aggregated to the I-O industry shown. On the next line, the direct exports from each State are given and line F shows the available supply for domestic uses produced in each State. The industry ratio of indirect requirements to total supply is applied to each State on line 1. This assumes that each State contributes an equal proportion of its domestic supply to the product of finished manufactured goods to be exported. For I-O Industry 35, 7 percent of the domestic supply of each State is allocated to export.

In the remaining lines of the exhibit, the values of goods are converted to employment. For each State, the value of shipments per employee is obtained from 1977 Census of Manufactures data, line H. This value is then divided into the indirect requirements to arrive at the number of employees involved in production of goods for export, line J. The total indirect employment in manufacturing for each State is obtained by summing the employment in each I-O manufacturing industry.

In each of these steps, the basic source data from the census and the import data were in more detailed coding structures and had to be reorganized to the 51 I-O manufacturing industries to compile these estimates.

Exhibit B. **Estimating Indirect Requirements by State, BEA Industry 35, Glass and Glass Products**

(Money figures in million dollars, except where noted)

Industry ratios	Estimates	
A. Indirect requirements (See exhibit A).	626.2	
B. Total value of shipments (1977 census) less direct exports	8,751.1	
C. Ratio A - B	.0716	
State calculations	**New York**	**New Jersey**
D. Value of shipments	479.0	798.7
E. Direct exports	23.3	26.2
F. Domestic supply (D - E)	455.7	772.5
G. Employment (thousands)	8.5	16.4
H. Shipments per employee (D ÷ G) (thousands)	56.4	48.7
I. Indirect exports (F x C)	32.5	55.4
J. Indirect employment (I ÷ H) (number)	576	1,137

Additional sources: Lines D, E, and G were obtained by accumulation of 3-digit data from the 1976 ASM.

Estimating Export-Related Employment for Central Administrative Offices and Auxiliaries—Large firms in manufacturing often have central administrative offices, warehouses, garages, repair shops, research centers, etc. which support or provide services to the manufacturing plants. These establishments, usually referred to as CAO's, also contribute indirectly to the production of merchandise for export. A special tabulation of the employment of CAO's by manufacturing industry by State was prepared and estimates made of the proportion of employment attributable to exports. The procedure provided an estimate of 116,900 employees as export-related.

The export-related employment estimates for CAO's were based on the ratio of the total export-related manufacturing employment at the 2-digit national level to the total manufacturing employment at the 2-digit national level (see table 4, column J). The numerator of this ratio includes the estimates for both direct and indirect export-related manufacturing employment. Each of the ratios was applied to the CAO employment, at the corresponding 2-digit level within a State and the resulting figures summed to a total for the State.

For example, assume that State X includes only two different industry groups as shown below:

CAO ratios	Industry group 25	Industry group 39
1. Total CAO employment	3,000	10,000
2. Two-digit national ratio from table 4, column J	.020	.075
3. Export-related CAO employment (1 x 2)	60	750

Thus, the total export-related employment for CAO's for State X is the sum of the two figures in line 3 above, or 810.

Indirect Requirements on Nonmanufacturing Industries—In exhibit A, the estimates of requirements on nonmanufacturing industries as inputs to manufactured goods for export obtained from the I-O computer operation are shown. These include materials inputs from farms and mines and a wide variety of services. It should be pointed out that in the BEA I-O model, estimates are made at producers' prices and the contribution of wholesale and retail trade are treated as margins paid for by the purchasers. Hence, the $5,011.8 million shown for trade is the difference between the producers' price and the purchasers' price for goods passing through trade for use by manufacturers. This is often referred to as the trade margin.

The next operation was to convert these values to estimates of employment. The first step was to estimate the compensation of employees. This was accomplished by using data on compensation as a proportion of requirements which appeared in the 1972 I-O matrix, table 3, line EC, beginning on page 57 of the February 1979 Survey of Current Business. Exhibit C is an illustration of the actual calculations for I-O Industry 65, Transportation and Warehousing.

The next source of data to be used was from the annual national income accounts. The 30 I-O industries had to be regrouped slightly to 25 nonmanufacturing industries to match the industry disaggregation of the national income accounts. Then, data on compensation and employment in the accounts were used to convert export-related compensation to employment, as shown for I-O Industry 65, Transportation, in exhibit C. The data in the exhibit come directly from worksheets. The specific data sources used are given in the exhibit.

There are further steps in the exhibit by which number of employees (line G) is converted to all persons engaged (line K) using data from the national income accounts. In some industries, especially agriculture, working proprietors and partners are a significant share of the labor force, and it was considered necessary that they also be included in these estimates. In the transportation industry, the increase to take account of working proprietors and partners was 9 percent (see line J).

Exhibit C. **Estimating Employment for Indirect Nonmanufacturing Requirements**

Nonmanufacturing ratios	Transportation
A. Domestic indirect requirements (See exhibit A)....	4,095.0
B. Compensation ratio (I-O table, Feb. 1979, Survey of Current Business).....	.40647
C. Compensation related to exports (A x B).....	1,664.5
D. Compensation, 1977 (table 6.5).....	50,674
E. Employment, 1977 (table 6.7).....	2,763
F. Compensation per employee (D ÷ E).....	18,340
G. Employment related to exports (C ÷ F).....	90,758
H. Hours worked by employees (table 6.10).....	5,266
I. Hours worked by persons engaged (table 6.11).....	5,716
J. Adjustment ratio for proprietors and partners (I ÷ H).....	1.09
K. Persons engaged (G x J).....	98,926

Notes and sources: Lines A, C, and D are in million dollars. Line E is in thousands. Lines H and I are in million hours. Table references are the July 1978, Survey of Current Business, National Income Table, Transportation Industry.

The Plant to Port Indirect Requirements—Exports of manufactured goods amounted to $95.5 billion in 1977, and it was estimated that the f.o.b. plant value of these goods amounted to $85.8 billion. The difference of $9.8 billion represents transportation costs of moving these goods, mainly to seaports, but also to airports, or to rail or truck border crossing points. In addition, there is the margin, or markup of exporters, a component of wholesale trade. BEA provided I-O data which permitted the allocation of the $9.8 billion to transportation and wholesale trade. These values were then converted to estimates of persons engaged by essentially the same procedures described above for other nonmanufacturing industries. It was estimated that 260,718 persons were engaged in these plant to port operations, with 53,234 in transportation and 207,484 in wholesale.

Allocating Nonmanufacturing Employment by State—The statistical procedures described above resulted in national estimates of persons engaged in nonmanufacturing industries induced by U.S. manufacturing exports. These are industries supplying materials to manufacturing for further processing and services and supplies of all kinds to manufacturing industries.

It remained to allocate these persons engaged estimates by State. Procedures used for this purpose were the following: For agriculture, where about 129,000 persons were estimated to be supplying food and fiber for processing to manufactured goods which were later exported, the State distribution of all agriculture workers for 1977 as reported by the U.S. Department of Agriculture, Crop Reporting board in Farm Labor, February 1978 was used. For mining, with only 34,000 persons engaged to be allocated, the State distribution of employment for 1977 reported by the Bureau of the Census in County Business Patterns, was used.

There were 282,000 persons engaged in trade (not including the plant-to-port exporters) estimated to be supporting production of manufactured export goods. These are persons purchasing agricultural goods, steel, ores, and various other materials and supplies from producers and selling them to manufacturers for further processing into goods which were exported. An assumption, based upon review of more detailed I-O data, was made that 85 percent of this employment was in wholesale trade and 15 percent was in retail. The amounts of employment resulting were than allocated by State on the basis of the State distributions for wholesale and retail, respectively, in 1977 County Business Patterns. Possible errors in the 85/15 allocation has a negligible effect on the State by State results.

The "plant to port" 207,484 persons engaged in wholesale trade were allocated by State on the basis of the 1977 County Business Patterns estimates for merchant wholesalers. The remaining nonmanufacturing employment (mostly in transportation, utilities, and business services) were judged to be closely allied in terms of location to the State distribution of manufacturing. That is, they supply services in the sense of statellites to manufacturing plants in the vicinity. This employment was, therefore, allocated by State proportionately based upon the State distribution of export induced manufacturing employment.

Quality of the Estimates—As previously mentioned, many of the statistical processing steps, beyond the collection of the data on the direct value of exports, involved a series of assumptions so that the final estimates of indirect export-related employment by State are not of the usual Census quality; that is, these estimates go beyond the customary Bureau of the Census function of collecting and compiling data in a carefully designed survey. Estimation methods for the survey of direct exports are described in appendix C.

The estimates published in June 1978, of the State distribution of jobs directly related to exports, were criticized as being incomplete because of the omission of indirect employment, and the Bureau was urged to expand the estimates to measure the full impact by State.

The task could only be undertaken because of the availability of BEA's input-output model of interindustry relations and transactions between producing industries and final purchases. The BEA I-O matrix is a powerful analytical tool, useful for all sorts of intricate economic analysis. It is, however, a construct of estimates of relationships between million of buyers and sellers and is, therefore, subject to estimation error. Flaws in the estimated relationships might carry over to this project. However, it should be recognized that the I-O matrix is compiled by highly skilled technicians with painstaking caution and further, that the interlocking system provides careful cross-checks on itself.

At a number of later stages in the process, assumptions were required on how various estimates or allocations were to be made. These were carefully weighed and methods developed which took account of quality requirements and feasibility. For example, suppose a manufactured raw material was made in 20 States and 10 percent of the domestic sales went to producers of finished products for export. It was not feasible or even possible to estimate specifically how much of the raw material from each State found its way into exported manufactured goods; each State was assumed to have 10 percent of its domestic sales going to exports indirectly. One might even argue that, for a given State, even if it could be determined that 12 percent was actually going to exports indirectly in a physical sense, that for economic purposes 10 percent was preferable because the manufacturer of the finished product would be indiferrent as to where the supply came from. In any case, if there are errors due to the assumption of proportionally, they are considered to be relatively minor.

There are other specific flaws in the process which may be pointed out. An I-O computer run on the plant-to-port services for electricity, office supplies, etc. was not made. This results in an estimated understatement of 50 to 75 thousand export-related workers.

Secondly, in the census surveys of the manufacturing sector working proprietors and partners are omitted by convention and are, therefore, omitted from these export-related job estimates. They are basically omitted because they are judged to be a negligible volume. That is also the case here, as it is estimated that about 10 thousand jobs are omitted on this account.

Furthermore, the procedure for converting the estimates for the effect of manufactured indirect inputs is judged to be an underestimate of employment by about 40 to 50 thousand. This comes about because shipments of a parts supplier were deflated to obtain employment by an aggregate which sometimes included finished goods producers in the same State and industry. The parts producers tend to require more employment per dollar of shipments than the finished goods producing firm in the same industry. Since the conversion ratio for the parts shipments was based upon aggregates for both types of plants, the resulting estimate of the export-related employment is a bit low.

All three of the comments above described underestimates of export-related employment. Working in the opposite direction are advances in productivity (more output per unit of labor input). The I-O data used were for 1972, the latest available. For this problem the relevant area of concern is the nonmanufacturing industries, where an important step was conversion of the value of indirect requirements to compensation of labor by use of the 1972 I-O ratios.

While these nonmanufacturing industries are the least susceptible to labor productivity advances, they are almost surely positive overall from 1972 to 1977 and, therefore, result in too high an estimate of compensation and of employment. In this case, an estimate of the overstatement in number of jobs is not feasible.

Finally, not part of the basic work but worthy of comment, are the percentages calculated from the civilian employment and private sector employment shown in table 2. The export-related jobs are estimates of the States in which the jobs are located. The civilian and private sector employment come from the Bureau's Current Population Survey (CPS). This is a household survey so that the State aggregates concern where the people live. An attempt was made to adjust the CPS household data by shifting estimates from a where-live basis to a where-work basis, but the resulting percentages turned out to be so slightly changed that it did not seem necessary to make the adjustments.

Table 1. **Employment Related to Manufactured Exports by Major Economic Sector: 1977 and 1976**

Industries	1977			1976		
		Employment related to manufactured exports[2]			Employment related to manufactured exports[2]	
	Civilian employment[1] (1,000)	Number (1,000)	Percent of civilian employment	Civilian employment[3] (1,000)	Number (1,000)	Percent of civilian employment
United States	89,369	3,258	3.6	86,892	3,452	4.0
Manufacturing industries	19,590	1,990	10.2	18,753	2,125	11.3
Nonmanufacturing industries	69,779	1,268	1.8	68,139	1,327	1.9
Trade	16,653	489	2.9	16,025	489	3.1
Business services	16,750	215	1.3	12,851	256	2.0
Transportation, communication, and utilities	4,797	185	3.9	4,584	192	4.2
Agriculture	3,044	129	4.2	3,403	137	4.0
Mining	747	34	4.6	688	35	5.1
Other	27,788	216	.8	30,588	218	.7

[1]Civilian employment is the sum of manufacturing employment estimates from the 1977 Census of Manufactures and nonmanufacturing employment estimates from the 1977 Current Population Survey, Bureau of the Census, Table 5a, Employed Persons by Industry Group, Class of Worker, and Color for the United States.

[2]Total employment related to manufactured exports is the sum of employment directly calculated for the plants shipping the exported product, the supplying industries and service organizations, and the central administrative offices and auxiliaries. For manufacturing industries, employment is limited to paid employees in manufacturing plants, while for nonmanufacturing it includes an estimate for working proprietors and partners.

[3]Civilian employment is the sum of manufacturing employment estimates from the 1976 Annual Survey of Manufactures and nonmanufacturing employment estimates from the 1976 Current Population Survey, Bureau of the Census, Table 5a, Employed Persons by Industry Group, Class of Worker, and Color for the United States.

Table 2a. **Employment Related to Manufactured Exports, by Major Economic Sector, for States: 1977**

State	Employment related to manufactured exports[3]										
				Nonmanufacturing industries							
	Civilian employment[1] (1,000)	Private sector employment[2] (1,000)	Manufacturing industries (1,000)	Trade (1,000)	Business services (1,000)	Transportation, communication, and utilities (1,000)	Other, including mining and agriculture (1,000)	Total (1,000)	Total (col. C+ col. H) (1,000)	Total as percent of civilian employment (col. I ÷ col. A)	Total as percent of private sector employment (col. I ÷ col. B)
	A	B	C	D	E	F	G	H	I	J	K
United States	89,369	74,225	1,990.2	489.0	215.0	185.0	379.0	1,268.0	3,258.2	3.6	4.4
Alabama	1,391	1,144	26.8	6.9	2.9	2.5	6.2	18.5	45.3	3.3	4.0
Alaska	160	114	3.1	.7	.3	.3	.5	1.8	4.9	3.1	4.3
Arizona	876	733	17.7	4.4	1.9	1.6	3.5	11.4	29.1	3.3	4.0
Arkansas	845	731	13.4	3.7	1.5	1.3	4.5	11.0	24.4	2.9	3.3
California	9,257	7,685	205.1	50.3	22.1	19.0	32.7	124.1	329.1	3.6	4.3
Colorado	1,165	965	15.9	6.6	1.7	1.5	4.4	14.2	30.1	2.6	3.1
Connecticut	1,403	1,225	51.8	6.5	5.6	4.8	6.3	23.2	75.0	5.3	6.1
Delaware	251	217	6.6	1.2	.7	.6	.9	3.4	10.0	4.0	4.6
District of Columbia	308	184	.3	1.3	(Z)	(Z)	.1	1.4	1.7	.6	.9
Florida	3,173	2,646	35.8	17.5	3.9	3.3	7.1	31.8	67.6	2.1	2.6
Georgia	2,075	1,734	37.9	13.2	4.1	3.5	7.0	27.8	65.7	3.2	3.8
Hawaii	368	282	.7	1.7	.1	.1	.1	2.0	2.7	.7	1.0
Idaho	361	303	4.8	2.2	.5	.5	2.0	5.2	10.0	2.8	3.3
Illinois	4,879	4,244	140.1	30.9	15.2	13.0	21.7	80.8	220.9	4.5	5.2
Indiana	2,243	1,968	74.9	10.8	8.1	7.0	12.3	38.2	113.1	5.0	5.7
Iowa	1,270	1,059	27.2	7.5	2.7	2.3	9.4	21.9	49.1	3.9	4.6
Kansas	1,036	899	15.8	5.9	1.7	1.5	5.2	14.3	30.1	2.9	3.3
Kentucky	1,381	1,174	24.7	6.2	2.7	2.3	9.0	20.2	44.9	3.3	3.8
Louisiana	1,437	1,192	16.1	8.7	1.7	1.5	6.2	18.1	34.2	2.4	2.9
Maine	420	348	7.5	1.9	.8	.7	1.2	4.6	12.1	2.9	3.5
Maryland	1,816	1,345	20.3	7.8	2.2	1.9	3.3	15.2	35.5	2.0	2.6
Massachusetts	2,468	2,065	70.2	12.8	7.5	6.5	8.2	35.0	105.2	4.3	5.1
Michigan	3,651	3,154	132.7	16.7	14.4	12.4	18.3	61.8	194.5	5.3	6.2
Minnesota	1,788	1,547	34.6	10.9	3.7	3.2	10.4	28.2	62.8	3.5	4.1
Mississippi	863	713	17.8	3.8	1.9	1.6	4.9	12.2	30.0	3.5	4.2
Missouri	2,056	1,723	35.7	12.8	3.9	3.3	9.6	29.6	65.3	3.2	3.8
Montana	309	255	1.3	1.6	.2	.1	1.4	3.3	4.6	1.5	1.8
Nebraska	696	597	6.0	4.4	.6	.6	4.1	9.7	15.7	2.3	2.6
Nevada	299	251	.9	1.1	.1	.1	.4	1.7	2.6	.9	1.0
New Hampshire	363	298	9.7	1.4	1.1	.9	1.2	4.6	14.3	3.9	4.8
New Jersey	3,011	2,540	73.5	20.3	8.0	6.9	8.8	44.0	117.5	3.9	4.6
New Mexico	447	333	.9	1.9	.1	.1	1.9	4.0	4.9	1.1	1.5
New York	7,058	5,828	141.2	45.0	15.3	13.1	19.0	92.4	233.6	3.3	4.0
North Carolina	2,345	1,989	58.1	11.7	6.3	5.4	11.6	35.0	93.1	4.0	4.7
North Dakota	265	232	1.4	1.7	.2	.1	2.3	4.3	5.7	2.2	2.5
Ohio	4,437	3,806	153.2	24.3	16.6	14.2	22.9	78.0	231.2	5.2	6.1
Oklahoma	1,119	944	15.0	5.9	1.6	1.4	6.5	15.4	30.4	2.7	3.2
Oregon	1,041	892	22.3	6.0	2.4	2.1	4.5	15.0	37.3	3.6	4.2
Pennsylvania	4,725	4,057	145.5	23.8	15.7	13.5	22.2	75.2	220.7	4.7	5.4
Rhode Island	394	329	10.6	2.0	1.1	1.0	1.3	5.4	16.0	4.1	4.9
South Carolina	1,245	1,068	36.7	4.7	4.0	3.4	5.8	17.9	54.6	4.4	5.1
South Dakota	287	253	2.1	1.6	.2	.2	2.5	4.5	6.6	2.3	2.6
Tennessee	1,770	1,475	36.0	10.0	3.9	3.3	8.4	25.6	61.6	3.5	4.2
Texas	5,418	4,612	88.9	34.6	9.6	8.3	23.4	75.9	164.8	3.0	3.6
Utah	498	398	5.4	3.0	.6	.5	2.0	6.1	11.5	2.3	2.9
Vermont	209	180	5.0	.8	.4	.5	.9	2.6	7.6	3.6	4.2
Virginia	2,169	1,676	33.5	9.0	3.6	3.1	6.9	22.6	56.1	2.6	3.3
Washington	1,499	1,242	38.2	8.6	4.1	3.6	6.6	22.9	61.1	4.1	4.9
West Virginia	613	507	12.0	2.9	1.3	1.1	5.6	10.9	22.9	3.7	4.5
Wisconsin	2,010	1,766	55.2	9.3	6.0	5.1	12.3	32.7	87.9	4.4	5.0
Wyoming	178	150	.2	.7	(Z)	(Z)	1.5	2.2	2.4	1.3	1.6

(Z) Less than one-half of the unit of measurement shown.

[1]Civilian employment is the sum of manufacturing employment estimates from the 1977 Census of Manufactures and nonmanufacturing employment estimates from the 1977 Current Population Survey, Bureau of the Census, Table 5a, Employed Persons by Industry Group, Class of Worker, and Color for the United States.

[2]Private sector employment is the civilian employment (column A) less the Federal, State, and local government estimates from the source noted in the previous footnote.

[3]Total employment related to manufactured exports is the sum of employment directly calculated for the plants shipping the exported products, the supplying industries and service organizations, and the central administrative offices and auxiliaries. For manufacturing industries, employment is limited to paid employees in manufacturing plants, while for nonmanufacturing industries, employment includes an estimate for working proprietors and partners.

Table 2b. **Employment Related to Manufactured Exports, by Major Economic Sector, for States: 1976**

State	Employment related to manufactured exports[3]										
				Nonmanufacturing industries							
	Civilian employment[1] (1,000)	Private sector employment[2] (1,000)	Manufacturing industries (1,000)	Trade (1,000)	Business services (1,000)	Transportation, communication, and utilities (1,000)	Other, including mining and agriculture (1,000)	Total (1,000)	Total (col. C+ col. H) (1,000)	Total as percent of civilian employment (col. I ÷ col. A)	Total as percent of private sector employment (col. I ÷ col. B)
	A	B	C	D	E	F	G	H	I	J	K
United States	86,892	71,915	2,125.4	489.0	256.0	192.0	390.0	1,327.0	3,452.1	4.0	4.8
Alabama	1,348	1,094	30.1	5.9	3.6	2.7	6.6	18.8	48.9	3.6	4.5
Alaska	145	103	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Arizona	835	677	17.4	3.5	2.1	1.6	3.5	10.7	28.1	3.4	4.2
Arkansas	817	691	14.7	3.1	1.8	1.3	4.7	10.9	25.6	3.1	3.7
California	8,726	7,170	196.5	52.7	23.7	17.8	31.8	126.0	322.5	3.7	4.5
Colorado	1,144	919	15.5	5.2	1.9	1.4	4.3	12.8	28.3	2.5	3.1
Connecticut	1,341	1,164	57.7	6.5	7.0	5.2	6.7	25.4	83.1	6.2	7.1
Delaware	242	206	4.3	1.4	0.9	0.7	1.0	4.0	8.3	3.4	4.0
District of Columbia	312	174	0.4	1.2	0.1	(Z)	0.1	1.4	1.8	0.6	1.0
Florida	3,118	2,582	32.7	20.0	3.9	3.0	6.6	33.5	66.2	2.1	2.6
Georgia	2,027	1,675	40.6	11.2	4.9	3.7	7.5	27.3	67.9	3.3	4.1
Hawaii	365	279	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Idaho	346	286	4.4	1.7	0.5	0.4	2.2	4.8	9.2	2.7	3.2
Illinois	4,793	4,082	156.9	27.7	19.0	14.2	22.6	83.5	240.4	5.1	5.9
Indiana	2,187	1,898	81.0	9.7	9.8	7.3	12.7	39.5	120.5	5.5	6.3
Iowa	1,270	1,045	28.2	6.9	3.4	2.5	10.0	22.8	51.0	4.0	4.9
Kansas	1,025	855	17.3	4.7	2.1	1.6	5.5	13.9	31.2	3.0	3.6
Kentucky	1,346	1,120	25.6	5.0	3.1	2.3	9.3	19.7	45.3	3.4	4.0
Louisiana	1,365	1,111	17.9	9.4	2.2	1.6	6.7	19.9	37.8	2.8	3.4
Maine	420	346	7.9	1.5	1.0	0.7	1.3	4.5	12.4	3.0	3.6
Maryland	1,760	1,296	22.0	8.2	2.7	2.0	3.5	16.4	38.4	2.2	3.0
Massachusetts	2,415	2,028	r 77.1	12.0	9.3	7.0	8.7	37.0	r 114.1	r 4.7	r 5.6
Michigan	3,569	3,010	r 123.6	14.0	17.8	13.4	19.5	64.7	r 188.3	r 5.3	r 6.3
Minnesota	1,764	1,479	37.8	9.6	4.6	3.4	11.4	29.0	66.8	3.8	4.5
Mississippi	854	695	15.5	3.5	1.9	1.4	4.9	11.7	27.2	3.2	3.9
Missouri	2,002	1,629	40.7	11.9	4.9	3.7	10.8	31.3	72.0	3.6	4.4
Montana	303	243	1.6	1.3	0.2	0.1	1.6	3.2	4.8	1.3	2.0
Nebraska	696	587	6.8	3.6	0.8	0.6	4.4	9.4	16.2	2.3	2.8
Nevada	281	234	0.9	0.8	0.1	0.1	0.5	1.5	2.4	0.9	1.0
New Hampshire	345	283	10.5	1.0	1.3	0.9	1.4	4.6	15.1	4.4	5.3
New Jersey	2,949	2,480	76.2	23.5	9.2	6.9	8.7	48.3	124.5	4.2	5.0
New Mexico	418	305	1.8	1.6	0.2	0.2	1.9	3.9	5.7	1.4	1.9
New York	6,949	5,661	153.5	69.8	18.5	13.9	20.0	122.2	275.7	4.0	4.9
North Carolina	2,337	1,970	61.8	11.9	7.4	5.6	12.4	37.3	99.1	4.2	5.0
North Dakota	270	228	1.7	1.4	0.2	0.2	2.1	3.9	5.6	2.1	2.5
Ohio	4,304	3,667	165.7	19.7	20.0	15.0	21.9	76.6	242.3	5.6	6.6
Oklahoma	1,067	889	14.1	5.0	1.8	1.3	7.9	16.0	30.1	2.8	3.4
Oregon	970	802	22.2	7.9	2.7	2.0	4.2	16.8	39.0	4.0	4.9
Pennsylvania	4,656	3,961	160.0	22.1	19.3	14.5	23.2	79.1	239.1	5.1	6.0
Rhode Island	380	318	11.1	1.6	1.3	1.0	1.3	5.2	16.3	4.3	5.1
South Carolina	1,192	1,007	35.2	4.1	4.2	3.2	5.6	17.1	52.3	4.4	5.2
South Dakota	299	247	1.6	1.3	0.2	0.1	2.4	4.0	5.6	1.9	2.3
Tennessee	1,711	1,410	38.2	8.4	4.6	3.5	8.9	25.4	63.6	3.7	4.5
Texas	5,213	4,332	97.5	34.3	11.7	8.8	24.2	79.0	176.5	3.4	4.1
Utah	486	385	7.3	2.5	0.9	0.7	2.1	6.2	13.5	2.8	3.5
Vermont	197	167	5.6	0.6	0.7	0.5	1.0	2.8	8.4	4.3	5.0
Virginia	2,110	1,598	35.6	7.7	4.3	3.2	7.5	22.7	58.3	2.8	3.6
Washington	1,435	1,159	42.1	9.7	5.1	3.8	7.3	25.9	59.3	4.1	5.1
West Virginia	625	515	14.0	2.3	1.7	1.3	5.9	11.2	25.2	4.0	4.9
Wisconsin	1,992	1,716	59.7	8.0	7.2	5.4	12.5	33.1	92.8	4.7	5.4
Wyoming	168	134	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

r Revised. (S) Withheld because the estimate did not meet publication standards. (Z) Less than one-half of the unit of measurement shown.

[1] Civilian employment is the sum of manufacturing employment estimates from the 1976 Census of Manufactures and nonmanufacturing employment estimates from the 1976 Current Population Survey, Bureau of the Census, Table 5a, Employed Persons by Industry Group, Class of Worker, and Color for the United States.

[2] Private sector employment is the civilian employment (column A) less the Federal, State, and local government employment estimates from the source noted in the previous footnote.

[3] Total employment related to manufactured exports is the sum of employment directly calculated for the plants shipping the exported product, the supplying industries and service organizations, and the central administrative offices and auxiliaries. For manufacturing industries, employment is limited to paid employees in manufacturing plants, while for nonmanufacturing industries, it includes an estimate for working proprietors and partners.

Table 3a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States: 1977**

State	Value of manufacturers' shipments					Manufacturing employment				
	Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
	A	B	C	D	E	F	G	H	I	J
United States	1,358,397.3	85,795.9	56,607.7	142,403.6	10.4	19,590.1	1,106.2	884.0	1,990.2	10.2
Alabama	21,010.1	895.0	1,166.4	2,061.4	9.8	341.0	10.9	15.9	26.8	7.8
Alaska	1,250.3	374.1	19.3	393.4	31.4	11.4	2.9	.2	3.1	27.2
Arizona	7,022.4	680.3	369.5	1,049.8	14.9	110.9	12.3	5.4	17.7	16.0
Arkansas	12,276.1	625.9	459.9	1,085.8	8.8	197.1	6.4	7.0	13.4	6.8
California	120,895.8	9,115.8	4,203.6	13,319.4	11.0	1,751.5	134.5	70.6	205.1	11.7
Colorado	10,018.0	668.3	308.2	976.5	9.7	152.5	10.3	5.6	15.9	10.4
Connecticut	19,842.2	1,662.3	1,024.5	2,686.8	13.5	412.1	29.0	22.8	51.8	12.6
Delaware	5,208.7	154.7	191.1	345.8	6.6	66.5	1.7	4.9	6.6	9.9
District of Columbia	984.4	7.4	13.6	21.0	2.1	18.6	(Z)	.3	.3	1.6
Florida	20,980.6	1,583.1	711.0	2,294.1	10.9	358.0	23.8	12.0	35.8	10.0
Georgia	32,856.4	1,419.4	1,303.8	2,723.2	8.3	484.7	18.9	19.0	37.9	7.8
Hawaii	1,974.0	26.3	39.5	65.8	3.5	25.0	.2	.5	.7	2.8
Idaho	3,657.7	245.6	135.3	380.9	10.4	51.6	3.2	1.6	4.8	9.3
Illinois	93,081.3	6,312.9	3,903.3	10,216.2	11.0	1,286.2	75.2	64.9	140.1	10.9
Indiana	52,172.2	2,941.8	2,842.7	5,784.5	11.1	705.9	36.7	38.2	74.9	10.6
Iowa	23,514.9	1,578.1	650.4	2,228.5	9.5	240.3	19.2	8.0	27.2	11.3
Kansas	15,987.3	689.2	468.4	1,157.6	7.2	168.1	9.4	6.4	15.8	9.4
Kentucky	22,874.7	1,353.9	1,013.1	2,367.0	10.3	277.5	12.7	12.0	24.7	8.9
Louisiana	29,493,3	1,494.1	1,239.9	2,734.0	9.3	194.8	8.5	7.6	16.1	8.3
Maine	5,144.6	232.4	192.5	424.9	8.3	102.8	4.0	3.5	7.5	7.3
Maryland	15,930.4	633.9	692.8	1,326.7	8.3	243.2	9.3	11.0	20.3	8.3
Massachusetts	30,144.2	2,310.3	1,187.2	3,497.5	11.6	613.4	42.5	27.7	70.2	11.4
Michigan	93,757.1	6,937.4	4,037.9	10,975.3	11.7	1,115.9	68.5	64.2	132.7	11.9
Minnesota	23,021.2	1,605.4	692.6	2,298.0	10.0	331.7	21.1	13.4	34.6	10.4
Mississippi	12,765.8	717.7	393.3	1,111.0	8.7	219.4	11.9	5.9	17.8	8.1
Missouri	33,162.5	1,681.8	1,151.7	2,833.5	8.5	433.0	18.4	17.3	35.7	8.2
Montana	2,669.9	59.3	122.2	181.5	6.8	23.8	.3	1.0	1.3	5.5
Nebraska	8,713.4	328.4	247.8	576.2	6.6	87.7	3.2	2.8	6.0	6.8
Nevada	942.0	31.2	39.2	70.4	7.4	15.0	.3	.6	.9	6.0
New Hampshire	4,032.3	290.3	164.3	454.6	11.3	95.3	5.8	3.9	9.7	10.2
New Jersey	51,279.4	2,881.1	1,998.4	4,879.5	9.5	778.3	36.5	37.0	73.5	9.4
New Mexico	2,009.2	36.8	72.2	109.0	5.4	29.0	(Z)	.9	.9	3.1
New York	86,216.4	5,832.6	3,060.9	8,893.5	10.3	1,509.9	81.3	59.9	141.2	9.4
North Carolina	40,912.2	2,291.2	1,592.1	3,883.3	9.5	765.3	29.3	28.8	58.1	7.6
North Dakota	1,312.9	72.8	25.2	98.0	7.5	13.8	1.1	.3	1.4	10.1
Ohio	95,234.7	6,027.8	5,018.9	11,046.7	11.6	1,331.2	77.7	75.5	153.2	11.5
Oklahoma	12,564.5	638.7	405.5	1,044.2	8.3	164.4	8.7	6.3	15.0	9.1
Oregon	14,370.0	906.4	592.0	1,498.4	10.4	202.4	14.0	8.3	22.3	11.0
Pennsylvania	79,844.8	4,714.3	4,240.7	8,955.0	11.2	1,329.2	74.6	70.9	145.5	10.9
Rhode Island	5,364.6	296.6	243.7	540.3	10.1	125.0	5.4	5.2	10.6	8.5
South Carolina	18,882.4	1,150.2	967.0	2,117.2	11.2	374.2	18.6	18.1	36.7	9.8
South Dakota	1,793.7	94.7	35.8	130.5	7.3	22.5	1.6	.5	2.1	9.3
Tennessee	28,752.0	1,500.9	1,215.2	2,716.1	9.4	489.8	18.1	17.9	36.0	7.3
Texas	92,735.7	5,386.0	3,809.8	9,195.8	9.9	886.4	51.9	37.0	88.9	10.0
Utah	5,092.8	173.2	242.3	415.5	8.2	70.2	2.5	2.9	5.4	7.7
Vermont	2,189.3	182.9	103.8	286.7	13.1	41.5	3.1	1.9	5.0	12.0
Virginia	23,988.6	1,572.6	907.7	2,480.3	10.3	395.2	19.4	14.1	33.5	8.5
Washington	21,746.9	2,805.1	911.0	3,716.1	17.1	265.0	27.3	10.9	38.2	14.4
West Virginia	8,705.9	437.6	670.5	1,108.1	12.7	117.0	4.2	7.8	12.0	10.3
Wisconsin	38,725.3	2,132.1	1,474.6	3,606.7	9.3	535.0	29.8	25.4	55.2	10.3
Wyoming	1,287.8	6.0	36.7	42.7	3.3	8.5	(Z)	.2	.2	2.4

(Z) Less than one-half of the unit of measurement shown.

[1]Includes total domestic and export shipments for all manufacturing establishments.

[2]Includes only the value of manufactured products exported by the producing plants.

[3]Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification (SIC) totals.

[4]Total export related shipments are the sum of columns B and C.

[5]Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6]Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by State, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7]Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 116.9 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8]The employment totals shown are the sum of columns G and H.

Table 3b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States: 1976**

State	Value of manufacturers' shipments					Manufacturing employment				
	Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
	A	B	C	D	E	F	G	H	I	J
United States	1,185,695.3	83,098.0	54,098.0	137,729.9	11.6	18,753.0	1,173.2	952.2	2,125.4	11.3
Alabama	17,988.1	832.2	1,134.1	1,966.3	10.9	330.3	12.6	17.5	30.1	9.1
Alaska	991.8	232.8	(S)	(S)	(S)	7.9	1.8	(S)	(S)	(S)
Arizona	6,232.9	639.2	423.1	1,062.3	17.0	99.0	11.5	5.9	17.4	17.6
Arkansas	10,604.8	651.3	441.0	1,092.3	10.3	188.3	7.2	7.5	14.7	7.8
California	102,041.0	8,071.8	3,952.4	12,024.2	11.8	1,600.1	123.7	72.8	196.5	12.3
Colorado	9,535.5	616.3	311.0	927.3	9.7	142.9	9.4	6.1	15.5	10.8
Connecticut	18,229.0	1,957.6	863.3	2,820.9	15.5	405.4	36.6	21.1	57.7	14.2
Delaware	5,042.7	188.4	212.7	401.1	8.0	66.0	1.9	2.4	4.3	6.5
District of Columbia	932.0	6.9	17.7	24.6	2.6	17.9	0.1	0.3	0.4	2.2
Florida	18,091.3	1,362.8	681.3	2,044.1	11.3	331.4	20.0	12.7	32.7	9.9
Georgia	28,391.4	1,364.4	1,192.8	2,557.2	9.0	468.9	21.1	19.5	40.6	8.7
Hawaii	1,854.8	51.1	(S)	(S)	(S)	24.2	0.5	(S)	(S)	(S)
Idaho	3,448.1	168.9	160.8	329.7	9.6	52.5	2.1	2.3	4.4	8.4
Illinois	82,351.3	6,659.6	3,773.0	10,432.6	12.7	1,255.8	86.9	70.0	156.9	12.5
Indiana	45,180.9	2,827.6	2,744.0	5,571.6	12.3	677.0	40.0	41.0	81.0	12.0
Iowa	20,772.3	1,499.8	624.4	2,124.2	10.2	231.1	19.8	8.4	28.2	12.2
Kansas	14,657.5	635.2	465.9	1,101.1	7.5	167.5	10.2	7.1	17.3	10.3
Kentucky	20,268.5	1,137.3	1,022.3	2,159.6	10.7	277.0	12.3	13.3	25.6	9.2
Louisiana	25,225.2	1,383.4	1,181.1	2,564.5	10.2	189.8	9.4	8.5	17.9	9.4
Maine	4,422.8	254.9	178.6	433.5	9.8	99.0	4.2	3.7	7.9	8.0
Maryland	14,762.2	640.7	686.5	1,327.2	9.0	242.8	10.5	11.5	22.0	9.1
Massachusetts	26,918.4	2,502.4	1,160.3	3,662.7	13.6	590.9	48.2	28.9	77.1	13.0
Michigan	80,326.7	r6,374.1	r3,835.1	r10,209.2	r12.7	1,049.9	r68.7	r75.6	r144.3	r13.8
Minnesota	20,439.5	1,566.7	677.6	2,244.3	11.0	321.0	23.2	14.6	37.8	11.8
Mississippi	10,867.6	697.8	371.9	1,069.7	9.8	209.5	9.5	6.0	15.5	7.4
Missouri	27,468.8	1,622.1	1,074.4	2,696.5	9.8	424.4	22.6	18.1	40.7	9.6
Montana	2,524.9	43.6	159.5	204.4	8.1	21.7	0.4	1.2	1.6	7.4
Nebraska	8,773.3	309.2	251.9	561.1	6.4	87.8	3.7	3.1	6.8	7.7
Nevada	724.8	27.2	35.5	62.7	8.7	13.6	0.3	0.6	0.9	6.6
New Hampshire	3,495.4	291.1	151.8	442.9	12.7	87.8	6.5	4.0	10.5	12.0
New Jersey	45,711.3	2,660.2	2,057.8	4,718.0	10.3	735.7	34.9	41.3	76.2	10.4
New Mexico	1,534.0	69.2	62.7	131.9	8.6	30.2	0.8	1.0	1.8	6.0
New York	76,087.1	5,320.2	3,072.8	8,393.0	11.0	1,455.3	84.0	69.5	153.5	10.5
North Carolina	35,818.9	2,202.0	1,470.6	3,672.6	10.3	738.9	32.2	29.6	61.8	8.4
North Dakota	1,236.2	84.5	22.6	107.1	8.7	14.0	1.4	0.3	1.7	12.1
Ohio	83,599.5	5,793.6	4,782.4	10,576.0	12.7	1,283.0	86.8	78.9	165.7	12.9
Oklahoma	10,126.0	578.8	364.3	943.1	9.3	150.1	8.5	5.6	14.1	9.4
Oregon	12,229.2	824.2	601.7	1,425.9	11.7	187.8	13.0	9.2	22.2	11.8
Pennsylvania	71,918.5	4,706.0	4,272.2	8,978.2	12.5	1,310.2	82.4	77.6	160.0	12.2
Rhode Island	4,532.7	268.5	246.7	515.2	11.4	115.1	5.8	5.3	11.1	9.6
South Carolina	16,610.1	935.4	880.7	1,816.1	10.9	371.3	16.4	18.8	35.2	9.5
South Dakota	1,608.5	68.3	33.8	102.1	6.3	21.8	1.0	0.6	1.6	7.3
Tennessee	24,755.5	1,253.1	1,153.3	2,406.4	9.7	478.7	18.6	19.6	38.2	8.0
Texas	77,120.1	5,200.6	3,446.5	8,647.1	11.2	824.6	59.4	38.1	97.5	11.8
Utah	4,640.6	223.6	347.4	571.0	12.3	71.2	3.7	3.6	7.3	10.3
Vermont	2,056.2	199.8	110.8	310.6	15.1	41.1	3.5	2.1	5.6	13.6
Virginia	20,470.5	1,544.7	825.7	2,370.4	11.6	375.0	21.4	14.2	35.6	9.5
Washington	18,842.8	3,234.7	884.0	4,118.7	21.9	244.1	30.4	11.7	42.1	17.2
West Virginia	7,937.6	447.1	694.2	1,141.3	14.4	120.0	4.5	9.5	14.0	11.7
Wisconsin	35,427.3	2,209.2	1,498.7	3,707.9	10.5	519.9	32.1	27.6	59.7	11.5
Wyoming	833.2	10.3	27.1	37.4	4.5	7.0	(Z)	0.2	0.2	2.9

r Revised. (S) Withheld because the estimate did not meet publication standards. (Z) Less than one-half of the unit of measurement shown.

[1] Includes total domestic and export shipments for all manufacturing establishments.

[2] Includes only the value of manufactured products exported by the producing plants.

[3] Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification (SIC) totals.

[4] Total export related shipments are the sum of columns B and C.

[5] Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6] Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by State, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7] Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 131.0 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8] The employment totals shown are the sum of columns G and H.

Table 4a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports by Major Industry Group: 1977**

SIC code	Major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	United States	1,358,397.3	85,795.9	56,607.7	142,403.6	10.4	19,590.1	1,106.2	884.0	1,990.2	10.2	1	1
20	Food and kindred products	192,911.6	6,782.2	2,570.4	9,352.6	4.8	1,520.0	37.3	20.2	57.5	3.7	3	5
21	Tobacco products	9,050.6	1,190.4	358.7	1,549.1	17.1	60.6	8.4	2.4	10.8	17.8	2	3
22	Textile mill products	40,550.5	1,491.9	1,769.3	3,261.2	8.0	875.7	29.0	38.1	67.1	7.6	1	1
23	Apparel, other textile products	40,105.6	756.6	502.6	1,259.2	3.1	1,334.1	13.2	14.3	27.5	2.0	4	5
24	Lumber and wood products	39,941.3	1,873.5	1,732.3	3,605.8	9.0	692.4	20.1	31.1	51.2	7.3	3	4
25	Furniture and fixtures	16,978.0	206.7	122.8	329.5	1.9	463.8	5.0	3.2	8.2	1.7	3	3
26	Paper and allied products	52,085.7	2,099.5	2,810.3	4,909.8	9.4	628.7	18.8	34.7	53.5	8.5	1	1
27	Printing and publishing	49,716.2	649.3	507.3	1,156.6	2.3	1,092.2	10.0	11.0	21.0	1.9	3	4
28	Chemicals and allied products	118,073.6	9,466.1	7,507.4	16,973.5	14.3	879.6	69.4	51.6	121.0	13.7	1	1
29	Petroleum and coal products	97,452.7	1,111.5	1,886.2	2,997.7	3.0	146.8	2.6	2.8	5.4	3.6	1	5
30	Rubber, miscellaneous plastics products	39,552.8	1,410.8	2,163.9	3,574.7	9.0	721.3	24.3	39.3	63.6	8.8	2	3
31	Leather and leather products	7,607.4	270.1	66.9	337.0	4.4	242.5	4.1	1.3	5.4	2.2	3	3
32	Stone, clay, glass products	35,476.6	997.0	1,295.2	2,292.2	6.4	613.7	17.2	22.9	40.1	6.5	1	1
33	Primary metal industries	103,259.4	2,791.6	13,303.6	16,095.2	15.5	1,114.3	27.7	144.9	172.6	15.4	1	1
34	Fabricated metal products	90,077.5	4,125.2	5,351.2	9,476.4	10.5	1,557.2	70.6	91.9	162.5	10.4	1	1
35	Machinery, except electrical	122,187.7	19,142.1	5,451.4	24,593.5	20.1	2,083.3	279.0	105.7	384.7	18.4	1	1
36	Electric, electronic equipment	88,426.0	8,060.9	3,996.1	12,057.0	13.6	1,723.0	159.2	85.1	244.3	14.1	1	1
37	Transportation equipment	166,895.5	17,711.9	4,313.2	22,025.1	13.1	1,766.6	200.5	47.3	247.8	14.0	1	1
38	Instruments, related products	28,897.8	4,235.1	665.5	4,900.6	16.9	559.1	84.7	14.1	98.8	17.6	1	1
39	Miscellaneous manufacturing industries	19,150.7	1,423.6	233.2	1,656.8	8.6	440.7	24.2	5.3	29.5	6.6	2	2
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1,074.2	(X)	116.9	116.9	10.9	(X)	(X)

(X) Not applicable.

[1]Includes total domestic and export shipments for all manufacturing establishments.

[2]Includes only the value of manufactured products exported by the producing plants.

[3]Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification (SIC) totals.

[4]Total export related shipments are the sum of columns B and C.

[5]Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6]Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by State, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7]Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 116.9 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8]The employment totals shown are the sum of columns G and H.

[9]A description of the standard error of estimate is given in appendix B under Qualifications of the Data. The percentage standard errors shown are the approximate relative standard errors of the estimates of that level.

Table 4b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports by Major Industry Group: 1976**

SIC code	Major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	United States	1,185,695.3	83,098.0	54,631.9	137,729.9	11.6	18,753.0	1,173.2	952.2	2,125.4	11.3
20	Food and kindred products	180,929.7	5,883.0	2,380.2	8,263.2	4.6	1,535.9	36.9	19.7	56.6	3.7
21	Tobacco products	8,786.1	1,019.9	305.9	1,325.8	15.1	64.8	9.5	2.7	12.2	18.8
22	Textile mill products	36,389.2	1,224.5	1,606.9	2,831.4	7.8	875.8	27.6	38.5	66.1	7.6
23	Apparel, other textile products	34,758.4	728.5	445.7	1,174.2	3.4	1,270.6	16.2	13.9	30.1	2.4
24	Lumber and wood products	31,239.4	1,892.0	1,680.5	3,572.5	11.4	628.7	22.8	34.9	57.7	9.2
25	Furniture and fixtures	14,232.0	184.5	118.2	302.7	2.1	425.6	5.1	3.5	8.6	2.0
26	Paper and allied products	48,218.1	2,260.7	2,843.7	5,104.4	10.6	614.8	20.9	37.2	58.1	9.5
27	Printing and publishing	42,837.8	573.9	481.3	1,055.2	2.5	1,085.8	11.5	12.6	24.1	2.2
28	Chemicals and allied products	104,138.6	9,271.2	7,241.1	16,512.3	15.9	851.2	74.5	55.3	129.8	15.3
29	Petroleum and coal products	82,347.0	1,151.6	1,748.2	2,899.8	3.5	144.5	3.0	3.1	6.1	4.2
30	Rubber, miscellaneous plastic products	31,765.2	1,270.4	2,120.3	3,390.7	10.7	627.4	23.0	41.7	64.7	10.3
31	Leather and leather products	7,176.0	279.7	61.8	341.5	4.8	247.1	5.5	1.4	6.9	2.8
32	Stone, clay, glass products	30,635.2	901.7	1,243.1	2,144.8	7.0	599.0	17.2	27.7	44.9	7.5
33	Primary metal industries	93,001.8	2,935.7	13,182.5	16,118.2	17.3	1,106.0	30.4	155.2	185.6	16.8
34	Fabricated metal products	77,507.1	3,702.5	5,014.7	8,717.2	11.3	1,471.4	69.9	93.4	163.3	11.1
35	Machinery, except electrical	105,525.2	19,036.5	5,350.8	24,387.3	23.1	1,959.8	294.5	111.8	406.3	20.7
36	Electric, electronic equipment	73,867.1	9,169.5	3,955.9	13,125.4	17.8	1,578.5	196.3	97.5	293.8	18.6
37	Transportation equipment	141,025.5	16,518.1	3,963.2	20,481.3	14.5	1,667.6	203.2	49.1	252.3	15.1
38	Instruments, related products	25,030.1	3,758.3	664.3	4,422.6	17.7	518.0	80.3	16.2	96.5	18.6
39	Miscellaneous manufacturing industries	16,285.9	1,335.8	223.6	1,559.4	9.6	410.0	24.9	5.8	30.7	7.5
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	r1,091.7	(X)	131.0	131.0	12.0

rRevised. (X) Not applicable.

[1]Includes total domestic and export shipments for all manufacturing establishments.

[2]Includes only the value of manufactured products exported by the producing plants.

[3]Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification (SIC) totals.

[4]Total export related shipments are the sum of columns B and C.

[5]Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6]Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by State, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7]Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 131.0 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8]The employment totals shown are the sum of columns G and H.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment	B	G
		A	B	C	D	E	F	G	H	I	J		
	United States	1,358,397.3	85,795.9	56,607.7	142,403.6	10.4	19,590.1	1,106.2	884.0	1,990.2	10.2	1	1
	Alabama	21,010.1	895.0	1,166.4	2,061.4	9.8	341.0	10.9	15.9	26.8	7.8	1	2
20	Food and kindred products	2,334.3	139.8	30.3	170.1	7.3	24.4	.4	.3	.7	2.8	1	1
22	Textile mill products	1,730.3	53.6	89.2	142.8	8.2	42.3	1.3	2.2	3.5	8.2	1	1
23	Apparel, other textile products	1,200.1	38.8	14.4	53.2	4.4	53.9	.9	.5	1.4	2.5	1	1
24	Lumber and wood products	1,219.0	17.7	53.0	70.7	5.7	23.8	.3	1.1	1.4	5.8	38	52
25	Furniture and fixtures	247.6	3.8	1.7	5.5	2.2	7.3	.1	(Z)	.1	1.3	52	50
26	Paper and allied products	1,981.9	35.6	103.0	138.6	6.9	18.8	.2	1.0	1.2	6.3	1	1
27	Printing and publishing	370.2	.6	3.8	4.4	1.1	7.9	(Z)	.1	.1	1.2	1	1
28	Chemicals and allied products	2,049.2	222.1	162.1	384.2	18.7	13.2	1.4	1.0	2.4	18.1	1	1
29	Petroleum and coal products	556.1	.7	10.9	11.6	2.0	1.4	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	1,288.8	47.7	70.4	118.1	9.1	14.8	.6	.8	1.4	9.4	2	4
32	Stone, clay, glass products	518.3	7.2	15.9	23.1	4.4	9.7	.1	.3	.4	4.1	43	50
33	Primary metal industries	3,665.2	80.1	476.6	556.7	15.1	39.5	.6	5.1	5.7	14.4	3	8
34	Fabricated metal products	1,332.3	43.8	55.5	99.3	7.4	25.3	.7	1.1	1.8	7.1	12	12
35	Machinery, except electrical	607.6	42.1	26.4	68.5	11.2	13.0	.8	.6	1.4	10.7	2	2
36	Electric, electronic equipment	700.1	81.9	24.8	106.7	15.2	14.7	1.4	.5	1.9	12.9	1	1
37	Transportation equipment	835.1	55.8	20.8	76.6	9.1	17.0	1.0	.4	1.4	8.2	6	4
38	Instruments, related products	124.0	16.3	3.8	20.1	16.2	2.5	.3	.1	.4	15.9	1	1
39	Miscellaneous manufacturing industries	193.9	3.2	2.5	5.7	2.9	4.5	(Z)	.1	.1	2.2	3	3
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	5.4	(X)	.5	.5	9.3	(X)	(X)
	Alaska	1,250.3	374.1	19.3	393.4	31.4	11.4	2.9	.2	3.1	27.2	4	8
20	Food and kindred products	516.5	127.4	5.4	132.8	25.7	5.4	1.1	.1	1.2	22.2	14	22
23	Apparel, other textile products	3.5	.1	.1	.2	5.7	(Z)	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	142.5	74.0	3.1	77.1	54.1	2.4	.5	.1	.6	25.0	7	14
39	Miscellaneous manufacturing industries	4.9	.2	.1	.3	6.1	.1	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(D)	(X)	(X)
	Arizona	7,022.4	680.3	369.5	1,049.8	14.9	110.9	12.3	5.4	17.7	16.0	1	2
20	Food and kindred products	789.6	24.7	10.6	35.3	4.5	6.0	.1	.1	.2	3.3	4	2
23	Apparel, other textile products	139.8	2.1	1.5	3.6	2.5	5.6	(Z)	.1	.1	1.7	1	1
24	Lumber and wood products	282.8	1.9	11.4	13.3	4.7	5.5	(Z)	.2	.2	3.6	1	1
26	Paper and allied products	121.9	.2	6.8	7.0	5.7	1.2	(Z)	.1	.1	8.3	1	1
27	Printing and publishing	289.7	.4	3.0	3.4	1.1	7.5	(Z)	.1	.1	1.3	1	1
28	Chemicals and allied products	268.0	8.1	11.5	19.6	7.3	2.2	(Z)	.1	.1	4.5	1	4
31	Leather and leather products	32.4	.2	.1	.3	.9	.6	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	314.4	.2	8.3	8.5	2.7	4.4	(Z)	.1	.1	2.2	1	1
33	Primary metal industries	1,525.3	12.7	177.1	189.8	12.4	8.2	.3	1.0	1.3	15.8	17	28
34	Fabricated metal products	232.5	.4	8.2	8.6	3.6	5.2	(Z)	.2	.2	3.8	8	1
35	Machinery, except electrical	933.0	263.5	35.2	298.7	32.0	14.0	2.6	.7	3.3	23.6	2	3
36	Electric, electronic equipment	805.2	225.9	51.7	277.6	34.4	24.1	7.1	1.6	8.7	36.0	1	2
37	Transportation equipment	799.6	100.9	31.3	132.2	16.5	10.9	1.1	.4	1.5	13.7	2	5
39	Miscellaneous manufacturing industries	107.1	2.3	1.4	3.7	3.4	2.3	(Z)	(Z)	(Z)	(Z)	14	25
--	Central adiminstrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	5.0	(X)	.6	.6	12.0	(X)	(X)
	Arkansas	12,276.1	625.9	459.9	1,085.8	8.8	197.1	6.4	7.0	13.4	6.8	2	1
20	Food and kindred products	2,838.9	206.5	36.4	242.9	8.6	25.1	.7	.3	1.0	3.9	6	5
22	Textile mill products	261.2	13.1	11.2	24.3	9.3	4.3	.1	.2	.3	6.9	1	1
23	Apparel, other textile products	315.9	4.5	2.5	7.0	2.2	15.3	.1	.1	.2	1.3	4	1
24	Lumber and wood products	1,025.8	12.9	48.5	61.4	5.9	19.0	.1	.9	1.0	5.2	13	15
25	Furniture and fixtures	366.5	3.8	2.5	6.3	1.7	11.5	(Z)	.1	.1	.8	10	13
26	Paper and allied products	1,043.3	102.5	51.7	154.2	14.7	10.2	.2	.5	.7	6.8	1	1
28	Chemicals and allied products	730.3	72.4	55.1	127.5	17.5	6.0	.7	.4	1.1	18.3	2	2
29	Petroleum and coal products	436.1	.8	8.5	9.3	2.1	2.1	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	555.8	20.8	30.4	51.2	9.2	10.6	.5	.6	1.1	10.3	2	2
31	Leather and leather products	172.1	.5	.5	1.0	.5	7.3	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	278.8	.5	8.3	8.8	3.1	4.7	(Z)	.1	.1	2.1	1	1
33	Primary metal industries	632.7	15.4	79.0	94.4	14.9	6.8	.1	.9	1.0	14.7	5	5
34	Fabricated metal products	730.7	33.5	36.5	70.0	9.5	15.5	.6	.8	1.4	9.0	2	2
35	Machinery, except electrical	625.5	33.8	26.5	60.3	9.6	11.6	.6	.5	1.1	9.4	8	10
36	Electric, electronic equipment	1,216.9	54.8	44.6	99.4	8.1	21.1	.9	.9	1.8	8.5	2	2
37	Transportation equipment	322.9	24.7	5.0	29.7	9.1	6.3	.6	.1	.7	11.1	1	1
39	Miscellaneous manufacturing industries	129.6	8.4	1.6	10.0	7.7	3.7	.2	(Z)	.2	5.4	4	6
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	3.5	(X)	.2	.2	5.7	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977** — Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	California	120,895.8	9,115.8	4,203.6	13,319.4	11.0	1,751.5	134.5	70.6	205.1	11.7	1	1
20	Food and kindred products	20,504.1	797.7	272.2	1,069.9	5.2	163.4	6.8	2.2	9.0	5.5	7	18
22	Textile mill products	954.7	15.3	35.2	50.5	5.2	16.4	.2	.6	.8	4.8	35	58
23	Apparel, other textile products	3,728.3	36.7	42.1	78.8	2.1	101.1	.5	1.2	1.7	1.6	46	21
24	Lumber and wood products	4,468.5	145.6	196.8	342.4	7.6	67.1	2.0	3.0	5.0	7.4	13	16
25	Furniture and fixtures	2,001.5	24.3	14.3	38.6	1.9	51.9	.5	.4	.9	1.7	19	25
26	Paper and allied products	3,298.9	125.4	187.0	312.4	9.4	35.9	.7	2.1	2.8	7.7	9	7
27	Printing and publishing	4,463.1	29.0	45.9	74.9	1.6	97.1	.4	1.0	1.4	1.4	13	13
28	Chemicals and allied products	6,182.9	389.3	315.1	704.4	11.4	52.7	3.4	2.4	5.8	11.0	2	2
29	Petroleum and coal products	12,460.1	373.2	236.6	609.8	4.8	18.5	.8	.3	1.1	5.9	2	12
30	Rubber, miscellaneous plastics products	3,312.1	82.3	183.2	265.5	8.0	63.6	1.7	3.5	5.2	8.1	10	15
31	Leather, and leather products	361.4	8.6	4.7	13.3	3.6	11.6	(Z)	.1	.1	.8	22	25
32	Stone, clay, glass products	3,458.3	44.9	126.1	171.0	4.9	53.0	.7	2.1	2.8	5.2	1	4
33	Primary metal industries	3,831.4	93.0	507.0	600.0	15.6	49.0	1.1	6.5	7.6	15.5	3	3
34	Fabricated metal products	7,606.2	239.6	397.0	636.6	8.3	136.2	4.6	7.5	12.1	8.8	4	4
35	Machinery, except electrical	9,811.6	1,875.5	455.8	2,331.3	23.8	174.3	28.3	9.2	37.5	21.5	2	2
36	Electric, electronic equipment	10,805.3	1,514.5	552.8	2,067.3	19.1	228.8	30.9	12.2	43.1	18.8	3	2
37	Transportation equipment	18,892.0	2,592.8	534.0	3,126.8	16.5	253.5	35.0	7.2	42.2	16.6	1	1
38	Instruments, related products	2,866.5	575.5	74.8	650.3	22.6	69.0	13.4	1.8	15.2	22.0	4	4
39	Miscellaneous manufacturing industries	1,888.3	151.9	22.9	174.8	9.2	40.0	2.5	.5	3.0	7.4	4	5
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	68.6	(X)	7.0	7.0	10.2	(X)	(X)
	Colorado	10,018.0	668.3	308.2	976.5	9.7	152.5	10.3	5.6	15.9	10.4	1	2
20	Food and kindred products	3,140.2	54.6	42.6	97.2	3.1	21.7	.2	.3	.5	2.3	3	6
22	Textile mill products	4.4	.1	.2	.3	6.8	.2	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	112.6	2.3	2.1	4.4	3.9	3.9	(Z)	.1	.1	2.5	7	13
24	Lumber and wood products	222.6	1.6	8.5	10.1	4.5	4.9	(Z)	.2	.2	4.0	1	1
25	Furniture and fixtures	81.0	.2	.6	.8	.9	2.0	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	126.0	.3	7.9	8.2	6.5	1.9	(Z)	.1	.1	5.2	1	1
28	Chemicals and allied products	244.6	33.2	15.2	48.4	19.8	2.3	.2	.1	.3	13.0	1	1
29	Petroleum and coal products	273.4	.2	5.3	5.5	2.0	.8	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	423.8	27.5	22.5	50.0	11.7	9.3	.6	.5	1.1	11.8	7	6
34	Fabricated metal products	695.8	23.8	31.0	54.8	7.8	13.7	.3	.6	.9	6.5	5	6
35	Machinery, except electrical	787.4	135.2	36.4	171.6	21.8	15.0	2.1	.8	2.9	19.3	7	11
36	Electric, electronic equipment	482.5	28.1	16.4	44.5	9.2	8.8	.7	.4	1.1	12.5	4	4
37	Transportation equipment	421.8	7.6	10.3	17.9	4.2	7.9	.1	.2	.3	3.7	4	2
38	Instruments, related products	1,260.6	284.3	18.9	303.2	24.0	17.0	4.7	.3	5.0	29.4	1	1
39	Miscellaneous manufacturing industries	146.3	12.4	1.8	14.2	9.7	4.0	.2	(Z)	.2	4.9	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.8	(X)	.7	.7	8.0	(X)	(X)
	Connecticut	19,842.2	1,662.3	1,024.5	2,686.8	13.5	412.1	29.0	22.8	51.8	12.6	1	1
20	Food and kindred products	946.7	16.1	12.8	28.9	3.0	9.9	.1	.1	.2	2.0	2	4
22	Textile mill products	420.1	17.6	17.5	35.1	8.3	10.1	.3	.5	.8	7.9	5	9
23	Apparel, other textile products	347.3	15.8	3.6	19.4	5.5	11.7	.2	.1	.3	2.5	1	1
24	Lumber and wood products	75.3	.3	3.8	4.1	5.4	2.1	(Z)	.1	.1	4.7	1	1
25	Furniture and fixtures	177.8	2.0	1.4	3.4	1.9	4.4	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	532.6	14.5	29.6	44.1	8.2	7.0	.1	.4	.5	7.1	5	4
27	Printing and publishing	791.5	7.3	8.1	15.4	1.9	19.6	.1	.2	.3	1.5	11	12
28	Chemicals and allied products	1,556.7	123.4	61.3	184.7	11.9	12.3	1.2	.5	1.7	13.8	1	2
29	Petroleum and coal products	73.3	.6	1.4	2.0	2.7	.6	(Z)	(Z)	(Z)	(Z)	89	1
30	Rubber, miscellaneous plastics products	626.9	12.2	34.9	47.1	7.5	13.2	.1	.7	.8	6.0	16	17
32	Stone, clay, glass products	270.0	5.7	10.7	16.4	6.0	5.7	.1	.2	.3	5.2	4	3
33	Primary metal industries	1,662.0	31.9	222.1	254.0	15.2	20.0	.4	2.7	3.1	15.4	5	7
34	Fabricated metal products	2,229.7	158.8	144.7	303.5	13.6	49.8	2.9	3.3	6.2	12.4	6	7
35	Machinery, except electrical	2,495.6	285.4	155.2	440.6	17.7	56.7	5.9	3.7	9.6	16.9	4	4
36	Electric, electronic equipment	1,844.1	179.4	95.2	274.6	14.8	39.2	3.7	2.1	5.8	14.7	3	4
38	Instruments, related products	1,145.0	208.7	28.2	236.9	20.6	21.1	3.4	.6	4.0	18.9	2	1
39	Miscellaneous manufacturing industries	608.7	39.0	7.5	46.5	7.6	13.0	.9	.2	1.1	8.4	5	6
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	34.6	(X)	4.0	4.0	11.6	(X)	(X)
	Delaware	5,208.7	154.7	191.1	345.8	6.6	66.5	1.7	4.9	6.6	9.9	3	2
20	Food and kindred products	842.6	7.3	11.5	18.8	2.2	6.3	(Z)	.1	.1	1.5	3	1
22	Textile mill products	39.4	1.3	1.8	3.1	7.8	1.0	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	12.9	.2	.2	.4	3.1	1.0	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	26.1	.1	1.0	1.1	4.2	.5	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	1,048.8	52.0	77.2	129.2	12.3	8.4	.4	.6	1.0	11.9	6	7

See footnotes at end of table.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977** — Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Delaware--Con.												
30	Rubber, miscellaneous plastics products	185.3	10.4	9.9	20.3	10.9	2.5	.1	.1	.2	7.9	11	10
34	Fabricated metal products	71.6	9.2	1.7	10.9	15.2	1.6	.1	(Z)	.1	6.2	10	9
35	Machinery, except electrical	56.2	9.2	2.9	12.1	21.5	1.7	.2	.1	.3	17.6	1	1
36	Electric, electronic equipment	36.9	.1	1.9	2.0	5.4	.5	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	24.3	(X)	3.1	3.1	12.8	(X)	(X)
	District of Columbia	984.4	7.4	13.6	21.0	2.1	18.6	(Z)	.3	.3	1.6	6	12
20	Food and kindred products	89.5	.1	1.2	1.3	1.4	1.5	(Z)	(Z)	(Z)	(Z)	1	1
27	Printing and publishing	798.1	5.6	8.2	13.8	1.7	13.8	(Z)	.1	.1	.7	6	12
35	Machinery, except electrical	6.9	.1	.4	.5	7.2	.2	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.1	(X)	.1	.1	9.1	(X)	(X)
	Florida	20,980.6	1,583.1	711.0	2,294.1	10.9	358.0	23.8	12.0	35.8	10.0	1	2
20	Food and kindred products	5,608.8	150.2	75.4	225.6	4.0	45.1	1.0	.6	1.6	3.5	5	8
22	Textile mill products	133.0	1.6	2.6	4.2	3.1	4.7	(Z)	.1	.1	2.1	1	1
23	Apparel, other textile products	721.3	14.7	7.8	22.5	3.1	32.0	.4	.3	.7	2.1	24	18
24	Lumber and wood products	790.3	10.2	32.8	43.0	5.4	16.5	.1	.7	.8	4.8	7	10
25	Furniture and fixtures	325.9	6.3	2.3	8.6	2.6	9.3	.1	.1	.2	2.1	18	20
26	Paper and allied products	1,399.1	169.5	68.5	238.0	17.0	15.3	1.4	.8	2.2	14.3	1	1
27	Printing and publishing	1,164.3	19.0	11.8	30.8	2.6	29.8	.3	.3	.6	2.0	16	18
28	Chemicals and allied products	2,646.3	475.1	185.9	661.0	25.0	21.5	3.7	1.4	5.1	23.7	1	2
30	Rubber, miscellaneous plastics products	429.4	10.5	23.8	34.3	7.9	10.8	.2	.6	.8	7.4	48	52
31	Leather and leather products	82.7	.8	.5	1.3	1.5	3.9	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	860.6	5.0	27.4	32.4	3.7	13.9	(Z)	.5	.5	3.5	2	3
33	Primary metal industries	371.8	36.3	45.5	81.8	22.0	4.8	.5	.6	1.1	22.9	2	1
34	Fabricated metal products	1,423.2	56.7	54.4	111.1	7.8	24.3	.7	.9	1.6	6.5	8	10
35	Machinery, except electrical	948.0	209.8	41.3	251.1	26.5	20.9	3.7	1.1	4.8	22.9	6	10
36	Electric, electronic equipment	1,830.5	142.5	83.0	225.5	12.3	41.9	3.0	2.1	5.1	12.1	3	4
37	Transportation equipment	1,514.5	228.1	32.8	260.9	17.2	36.7	6.6	.8	7.4	20.1	5	3
38	Instruments, related products	298.1	34.5	6.6	41.1	13.7	8.3	1.1	.2	1.3	15.6	4	9
39	Miscellaneous manufacturing industries	251.9	7.6	3.2	10.8	4.2	7.0	.2	.1	.3	4.2	3	4
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.0	(X)	.8	.8	10.0	(X)	(X)
	Georgia	32,856.4	1,419.4	1,303.8	2,723.2	8.3	484.7	18.9	19.0	37.9	7.8	1	1
20	Food and kindred products	4,844.8	138.0	65.0	203.0	4.2	47.1	1.5	.6	2.1	4.5	3	5
22	Textile mill products	6,729.3	194.8	325.1	519.9	7.7	116.6	3.7	6.0	9.7	8.3	2	2
23	Apparel, other textile products	2,122.3	42.3	28.9	71.2	3.3	76.2	.6	.8	1.4	1.8	7	15
24	Lumber and wood products	1,395.9	20.3	62.4	82.7	5.9	24.3	.2	1.1	1.3	5.3	18	18
25	Furniture and fixtures	347.8	2.8	2.5	5.3	1.5	9.2	(Z)	.1	.1	1.0	24	28
26	Paper and allied products	2,522.4	139.4	131.8	271.2	10.7	26.2	1.2	1.4	2.6	9.9	1	1
27	Printing and publishing	658.2	1.6	6.8	8.4	1.2	16.9	(Z)	.2	.2	1.1	1	1
28	Chemicals and allied products	2,387.3	108.1	144.1	252.2	10.6	14.9	.5	.9	1.4	9.3	3	3
29	Petroleum and coal products	227.8	2.4	4.4	6.8	2.9	1.1	(Z)	(Z)	(Z)	(Z)	19	39
31	Leather and leather products	78.9	1.1	.5	1.6	2.0	3.1	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	846.1	21.5	27.2	48.7	5.7	14.9	.3	.5	.8	5.3	5	4
33	Primary metal industries	1,416.6	56.2	187.0	243.2	17.1	12.6	.3	1.7	2.0	15.8	1	3
34	Fabricated metal products	1,134.3	26.0	44.4	70.4	6.2	19.2	.3	.8	1.1	5.7	6	6
35	Machinery, except electrical	787.2	114.0	31.7	145.7	18.5	16.2	2.4	.7	3.1	19.1	4	5
36	Electric, electronic equipment	974.2	57.1	48.9	106.0	10.8	15.8	.9	.8	1.7	10.7	4	5
37	Transportation equipment	5,084.6	442.5	138.2	580.7	11.4	30.8	5.3	.9	6.2	20.1	1	1
38	Instruments, related products	182.1	14.7	5.1	19.8	10.8	4.0	.4	.1	.5	12.5	4	3
39	Miscellaneous manufacturing industries	263.9	16.7	3.3	20.0	7.5	6.7	.4	.1	.5	7.4	2	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	14.4	(X)	1.3	1.3	9.0	(X)	(X)
	Hawaii	1,974.0	26.3	39.5	65.8	3.3	25.0	.2	.5	.7	2.8	1	5
20	Food and kindred products	800.7	9.6	10.9	20.5	2.5	10.9	.1	.1	.2	1.8	3	6
23	Apparel, other textile products	78.0	1.3	.9	2.2	2.8	3.8	(Z)	(Z)	(Z)	(Z)	86	90
27	Printing and publishing	124.3	.1	1.3	1.4	1.1	2.5	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.4	(X)	.1	.1	7.1	(X)	(X)
	Idaho	3,657.7	245.6	135.3	380.9	10.4	51.6	3.2	1.6	4.8	9.3	1	2
20	Food and kindred products	1,219.5	52.1	16.1	68.2	5.6	15.5	1.0	.2	1.2	7.7	5	8
24	Lumber and wood products	1,084.0	21.9	46.8	68.7	6.3	16.4	.1	.7	.8	4.8	6	8
27	Printing and publishing	71.7	.1	.7	.8	1.1	2.2	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	386.2	49.8	33.2	83.0	21.4	2.1	.2	.2	.4	19.0	1	1
30	Rubber, miscellaneous plastics products	71.7	.1	4.1	4.2	5.8	1.0	(Z)	.1	.1	9.9	1	1

See footnotes at end of table.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[6] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Idaho--Con.												
34	Fabricated metal products	88.0	4.4	2.0	6.4	7.2	1.5	.1	(Z)	.1	6.6	1	1
35	Machinery, except electrical	190.2	67.6	4.4	72.0	37.9	3.3	.9	.1	1.0	30.3	1	3
37	Transportation equipment	67.6	8.3	.8	9.1	13.4	1.3	.1	(Z)	.1	7.6	1	1
38	Instruments, related products	3.9	.1	.1	.2	5.1	.1	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.9	(X)	.1	.1	5.3	(X)	(X)
	Illinois	93,081.3	6,312.9	3,903.3	10,216.2	11.0	1,286.2	75.2	64.9	140.1	10.9	1	1
20	Food and kindred products	14,938.2	735.8	196.2	932.0	6.2	103.9	2.1	1.4	3.5	3.4	1	4
22	Textile mill products	169.5	5.6	7.3	12.9	7.6	3.7	.1	.1	.2	5.4	1	1
23	Apparel, other textile products	818.1	7.3	13.4	20.7	2.5	24.7	(Z)	.3	.3	1.2	20	23
24	Lumber and wood products	661.1	10.5	29.3	39.8	6.0	13.9	.2	.6	.8	5.7	46	24
25	Furniture and fixtures	1,051.7	11.2	8.1	19.3	1.8	23.5	.1	.2	.3	1.2	4	5
26	Paper and allied products	2,386.3	35.4	140.7	176.1	7.3	35.8	.4	2.1	2.5	6.9	6	5
27	Printing and publishing	4,957.4	91.3	50.3	141.6	2.8	100.5	1.2	1.0	2.2	2.1	4	5
28	Chemicals and allied products	7,042.5	406.9	352.8	759.7	10.8	54.7	4.3	2.4	6.7	12.2	2	3
29	Petroleum and coal products	7,463.2	52.8	145.1	197.9	2.6	10.8	.1	.2	.3	2.7	2	3
30	Rubber, miscellaneous plastics products	2,603.7	73.8	143.5	217.3	8.3	50.1	1.7	2.8	4.5	8.9	8	9
31	Leather and leather products	211.8	6.7	2.1	8.8	4.1	7.2	.1	(Z)	.1	1.3	2	1
33	Primary metal industries	8,239.0	185.6	1,087.8	1,273.4	15.4	89.1	2.3	11.7	14.0	15.7	3	4
34	Fabricated metal products	8,226.5	323.3	594.2	917.5	11.1	140.0	5.6	10.2	15.8	11.2	3	3
35	Machinery, except electrical	15,113.5	2,892.2	566.2	3,458.4	22.9	211.2	31.2	9.6	40.8	19.3	1	1
36	Electric, electronic equipment	8,693.6	532.0	315.4	847.4	9.7	155.3	10.5	6.9	17.4	11.2	1	1
37	Transportation equipment	4,915.0	460.9	93.1	554.0	11.2	50.0	3.9	1.0	4.9	9.7	1	3
38	Instruments, related products	2,003.9	254.3	57.3	311.6	15.5	43.9	5.5	1.2	6.7	15.2	2	2
39	Miscellaneous manufacturing industries	1,464.4	174.0	17.0	191.0	13.0	34.7	4.0	.4	4.4	12.6	4	5
--	Cental administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	96.1	(X)	11.1	11.1	11.6	(X)	(X)
	Indiana	52,172.2	2,941.8	2,842.7	5,784.5	11.1	705.9	36.7	38.2	74.9	10.6	1	1
20	Food and kindred products	4,931.2	122.9	66.4	189.3	3.8	36.2	.4	.5	.9	2.4	1	3
22	Textile mill products	62.3	1.6	2.2	3.8	6.0	1.1	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	419.0	3.6	7.2	10.8	2.5	12.6	(Z)	.2	.2	1.5	1	1
24	Lumber and wood products	1,074.8	20.9	40.9	61.8	5.7	20.6	.5	.9	1.4	6.7	19	22
25	Furniture and fixtures	783.8	6.5	5.6	12.1	1.5	22.5	.1	.2	.3	1.3	11	13
26	Paper and allied products	910.7	10.6	53.4	64.0	7.0	13.5	.1	.8	.9	6.6	6	9
27	Printing and publishing	1,085.5	7.4	11.1	18.5	1.7	26.1	.1	.3	.4	1.5	7	8
28	Chemicals and allied products	3,150.3	294.5	120.4	414.9	13.2	25.4	2.6	.7	3.3	12.9	1	1
29	Petroleum and coal products	2,727.3	1.0	53.4	54.4	1.9	4.2	(Z)	.1	.1	2.3	1	1
30	Rubber, miscellaneous plastics products	1,706.6	83.2	92.1	175.3	10.2	33.0	1.3	1.8	3.1	9.3	3	5
31	Leather and leather products	60.2	1.3	.3	1.6	2.6	2.6	(Z)	(Z)	(Z)	(Z)	8	10
33	Primary metal industries	10,411.0	230.3	1,368.5	1,598.8	15.3	102.3	1.8	13.5	15.3	14.9	1	3
34	Fabricated metal products	4,039.0	135.7	266.5	402.2	9.9	62.0	1.8	4.1	5.9	9.5	3	4
35	Machinery, except electrical	4,234.6	432.3	252.6	684.9	16.1	73.7	6.0	4.7	10.7	14.5	1	2
36	Electric, electronic equipment	6,325.8	429.2	230.3	659.5	10.4	107.1	7.2	4.5	11.7	10.9	1	1
37	Transportation equipment	8,038.3	1,072.9	202.1	1,275.0	15.8	101.3	12.4	2.6	15.0	14.8	1	1
39	Miscellaneous manufacturing industries	480.1	23.4	6.0	29.4	6.1	10.8	.4	.1	.5	4.6	4	6
--	Central administratvie offices, auxiliary	(X)	(X)	(X)	(X)	(X)	17.4	(X)	2.0	2.0	11.5	(X)	(X)
	Iowa	23,514.9	1,578.1	650.4	2,228.5	9.5	240.3	19.2	8.0	27.2	11.3	1	1
20	Food and kindred products	9,905.9	284.1	133.0	417.1	4.2	46.3	2.9	.6	3.5	7.6	1	2
22	Textile mill products	35.8	1.8	1.1	2.9	8.1	1.2	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	127.3	2.0	2.0	4.0	3.1	4.4	(Z)	.1	.1	2.2	28	34
24	Lumber and wood products	281.8	10.4	10.3	20.7	7.3	5.2	.2	.2	.4	7.6	3	1
25	Furniture and fixtures	191.0	.8	1.5	2.3	1.2	3.7	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	395.3	8.7	22.9	31.6	7.9	4.8	(Z)	.3	.3	6.2	1	1
27	Printing and publishing	710.7	2.7	7.3	10.0	1.4	14.6	(Z)	.1	.1	.6	7	1
28	Chemicals and allied products	1,520.0	109.1	95.4	204.5	13.5	5.5	.4	.3	.7	12.7	1	1
30	Rubber, miscellaneous plastics products	813.7	53.8	43.1	96.9	11.9	11.6	.7	.6	1.3	11.2	7	10
32	Stone, clay, glass products	538.4	5.5	14.8	20.3	3.7	6.9	(Z)	.2	.2	2.8	1	1
33	Primary metal industries	776.0	38.7	101.1	139.8	18.0	8.4	.2	1.1	1.3	15.4	7	8
34	Fabricated metal products	1,060.0	69.0	51.6	120.6	11.3	20.7	1.1	1.0	2.1	10.1	2	2
35	Machinery, except electrical	4,912.0	775.2	111.5	886.7	18.0	61.5	9.1	1.6	10.7	17.3	1	2
36	Electric, electronic equipment	1,344.6	148.2	35.6	183.8	13.6	23.6	2.6	.8	3.4	14.4	2	1
38	Instruments, related products	102.8	9.0	3.3	12.3	11.9	2.9	.2	.1	.3	10.3	1	1
39	Miscellaneous manufacturing industries	234.9	33.5	2.6	36.1	15.3	5.4	1.0	.1	1.1	20.3	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	4.8	(X)	.6	.6	12.5	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Kansas	15,987.3	689.2	468.4	1,157.6	7.2	168.1	9.4	6.4	15.8	9.4	1	1
20	Food and kindred products	3,934.6	157.6	52.2	209.8	5.3	20.0	.5	.3	.8	4.0	3	5
24	Lumber and wood products	216.7	6.0	7.0	13.0	5.9	3.7	.1	.1	.2	5.4	59	23
25	Furniture and fixtures	70.6	.2	.5	.7	.9	2.0	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	277.7	3.6	16.3	19.9	7.1	3.7	(Z)	.2	.2	5.4	1	1
28	Chemicals and allied products	968.1	27.7	54.5	82.2	8.5	6.4	.2	.4	.6	9.4	1	1
29	Petroleum and coal products	2,667.1	3.6	52.1	55.7	2.0	4.1	(Z)	.1	.1	2.4	1	1
32	Stone, clay, glass products	512.9	4.6	13.5	18.1	3.5	7.2	(Z)	.2	.2	2.7	1	1
34	Fabricated metal products	525.6	18.4	14.7	33.1	6.2	9.4	.2	.2	.4	4.2	12	15
35	Machinery, except electrical	1,396.7	133.0	49.3	182.3	13.1	25.7	2.0	1.1	3.1	12.0	2	3
36	Electric, electronic equipment	365.3	18.5	15.4	33.9	9.2	7.6	.5	.3	.8	10.5	1	1
37	Transportation equipment	3,031.9	232.2	122.1	354.3	11.6	38.7	4.5	2.0	6.5	16.7	1	1
38	Instruments, related products	111.1	8.3	2.9	11.2	10.0	3.3	.2	.1	.3	9.0	2	1
39	Miscellaneous manufacturing industries	88.1	1.7	1.1	2.8	3.1	2.2	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	3.7	(X)	.3	.3	8.1	(X)	(X)
	Kentucky	22,874.7	1,353.9	1,013.1	2,367.0	10.3	277.5	12.7	12.0	24.7	8.9	1	1
20	Food and kindred products	2,565.0	84.2	34.3	118.5	4.6	19.7	.2	.3	.5	2.5	2	5
21	Tobacco products	1,678.6	38.5	74.8	113.3	6.7	11.1	.3	.5	.8	7.2	23	23
22	Textile mill products	295.3	11.4	8.2	19.6	6.6	7.3	.3	.2	.5	6.8	1	1
23	Apparel, other textile products	610.5	10.5	6.8	17.3	2.8	27.1	.3	.2	.5	1.8	3	6
24	Lumber and wood products	309.2	6.6	16.4	23.0	7.4	8.3	.1	.4	.5	6.0	9	12
25	Furniture and fixtures	141.3	.9	1.0	1.9	1.3	4.5	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	437.6	56.4	22.3	78.7	17.9	4.8	.3	.3	.6	12.5	1	1
27	Printing and publishing	601.5	3.7	6.2	9.9	1.6	13.7	(Z)	.1	.1	.7	19	16
28	Chemicals and allied products	2,480.4	195.9	198.9	394.8	15.9	15.7	1.3	1.2	2.5	15.9	1	1
30	Rubber, miscellaneous plastics products	694.4	21.5	38.2	59.7	8.5	9.4	.3	.5	.8	8.5	7	8
31	Leather and leather products	130.7	1.5	1.4	2.9	2.2	4.2	(Z)	(Z)	(Z)	(Z)	1	1
33	Primary metal industries	2,180.0	50.2	282.1	332.3	15.2	17.3	.3	2.3	2.6	15.0	1	2
34	Fabricated metal products	1,216.6	54.8	66.0	120.8	9.9	22.2	.9	1.3	2.2	9.9	3	5
35	Machinery, except electrical	2,523.3	311.8	87.5	399.3	15.8	38.8	4.0	1.6	5.6	14.4	1	1
36	Electric, electronic equipment	2,050.2	96.3	59.2	155.5	7.5	31.5	1.5	1.2	2.7	8.5	1	1
37	Transportation equipment	3,233.8	349.3	70.9	420.2	12.9	14.6	1.2	.3	1.5	10.2	1	2
38	Instruments, related products	180.1	23.6	4.8	28.4	15.7	3.3	.3	.1	.4	12.1	1	1
39	Miscellaneous manufacturing industries	166.8	11.5	2.0	13.5	8.0	3.8	.1	(Z)	.1	2.6	1	2
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	11.3	(X)	1.2	1.2	10.6	(X)	(X)
	Louisiana	29,493.3	1,494.1	1,239.9	2,734.0	9.3	194.8	8.5	7.6	16.1	8.3	1	2
20	Food and kindred products	3,147.8	278.1	39.6	317.7	10.1	25.8	.9	.3	1.2	4.6	3	8
22	Textile mill products	69.9	1.1	1.1	2.2	3.1	2.5	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	239.5	6.4	2.6	9.0	3.7	11.1	.1	.1	.2	1.8	13	11
24	Lumber and wood products	825.8	7.7	38.7	46.4	5.6	14.4	(Z)	.7	.7	4.8	8	15
25	Furniture and fixtures	41.5	.8	.3	1.1	2.6	1.2	(Z)	(Z)	(Z)	(Z)	39	24
26	Paper and allied products	1,573.2	97.4	79.7	177.1	11.2	15.0	.7	.8	1.5	9.9	1	1
27	Printing and publishing	294.6	.5	3.0	3.5	1.1	7.7	(Z)	.1	.1	1.2	57	1
28	Chemicals and allied products	8,000.9	753.0	695.5	1,448.5	18.1	30.2	2.6	2.6	5.2	17.2	1	1
29	Petroleum and coal products	11,134.3	81.9	216.4	298.3	2.6	10.8	(Z)	.2	.2	1.8	1	1
32	Stone, clay, glass products	510.0	6.6	16.8	23.4	4.5	7.8	.1	.3	.4	5.1	2	5
34	Fabricated metal products	721.9	35.8	20.0	55.8	7.7	13.5	1.0	.4	1.4	10.3	3	3
35	Machinery, except electrical	432.2	86.9	22.5	109.4	25.3	9.3	1.4	.5	1.9	20.4	7	9
36	Electric, electronic equipment	669.3	21.3	20.6	41.9	6.2	10.2	.2	.3	.5	4.9	1	1
37	Transportation equipment	983.5	24.7	7.2	31.9	3.2	22.1	.4	.2	.6	2.7	8	10
38	Instruments, related products	24.4	1.2	.7	1.9	7.7	.7	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.8	(X)	.3	.3	10.7	(X)	(X)
	Maine	5,144.6	232.4	192.5	424.9	8.3	102.8	4.0	3.5	7.5	7.3	1	1
20	Food and kindred products	716.6	23.0	9.6	32.6	4.5	10.3	.5	.1	.6	5.8	4	6
22	Textile mill products	351.1	8.1	19.4	27.5	7.8	9.2	(Z)	.5	.5	5.4	2	1
23	Apparel, other textile products	102.4	1.2	.9	2.1	2.0	3.5	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	556.5	12.0	25.6	37.6	6.7	12.7	.2	.6	.8	6.2	10	11
26	Paper and allied products	1,661.6	64.3	83.8	148.1	8.9	17.2	.7	.9	1.6	9.3	1	1
27	Printing and publishing	83.6	.4	.9	1.3	1.5	2.9	(Z)	(Z)	(Z)	(Z)	11	15
29	Petroleum and coal products	24.4	.1	.5	.6	2.4	.4	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	142.9	6.8	7.7	14.5	10.1	3.9	.1	.2	.3	7.6	2	1
31	Leather and leather products	585.3	52.9	4.7	57.6	9.8	19.5	.7	.1	.8	4.1	2	2
34	Fabricated metal products	114.7	4.0	4.8	8.8	7.6	2.8	.1	.1	.2	7.1	1	1

See footnotes at end of table.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment	B	G
		A	B	C	D	E	F	G	H	I	J		
	Maine--Con.												
35	Machinery, except electrical	179.1	8.4	11.6	20.0	11.1	3.9	.2	.3	.5	12.8	4	4
36	Electric, electronic equipment	193.3	33.6	12.4	46.0	23.7	5.7	.9	.4	1.3	22.8	1	1
38	Instruments, related products	15.0	1.3	.4	1.7	11.3	.4	(Z)	(Z)	(Z)	(Z)	4	5
39	Miscellaneous manufacturing industries	37.4	1.4	.5	1.9	5.0	1.5	(Z)	(Z)	(Z)	(Z)	33	27
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	.9	(X)	.1	.1	11.1	(X)	(X)
	Maryland	15,930.4	633.9	692.8	1,326.7	8.3	243.2	9.3	11.0	20.3	8.3	1	2
20	Food and kindred products	3,025.6	95.9	40.5	136.4	4.5	27.9	.7	.4	1.1	3.9	1	1
22	Textile mill products	34.1	1.1	1.9	3.0	8.7	1.1	(Z)	.1	.1	9.0	1	1
23	Apparel, other textile products	513.4	4.1	5.0	9.1	1.7	16.2	.1	.2	.3	1.8	21	22
24	Lumber and wood products	192.4	1.4	8.6	10.0	5.1	4.2	(Z)	.2	.2	4.7	21	10
25	Furniture and fixtures	120.9	2.7	.9	3.6	2.9	3.6	(Z)	(Z)	(Z)	(Z)	45	32
26	Paper and allied products	667.8	4.7	40.7	45.4	6.7	10.3	(Z)	.6	.6	5.8	3	4
27	Printing and publishing	821.0	4.7	8.4	13.1	1.5	20.4	(Z)	.2	.2	.9	13	18
28	Chemicals and allied products	1,468.3	90.3	73.7	164.0	11.2	12.7	.9	.7	1.6	12.5	1	1
29	Petroleum and coal products	167.2	2.3	3.2	5.5	3.2	1.1	(Z)	(Z)	(Z)	(Z)	1	1
31	Leather and leather products	75.1	1.6	1.4	3.0	3.9	2.1	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	569.1	13.8	18.0	31.8	5.5	9.2	.2	.3	.5	5.4	1	1
35	Machinery, except electrical	1,212.3	130.3	75.4	205.7	16.9	19.1	2.0	1.2	3.2	16.7	2	2
36	Electric, electronic equipment	1,503.7	176.1	37.4	213.5	14.1	32.2	3.3	.9	4.2	13.0	1	3
37	Transportation equipment	1,977.2	14.6	45.8	60.4	3.0	15.2	.1	.3	.4	2.6	1	1
38	Instruments, related products	109.0	10.1	2.5	12.6	11.5	3.1	.3	.1	.4	12.9	22	18
39	Miscellaneous manufacturing industries	141.5	7.0	1.8	8.8	6.2	3.5	(Z)	(Z)	(Z)	(Z)	17	22
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	14.7	(X)	1.5	1.5	10.2	(X)	(X)
	Massachusetts	30,144.2	2,310.3	1,187.2	3,497.5	11.6	613.4	42.5	27.7	70.2	11.4	1	2
20	Food and kindred products	2,650.7	16.0	36.4	52.4	2.0	26.8	(Z)	.4	.4	1.4	25	19
22	Textile mill products	1,123.0	35.2	46.3	81.5	7.2	26.3	.6	1.1	1.7	6.4	16	14
23	Apparel, other textile products	1,370.3	12.7	17.6	30.3	2.2	42.4	(Z)	.5	.5	1.1	12	14
24	Lumber and wood products	242.7	17.4	10.3	27.7	11.4	6.0	.2	.3	.5	8.3	38	59
25	Furniture and fixtures	275.2	2.7	1.9	4.6	1.6	7.6	(Z)	.1	.1	1.3	2	1
26	Paper and allied products	1,700.7	45.4	93.3	138.7	8.1	29.8	.7	1.6	2.3	7.7	8	10
27	Printing and publishing	1,734.5	17.8	17.8	35.6	2.0	41.8	.2	.4	.6	1.4	6	5
28	Chemicals and allied products	1,572.2	116.3	85.1	201.4	12.8	15.8	1.1	.9	2.0	12.6	3	4
29	Petroleum and coal products	173.2	1.8	3.4	5.2	3.0	1.3	(Z)	(Z)	(Z)	(Z)	2	1
30	Rubber, miscellaneous plastics products	1,508.0	52.1	82.6	134.7	8.9	30.4	1.1	1.7	2.8	9.2	32	38
31	Leather and leather products	765.8	31.5	8.3	39.8	5.1	22.1	.5	.2	.7	3.1	15	14
33	Primary metal industries	1,044.8	24.0	139.7	163.7	15.6	14.0	.2	1.9	2.1	14.9	9	7
34	Fabricated metal products	2,171.2	118.3	142.5	260.8	12.0	47.4	3.0	3.1	6.1	12.8	4	5
35	Machinery, except electrical	4,375.5	752.5	209.8	962.3	22.0	81.2	12.7	4.9	17.6	21.7	3	7
36	Electric, electronic equipment	3,403.7	385.1	156.0	541.1	15.8	77.9	8.4	4.0	12.4	15.9	2	2
38	Instruments, related products	2,445.3	400.2	52.9	453.1	18.5	47.5	8.3	1.1	9.4	19.7	4	4
39	Miscellaneous manufacturing industries	1,118.6	68.8	13.8	82.6	7.3	27.2	1.7	.3	2.0	7.3	5	8
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	33.7	(X)	4.3	4.3	12.8	(X)	(X)
	Michigan	93,757.1	6,937.4	4,037.9	10,975.3	11.7	1,115.9	68.5	64.2	132.7	11.9	1	1
20	Food and kindred products	5,586.8	153.4	75.1	228.5	4.1	46.2	.8	.6	1.4	3.0	7	10
22	Textile mill products	196.2	8.8	7.1	15.9	8.1	2.6	.1	.1	.2	7.6	21	18
23	Apparel, other textile products	1,757.1	78.7	53.6	132.3	7.5	25.5	1.0	.7	1.7	6.6	1	3
24	Lumber and wood products	683.6	12.1	32.7	44.8	6.5	15.0	.4	.7	1.1	7.3	44	39
25	Furniture and fixtures	1,099.0	21.2	9.2	30.4	2.7	21.7	.4	.2	.6	2.7	4	6
26	Paper and allied products	2,026.1	29.3	112.9	142.2	7.0	23.1	.2	1.3	1.5	6.4	2	3
27	Printing and publishing	1,477.3	8.8	15.2	24.0	1.6	33.4	.1	.3	.4	1.1	10	16
28	Chemicals and allied products	3,761.0	404.5	201.9	606.4	16.1	33.9	3.5	1.9	5.4	15.9	1	2
29	Petroleum and coal products	1,080.6	3.8	21.1	24.9	2.3	2.2	(Z)	(Z)	(Z)	(Z)	55	1
30	Rubber, miscellaneous plastics products	1,794.5	62.1	98.3	160.4	8.9	35.6	1.0	1.9	2.9	8.1	12	12
31	Leather and leather products	143.0	2.6	2.4	5.0	3.4	2.9	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	1,443.2	75.9	54.6	130.5	9.0	20.1	1.2	.7	1.9	9.4	3	2
33	Primary metal industries	7,050.3	196.4	921.1	1,117.5	15.8	83.0	2.5	10.8	13.3	16.0	1	2
34	Fabricated metal products	9,372.8	514.3	834.5	1,348.8	14.3	142.6	7.5	12.4	19.9	13.9	2	4
35	Machinery, except electrical	9,116.9	985.5	497.7	1,483.2	16.3	145.9	12.9	8.9	21.8	14.9	2	2
36	Electric, electronic equipment	2,070.8	188.3	82.5	270.8	13.0	33.9	2.5	1.5	4.0	11.7	2	4
37	Transportation equipment	44,093.5	4,107.1	997.5	5,104.6	11.5	321.2	32.1	7.3	39.4	12.2	1	1
38	Instruments, related products	541.8	63.4	15.0	78.4	14.4	11.6	1.3	.3	1.6	13.7	6	6
39	Miscellaneous manufacturing industries	462.5	20.4	5.8	26.2	5.6	10.8	.5	.1	.6	5.5	5	7
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	104.8	(X)	14.3	14.3	13.6	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Minnesota	23,021.2	1,605.4	692.6	2,298.0	10.0	331.7	21.2	13.4	34.6	10.4	1	1
20	Food and kindred products	6,806.4	316.5	89.7	406.2	6.0	42.7	.9	.6	1.5	3.5	1	2
22	Textile mill products	93.0	15.9	2.0	17.9	19.2	2.5	.2	(Z)	.2	7.9	17	27
23	Apparel, other textile products	184.7	1.7	2.5	4.2	2.2	5.7	(Z)	.1	.1	1.7	1	1
24	Lumber and wood products	844.3	26.3	36.4	62.7	7.4	12.8	.2	.6	.8	6.2	3	9
25	Furniture and fixtures	155.9	.6	1.2	1.8	1.1	4.0	(Z)	(Z)	(Z)	(Z)	36	37
26	Paper and allied products	1,105.3	18.5	60.5	79.0	7.1	12.7	.1	.7	.8	6.2	1	5
27	Printing and publishing	1,151.6	8.4	11.8	20.2	1.7	28.9	.1	.3	.4	1.3	6	6
28	Chemicals and allied products	784.5	20.7	38.8	59.5	7.6	6.2	.1	.3	.4	6.4	3	8
29	Petroleum and coal products	1,395.1	1.1	27.3	28.4	2.0	1.6	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	479.5	5.2	26.9	32.1	6.6	10.6	.1	.6	.7	6.6	15	17
32	Stone, clay, glass products	853.7	2.5	26.5	29.0	3.3	11.7	(Z)	.4	.4	3.4	14	50
33	Primary metal industries	451.1	5.6	60.2	65.8	14.5	7.4	(Z)	1.0	1.0	13.5	1	1
34	Fabricated metal products	1,559.7	66.6	70.2	136.8	8.7	30.3	3.1	1.4	4.5	14.8	3	2
35	Machinery, except electrical	3,597.7	753.6	133.2	886.8	24.6	64.1	10.4	2.7	13.1	20.4	1	2
36	Electric, electronic equipment	1,498.7	141.2	63.5	204.7	13.6	29.0	2.3	1.5	3.8	13.1	1	2
37	Transportation equipment	1,015.5	85.3	20.2	105.5	10.3	8.0	.6	.1	.7	8.7	1	3
38	Instruments, related products	639.7	113.1	16.5	129.6	20.2	13.8	2.3	.4	2.7	19.5	1	1
39	Miscellaneous manufacturing industries	279.8	10.3	3.5	13.8	4.9	7.4	.2	.1	.3	4.0	21	20
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	30.1	(X)	2.6	2.6	8.6	(X)	(X)
	Mississippi	12,765.8	717.7	393.3	1,111.0	8.7	219.4	11.9	5.9	17.8	8.1	1	2
20	Food and kindred products	1,745.4	151.1	22.0	173.1	9.9	18.2	1.0	.2	1.2	6.6	1	2
22	Textile mill products	328.2	7.2	10.5	17.7	5.3	7.8	(Z)	.2	.2	2.5	1	1
23	Apparel, other textile products	809.4	18.7	7.0	25.7	3.1	39.0	.7	.3	1.0	2.5	3	2
24	Lumber and wood products	1,192.7	29.4	55.7	85.1	7.1	22.3	.4	1.1	1.5	6.7	14	16
25	Furniture and fixtures	550.3	4.8	3.6	8.4	1.5	15.5	.1	.1	.2	1.2	7	9
27	Printing and publishing	145.2	.3	1.5	1.8	1.2	4.5	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	871.2	83.9	59.4	143.3	16.4	6.6	.5	.4	.9	13.6	1	1
31	Leather and leather products	63.4	.4	.2	.6	.9	2.1	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	400.7	19.1	13.0	32.1	8.0	7.3	.2	.2	.4	5.4	11	16
33	Primary metal industries	253.8	9.4	33.5	42.9	16.9	2.9	(Z)	.4	.4	13.7	2	4
34	Fabricated metal products	551.4	14.6	26.6	41.2	7.4	9.4	.2	.5	.7	7.4	3	4
35	Machinery, except electrical	650.5	41.6	22.3	63.9	9.8	11.9	.6	.5	1.1	9.2	2	3
36	Electric, electronic equipment	870.9	57.6	37.6	95.2	10.9	18.3	1.3	.8	2.1	11.4	1	1
38	Instruments, related products	64.2	3.6	1.7	5.3	8.2	2.0	.1	.1	.2	9.9	18	18
39	Miscellaneous manufacturing industries	153.8	12.9	1.8	14.7	9.5	4.2	.4	(Z)	.4	9.5	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.6	(X)	.2	.2	7.7	(X)	(X)
	Missouri	33,162.5	1,681.8	1,151.7	2,833.5	8.5	433.0	18.4	17.3	35.7	8.2	1	1
20	Food and kindred products	5,905.5	175.8	79.1	254.9	4.3	38.8	.6	.5	1.1	2.8	4	6
22	Textile mill products	18.2	.4	1.0	1.4	7.6	.4	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	740.7	11.1	8.8	19.9	2.6	29.5	.2	.3	.5	1.6	15	31
24	Lumber and wood products	357.0	7.2	17.1	24.3	6.8	8.9	.1	.4	.5	5.6	28	28
25	Furniture and fixtures	295.8	2.6	2.2	4.8	1.6	7.5	(Z)	.1	.1	1.3	8	12
26	Paper and allied products	837.3	7.7	49.1	56.8	6.7	12.1	(Z)	.7	.7	5.7	1	1
27	Printing and publishing	1,280.8	17.0	13.1	30.1	2.3	31.6	.3	.3	.6	1.8	8	8
28	Chemicals and allied products	2,523.7	128.7	129.6	258.3	10.2	23.6	1.3	1.2	2.5	10.5	1	1
31	Leather and leather products	575.0	3.6	2.0	5.6	.9	21.3	(Z)	.1	.1	.4	3	5
32	Stone, clay, glass products	827.4	38.7	23.6	62.3	7.5	12.7	.6	.4	1.0	7.8	3	3
33	Primary metal industries	1,468.0	13.2	182.6	195.8	13.3	17.6	.1	2.3	2.4	13.6	7	8
34	Fabricated metal products	1,929.4	71.7	79.3	151.0	7.8	35.1	1.4	1.3	2.7	7.6	7	8
35	Machinery, except electrical	1,580.0	162.7	73.6	236.3	14.9	32.1	2.5	1.9	4.4	13.7	4	4
36	Electric, electronic equfpment	1,880.5	132.7	99.5	232.2	12.3	37.1	2.5	2.1	4.6	12.3	4	5
37	Transportation equipment	11,189.8	851.0	334.4	1,185.4	10.5	70.7	7.1	2.4	9.5	13.4	1	1
38	Instruments, related products	178.0	8.2	5.3	13.5	7.5	4.8	.1	.1	.2	4.1	3	3
39	Miscellaneous manufacturing industries	237.7	7.1	3.0	10.1	4.2	6.6	.1	.1	.2	3.0	25	32
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	28.9	(X)	2.5	2.5	8.7	(X)	(X)
	Montana	2,669.9	59.3	122.2	181.5	6.8	23.8	.3	1.0	1.3	5.5	7	21
20	Food and kindred products	392.1	37.7	4.9	42.6	10.9	3.4	.1	(Z)	.1	2.9	9	36
24	Lumber and wood products	614.9	9.8	28.3	38.1	6.1	9.8	.1	.4	.5	5.1	6	7
27	Printing and publishing	62.3	.1	.6	.7	1.1	1.8	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	63.8	8.5	5.3	13.8	21.6	.5	(Z)	(Z)	(Z)	(Z)	1	1
35	Machinery, except electrical	17.4	.3	1.0	1.3	7.4	.4	(Z)	(Z)	(Z)	(Z)	1	1
37	Transportation equipment	9.4	1.1	.1	1.2	12.7	.2	(Z)	(Z)	(Z)	(Z)	25	18
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	.3	(X)	(Z)	(Z)	(Z)	(X)	(X)

See footnotes at end of table.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	C
	Nebraska	8,713.4	328.4	247.8	576.2	6.6	87.7	3.2	2.8	6.0	6.8	2	2
20	Food and kindred products	4,542.0	144.1	60.8	204.9	4.5	21.5	.5	.3	.8	3.7	1	4
23	Apparel, other textile products	59.9	.4	.6	1.0	1.6	2.0	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	130.5	.8	4.7	5.5	4.2	2.4	(Z)	.1	.1	4.1	3	1
25	Furniture and fixtures	87.3	3.0	.7	3.7	4.2	1.8	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	68.1	.1	4.3	4.4	6.4	1.1	(Z)	.1	.1	9.0	1	1
27	Printing and publishing	246.7	.5	2.5	3.0	1.2	6.3	(Z)	.1	.1	1.5	1	1
28	Chemicals and allied products	438.9	8.6	29.3	37.9	8.6	2.3	(Z)	.1	.1	4.3	2	1
29	Petroleum and coal products	52.2	.7	1.0	1.7	3.2	.2	(Z)	(Z)	(Z)	(Z)	1	1
31	Leather and leather products	9.0	.2	.3	.5	5.5	.1	(Z)	(Z)	(Z)	(Z)	1	1
33	Primary metal industries	488.7	1.3	61.4	62.7	12.8	2.7	(Z)	.4	.4	14.8	1	1
34	Fabricated metal products	462.5	16.5	15.1	31.6	6.8	7.4	.3	.3	.6	8.1	2	1
35	Machinery, except electrical	794.6	97.3	22.4	119.7	15.1	12.2	1.1	.4	1.5	12.2	5	6
36	Electric, electronic equipment	410.5	12.4	18.6	31.0	7.5	8.6	.4	.5	.9	10.4	1	1
37	Transportation equipment	274.4	12.9	4.2	17.1	6.2	4.3	.2	.1	.3	6.9	1	1
38	Instruments, related products	223.4	19.8	5.8	25.6	11.4	3.5	.3	.1	.4	11.4	1	1
39	Miscellaneous manufacturing industries	45.3	1.7	.6	2.3	5.0	1.4	(Z)	(Z)	(Z)	(Z)	2	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.7	(X)	.2	.2	7.4	(X)	(X)
	Nevada	942.0	31.2	39.2	70.4	7.4	15.0	.3	.6	.9	6.0	3	4
20	Food and kindred products	171.2	3.0	2.3	5.3	3.0	1.4	(Z)	(Z)	(Z)	(Z)	40	61
24	Lumber and wood products	25.9	.1	1.3	1.4	5.4	.6	(Z)	(Z)	(Z)	(Z)	1	1
27	Printing and publishing	80.5	2.1	.8	2.9	3.6	2.1	(Z)	(Z)	(Z)	(Z)	16	12
28	Chemicals and allied products	109.8	18.6	7.7	26.3	23.9	.9	.1	.1	.2	22.2	1	1
38	Instruments, related products	27.8	1.0	1.2	2.2	7.9	.8	(Z)	(Z)	(Z)	(Z)	1	1
39	Miscellaneous manufacturing industries	39.5	1.5	.5	2.0	5.0	1.0	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	.5	(X)	.1	.1	20.0	(X)	(X)
	New Hampshire	4,032.3	290.3	164.3	454.6	11.3	95.3	5.8	3.9	9.7	10.2	2	2
20	Food and kindred products	336.4	4.7	4.6	9.3	2.7	2.4	(Z)	(Z)	(Z)	(Z)	1	1
22	Textile mill products	219.6	5.8	10.1	15.9	7.2	6.1	(Z)	.3	.3	4.9	1	1
23	Apparel, other textile products	48.1	.7	.5	1.2	2.4	2.5	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	202.6	9.3	8.9	18.2	8.9	4.4	(Z)	.2	.2	4.5	17	40
25	Furniture and fixtures	55.5	.3	.4	.7	1.2	1.7	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	480.1	50.7	22.9	73.6	15.3	6.6	.6	.3	.9	13.6	2	2
27	Printing and publishing	173.2	.6	1.8	2.4	1.3	5.1	(Z)	(Z)	(Z)	(Z)	18	1
28	Chemicals and allied products	84.5	11.5	6.3	17.8	21.1	.8	.1	.1	.2	25.0	1	1
30	Rubber, miscellaneous plastics products	291.9	17.0	15.6	32.6	11.1	7.6	.3	.4	.7	9.2	1	1
31	Leather and leather products	301.8	5.1	2.9	8.0	2.6	11.1	(Z)	.1	.1	.9	23	25
32	Stone, clay, glass products	114.8	2.3	3.1	5.4	4.7	2.8	(Z)	.1	.1	3.5	4	3
33	Primary metal industries	108.7	.7	14.7	15.4	14.1	2.7	(Z)	.4	.4	14.8	38	22
34	Fabricated metal products	188.7	5.0	7.7	12.7	6.7	4.7	.1	.2	.3	6.3	14	15
35	Machinery, except electrical	538.9	95.3	27.0	122.3	22.7	12.7	2.2	.7	2.9	22.8	5	5
36	Electric, electronic equipment	503.7	34.2	27.3	61.5	12.2	12.7	.8	.8	1.6	12.5	11	7
37	Transportation equipment	81.1	7.9	2.3	10.2	12.5	1.8	.1	.1	.2	11.1	1	1
38	Instruments, related products	245.5	37.5	7.6	45.1	18.3	6.7	.9	.2	1.1	16.4	1	1
39	Miscellaneous manufacturing industries	48.2	1.0	.6	1.6	3.3	1.8	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.1	(X)	.1	.1	9.1	(X)	(X)
	New Jersey	51,279.4	2,881.1	1,998.4	4,879.5	9.5	778.3	36.5	37.0	73.5	9.4	4	2
20	Food and kindred products	6,072.5	180.2	81.4	261.6	4.3	43.2	1.1	.6	1.7	3.9	7	8
22	Textile mill products	1,078.6	28.0	37.9	65.9	6.1	23.4	.2	.8	1.0	4.2	5	5
23	Apparel, other textile products	1,706.9	57.2	22.7	79.9	4.6	59.7	.9	.7	1.6	2.6	27	34
25	Furniture and fixtures	382.5	6.9	2.9	9.8	2.5	9.6	.1	.1	.2	2.0	16	14
26	Paper and allied products	1,984.7	47.0	112.2	159.2	8.0	29.4	.5	1.7	2.2	7.4	5	7
27	Printing and publishing	1,769.9	20.1	18.1	38.2	2.1	45.4	.3	.5	.8	1.7	23	33
28	Chemicals and allied products	11,298.5	834.9	511.8	1,346.7	11.9	95.6	6.5	4.0	10.5	10.9	1	2
29	Petroleum and coal products	4,126.4	80.7	79.2	159.9	3.8	6.7	.1	.1	.2	2.9	3	9
30	Rubber, miscellaneous plastics products	2,021.5	57.7	111.4	169.1	8.3	38.7	1.0	2.1	3.1	8.0	5	6
31	Leather and leather products	272.5	7.8	3.2	11.0	4.0	7.9	.1	.1	.2	2.5	41	46
33	Primary metal industries	2,088.5	55.9	272.6	328.5	15.7	21.7	.6	2.8	3.4	15.6	6	8
34	Fabricated metal products	3,280.2	150.2	193.1	343.3	10.4	57.9	2.6	3.5	6.1	10.5	4	5
35	Machinery, except electrical	3,230.5	451.0	172.5	623.5	19.3	63.5	7.5	3.5	11.0	17.3	3	4
36	Electric, electronic equipment	3,251.0	304.0	137.2	441.2	13.5	77.6	6.3	3.6	9.9	12.7	27	7
37	Transportation equipment	4,097.2	271.4	99.6	371.0	9.0	21.2	1.2	.6	1.8	8.4	1	1
38	Instruments, related products	1,480.1	199.4	36.4	235.8	15.9	28.6	4.3	.7	5.0	17.4	5	6
39	Miscellaneous manufacturing industries	1,161.8	81.0	14.2	95.2	8.1	23.6	1.5	.3	1.8	7.6	9	9
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	86.9	(X)	9.6	9.6	11.0	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	New Mexico	2,009.2	36.8	72.2	109.0	5.4	29.0	(Z)	.9	.9	3.1	2	4
20	Food and kindred products	486.1	8.1	6.6	14.7	3.0	4.3	(Z)	.1	.1	2.3	11	14
23	Apparel, other textile products	100.5	.9	.8	1.7	1.6	3.0	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	126.7	1.6	5.7	7.3	5.7	3.0	(Z)	.1	.1	3.3	36	1
27	Printing and publishing	84.2	.2	.9	1.1	1.3	2.6	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	70.8	2.4	6.2	8.6	12.1	.8	(Z)	.1	.1	12.5	1	1
35	Machinery, except electrical	62.4	.4	4.6	5.0	8.0	1.6	(Z)	.1	.1	6.2	66	75
36	Electric, electronic equipment	127.6	.3	3.3	3.6	2.8	3.4	(Z)	.1	.1	2.9	1	1
37	Transportation equipment	85.3	.8	3.6	4.4	5.1	1.5	(Z)	.1	.1	6.6	1	1
38	Instruments, related products	14.7	.7	.6	1.3	8.8	.5	(Z)	(Z)	(Z)	(Z)	1	1
39	Miscellaneous manufacturing industries	57.2	4.9	.7	5.6	9.7	1.8	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	.3	(X)	(Z)	(Z)	(Z)	(X)	(X)
	New York	86,216.4	5,832.6	3,060.9	8,893.5	10.3	1,509.9	81.3	59.9	141.2	9.4	1	1
20	Food and kindred products	8,927.0	113.4	121.7	235.1	2.6	75.2	.8	1.0	1.8	2.3	6	7
21	Tobacco products	24.0	2.9	1.0	3.9	16.2	.3	(Z)	(Z)	(Z)	(Z)	1	1
22	Textile mill products	1,905.5	35.9	40.2	76.1	3.9	43.0	.6	.9	1.5	3.4	10	12
23	Apparel, other textile products	9,117.6	90.4	94.3	184.7	2.0	214.4	.9	2.2	3.1	1.4	16	29
24	Lumber and wood products	650.6	10.4	30.2	40.6	6.2	14.8	.1	.7	.8	5.4	14	21
25	Furniture and fixtures	843.8	8.1	6.5	14.6	1.7	24.3	.2	.2	.4	1.6	15	17
26	Paper and allied products	2,838.7	59.1	158.1	217.2	7.6	46.1	.9	2.6	3.5	7.5	5	6
27	Printing and publishing	9,823.6	270.4	98.8	369.2	3.7	154.3	3.7	1.6	5.3	3.4	4	6
28	Chemicals and allied products	5,357.8	430.4	208.7	639.1	11.9	51.6	4.0	2.0	6.0	11.6	3	4
29	Petroleum and coal products	755.8	4.1	14.7	18.8	2.4	2.4	(Z)	(Z)	(Z)	(Z)	27	37
30	Rubber,miscellaneous plastics products	1,624.2	63.5	88.5	152.0	9.3	34.5	1.0	1.9	2.9	8.4	11	16
31	Leather and leather products	882.8	36.3	6.1	42.4	4.8	29.3	.6	.2	.8	2.7	17	18
32	Stone, clay, glass products	1,751.0	62.9	64.7	127.6	7.2	31.2	1.1	1.1	2.2	7.0	3	4
33	Primary metal industries	5,481.2	232.1	703.3	935.4	17.0	53.5	1.5	6.9	8.4	15.7	2	6
34	Fabricated metal products	4,032.0	206.8	243.6	450.4	11.1	83.0	3.4	5.0	8.4	10.1	4	5
35	Machinery, except electrical	8,273.0	1,424.7	394.5	1,819.2	22.0	133.3	20.3	7.1	27.4	20.6	1	2
36	Electric, electronic equipment	7,482.0	818.3	447.7	1,266.0	16.9	148.6	15.2	8.4	23.6	15.8	1	2
37	Transportation equipment	5,540.0	695.5	179.8	875.3	15.7	73.5	10.3	2.6	12.9	17.5	1	1
38	Instruments, related products	7,525.4	934.5	118.6	1,053.1	13.9	100.6	13.6	1.8	15.4	15.3	1	2
39	Miscellaneous manufacturing industries	3,380.5	332.1	40.1	372.2	11.0	70.0	2.3	.9	3.2	4.5	7	7
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	126.1	(X)	12.8	12.8	10.2	(X)	(X)
	North Carolina	40,912.2	2,291.2	1,592.1	3,883.3	9.5	765.3	29.3	28.8	58.1	7.6	1	2
20	Food and kindred products	3,601.5	27.5	49.4	76.9	2.1	39.1	.2	.5	.7	1.7	1	1
21	Tobacco products	4,327.3	685.6	166.2	851.8	19.6	23.4	4.7	.9	5.6	23.9	3	6
22	Textile mill products	11,053.7	452.1	481.8	933.9	8.4	245.3	8.5	10.5	19.0	7.7	2	3
23	Apparel, other textile products	1,891.1	43.7	29.0	72.7	3.8	77.1	.9	.9	1.8	2.3	23	41
24	Lumber and wood products	1,460.7	41.4	65.0	106.4	7.2	32.6	.4	1.5	1.9	5.8	11	17
25	Furniture and fixtures	2,467.3	29.5	16.1	45.6	1.8	78.9	.9	.5	1.4	1.7	1	1
26	Paper and allied products	1,621.9	69.6	86.9	156.5	9.6	19.4	.7	1.1	1.8	9.2	1	1
27	Printing and publishing	572.5	1.3	5.9	7.2	1.2	15.7	(Z)	.2	.2	1.2	35	1
28	Chemicals and allied products	3,522.7	161.7	229.8	391.5	11.1	33.0	1.2	2.1	3.3	9.9	4	3
30	Rubber,miscellaneous plastics products	1,318.2	44.6	72.3	116.9	8.8	21.9	.6	1.2	1.8	8.2	3	4
31	Leather and leather products	139.9	1.4	.9	2.3	1.6	4.3	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	816.3	25.3	36.4	61.7	7.5	15.8	.4	.7	1.1	6.9	1	1
33	Primary metal industries	558.5	13.1	69.4	82.5	14.7	5.9	.1	.8	.9	15.2	1	1
34	Fabricated metal products	1,794.9	128.7	61.8	190.5	10.6	26.3	.9	1.1	2.0	7.6	4	9
35	Machinery, except electrical	1,973.7	272.1	92.5	364.6	18.5	33.0	4.0	1.6	5.6	16.9	1	2
36	Electric, electronic equipment	2,366.2	177.9	99.9	277.8	11.7	40.1	3.1	1.9	5.0	12.4	3	6
37	Transportation equipment	617.1	55.8	13.0	68.8	11.1	11.3	1.0	.2	1.2	10.6	2	3
38	Instruments, related products	444.9	51.7	10.6	62.3	14.0	8.4	.8	.2	1.0	11.9	1	1
39	Miscellaneous manufacturing industries	278.6	7.2	3.6	10.8	3.8	7.6	.2	.1	.3	3.9	7	5
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	25.9	(X)	2.8	2.8	10.8	(X)	(X)
	North Dakota	1,312.9	72.8	25.2	98.0	7.5	13.8	1.1	.3	1.4	10.1	1	1
20	Food and kindred products	514.5	6.4	7.0	13.4	2.6	3.9	(Z)	.1	.1	2.5	1	1
28	Chemicals and allied products	12.4	.2	1.1	1.3	10.4	.2	(Z)	(Z)	(Z)	(Z)	1	1
35	Machinery, except electrical	254.4	53.8	4.0	57.8	22.7	3.9	.8	.1	.9	23.0	2	1
39	Miscellaneous manufacturing industries	12.4	3.3	.1	3.4	27.4	.5	.2	(Z)	.2	39.9	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(Z)	(Z)	(D)	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977** – Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment	B	C
		A	B	C	D	E	F	G	H	I	J		
	Ohio	95,234.7	6,027.8	5,018.9	11,046.7	11.6	1,331.2	77.7	75.5	153.2	11.5	3	1
20	Food and kindred products	8,275.7	392.0	109.1	501.1	6.1	66.4	1.9	.9	2.8	4.2	51	59
22	Textile mill products	391.5	46.9	11.7	58.6	14.9	7.2	.5	.2	.7	9.7	1	1
23	Apparel, other textile products	824.1	16.9	16.0	32.9	3.9	19.8	.2	.3	.5	2.5	8	19
24	Lumber and wood products	697.2	5.8	30.7	36.5	5.2	13.7	(Z)	.7	.7	5.1	10	14
25	Furniture and fixtures	720.3	12.5	5.5	18.0	2.4	17.5	.3	.1	.4	2.2	4	6
26	Paper and allied products	2,496.7	34.2	142.9	177.1	7.0	36.7	.5	2.1	2.6	7.0	4	5
27	Printing and publishing	2,627.0	31.2	26.8	58.0	2.2	60.0	.5	.6	1.1	1.8	8	10
28	Chemicals and allied products	6,758.3	304.8	412.4	717.2	10.6	45.5	2.4	3.0	5.4	11.9	2	2
29	Petroleum and coal products	3,953.7	16.8	77.1	93.9	2.3	7.4	.1	.1	.2	2.7	44	63
30	Rubber, miscellaneous plastics products	5,390.8	205.5	294.2	499.7	9.2	98.3	3.3	5.4	8.7	8.8	2	4
31	Leather and leather products	112.0	.8	.7	1.5	1.3	4.0	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	3,066.8	194.4	119.0	313.4	10.2	59.0	3.3	2.3	5.6	9.4	5	5
33	Primary metal industries	13,281.0	288.1	1,741.4	2,029.5	15.2	142.6	3.2	18.7	21.9	15.3	1	2
34	Fabricated metal products	11,035.8	477.3	806.7	1,284.0	11.6	164.5	6.8	11.9	18.7	11.3	1	2
35	Machinery, except electrical	10,766.5	1,382.0	525.8	1,907.8	17.7	197.3	22.1	10.4	32.5	16.4	1	2
36	Electric, electronic equipment	6,624.3	467.9	247.8	715.7	10.8	110.0	8.1	4.5	12.6	11.4	1	2
37	Transportation equipment	16,568.9	2,004.8	413.8	2,418.6	14.5	158.9	20.0	4.3	24.3	15.2	1	1
38	Instruments, related products	816.0	120.8	26.4	147.2	18.0	23.1	3.2	.8	4.0	17.3	5	5
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	81.7	(X)	8.9	8.9	10.9	(X)	(X)
	Oklahoma	12,564.5	638.7	405.5	1,044.2	8.3	164.4	8.7	6.3	15.0	9.1	1	2
20	Food and kindred products	1,627.3	49.3	21.8	71.1	4.3	14.1	.2	.2	.4	2.8	3	3
22	Textile mill products	116.2	1.1	5.2	6.3	5.4	1.9	(Z)	.1	.1	5.2	1	1
23	Apparel, other textile products	327.8	13.5	3.8	17.3	5.2	11.3	.2	.1	.3	2.6	1	1
24	Lumber and wood products	260.1	3.7	11.4	15.1	5.8	3.8	(Z)	.2	.2	5.2	33	20
25	Furniture and fixtures	69.7	.3	.5	.8	1.1	1.9	(Z)	(Z)	(Z)	(Z)	1	1
27	Printing and publishing	340.0	.8	3.5	4.3	1.2	9.0	(Z)	.1	.1	1.1	14	1
28	Chemicals and allied products	374.5	8.6	33.7	42.3	11.3	1.7	(Z)	.1	.1	5.8	19	16
29	Petroleum and coal products	3,350.7	19.5	65.2	84.7	2.5	5.1	(Z)	.1	.1	1.9	1	1
30	Rubber, miscellaneous plastics products	732.7	22.6	40.3	62.9	8.5	10.0	.2	.5	.7	6.9	2	3
31	Leather and leather products	19.4	.6	.1	.7	3.6	.8	(Z)	(Z)	(Z)	(Z)	1	1
33	Primary metal industries	293.7	2.2	37.8	40.0	13.6	5.3	(Z)	.7	.7	13.2	1	1
34	Fabricated metal products	1,034.5	119.7	31.1	150.8	14.5	18.6	1.5	.6	2.1	11.2	6	9
35	Machinery, except electrical	1,527.5	283.7	56.7	340.4	22.3	28.1	4.6	1.2	5.8	20.6	1	1
36	Electric, electronic equipment	813.3	24.9	25.4	50.3	6.1	11.9	.5	.5	1.0	8.4	7	10
37	Transportation equipment	573.6	55.7	22.0	77.7	13.5	11.5	.7	.5	1.2	10.4	3	3
38	Instruments, related products	190.0	12.5	3.9	16.4	8.6	2.5	.2	.1	.3	11.9	8	14
39	Miscellaneous manufacturing industries	76.6	1.5	1.0	2.5	3.2	1.9	(Z)	(Z)	(Z)	(Z)	13	19
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	14.2	(X)	.8	.8	5.6	(X)	(X)
	Oregon	14,370.0	906.4	592.0	1,498.4	10.4	202.4	14.0	8.3	22.3	11.0	1	1
20	Food and kindred products	1,923.2	45.2	25.9	71.1	3.7	23.2	.5	.3	.8	3.4	5	6
24	Lumber and wood products	6,214.2	347.2	276.5	623.7	10.0	75.3	3.4	3.4	6.8	9.0	3	4
25	Furniture and fixtures	103.3	1.3	.7	2.0	1.9	2.7	(Z)	(Z)	(Z)	(Z)	12	19
26	Paper and allied products	1,166.1	32.5	59.8	92.3	7.9	9.1	.2	.5	.7	7.6	1	1
27	Printing and publishing	328.5	.4	3.4	3.8	1.1	7.9	(Z)	.1	.1	1.2	1	1
28	Chemicals and allied products	350.4	26.8	26.8	53.6	15.3	2.5	.1	.2	.3	11.9	14	27
29	Petroleum and coal products	128.9	.4	2.5	2.9	2.2	.8	(Z)	(Z)	(Z)	(Z)	1	1
31	Leather and leather products	14.0	.3	.1	.4	2.8	.3	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	239.4	6.6	7.6	14.2	5.9	4.1	.1	.1	.2	4.8	5	10
33	Primary metal industries	671.5	50.7	75.7	126.4	18.8	9.0	.8	1.0	1.8	19.9	2	2
34	Fabricated metal products	680.9	23.2	30.6	53.8	7.9	11.8	.4	.6	1.0	8.4	4	7
35	Machinery, except electrical	816.6	100.7	36.4	137.1	16.8	14.4	1.6	.7	2.3	15.9	5	4
36	Electric, electronic equipment	243.7	15.7	12.9	28.6	11.7	4.7	.2	.3	.5	10.6	10	12
37	Transportation equipment	638.0	40.2	11.4	51.6	8.0	9.4	.4	.2	.6	6.3	4	7
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	5.4	(X)	.5	.5	9.3	(X)	(X)
	Pennsylvania	79,844.8	4,714.3	4,240.7	8,955.0	11.2	1,329.2	74.6	70.9	145.5	10.9	1	1
20	Food and kindred products	9,508.3	119.6	129.7	249.3	2.6	92.3	1.2	1.3	2.5	2.7	3	3
21	Tobacco products	142.9	10.5	6.0	16.5	11.5	3.3	.1	.1	.2	6.0	1	1
22	Textile mill products	1,883.6	59.8	50.1	109.9	5.8	46.8	1.4	1.3	2.7	5.7	4	6
23	Apparel, other textile products	2,786.2	43.0	26.1	69.1	2.4	132.6	1.2	1.2	2.4	1.8	6	9
24	Lumber and wood products	1,028.5	17.7	43.3	61.0	5.9	20.4	.2	.9	1.1	5.3	13	18

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Pennsylvania--Con.												
25	Furniture and fixtures	788.9	9.4	6.1	15.5	1.9	20.1	.2	.2	.4	1.9	8	8
26	Paper and allied products	3,320.8	57.3	182.8	240.1	7.2	39.9	.5	2.3	2.8	7.0	3	4
27	Printing and publishing	3,001.1	67.6	30.3	97.9	3.2	68.6	1.6	.7	2.3	3.3	9	13
28	Chemicals and allied products	5,300.9	499.1	260.0	759.1	14.3	44.0	3.3	2.2	5.5	12.5	1	3
29	Petroleum and coal products	5,553.4	68.9	107.4	176.3	3.1	11.0	.2	.2	.4	3.6	13	19
30	Rubber, miscellaneous plastics products	2,133.0	67.0	117.2	184.2	8.6	37.9	1.0	2.1	3.1	8.1	3	6
31	Leather and leather products	531.4	8.5	5.3	13.8	2.5	18.3	.1	.1	.2	1.0	5	5
32	Stone, clay, glass products	2,771.0	106.1	118.9	225.0	8.1	54.0	2.1	2.3	4.4	8.1	3	3
33	Primary metal industries	15,504.3	515.4	2,005.9	2,521.3	16.2	181.2	5.2	23.5	28.7	15.8	1	1
34	Fabricated metal products	5,999.2	294.0	335.1	629.1	10.4	104.5	5.3	5.9	11.2	10.7	4	5
35	Machinery, except electrical	6,680.7	1,264.5	324.5	1,589.0	23.8	129.7	22.9	6.6	29.5	22.7	1	2
36	Electric, electronic equipment	5,116.1	561.5	337.5	899.0	17.5	103.9	11.2	6.9	18.1	17.4	2	2
37	Transportation equipment	4,700.8	522.3	89.2	611.5	13.0	70.2	7.9	1.4	9.3	13.2	1	1
38	Instruments, related products	1,696.7	302.6	48.5	351.1	20.6	38.0	6.6	1.1	7.7	20.2	1	2
39	Miscellaneous manufacturing industries	1,397.0	118.4	16.8	135.2	9.6	25.3	1.7	.3	2.0	7.9	4	8
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	87.3	(X)	10.4	10.4	11.9	(X)	(X)
	Rhode Island	5,364.6	296.6	243.7	540.3	10.1	125.0	5.4	5.2	10.6	8.5	3	5
20	Food and kindred products	268.5	1.8	3.7	5.5	2.0	3.7	(Z)	(Z)	(Z)	(Z)	1	1
22	Textile mill products	467.7	20.5	23.2	43.7	9.3	12.8	.4	.7	1.1	8.5	8	8
23	Apparel, other textile products	91.3	.8	1.4	2.2	2.4	3.1	(Z)	(Z)	(Z)	(Z)	71	1
26	Paper and allied products	119.1	1.5	7.0	8.5	7.1	2.5	(Z)	.2	.2	7.9	3	8
27	Printing and publishing	202.1	.3	2.1	2.4	1.1	4.9	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	217.4	10.5	14.3	24.8	11.4	3.0	.1	.2	.3	9.9	17	17
30	Rubber, miscellaneous plastics products	274.7	11.9	14.9	26.8	9.7	5.3	.2	.3	.5	9.4	18	42
31	Leather and leather products	99.3	1.1	.3	1.4	1.4	2.7	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	121.6	3.7	6.2	9.9	8.1	2.4	(Z)	.1	.1	4.1	1	1
33	Primary metal industries	665.8	46.0	85.4	131.4	19.7	8.1	.2	1.1	1.3	16.0	1	1
34	Fabricated metal products	576.9	15.6	28.5	44.1	7.6	15.4	.4	.8	1.2	7.7	13	13
35	Machinery, except electrical	317.7	37.7	17.9	55.6	17.5	8.7	.9	.5	1.4	16.0	13	15
36	Electric, electronic equipment	294.8	19.4	14.4	33.8	11.4	8.3	.4	.4	.8	9.6	2	3
38	Instruments, related products	232.6	21.3	6.5	27.8	11.9	6.0	.5	.2	.7	11.6	1	1
39	Miscellaneous manufacturing industries	1,271.6	100.8	15.4	116.2	9.1	33.3	1.9	.4	2.3	6.9	8	12
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.4	(X)	.2	.2	14.3	(X)	(X)
	South Carolina	18,882.4	1,150.2	967.0	2,117.2	11.2	374.2	18.6	18.1	36.7	9.8	1	1
20	Food and kindred products	1,163.3	18.0	15.8	33.8	2.9	11.8	.1	.2	.3	2.5	4	3
22	Textile mill products	6,475.7	276.5	351.4	627.9	9.6	139.1	5.7	7.8	13.5	9.7	1	1
23	Apparel, other textile products	988.1	22.0	14.0	36.0	3.6	44.8	.2	.5	.7	1.5	1	1
24	Lumber and wood products	788.3	24.2	36.9	61.1	7.7	13.7	.3	.7	1.0	7.2	21	21
25	Furniture and fixtures	128.2	1.5	.9	2.4	1.8	4.1	(Z)	(Z)	(Z)	(Z)	30	31
26	Paper and allied products	1,107.6	116.6	55.1	171.7	15.5	12.5	.9	.7	1.6	12.7	1	1
27	Printing and publishing	188.5	.4	1.9	2.3	1.2	5.9	(Z)	.1	.1	1.6	1	1
28	Chemicals and allied products	2,908.9	265.2	216.8	482.0	16.5	33.1	2.9	2.5	5.4	16.3	1	1
30	Rubber, miscellaneous plastics products	699.2	44.8	37.1	81.9	11.7	12.5	1.1	.7	1.8	14.3	3	2
32	Stone, clay, glass products	549.4	7.2	23.3	30.5	5.5	11.2	.1	.5	.6	5.3	1	1
33	Primary metal industries	438.7	31.8	55.0	86.8	19.7	4.6	.2	.6	.8	17.3	1	2
34	Fabricated metal products	687.1	22.8	35.4	58.2	8.4	12.3	.5	.6	1.1	8.9	1	1
35	Machinery, except electrical	1,443.0	231.4	71.9	303.3	21.0	27.3	3.8	1.3	5.1	18.6	2	4
36	Electric, electronic equipment	722.5	57.8	39.1	96.9	13.4	17.4	1.5	1.1	2.6	14.9	1	1
38	Instruments, related products	200.0	7.6	6.3	13.9	6.9	4.7	.2	.1	.3	6.3	1	1
39	Miscellaneous manufacturing industries	128.4	5.8	1.6	7.4	5.7	4.2	.1	.1	.2	4.7	9	16
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	9.0	(X)	.8	.8	8.9	(X)	(X)
	South Dakota	1,793.7	94.7	35.8	130.5	7.3	22.5	1.6	.5	2.1	9.3	1	3
20	Food and kindred products	1,078.6	23.4	14.6	38.0	3.5	8.2	.1	.1	.2	2.4	2	1
24	Lumber and wood products	100.6	1.0	3.8	4.8	4.7	2.0	(Z)	.1	.1	4.9	1	1
27	Printing and publishing	53.9	.1	.6	.7	1.2	1.7	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	24.2	17.0	.4	17.4	71.9	.6	.3	(Z)	.3	50.0	1	1
34	Fabricated metal products	69.2	1.1	1.6	2.7	3.9	1.0	(Z)	(Z)	(Z)	(Z)	1	1
35	Machinery, except electrical	151.6	10.7	5.0	15.7	10.3	3.0	.1	.1	.2	6.6	7	9
36	Electric, electronic equipment	16.5	1.3	1.7	3.0	18.1	.8	(Z)	.1	.1	12.5	1	1
39	Miscellaneous manufacturing industries	14.3	.8	.2	1.0	6.9	.3	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(D)	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Tennessee	28,752.0	1,500.9	1,215.2	2,716.1	9.4	489.8	18.1	17.9	36.0	7.3	2	3
20	Food and kindred products	4,784.6	189.3	63.5	252.8	5.3	37.2	.4	.5	.9	2.4	2	3
21	Tobacco products	118.3	7.1	5.1	12.2	10.3	1.1	(Z)	(Z)	(Z)	(Z)	1	1
22	Textile mill products	1,110.5	28.1	41.1	69.2	6.2	27.1	.6	.9	1.5	5.5	3	5
23	Apparel, other textile products	1,741.9	55.9	17.0	72.9	4.1	69.9	.9	.6	1.5	2.1	1	3
24	Lumber and wood products	606.2	14.5	27.7	42.2	6.9	16.7	.5	.8	1.3	7.7	55	50
25	Furniture and fixtures	752.1	7.8	5.1	12.9	1.7	23.0	.2	.2	.4	1.7	17	18
26	Paper and allied products	1,389.2	45.7	75.2	120.9	8.7	16.5	.6	.9	1.5	9.0	1	1
27	Printing and publishing	807.1	5.6	8.3	13.9	1.7	23.8	(Z)	.2	.2	.8	11	7
28	Chemicals allied products	4,650.7	358.0	369.8	727.8	15.6	53.0	3.2	4.1	7.3	13.7	1	1
29	Petroleum and coal products	371.0	.8	7.2	8.0	2.1	1.0	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	1,439.6	35.6	79.6	115.2	8.0	21.6	.4	1.2	1.6	7.4	3	4
31	Leather and leather products	562.9	10.5	3.9	14.4	2.5	17.7	.2	.1	.3	1.6	8	6
32	Stone, clay, glass products	825.1	39.8	37.8	77.6	9.4	14.8	.5	.6	1.1	7.4	1	1
33	Primary metal industries	1,731.8	47.7	220.0	267.7	15.4	17.4	.3	2.2	2.5	14.3	1	2
34	Fabricated metal products	1,688.5	121.0	67.5	188.5	11.1	33.4	2.5	1.3	3.8	11.3	20	20
35	Machinery, except electrical	2,035.5	290.4	75.5	365.9	18.0	29.7	3.1	1.4	4.5	15.2	1	1
36	Electric, Electronic equipment	2,095.2	101.0	70.2	171.2	8.1	38.1	1.8	1.3	3.1	8.1	2	2
37	Transportation equipment	1,509.2	121.8	31.2	153.0	10.1	25.4	2.0	.6	2.6	10.2	1	1
38	Instruments, related products	144.4	9.1	4.5	13.6	9.4	3.8	.2	.1	.3	7.8	2	2
39	Miscellaneous manufacturing industries	388.5	10.4	5.0	15.4	3.9	9.9	.1	.1	.2	2.0	8	8
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.8	(X)	.6	.6	6.8	(X)	(X)
	Texas	92,735.7	5,386.0	3,809.8	9,195.8	9.9	886.4	51.9	37.0	88.9	10.0	1	2
20	Food and kindred products	11,494.7	682.0	149.4	831.4	7.2	84.8	2.8	1.1	3.9	4.6	2	7
22	Textile mill products	304.5	14.3	15.0	29.3	9.6	7.1	.1	.4	.5	7.0	2	3
23	Apparel, other textile products	1,959.4	26.9	20.4	47.3	2.4	73.4	.5	.7	1.2	1.6	3	6
24	Lumber and wood products	1,761.8	66.3	72.9	139.2	7.9	33.1	1.2	1.4	2.6	7.8	18	22
25	Furniture and fixtures	610.7	4.4	4.5	8.9	1.4	17.4	(Z)	.1	.1	.5	5	13
26	Paper and allied products	1,580.9	32.4	88.3	120.7	7.6	19.8	.2	1.1	1.3	6.5	1	1
27	Printing and publishing	1,819.4	5.0	18.8	23.8	1.3	47.4	(Z)	.5	.5	1.0	36	37
28	Chemicals and allied products	17,347.0	1,525.6	1,460.7	2,986.3	17.2	67.7	6.0	5.4	11.4	16.8	1	1
29	Petroleum and coal products	27,178.9	360.1	525.1	885.2	3.2	35.3	.8	.7	1.5	4.2	2	8
30	Rubber, miscellaneous plastics products	1,494.5	65.9	81.0	146.9	9.8	25.5	1.0	1.4	2.4	9.4	4	7
31	Leather and leather products	189.6	3.7	.7	4.4	2.3	6.6	(Z)	(Z)	(Z)	(Z)	6	14
32	Stone, clay, glass products	2,359.7	17.3	72.4	89.7	3.8	35.6	.2	1.1	1.3	3.6	3	4
33	Primary metal industries	4,405.0	99.0	529.7	628.7	14.2	38.6	.8	4.9	5.7	14.7	1	1
34	Frabricated metal products	4,666.6	280.3	191.6	471.9	10.1	78.3	4.4	3.0	7.4	9.4	6	8
35	Machinery, except electrical	6,831.5	1,227.5	242.6	1,470.1	21.5	115.4	18.4	4.7	23.1	20.0	1	1
36	Electric, Electronic equipment	3,452.6	328.7	173.0	501.7	14.5	67.8	6.8	3.7	10.5	15.4	7	8
38	Instruments, related products	699.2	54.0	20.3	74.3	10.6	14.1	1.0	.4	1.4	9.9	10	10
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	44.9	(X)	4.1	4.1	9.1	(X)	(X)
	Utah	5,092.8	173.2	242.3	415.5	8.2	70.2	2.5	2.9	5.4	7.7	7	8
20	Food and kindred products	758.0	3.2	10.4	13.6	1.7	6.8	(Z)	.1	.1	1.4	1	1
23	Apparel, other textile products	130.6	3.0	1.5	4.5	3.4	6.0	(Z)	.1	.1	1.6	1	1
24	Lumber and wood products	122.3	.6	4.3	4.9	4.0	3.0	(Z)	.1	.1	3.3	1	1
25	Furniture and fixtures	46.6	.2	.4	.6	1.2	1.3	(Z)	(Z)	(Z)	(Z)	1	1
26	Paper and allied products	49.5	.2	2.8	3.0	6.0	.8	(Z)	(Z)	(Z)	(Z)	1	1
27	Printing and publishing	171.5	.2	1.8	2.0	1.1	4.6	(Z)	(Z)	(Z)	(Z)	1	1
28	Chemicals and allied products	126.0	4.6	8.8	13.4	10.6	1.8	.1	.1	.2	11.1	9	8
31	Leather and leather products	2.5	.1	(Z)	.1	3.9	.1	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, and glass products	236.7	1.1	6.3	7.4	3.1	3.9	(Z)	.1	.1	2.5	1	1
34	Fabricated metal products	249.7	12.7	7.3	20.0	8.0	4.4	.1	.1	.2	4.5	15	19
35	Machinery, except electrical	556.7	70.6	25.7	96.3	17.3	8.9	1.3	.4	1.7	19.1	19	15
36	Electric, electronic equipment	192.9	24.4	6.4	30.8	15.9	4.5	.4	.2	.6	13.3	1	1
37	Transportation equipment	365.8	7.9	6.9	14.8	4.0	5.9	(Z)	.1	.1	1.6	1	1
39	Miscellaneous manufacturing industries	66.9	6.7	.8	7.5	11.2	2.1	.1	(Z)	.1	4.7	9	9
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.1	(X)	.3	.3	14.3	(X)	(X)
	Vermont	2,189.3	182.9	103.8	286.7	13.1	41.5	3.1	1.9	5.0	12.0	1	1
20	Food and kindred products	357.7	1.2	4.9	6.1	1.7	2.2	(Z)	(Z)	(Z)	(Z)	1	1
22	Textile mill products	22.4	.3	1.2	1.5	6.6	.6	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	24.3	.3	.2	.5	2.0	1.3	(Z)	(Z)	(Z)	(Z)	1	1
24	Lumber and wood products	137.5	5.7	6.3	12.0	8.7	3.5	.1	.2	.3	8.5	34	33
25	Furniture and fixtures	65.7	.9	.4	1.3	1.9	2.4	(Z)	(Z)	(Z)	(Z)	1	1

See footnotes at end of table.

Table 5a. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Vermont--Con.												
26	Paper and allied products	201.7	3.8	10.7	14.5	7.1	2.6	(Z)	.1	.1	3.8	3	2
28	Chemicals and allied products	18.5	.4	1.2	1.6	8.6	.2	(Z)	(Z)	(Z)	(Z)	1	1
31	Leather and leather products	11.7	.7	.3	1.0	8.5	.4	(Z)	(Z)	(Z)	(Z)	1	1
33	Primary metal industries	51.8	1.2	7.0	8.2	15.8	.9	(Z)	.1	.1	11.1	1	1
34	Fabricated metal products	182.1	62.4	3.2	65.6	36.0	3.1	1.0	.1	1.1	35.4	1	1
35	Machinery, except electrical	265.0	29.2	13.7	42.9	16.2	6.0	.6	.3	.9	14.9	1	1
36	Electric, electronic equipment	468.2	64.7	42.9	107.6	22.9	7.3	.8	.7	1.5	20.5	1	1
39	Miscellaneous manufacturing industries	15.0	.1	.2	.3	1.9	.5	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offieces, auxiliary	(X)	(X)	(X)	(X)	(X)	.2	(X)	(Z)	(Z)	(Z)	(X)	(X)
	Virginia	23,988.6	1,572.6	907.7	2,480.3	10.3	395.2	19.4	14.1	33.5	8.5	1	1
20	Food and kindred products	3,599.8	135.0	47.9	182.9	5.1	35.0	1.0	.5	1.5	4.3	5	7
21	Tobacco products	2,412.1	401.8	91.7	493.5	20.4	14.9	2.4	.6	3.0	20.1	1	1
22	Textile mill products	1,996.8	109.7	97.0	206.7	10.3	43.0	2.8	1.9	4.7	10.9	2	2
23	Apparel, other textile products	788.5	11.4	8.3	19.7	2.4	37.0	.1	.3	.4	1.0	6	15
24	Lumber and wood products	1,081.5	16.8	48.0	64.8	5.9	21.9	.5	1.0	1.5	6.8	6	4
25	Furniture and fixtures	796.6	11.4	5.2	16.6	2.0	25.5	.4	.2	.6	2.3	2	3
26	Paper and allied products	1,162.7	41.7	62.2	103.9	8.9	13.1	.4	.7	1.1	8.3	1	1
27	Printing and publishing	796.4	3.2	8.2	11.4	1.4	17.5	(Z)	.2	.2	1.1	17	13
28	Chemicals and allied products	2,765.8	411.9	182.7	594.6	21.5	33.4	4.1	2.2	6.3	18.8	1	1
30	Rubber, miscellaneous plastics products	827.5	42.7	44.5	87.2	10.5	11.9	.6	.6	1.2	10.0	2	4
31	Leather and leather products	94.6	1.8	.8	2.6	2.7	3.6	(Z)	(Z)	(Z)	(Z)	1	1
33	Primary metal industries	802.5	9.2	107.7	116.9	14.5	10.5	(Z)	1.4	1.4	13.3	1	3
34	Fabricated metal products	1,079.4	33.6	48.8	82.4	7.6	15.5	.5	.6	1.1	7.0	3	3
35	Machinery, except electrical	913.3	106.7	35.9	142.6	15.6	17.4	2.1	.7	2.8	16.0	1	1
36	Electric, electronic equipment	1,506.3	156.0	54.2	210.2	13.9	28.1	2.7	1.1	3.8	13.5	2	2
37	Transportation equipment	2,219.0	36.6	37.1	73.7	3.3	36.7	.3	.4	.7	1.9	1	3
38	Instruments, related products	144.4	12.7	3.6	16.3	11.2	4.1	.2	.1	.3	7.3	7	7
39	Miscellaneous manufacturing industries	146.7	6.1	1.8	7.9	5.3	3.5	(Z)	(Z)	(Z)	(Z)	6	7
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	11.7	(X)	1.2	1.2	10.3	(X)	(X)
	Washington	21,746.9	2,805.1	911.0	3,716.1	17.1	265.0	27.3	10.9	38.2	14.4	1	1
20	Food and kindred products	3,254.8	150.8	42.9	193.7	6.0	29.3	1.0	.4	1.4	4.7	4	6
22	Textile mill products	30.8	.4	1.4	1.8	5.8	1.0	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	194.8	3.9	2.5	6.4	3.2	6.6	(Z)	.1	.1	1.5	1	1
24	Lumber and wood products	4,096.6	800.1	156.2	956.3	23.3	51.7	5.2	2.1	7.3	14.1	5	7
25	Furniture and fixtures	127.9	2.3	.9	3.2	2.5	3.2	(Z)	(Z)	(Z)	(Z)	48	54
26	Paper and allied products	1,927.6	197.2	93.4	290.6	15.0	16.9	1.6	.8	2.4	14.2	1	1
27	Printing and publishing	427.2	.9	4.4	5.3	1.2	11.3	(Z)	.1	.1	.8	1	1
28	Chemicals and allied products	576.7	45.0	46.9	91.9	15.9	6.4	.3	.5	.8	12.5	4	8
29	Petroleum and coal products	1,683.0	.7	32.9	33.6	1.9	2.8	(Z)	.1	.1	3.5	1	1
30	Rubber, miscellaneous plastics products	207.0	4.3	11.5	15.8	7.6	3.8	(Z)	.2	.2	5.2	31	20
32	Stone, clay, glass products	437.2	2.4	13.4	15.8	3.6	6.4	(Z)	.2	.2	3.1	1	1
33	Primary metal industries	2,173.2	33.4	254.6	288.4	13.2	15.3	.3	1.9	2.2	14.3	1	3
34	Fabricated metal products	665.9	8.1	22.3	30.4	4.5	10.8	.1	.4	.5	4.6	29	24
35	Machinery, except electrical	683.0	112.0	32.2	144.2	21.1	13.8	2.1	.7	2.8	20.2	7	8
36	Electric, electronic equipment	253.7	13.4	9.6	23.0	9.0	5.9	.3	.2	.5	8.4	13	16
38	Instruments, related products	138.2	38.3	3.4	41.7	30.1	3.2	.8	.1	.9	28.1	9	10
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.8	(X)	.8	.8	9.1	(X)	(X)
	West Virginia	8,705.9	437.6	670.5	1,108.1	12.7	117.0	4.2	7.8	12.0	10.3	1	2
20	Food and kindred products	391.6	1.2	5.4	6.6	1.6	5.1	(Z)	.1	.1	1.9	1	1
22	Textile mill products	24.2	.2	.5	.7	2.8	.7	(Z)	(Z)	(Z)	(Z)	1	1
23	Apparel, other textile products	105.4	1.3	1.5	2.8	2.6	5.4	(Z)	.1	.1	1.8	1	1
24	Lumber and wood products	187.4	6.0	9.1	15.1	8.0	5.1	.1	.2	.3	5.8	31	29
26	Paper and allied products	78.7	.6	4.5	5.1	6.4	1.6	(Z)	.1	.1	6.2	1	1
28	Chemicals and allied products	2,774.9	270.0	237.7	507.7	18.3	19.3	1.9	1.6	3.5	18.1	1	1
29	Petroleum and coal products	251.3	1.5	4.9	6.4	2.5	.9	(Z)	(Z)	(Z)	(Z)	1	1
31	Leather and leather products	86.6	.8	.9	1.7	1.9	2.8	(Z)	(Z)	(Z)	(Z)	1	1
32	Stone, clay, glass products	716.8	26.7	38.2	64.9	9.0	17.9	.5	1.0	1.5	8.3	3	5
33	Primary metal industries	2,272.7	46.3	298.6	344.9	15.1	23.4	.5	3.1	3.6	15.3	1	1
34	Fabricated metal products	483.1	7.0	27.0	34.0	7.0	8.2	.1	.5	.6	7.3	2	2
36	Electric, electronic equipment	273.1	11.3	14.1	25.4	9.3	4.6	.1	.2	.3	6.5	1	1
37	Transportation equipment	283.1	24.9	4.5	29.4	10.3	3.7	.4	(Z)	.4	10.8	1	1
39	Miscellaneous manufacturing industries	55.9	3.0	.7	3.7	6.6	1.2	.1	(Z)	.1	8.3	71	47
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.7	(X)	.4	.4	14.8	(X)	(X)

See footnotes at end of table.

Table 5a. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1977** – Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment					Relative standard error of estimate[9] (percent) for column--	
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment		
		A	B	C	D	E	F	G	H	I	J	B	G
	Wisconsin	38,725.3	2,132.1	1,474.6	3,606.7	9.3	535.0	29.8	25.4	55.2	10.3	1	1
20	Food and kindred products	8,929.0	121.4	121.7	243.1	2.7	59.8	.8	.8	1.6	2.7	1	2
22	Textile mill products	220.0	4.1	5.9	10.0	4.5	4.7	(Z)	.1	.1	2.1	3	5
23	Apparel, other textile products	245.8	4.4	3.2	7.6	3.0	7.3	(Z)	.1	.1	1.3	1	1
24	Lumber and wood products	1,073.4	10.9	44.6	55.5	5.1	22.3	.2	1.0	1.2	5.3	20	26
25	Furniture and fixtures	390.9	5.7	3.0	8.7	2.2	9.0	.1	.1	.2	2.2	14	14
26	Paper and allied products	4,002.8	80.0	211.8	291.8	7.2	40.0	.6	2.2	2.8	6.9	1	1
27	Printing and publishing	1,161.6	3.3	12.0	15.3	1.3	26.9	(Z)	.3	.3	1.1	15	24
28	Chemicals and allied products	985.1	30.9	40.8	71.7	7.3	7.6	.2	.4	.6	7.8	7	10
29	Petroleum and coal products	232.0	1.0	4.5	5.5	2.3	.6	(Z)	(Z)	(Z)	(Z)	1	1
30	Rubber, miscellaneous plastics products	851.7	13.7	47.5	61.2	7.1	16.5	.2	.9	1.1	6.6	11	19
31	Leather and leather products	516.0	28.5	8.3	36.8	7.1	11.4	.3	.1	.4	3.5	8	9
33	Primary metal industries	1,455.1	16.5	194.4	210.9	14.4	27.4	.2	3.7	3.9	14.2	1	1
34	Fabricated metal products	3,079.8	87.1	196.5	283.6	9.2	51.7	1.5	3.5	5.0	9.6	2	3
35	Machinery, except electrical	7,027.7	1,082.9	318.7	1,401.6	19.9	109.7	15.9	5.5	21.4	19.5	1	1
36	Electric, electronic equipment	2,503.0	209.6	124.9	334.5	13.3	51.1	3.9	2.7	6.6	12.9	1	2
37	Transportation equipment	4,624.4	315.8	103.8	419.6	9.0	37.0	3.3	.8	4.1	11.0	1	1
38	Instruments, related products	396.1	40.8	10.9	51.7	13.0	9.9	.8	.3	1.1	11.1	8	6
39	Miscellaneous manufacturing industries	427.4	59.8	4.8	64.6	15.1	10.4	.8	.1	.9	8.6	2	5
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	23.1	(X)	2.8	2.8	12.1	1	1
	Wyoming	1,287.8	6.0	36.7	42.7	3.3	8.5	(Z)	.2	.2	2.4	1	1
24	Lumber and wood products	73.4	.8	3.3	4.1	5.5	1.3	(Z)	.1	.1	7.6	1	1
28	Chemicals and allied products	102.6	.9	9.8	10.7	10.4	.4	(Z)	(Z)	(Z)	(Z)	1	1
35	Machinery, except electrical	31.9	.5	2.6	3.1	9.7	.8	(Z)	.1	.1	12.5	1	1
37	Transportation equipment	4.6	.1	.1	.2	4.3	.1	(Z)	(Z)	(Z)	(Z)	1	1
--	Central administrative offices, auxiliary	(X)	(X)	(X)	(X)	(X)	.4	(X)	(Z)	(Z)	(Z)	1	1

Note: Certain data lines have been withheld to avoid disclosing operations of individual companies. The data however are included in higher level totals.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (S) Withheld because the estimate did not meet publication standards. (X) Not applicable. (Z) Less than one-half of the unit of measurement shown.

[1]Includes total domestic and export shipments for all manufacturing establishments.

[2]Includes only the value of manufactured products exported by the producing plants.

[3]Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States and aggregated into State Standard Industrial Classification (SIC) totals.

[4]Total export related shipments are the sum of columns B and C.

[5]Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6]Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by States, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7]Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 116.9 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8]The employment totals shown are the sum of columns G and H.

[9]A description of the standard error of estimate is given in appendix B under Qualifications of the Data. The percentage standard errors shown are the approximate relative standard errors of the estimates of that level.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	United States, total	1,185,695.3	83,098.0	54,098.0	137,729.9	11.6	18,753.0	1,173.2	952.2	2,125.4	11.3
	Alabama	17,988.1	832.2	1,134.1	1,966.3	10.9	330.3	12.6	17.5	30.1	9.1
20	Food and kindred products	2,158.1	133.8	27.6	161.4	7.5	22.7	0.5	0.3	0.8	3.5
22	Textile mill products	1,604.0	58.2	80.0	138.2	8.6	45.0	1.9	2.3	4.2	9.3
23	Apparel, other textile products	1,061.5	36.7	13.5	50.2	4.7	54.8	0.4	0.5	0.9	1.6
24	Lumber and wood products	901.5	13.0	47.3	60.3	6.7	20.9	0.3	1.1	1.4	6.7
25	Furniture and fixtures	168.2	2.1	1.4	3.5	2.1	6.0	0.1	(Z)	0.1	1.7
26	Paper and allied products	1,815.7	72.1	101.5	173.6	9.6	18.1	0.5	1.0	1.5	8.3
27	Printing and publishing	367.5	0.4	4.3	4.7	1.3	7.9	(Z)	0.1	0.1	1.3
28	Chemicals and allied products	1,739.5	134.0	158.8	292.8	16.8	11.5	1.1	1.1	2.2	19.1
30	Rubber, miscellaneous plastics products	914.4	47.7	60.3	108.0	11.8	13.7	1.0	0.1	1.9	13.9
31	Leather and leather products	30.9	5.9	0.1	6.0	19.4	0.9	0.1	-	0.1	11.1
32	Stone, clay, glass products	411.3	4.5	14.7	19.2	4.7	9.2	0.1	0.3	0.4	4.3
33	Primary metal industries	3,362.6	101.0	477.1	578.1	17.2	41.6	1.0	5.8	6.8	16.3
34	Fabricated metal products	1,109.4	60.4	48.9	109.3	9.9	24.6	2.0	1.1	3.1	12.6
35	Machinery, except electrical	533.6	25.7	28.1	53.8	10.1	12.1	0.5	0.7	1.2	9.9
36	Electric, electronic equipment	590.8	57.2	26.6	83.8	14.2	12.2	1.3	0.6	1.9	15.6
37	Transportation equipment	689.5	62.4	17.4	79.8	11.6	16.1	1.5	0.4	1.9	11.8
38	Instruments, related products	87.2	12.6	2.6	15.2	17.4	2.5	0.4	0.1	0.5	20.0
39	Miscellaneous manufacturing industries	127.9	3.4	1.9	5.3	4.1	3.0	0.1	-	0.1	3.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	6.0	(X)	0.5	0.5	(X)
	Alaska	991.8	232.8	(S)	(S)	(S)	7.9	1.8	(S)	(S)	(S)
20	Food and kindred products	288.6	37.3	(S)	(S)	(S)	3.4	0.4	(S)	(S)	(S)
24	Lumber and wood products	116.5	51.0	(S)	(S)	(S)	1.6	0.6	(S)	(S)	(S)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Arizona	6,232.9	639.2	423.1	1,062.3	17.0	99.0	11.5	5.9	17.4	17.6
20	Food and kindred products	785.6	30.1	10.3	40.4	5.1	5.5	0.2	0.1	0.3	5.5
23	Apparel, other textile products	127.5	2.7	1.3	4.0	3.1	5.9	(Z)	0.1	0.1	1.7
26	Paper and allied products	72.4	0.5	5.6	6.1	6.6	1.1	(Z)	0.1	0.1	9.1
28	Chemicals and allied products	233.0	11.1	11.4	22.5	9.7	2.3	(Z)	0.1	0.1	4.3
30	Rubber, miscellaneous plastics products	17.0	0.3	1.2	1.5	8.8	0.2	(Z)	(Z)	(Z)	(Z)
33	Primary metal industries	1,677.7	16.6	(Z)	16.6	1.0	7.7	0.3	(Z)	0.3	3.9
34	Fabricated metal products	181.8	2.1	5.8	7.9	4.3	5.2	(Z)	0.2	0.2	3.8
35	Machinery, except electrical	754.7	247.8	27.2	275.0	36.4	11.5	2.6	0.6	3.2	27.8
36	Electric, electronic equipment	679.3	194.8	54.6	249.4	36.7	21.2	6.3	1.7	8.0	37.7
37	Transportation equipment	695.5	103.3	24.1	127.4	18.3	9.2	1.5	0.3	1.8	19.6
39	Miscellaneous manufacturing industries	51.4	1.6	0.7	2.3	4.5	1.4	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	4.0	(X)	0.5	0.5	(X)
	Arkansas	10,604.8	651.3	441.0	1,092.3	10.3	188.3	7.2	7.5	14.7	7.8
20	Food and kindred products	2,833.5	263.8	35.0	298.8	10.5	26.6	1.1	0.3	1.4	5.3
22	Textile mill products	205.9	10.7	9.7	20.4	9.9	3.9	0.1	0.2	0.3	7.7
23	Apparel, other textile products	275.1	12.9	2.1	15.0	5.5	15.6	0.6	0.1	0.7	4.5
24	Lumber and wood products	831.9	12.6	49.5	62.1	7.5	18.0	0.2	1.1	1.3	7.2
25	Furniture and fixtures	314.2	4.2	2.5	6.7	2.1	11.3	0.2	0.1	0.3	2.7
26	Paper and allied products	984.0	80.0	54.4	134.4	13.7	10.1	0.3	0.6	0.9	8.9
28	Chemicals and allied products	701.3	53.5	61.0	114.5	16.3	5.7	0.5	0.5	1.0	17.5
29	Petroleum and coal products	397.2	1.1	8.5	9.6	2.4	2.5	(Z)	0.1	0.1	4.0
30	Rubber, miscellaneous plastics products	447.1	28.8	29.1	57.9	13.0	9.4	0.9	0.6	1.5	16.0
31	Leather and leather products	176.8	0.6	0.5	1.1	0.6	8.8	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	213.0	0.5	7.6	8.1	3.8	5.3	(Z)	0.2	0.2	3.8
33	Primary metal industries	489.8	7.9	73.8	81.7	16.7	6.3	0.1	1.0	1.1	17.5
34	Fabricated metal products	641.8	28.4	33.9	62.3	9.7	14.6	0.6	0.8	1.4	9.6
35	Machinery, except electrical	431.5	24.3	20.1	44.4	10.3	9.1	0.5	0.5	1.0	11.0
36	Electric, electronic equipment	888.3	73.9	42.6	116.5	13.1	18.5	1.4	1.0	2.4	13.0
37	Transportation equipment	289.8	7.1	5.4	12.5	4.3	6.3	0.1	0.1	0.2	3.2
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.9	(X)	0.2	0.2	(X)

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976** – Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	California	102,041.0	8,071.8	3,952.4	12,024.2	11.8	1,600.1	123.7	72.8	196.5	12.3
20	Food and kindred products	18,821.7	720.3	246.4	966.7	5.1	159.1	4.9	2.1	7.0	4.4
22	Textile mill products	660.8	8.2	28.4	36.6	5.5	10.5	0.1	0.5	0.6	5.7
23	Apparel, other textile products	2,968.2	27.3	35.4	62.7	2.1	95.2	0.5	1.1	1.6	1.7
24	Lumber and wood products	3,469.6	125.8	187.2	313.0	9.0	54.2	1.8	3.0	4.8	8.9
25	Furniture and fixtures	1,597.1	20.5	12.9	33.4	2.1	44.1	0.5	0.4	0.9	2.0
26	Paper and allied products	3,066.5	117.2	191.7	308.9	10.1	37.1	0.7	2.3	3.0	8.1
27	Printing and publishing	3,815.3	23.2	44.3	67.5	1.8	94.0	0.5	1.1	1.6	1.7
28	Chemicals and allied products	5,375.6	484.5	277.6	762.1	14.2	51.7	5.4	2.4	7.8	15.1
29	Petroleum and coal products	10,418.6	335.2	217.1	552.3	5.3	17.4	0.7	0.4	1.1	6.3
30	Rubber, miscellaneous plastics products	2,499.2	62.0	169.5	231.5	9.3	48.3	1.3	3.3	4.6	9.5
32	Stone, clay, glass products	2,794.6	47.3	119.8	167.1	6.0	47.5	0.7	2.1	2.8	5.9
33	Primary metal industries	3,317.9	110.8	468.2	579.0	17.5	48.1	1.3	6.7	8.0	16.6
34	Fabricated metal products	6,298.1	270.1	372.3	642.4	10.2	119.1	4.8	4.5	9.3	7.8
35	Machinery, except electrical	8,006.2	1,528.3	440.2	1,968.5	24.6	159.7	24.7	9.9	34.6	21.7
36	Electric, electronic equipment	8,674.1	1,500.4	523.6	2,024.0	23.3	195.9	31.9	12.2	44.1	22.5
37	Transportation equipment	16,251.3	2,061.7	525.2	2,586.9	15.9	244.6	29.3	7.7	37.0	15.1
38	Instruments, related products	2,382.7	504.8	70.8	575.6	24.1	60.8	12.0	1.9	13.9	22.9
39	Miscellaneous manufacturing industries	1,319.0	115.1	18.0	133.1	10.1	33.4	2.6	0.5	3.1	9.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	68.4	(X)	7.8	7.8	(X)
	Colorado	9,535.5	616.3	311.0	927.3	9.7	142.9	9.4	6.1	15.5	10.8
20	Food and kindred products	3,446.6	44.5	46.3	90.8	2.6	24.5	0.2	0.3	0.5	2.0
25	Furniture and fixtures	113.4	1.2	1.0	2.2	1.9	2.3	(Z)	(Z)	(Z)	(Z)
27	Printing and publishing	408.8	4.9	4.7	9.6	2.3	11.2	(Z)	0.1	0.1	0.9
28	Chemicals and allied products	285.3	36.7	13.9	50.6	17.7	3.5	0.4	0.1	0.5	14.3
30	Rubber, miscellaneous plastics products	491.2	26.6	32.3	58.9	12.0	7.4	0.4	0.5	0.9	12.3
32	Stone, clay, glass products	356.7	4.7	12.3	17.0	4.8	8.2	0.1	0.3	0.4	4.9
34	Fabricated metal products	568.8	18.9	34.2	53.1	9.3	9.8	0.3	0.6	0.9	9.2
35	Machinery, except electrical	573.9	147.5	28.1	175.6	30.6	12.4	2.6	0.9	3.5	28.2
36	Electric, electronic equipment	318.0	40.2	10.7	50.9	16.0	6.7	0.7	0.3	1.0	14.9
37	Transportation equipment	386.2	6.8	8.5	15.3	4.0	8.5	0.1	0.2	0.3	3.5
38	Instruments, related products	1,007.2	241.6	24.3	265.9	26.4	15.1	3.9	0.5	4.4	29.1
39	Miscellaneous manufacturing industries	104.8	8.2	1.4	9.6	9.2	3.9	0.2	0.1	0.3	7.7
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.5	(X)	0.9	0.9	(X)
	Connecticut	18,229.0	1,957.6	863.3	2,820.9	15.5	405.4	36.6	21.1	57.7	14.2
20	Food and kindred products	1,016.2	12.0	13.7	25.7	2.5	8.3	0.1	0.1	0.2	2.4
22	Textile mill products	400.2	7.9	16.9	24.8	6.2	10.9	0.2	0.5	0.7	6.4
23	Apparel, other textile products	311.7	8.2	3.2	11.4	3.7	12.5	0.2	0.1	0.3	2.4
25	Furniture and fixtures	212.7	2.0	1.7	3.7	1.7	3.1	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	563.4	22.5	33.9	56.4	10.0	8.1	0.3	0.5	0.8	9.9
27	Printing and publishing	791.4	19.0	9.0	28.0	3.5	21.4	0.3	0.2	0.5	2.3
28	Chemicals and allied products	1,282.4	131.2	50.2	181.4	14.1	11.6	1.5	0.5	2.0	17.2
30	Rubber, miscellaneous plastics products	533.9	9.8	35.9	45.7	8.6	13.5	0.2	0.9	1.1	8.1
31	Leather and leather products	36.0	0.4	0.1	0.5	1.4	1.5	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	345.4	3.8	5.8	9.6	2.8	6.1	0.1	0.3	0.4	6.6
33	Primary metal industries	1,378.4	21.0	203.1	224.1	16.3	18.3	0.3	2.7	3.0	16.4
34	Fabricated metal products	2,211.5	124.6	63.3	187.9	8.5	50.7	2.3	1.4	3.7	7.3
35	Machinery, except electrical	2,187.6	252.7	120.0	372.7	17.0	54.9	6.0	3.1	9.1	16.6
36	Electric, electronic equipment	1,413.8	160.4	82.4	242.8	17.2	33.9	3.9	2.2	6.1	18.0
37	Transportation equipment	3,821.3	930.9	177.6	1,108.5	29.0	77.1	16.2	3.3	19.5	25.3
38	Instruments, related products	1,061.4	215.3	27.5	242.8	22.9	23.6	4.2	0.6	4.8	20.3
39	Miscellaneous manufacturing industries	560.8	33.9	7.9	41.8	7.5	12.5	0.8	0.2	1.0	8.0
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	32.2	(X)	4.5	4.5	(X)
	Delaware	5,042.7	188.4	212.7	401.1	8.0	66.0	1.9	2.4	4.3	6.5
20	Food and kindred products	876.0	12.0	11.8	23.8	2.7	7.0	0.1	0.1	0.2	2.9
30	Rubber, miscellaneous plastics products	183.1	40.0	10.0	50.0	27.3	3.2	0.4	0.2	0.6	18.8
33	Primary metal industries	111.7	3.6	15.4	19.0	17.0	2.2	(Z)	0.3	0.3	13.6
34	Fabricated metal products	52.2	3.9	14.9	18.8	36.0	1.1	0.1	0.3	0.4	36.4
35	Machinery, except electrical	81.7	10.1	5.1	15.2	18.6	1.8	0.2	0.1	0.3	16.7
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	District of Columbia	932.0	6.9	17.7	24.6	2.6	17.9	0.1	0.3	0.4	2.2
27	Printing and publishing	625.9	4.3	7.3	11.6	1.9	13.0	0.1	0.2	0.3	2.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Florida	18,091.3	1,362.8	681.3	2,044.1	11.3	331.4	20.0	12.7	32.7	9.9
20	Food and kindred products	4,937.8	99.4	65.9	165.3	3.3	43.7	0.8	0.6	1.4	3.2
22	Textile mill products	153.4	0.2	2.0	2.2	1.4	4.8	(Z)	0.1	0.1	2.1
23	Apparel, other textile products	633.5	6.5	5.9	12.4	2.0	32.2	(Z)	0.3	0.3	0.9
24	Lumber and wood products	470.1	15.0	22.2	37.2	7.9	13.0	0.3	0.7	1.0	7.7
25	Furniture and fixtures	222.8	3.2	1.8	5.0	2.2	7.5	0.1	0.1	0.2	2.7
26	Paper and allied products	1,446.8	201.0	75.4	276.4	19.1	15.1	1.5	0.8	2.3	15.2
27	Printing and publishing	977.7	7.9	11.3	19.2	2.0	29.3	0.1	0.3	0.4	1.4
28	Chemicals, and allied products	2,333.1	355.9	184.9	540.8	23.2	21.9	3.5	1.6	5.1	23.3
30	Rubber, miscellaneous plastics products	405.4	9.4	27.5	36.9	9.1	12.2	0.3	0.8	1.1	9.0
32	Stone, clay, glass products	706.3	5.8	26.4	32.2	4.6	13.4	0.1	0.5	0.6	4.5
33	Primary metal industries	286.6	26.7	38.1	64.8	22.6	3.1	(Z)	0.4	0.4	12.9
34	Fabricated metal products	1,443.8	68.5	51.9	120.4	8.3	22.0	1.1	0.9	2.0	9.1
35	Machinery, except electrical	772.7	141.8	41.2	183.0	23.7	16.9	2.6	1.1	3.7	21.9
36	Electric, electronic equipment	1,448.2	199.3	79.4	278.7	19.2	36.9	5.1	2.4	7.5	20.3
37	Transportation equipment	1,207.4	183.3	33.3	216.6	17.9	30.2	3.6	0.9	4.5	14.9
38	Instruments, related products	262.2	21.5	7.2	28.7	10.9	7.8	0.6	0.2	0.8	10.3
39	Miscellaneous manufacturing industries	147.4	11.1	2.0	13.1	8.9	5.5	0.3	0.1	0.4	7.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	8.2	(X)	0.8	0.8	(X)
	Georgia	28,391.4	1,364.4	1,192.8	2,557.2	9.0	468.9	21.1	19.5	40.6	8.7
20	Food and kindred products	4,511.8	70.5	60.4	130.9	2.9	45.0	0.8	0.6	1.4	3.1
22	Textile mill products	5,549.6	240.4	281.3	521.7	9.4	106.9	4.2	5.7	9.9	9.3
23	Apparel, other textile products	1,800.0	37.9	26.8	64.7	3.6	75.9	0.7	0.9	1.6	2.1
24	Lumber and wood products	1,281.0	28.1	67.5	95.6	7.5	27.0	0.4	1.5	1.9	7.0
25	Furniture and fixtures	279.6	1.4	2.3	3.7	1.3	8.6	(Z)	0.1	0.1	1.2
26	Paper and allied products	2,344.2	113.7	135.8	249.5	10.6	24.5	1.1	1.5	2.6	10.6
28	Chemicals and allied products	1,963.6	108.5	131.0	239.5	12.2	14.1	0.6	1.0	1.6	11.3
29	Petroleum and coal products	244.0	12.6	5.0	17.6	7.2	1.8	0.1	(Z)	0.1	5.6
30	Rubber, miscellaneous plastics products	630.4	14.2	42.9	57.1	9.1	12.6	0.3	0.9	1.2	9.5
31	Leather and leather products	83.0	2.0	0.5	2.5	3.0	3.2	(Z)	(Z)	(Z)	(Z)
33	Primary metal industries	1,072.8	44.4	156.7	201.1	18.7	10.7	0.4	1.6	2.0	18.7
34	Fabricated metal products	821.1	17.2	35.9	53.1	6.5	15.6	0.4	0.7	1.1	7.1
35	Machinery, except electrical	639.9	101.5	29.3	130.8	20.4	15.1	2.5	0.8	3.3	21.9
36	Electric, electronic equipment	842.3	57.3	49.5	146.8	12.7	15.4	0.9	0.9	1.8	11.7
37	Transportation equipment	4,692.0	466.6	127.4	594.0	12.7	32.3	7.9	0.9	8.8	27.2
39	Miscellaneous manufacturing industries	219.6	12.4	3.1	15.5	7.1	6.8	0.4	0.1	0.5	7.4
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	17.9	(X)	1.6	1.6	(X)
	Hawaii	1,854.8	51.1	(S)	(S)	(S)	24.2	0.5	(S)	(S)	(S)
20	Food and kindred products	761.3	(S)	(S)	(S)	(S)	11.4	(S)	(S)	(S)	(S)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Idaho	3,448.1	168.9	160.8	329.7	9.6	52.5	2.1	2.3	4.4	8.4
20	Food and kindred products	1,223.6	41.7	16.2	57.9	4.7	14.9	0.5	0.2	0.7	4.7
24	Lumber and wood products	829.9	18.4	44.7	63.1	7.6	14.0	0.2	0.8	1.0	7.1
28	Chemical and allied products	510.3	45.8	50.7	96.5	18.9	4.8	0.2	0.5	0.7	14.6
30	Rubber, miscellaneous plastics products	78.1	0.5	5.4	5.9	7.6	1.8	(Z)	0.1	0.1	5.6
31	Leather and leather products	3.7	0.9	(Z)	0.9	24.3	0.2	(Z)	(Z)	(Z)	(Z)
34	Fabricated metal products	69.5	2.5	2.2	4.7	6.8	2.0	0.1	(Z)	0.1	5.0
35	Machinery, except electrical	134.7	25.5	3.8	29.3	21.8	3.3	0.6	0.1	0.7	21.2
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.5	(X)	0.2	0.2	(X)
	Illinois	82,351.3	6,659.6	3,773.0	10,432.6	12.7	1,255.8	86.9	70.0	156.9	12.5
20	Food and kindred products	14,339.3	780.1	183.0	963.1	6.7	103.5	2.4	1.3	3.7	3.6
22	Textile mill products	212.6	3.7	10.7	14.4	6.8	4.1	0.1	0.2	0.3	7.3
23	Apparel, other textile products	823.0	6.8	13.8	20.6	2.5	24.4	0.1	0.4	0.5	2.0
24	Lumber and wood products	551.3	14.1	33.3	47.4	8.6	12.0	0.4	0.7	1.1	9.2
25	Furniture and fixtures	837.2	10.2	7.2	17.4	2.1	20.8	0.2	0.2	0.4	1.9

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] 1,000)	Direct export related[6] (1,000	Supporting exports[7] (1,000	Total export related[8] 1,000	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Illinois--Con.										
26	Paper and allied products	2,152.1	28.0	140.0	168.0	7.8	34.8	0.5	2.3	2.8	8.0
27	Printing and publishing	4,576.0	108.8	52.3	161.1	3.5	105.7	1.8	1.2	3.0	2.8
28	Chemicals and allied products	6,416.6	442.8	342.3	785.1	12.2	53.5	5.2	2.4	7.6	14.2
29	Petroleum and coal products	5,987.0	49.0	127.8	176.8	3.0	10.6	0.2	0.2	0.4	3.8
30	Rubber, miscellaneous plastics products	1,935.4	70.0	129.7	199.7	10.3	41.9	1.6	2.8	4.4	10.5
32	Stone, clay, glass products	1,864.0	46.9	59.7	106.6	5.7	36.5	1.0	1.2	2.2	6.0
33	Primary metal industries	7,349.0	183.6	1,037.8	1,221.4	16.6	88.5	2.6	12.4	15.0	16.9
34	Fabricated metal products	7,436.2	239.5	588.0	827.5	11.1	140.0	4.8	11.3	16.1	11.5
35	Machinery, except electrical	12,900.0	3,236.8	542.8	3,779.6	29.3	201.3	39.3	10.3	49.6	24.6
36	Electric, electronic equipment	7,544.6	667.2	326.4	993.6	13.2	143.4	12.9	7.5	20.4	14.2
37	Transportation equipment	3,939.5	404.7	81.2	485.9	12.3	44.1	4.8	1.0	5.8	13.2
38	Instruments, related products	1,872.3	257.5	73.9	331.4	17.7	45.1	6.5	1.9	8.4	18.6
39	Miscellaneous manufacturing industries	1,332.6	95.0	18.5	113.5	8.5	35.1	2.4	0.5	2.9	8.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	102.1	(X)	12.2	12.2	(X)
	Indiana	45,180.9	2,827.6	2,744.0	5,571.6	12.3	677.0	40.0	41.0	81.0	12.0
20	Food and kindred products	4,449.6	127.8	58.8	186.6	4.2	36.1	0.5	0.5	1.0	2.8
22	Textile mill products	26.5	0.9	1.1	2.0	7.5	0.8	(Z)	(Z)	(Z)	(Z)
23	Apparel, other textile products	378.7	5.6	6.7	12.3	3.2	14.3	0.1	0.2	0.3	2.1
24	Lumber and wood products	828.3	29.5	37.1	66.6	8.0	17.5	0.9	0.9	1.8	10.3
25	Furniture and fixtures	668.2	7.3	5.3	12.6	1.9	21.5	0.2	0.2	0.4	1.9
26	Paper and allied products	861.3	9.3	55.3	64.6	7.5	13.1	0.1	0.8	0.9	6.9
27	Printing and publishing	1,010.3	13.2	11.6	24.8	2.5	27.5	0.3	0.3	0.6	2.2
28	Chemicals and allied products	2,828.2	300.1	120.3	420.4	14.9	24.2	2.3	0.8	3.1	12.8
30	Rubber, miscellaneous plastics products	1,372.1	74.1	90.3	164.4	12.0	28.4	1.4	1.9	3.3	11.6
32	Stone, clay, glass products	1,101.2	13.4	50.4	63.8	5.8	22.6	0.3	1.1	1.4	6.2
33	Primary metal industries	9,272.5	204.4	1,305.4	1,509.8	16.3	99.6	1.7	13.9	15.6	15.7
34	Fabricated metal products	3,403.7	110.1	248.0	358.1	10.5	59.3	1.8	4.4	6.2	10.5
35	Machinery, except electrical	3,599.9	411.2	254.7	665.9	18.5	72.1	6.6	5.3	11.9	16.5
36	Electric, electronic equipment	5,555.6	519.6	252.6	772.2	13.9	105.7	10.1	5.5	15.6	14.8
37	Transportation equipment	6,622.0	919.3	178.1	1,097.4	16.6	95.3	12.1	2.7	14.8	15.5
38	Instruments, related products	372.3	46.7	11.2	57.9	15.6	7.9	1.2	0.3	1.5	19.0
39	Miscellaneous manufacturing industries	446.4	31.7	6.2	37.9	8.5	9.7	0.6	0.1	0.7	7.2
--	Central admin. office, auxiliary	(X)	(X)	(X)	(X)	(X)	14.7	(X)	2.0	2.0	(X)
	Iowa	20,772.3	1,499.8	624.4	2,124.2	10.2	231.1	19.8	8.4	28.2	12.2
20	Food and kindred products	9,020.0	262.1	119.2	381.3	4.2	43.5	1.1	0.6	1.7	3.9
24	Lumber and wood products	230.1	12.1	13.8	25.9	11.3	4.9	0.3	0.3	0.6	12.2
25	Furniture and fixtures	158.1	0.9	1.4	2.3	1.5	2.8	(Z)	0.1	0.1	3.6
26	Paper and allied products	354.0	7.2	22.8	30.0	8.5	4.5	0.1	0.3	0.4	8.9
27	Printing and publishing	582.7	6.8	6.7	13.5	2.3	14.1	0.1	0.2	0.3	2.1
28	Chemicals and allied products	1,564.5	83.9	87.6	171.5	11.0	6.0	0.4	0.3	0.7	11.7
30	Rubber, miscellaneous plastics products	716.4	51.9	46.2	98.1	13.7	11.5	0.8	0.7	1.5	13.0
32	Stone, clay, glass products	512.1	3.1	16.7	19.8	3.9	8.0	(Z)	0.3	0.3	3.8
33	Primary metal industries	666.1	24.2	96.8	121.0	18.2	7.7	0.2	1.1	1.3	16.9
34	Fabricated metal products	822.6	46.2	44.7	90.9	11.1	18.6	0.9	1.0	1.9	10.2
35	Machinery, except electrical	3,826.4	745.5	101.7	847.2	22.1	57.1	10.2	1.7	11.9	20.8
36	Electric, electronic equipment	1,284.7	194.1	43.8	237.9	18.5	24.4	4.3	1.1	5.4	22.1
37	Transportation equipment	597.7	20.3	15.9	36.2	6.1	9.1	0.3	0.3	0.6	6.6
38	Instruments, related products	64.3	7.6	1.9	9.5	14.8	2.2	0.3	0.1	0.4	18.2
39	Miscellaneous manufacturing industries	247.0	28.6	3.3	31.9	12.9	6.4	0.9	0.1	1.0	15.6
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	4.7	(X)	0.4	0.4	(X)
	Kansas	14,657.5	635.2	465.9	1,101.1	7.5	167.5	10.2	7.1	17.3	10.3
20	Food and kindred products	4,153.9	109.7	55.0	164.7	4.0	22.7	0.3	0.3	0.6	2.6
24	Lumber and wood products	134.7	2.5	4.6	7.1	5.3	2.8	(Z)	0.1	0.1	3.6
27	Printing and publishing	628.0	2.5	7.3	9.8	1.6	17.6	0.1	0.2	0.3	1.7
28	Chemicals and allied products	935.7	42.9	58.6	101.5	10.8	6.1	0.3	0.4	1.2	19.7
29	Petroleum and coal products	2,199.3	5.3	47.2	52.5	2.4	3.6	(Z)	0.1	0.1	2.8

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Groups: 1976** — Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Kansas--Con.										
30	Rubber, miscellaneous plastics products	435.4	28.9	28.3	57.2	13.1	7.5	0.4	0.5	0.9	12.0
32	Stone, clay, glass products	418.5	3.0	13.5	16.5	3.9	6.6	0.1	0.2	0.3	4.5
34	Fabricated metal products	481.0	30.4	11.6	42.0	8.7	7.6	0.4	0.2	0.6	7.9
35	Machinery, except electrical	1,251.5	101.0	54.7	155.7	12.4	25.6	1.9	1.3	3.2	12.5
36	Electrical, electronic equipment	278.2	34.0	15.7	49.7	17.9	7.1	1.1	0.4	1.5	21.1
37	Transportation equipment	2,672.2	264.1	119.7	383.8	14.4	37.7	5.6	2.1	7.7	20.4
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	3.9	(X)	0.4	0.4	(X)
	Kentucky	20,268.5	1,137.3	1,022.3	2,159.6	10.7	277.0	12.3	13.3	25.6	9.2
20	Food and kindred products	2,451.1	77.0	32.3	109.3	4.5	21.6	0.3	(Z)	0.3	1.4
22	Textile mill products	252.8	8.0	8.2	16.2	6.4	7.1	0.3	0.2	0.5	7.0
23	Apparel, other textile products	571.8	19.9	6.3	26.2	4.6	26.4	0.3	0.2	0.5	1.9
24	Lumber and wood products	344.7	11.9	23.6	35.5	10.3	12.4	0.3	0.8	1.1	8.9
25	Furniture and fixtures	152.2	1.1	1.3	2.4	1.6	5.1	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	515.2	47.8	29.8	77.6	15.1	7.3	0.3	0.4	0.7	9.6
27	Printing and publishing	443.0	2.3	5.1	7.4	1.7	12.3	(Z)	0.1	0.1	0.8
28	Chemicals and allied products	2,261.3	172.3	202.4	374.7	16.6	14.9	1.1	1.3	2.4	16.1
35	Machinery, except electrical	2,289.9	228.6	96.4	325.0	14.2	41.0	3.9	2.0	5.9	14.4
36	Electrical, electronic equipment	1,678.7	103.7	60.7	164.4	9.8	29.1	1.9	1.3	3.2	11.0
37	Transportation equipment	2,299.4	273.1	52.6	325.7	14.2	13.4	1.3	0.3	1.6	11.9
38	Instruments, related products	165.9	24.5	3.8	28.3	17.1	3.5	0.3	0.1	0.4	11.4
39	Miscellaneous manufacturing industries	117.9	10.9	1.6	12.5	10.6	3.2	0.2	(Z)	2.2	6.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	11.0	(X)	1.4	1.4	(X)
	Louisiana	25,225.2	1,383.4	1,181.1	2,564.5	10.2	189.8	9.4	8.5	17.9	9.4
20	Food and kindred products	3,036.5	215.8	38.4	254.2	8.4	29.2	1.0	0.4	1.4	4.8
22	Textile mill products	57.1	(Z)	0.9	0.9	1.6	2.6	(Z)	0.1	0.1	3.8
23	Apparel, other textile products	196.7	4.5	2.3	6.8	3.5	9.4	0.1	0.1	0.2	2.1
24	Lumber and wood products	671.0	14.4	39.4	53.8	8.0	14.2	0.2	0.9	1.1	7.7
26	Paper and allied products	1,450.2	115.3	79.5	194.8	13.4	14.5	0.9	0.8	1.7	11.7
27	Printing and publishing	260.8	0.1	3.0	3.1	1.2	6.9	(Z)	0.1	0.1	1.4
28	Chemicals and allied products	6,882.0	661.2	658.2	1,319.4	19.2	28.6	2.5	2.7	5.2	18.2
29	Petroleum and coal products	9,043.0	134.5	191.8	326.3	3.6	9.6	0.2	0.2	0.4	4.2
32	Stone, clay, glass products	426.5	3.3	5.5	8.8	2.1	7.3	0.1	0.3	0.4	5.5
34	Fabricated metal products	663.6	36.6	19.0	55.6	8.4	12.4	0.9	0.3	1.2	9.7
35	Machinery, except electrical	399.5	78.5	22.2	100.7	25.2	9.5	1.9	0.6	2.5	26.3
36	Electric, electronic equipment	554.0	17.9	20.6	38.5	6.9	8.5	0.2	0.3	0.5	5.9
37	Transportation equipment	915.9	38.8	12.8	51.6	5.6	21.6	0.9	0.3	1.2	5.6
38	Instruments, related products	8.5	0.4	0.2	0.6	7.1	0.5	(Z)	(Z)	(Z)	(Z)
39	Miscellaneous manufacturing industries	48.2	0.5	0.7	1.2	2.5	0.7	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Maine	4,422.8	254.9	178.6	433.5	9.8	99.0	4.2	3.7	7.9	8.0
20	Food and kindred products	715.7	22.8	9.4	32.2	4.5	11.5	0.5	0.2	0.7	6.1
22	Textile mill products	281.2	9.3	15.2	24.5	8.7	9.1	0.3	0.5	0.8	8.8
23	Apparel, other textile products	68.6	1.1	0.6	1.7	2.5	2.6	(Z)	(Z)	(Z)	(Z)
24	Lumber and wood products	443.1	12.4	26.1	38.5	8.7	12.8	0.1	0.8	0.9	7.0
26	Paper and allied products	1,406.0	96.9	76.0	172.9	12.3	16.2	1.1	0.9	2.0	12.3
27	Printing and publishing	91.0	0.2	1.1	1.3	1.4	3.0	(Z)	0.1	0.1	3.3
30	Rubber, miscellaneous plastics products	117.7	7.2	7.7	14.9	12.7	3.7	0.1	0.2	0.3	8.1
31	Leather and leather products	549.2	45.2	4.6	49.8	9.1	18.2	0.5	0.1	0.6	3.3
34	Fabricated metal products	96.4	3.1	3.9	7.0	7.3	2.8	0.1	0.1	0.2	7.1
35	Machinery, except electrical	116.8	6.7	8.1	14.8	12.7	3.2	0.3	0.2	0.5	15.6
38	Instruments, related products	16.8	1.2	0.4	1.6	9.5	0.4	(Z)	(Z)	(Z)	(Z)
39	Miscellaneous manufacturing industries	21.3	1.3	0.3	1.6	7.5	0.9	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Maryland	14,762.2	640.7	686.5	1,327.2	9.0	242.8	10.5	11.5	22.0	9.1
20	Food and kindred products	2,952.4	82.5	39.1	121.6	4.1	34.9	0.6	0.5	1.1	3.2
23	Apparel, other textile products	510.9	3.5	4.7	8.2	1.6	16.9	(Z)	0.2	0.2	1.2
24	Lumber and wood products	187.3	2.1	11.0	13.1	7.0	5.0	(Z)	0.3	0.3	6.0
25	Furniture and fixtures	63.4	1.2	0.5	1.7	2.7	2.4	0.1	(Z)	0.1	4.2
26	Paper and allied products	548.3	9.4	36.4	45.8	8.4	8.9	0.1	0.6	0.7	7.9

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976** — Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Maryland--Con.										
28	Chemicals and allied products	1,309.7	129.3	69.5	198.8	15.2	12.6	1.4	0.7	2.1	16.7
29	Petroleum and coal products	147.3	3.8	3.1	6.9	4.7	1.1	(Z)	(Z)	(Z)	(Z)
30	Rubber, miscellaneous plastics products	435.1	4.5	29.9	34.4	7.9	8.9	0.1	0.6	0.7	7.9
32	Stone, clay, glass products	548.6	18.2	20.0	38.2	7.0	9.5	0.4	0.4	0.8	8.4
34	Fabricated metal products	744.1	19.5	23.6	43.1	5.8	11.8	0.3	0.3	0.6	5.1
35	Machinery, except electrical	991.2	120.5	67.9	188.4	19.0	18.6	2.1	1.3	3.4	18.3
36	Electric, electronic equipment	1,181.2	146.8	34.1	180.9	15.3	29.0	3.8	1.0	4.8	16.6
37	Transportation equipment	2,051.5	19.2	51.8	71.0	3.5	16.3	0.3	0.3	0.6	3.7
38	Instruments, related products	114.4	7.4	2.9	10.3	9.0	3.2	0.2	0.1	0.3	9.4
39	Miscellaneous manufacturing industries	121.7	4.5	1.8	6.3	5.2	3.3	0.1	(Z)	0.1	3.0
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	11.9	(X)	1.4	1.4	(X)
	Massachusetts	26,918.4	2,502.4	1,160.3	3,662.7	13.6	590.9	48.2	28.9	77.1	13.0
20	Food and kindred products	2,704.4	24.6	36.5	61.1	2.3	28.4	0.1	0.4	0.5	1.8
22	Textile mill products	1,050.2	20.8	45.6	66.4	6.3	24.5	0.3	1.1	1.4	5.7
23	Apparel, other textile products	1,161.6	11.4	14.5	25.9	2.2	41.3	0.3	0.5	0.8	1.9
24	Lumber and wood products	175.8	16.2	10.0	26.2	14.9	5.0	0.3	0.3	0.6	12.0
25	Furniture and fixtures	283.1	3.2	2.2	5.4	1.9	8.4	0.1	0.1	0.2	2.4
26	Paper and allied products	1,603.1	60.3	95.3	155.6	9.7	28.5	1.0	1.7	2.7	9.5
27	Printing and publishing	1,462.4	11.5	16.9	28.4	1.9	40.5	0.1	0.5	0.6	1.5
28	Chemicals and allied products	1,396.1	287.1	77.4	364.5	26.1	15.1	2.3	0.9	3.2	21.2
30	Rubber, miscellaneous plastics products	1,342.6	31.7	91.2	122.9	9.2	29.8	0.6	2.0	2.6	8.7
31	Leather and leather products	751.2	35.9	7.1	43.0	5.7	20.3	0.7	0.2	0.9	4.4
32	Stone, clay, glass products	627.4	52.6	20.7	73.3	11.7	12.3	0.7	0.4	1.1	8.9
33	Primary metal industries	829.2	22.8	121.4	144.2	17.4	10.1	0.2	1.5	1.7	16.8
34	Fabricated metal products	1,913.1	103.6	143.5	247.1	12.9	43.1	2.4	3.1	5.5	12.8
35	Machinery, except electrical	3,914.9	703.2	203.8	907.0	23.2	76.7	13.3	4.3	17.6	22.9
36	Electric, electronic equipment	2,991.8	504.9	165.4	670.3	22.4	78.9	12.9	4.8	17.7	22.4
37	Transportation equipment	1,471.9	202.3	43.6	245.9	16.7	21.8	3.1	0.6	3.7	17.0
38	Instruments, related products	2,098.6	338.0	48.0	386.0	18.4	41.5	7.2	1.0	8.2	19.8
39	Miscellaneous manufacturing industries	966.1	66.8	13.5	80.3	8.3	26.0	2.4	0.4	2.8	10.8
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	36.9	(X)	5.1	5.1	(X)
	Michigan	80,326.7	r6,374.1	r3,835.1	r10,209.2	r12.7	1,049.9	r68.7	r75.6	r144.3	r13.8
20	Food and kindred products	5,090.6	176.0	66.9	242.9	4.8	44.3	0.9	0.6	1.5	3.4
22	Textile mill products	196.4	9.4	8.7	18.1	9.2	3.2	0.2	0.1	0.3	9.4
23	Apparel, other textile products	1,366.4	64.4	45.1	109.5	8.0	22.0	0.9	0.7	1.6	7.3
24	Lumber and wood products	535.0	5.6	32.2	37.8	7.1	14.1	0.1	0.8	0.9	6.4
25	Furniture and fixtures	880.6	14.9	8.1	23.0	2.6	20.2	0.3	0.2	0.5	2.5
26	Paper and allied products	1,764.3	38.2	107.5	145.7	8.3	22.6	0.4	1.4	1.8	8.0
27	Printing and publishing	1,362.6	9.0	15.8	24.8	1.8	34.5	0.1	0.4	0.5	1.4
28	Chemical and allied products	3,550.8	421.2	218.7	639.9	18.0	33.3	3.8	2.1	5.9	17.7
29	Petroleum and coal products	934.7	12.3	19.9	32.2	3.4	2.2	(Z)	0.1	0.1	4.5
30	Rubber, miscellaneous plastics products	1,358.5	43.9	91.4	135.3	10.0	30.0	0.8	2.0	2.8	9.3
32	Stone, clay, glass products	1,142.6	54.7	48.8	103.5	9.1	18.5	1.0	0.8	1.8	9.7
33	Primary metal industries	6,376.2	r138.2	r893.1	r1,031.3	r16.2	82.6	r2.1	r12.3	r14.4	r17.4
34	Fabricated metal products	7,866.7	478.1	771.3	1,249.4	15.9	130.8	7.3	12.3	19.6	15.0
35	Machinery, except electrical	7,766.3	1,011.6	506.4	1,518.0	19.5	133.5	13.2	9.8	23.0	17.2
36	Electric, electronic equipment	1,686.2	224.2	74.3	298.5	17.7	31.4	3.6	7.0	10.6	33.8
37	Transportation equipment	37,516.4	3,586.3	905.0	4,491.3	12.0	302.5	32.0	7.3	39.3	13.0
38	Instruments, related products	466.4	64.9	14.9	79.8	17.1	12.5	1.6	1.3	2.9	23.2
39	Miscellaneous manufacturing industries	331.5	18.1	4.7	22.8	6.9	7.5	0.5	0.2	0.7	9.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	101.3	(X)	16.2	16.2	(X)
	Minnesota	20,439.5	1,566.7	677.6	2,244.3	11.0	321.0	23.2	14.6	37.8	11.8
20	Food and kindred products	6,559.6	230.7	86.2	316.9	4.8	43.5	0.8	0.6	1.4	3.2
22	Textile mill products	75.9	11.5	1.4	12.9	17.0	2.4	0.2	(Z)	0.2	8.3
23	Apparel, other textile products	229.3	1.5	2.6	4.1	1.8	6.9	0.3	0.1	0.4	5.8
24	Lumber and wood products	645.9	15.8	37.4	53.2	8.2	10.7	0.2	0.6	0.8	7.5
25	Furniture and fixtures	138.8	1.2	1.2	2.4	1.7	4.4	(Z)	(Z)	(Z)	(Z)

See footnotes at end of table.

Table 5b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Minnesota--Con.										
26	Paper and allied products	1,321.0	38.9	77.8	116.7	8.8	16.5	0.4	1.0	1.4	8.5
27	Printing and publishing	927.5	4.9	10.8	15.7	1.7	26.0	0.1	0.3	0.4	1.5
28	Chemicals and allied products	714.1	61.0	39.2	100.2	14.0	6.6	0.5	0.4	0.9	13.6
30	Rubber, miscellaneous plastics products	330.8	5.2	22.6	27.8	8.4	6.9	0.1	0.5	0.6	8.7
32	Stone, clay, glass products	515.5	4.6	20.1	24.7	4.8	7.3	0.1	0.3	0.4	5.5
33	Primary metal industries	3,051.2	720.7	132.4	853.1	28.0	58.6	11.5	2.8	14.3	24.4
34	Fabricated metal products	1,427.4	102.1	67.9	170.0	11.9	31.0	2.7	1.5	4.2	13.5
36	Electric, electronic equipment	1,212.7	164.2	63.1	227.3	18.7	23.5	3.2	1.4	4.6	19.6
37	Transportation equipment	835.9	95.4	17.7	113.1	12.1	8.5	1.0	0.2	1.2	14.1
38	Instruments, related products	507.6	80.5	11.8	92.3	18.2	10.9	1.6	0.3	1.9	17.4
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	39.3	(X)	3.6	3.6	(X)
	Mississippi	10,867.6	697.8	371.9	1,069.7	9.8	209.5	9.5	6.0	15.5	7.4
20	Food and kindred products	1,671.5	143.8	20.8	164.6	9.8	18.5	0.8	(Z)	0.8	4.3
22	Textile mill products	300.4	11.8	8.1	19.9	6.6	7.5	0.2	0.2	0.4	5.3
23	Apparel, other textile products	740.9	14.6	7.4	22.0	3.0	40.3	0.2	0.4	0.6	1.5
24	Lumber and wood products	940.3	35.2	54.3	89.5	9.5	21.1	0.7	1.2	1.9	9.0
25	Furniture and fixtures	446.0	4.1	3.3	7.4	1.7	14.1	0.1	0.1	0.2	1.4
26	Paper and allied products	577.3	178.5	24.2	202.7	35.1	5.8	1.6	0.3	1.9	32.8
28	Chemicals and allied products	756.6	66.7	62.1	128.8	17.0	5.9	0.5	0.4	0.9	15.3
29	Petroleum and coal products	1,439.1	1.4	31.0	32.4	2.3	1.3	(Z)	(Z)	(Z)	(Z)
30	Rubber, miscellaneous plastics products	282.6	1.6	19.5	21.1	7.5	4.6	(Z)	0.3	0.3	6.5
31	Leather and leather products	65.3	1.2	0.2	1.4	2.1	2.3	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	343.5	5.0	13.3	18.3	5.3	7.6	0.1	0.3	0.4	5.3
33	Primary metal industries	232.2	3.3	34.4	37.7	16.2	2.6	0.1	0.4	0.5	19.2
34	Fabricated metal products	481.4	22.2	24.8	47.0	9.8	8.8	0.3	0.5	0.8	9.1
35	Machinery, except electrical	498.8	38.2	18.5	56.7	11.4	10.4	0.7	0.5	1.2	11.5
36	Electric, electronic equipment	723.7	68.1	35.8	103.9	14.4	16.4	1.6	0.8	2.4	14.6
37	Transportation equipment	1,028.1	83.2	9.1	92.3	9.0	28.5	2.0	0.2	2.2	7.7
38	Instruments, related products	58.1	4.4	1.7	6.1	10.5	1.8	0.1	0.1	0.2	11.1
39	Miscellaneous manufacturing industries	139.1	14.1	1.9	16.0	11.5	4.3	0.5	0.1	0.6	14.0
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	3.6	(X)	0.3	0.3	(X)
	Missouri	27,468.8	1,622.1	1,074.4	2,696.5	9.8	424.4	22.6	18.1	40.7	9.6
20	Food and kindred products	5,461.4	118.6	72.7	191.3	3.5	41.4	0.4	0.6	1.0	2.4
23	Apparel, other textile products	635.2	11.7	7.2	18.9	3.0	28.7	0.3	0.3	0.6	2.1
24	Lumber and wood products	287.3	8.0	17.2	25.2	8.8	10.7	0.4	0.6	1.0	9.3
25	Furniture and fixtures	270.8	3.1	2.1	5.2	1.9	6.7	0.1	0.1	0.2	3.0
26	Paper and allied products	787.1	9.9	51.1	61.0	7.7	13.5	0.1	0.9	1.0	7.4
27	Printing and publishing	1,200.7	13.0	13.8	26.8	2.2	33.3	0.2	0.4	0.6	1.8
28	Chemicals and allied products	2,410.9	151.5	148.3	229.8	12.4	23.8	1.8	1.4	3.2	13.4
30	Rubber, miscellaneous plastics products	572.6	39.2	37.1	76.3	13.3	11.8	0.7	0.7	1.4	1.9
32	Stone, clay, glass products	646.6	30.4	20.8	51.2	7.9	10.8	0.6	0.3	0.9	8.3
33	Primary metal industries	1,165.7	10.1	170.4	180.5	15.5	17.5	0.1	2.5	2.6	14.9
34	Fabricated metal products	1,502.4	52.3	68.9	121.2	8.1	31.6	1.0	1.4	2.4	7.6
35	Machinery, except electrical	1,462.3	195.7	77.4	273.1	18.7	33.3	3.6	2.2	5.8	17.4
36	Electric, electronic equipment	1,513.3	154.8	89.8	244.6	16.2	33.3	4.5	2.1	6.6	19.8
37	Transportation equipment	7,972.3	769.2	545.1	1,314.3	16.5	64.2	8.2	2.6	10.8	16.8
39	Miscellaneous manufacturing industries	227.7	5.4	3.3	8.7	3.8	6.5	0.1	0.1	0.2	3.1
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	28.9	(X)	2.7	2.7	(X)
	Montana	2,524.9	43.6	159.5	204.4	8.1	21.7	0.4	1.2	1.6	7.4
20	Food and kindred products	343.6	24.5	4.3	28.8	8.4	3.4	0.2	(Z)	0.2	5.9
24	Lumber and wood products	441.3	10.2	25.9	36.1	8.2	7.2	0.2	0.4	0.6	8.3
28	Chemicals and allied products	64.4	4.4	5.7	10.1	15.7	0.4	(Z)	(Z)	(Z)	(Z)
37	Transportation equipment	27.7	1.4	0.2	1.6	5.8	0.7	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	0.1	(X)	(Z)	(Z)	(X)
	Nebraska	8,773.3	309.2	251.9	561.1	6.4	87.8	3.7	3.1	6.8	7.7
20	Food and kindred products	5,228.6	142.6	68.7	211.3	4.0	24.6	0.5	0.3	0.8	3.3
22	Textile mill products	16.3	0.3	0.7	1.0	6.1	0.4	(Z)	(Z)	(Z)	(Z)
24	Lumber and wood products	112.4	0.9	4.7	5.6	5.0	2.1	(Z)	0.1	0.1	4.8
25	Furniture and fixtures	83.9	2.4	0.7	3.1	3.7	2.2	(Z)	(Z)	(Z)	(Z)
28	Chemicals and allied products	400.6	11.8	31.1	42.9	10.7	2.4	0.1	0.1	0.2	8.3

See footnotes at end of table.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] 1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Nebraska--Con.										
30	Rubber, miscellaneous plastics products	141.9	8.0	9.3	17.3	12.2	3.8	0.2	0.2	0.4	10.5
32	Stone, clay, glass products	171.7	0.5	5.2	5.7	3.3	2.7	(Z)	0.1	0.1	3.7
33	Primary metal industries	404.2	1.6	61.5	63.1	15.6	2.4	(Z)	0.4	0.4	16.7
34	Fabricated metal products	311.7	19.2	14.1	33.3	10.7	5.8	0.4	0.3	0.7	12.1
35	Machinery, except electrical	664.8	67.2	17.1	84.3	12.7	10.3	1.0	0.3	1.3	12.6
36	Electric, electronic equipment	372.8	17.3	20.3	37.6	10.1	8.6	0.7	0.6	1.3	15.1
37	Transportation equipment	208.1	6.9	3.7	10.6	5.1	3.5	0.1	0.1	0.2	5.7
38	Instruments, related products	213.5	23.1	5.6	28.7	13.4	4.2	0.6	0.1	0.7	16.7
39	Miscellaneous manufacturing industries	31.3	1.4	0.4	1.8	5.8	1.1	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	2.3	(X)	0.2	0.2	(X)
	Nevada	724.8	27.2	35.5	62.7	8.7	13.6	0.3	0.6	0.9	6.6
27	Printing and publishing	63.6	0.7	0.7	1.4	2.2	3.9	(Z)	(Z)	(Z)	(Z)
28	Chemicals and allied products	87.4	11.4	7.0	18.4	21.1	1.0	0.1	0.1	0.2	20.0
30	Rubber, miscellaneous plastics products	7.7	0.1	0.5	0.6	7.8	0.2	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	141.7	0.2	4.3	4.5	3.2	1.6	(Z)	(Z)	(Z)	(Z)
34	Fabricated metal products	41.0	9.4	3.2	12.6	30.7	0.7	0.1	0.1	0.2	28.6
35	Machinery, except electrical	26.0	0.6	1.4	2.0	7.7	0.6	(Z)	(Z)	(Z)	(Z)
36	Electric, electronic equipment	42.4	0.8	0.8	1.6	3.8	0.7	(Z)	(Z)	(Z)	(Z)
37	Transportation equipment	7.4	0.7	0.2	0.9	12.2	0.1	(Z)	(Z)	(Z)	(Z)
39	Miscellaneous manufacturing industries	29.4	0.7	0.4	1.1	3.7	0.8	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	0.5	(X)	0.1	0.1	(X)
	New Hampshire	3,495.4	291.1	151.8	442.9	12.7	87.8	6.5	4.0	10.5	12.0
20	Food and kindred products	311.4	3.4	4.2	7.6	2.4	2.5	(Z)	(Z)	(Z)	(Z)
22	Textile mill products	206.5	3.9	7.5	11.4	5.5	6.4	0.1	0.3	0.4	6.3
23	Apparel, other textile products	24.6	0.4	0.3	0.7	2.8	2.1	(Z)	(Z)	(Z)	(Z)
24	Lumber and wood products	171.7	8.0	10.6	18.6	10.8	3.2	0.1	0.2	0.3	9.4
26	Paper and allied products	434.5	61.8	21.9	83.7	19.3	6.6	0.9	0.3	1.2	18.2
27	Printing and publishing	137.4	0.3	1.6	1.9	1.4	3.8	(Z)	(Z)	(Z)	(Z)
28	Chemicals and allied products	64.1	8.0	5.2	13.2	20.6	0.8	0.1	0.1	0.2	25.0
30	Rubber, miscellaneous plastics products	230.1	4.7	15.7	20.4	8.9	6.8	0.1	(Z)	0.1	1.5
31	Leather and leather products	264.4	8.6	4.0	12.6	4.8	10.8	0.1	0.1	0.2	1.9
32	Stone, clay, glass products	117.6	2.4	3.7	6.1	5.2	3.2	(Z)	0.1	0.1	3.1
33	Primary metal industries	71.8	0.7	10.7	11.4	15.9	1.3	(Z)	0.2	0.2	15.4
34	Fabricated metal products	182.6	4.5	6.4	10.9	6.0	3.8	0.1	0.2	0.3	7.9
35	Machinery, except electrical	433.4	95.8	21.6	117.4	27.1	12.0	2.4	0.7	3.1	25.8
36	Electric, electronic equipment	480.9	45.1	24.5	69.6	14.5	12.3	1.6	0.8	2.4	19.5
37	Transportation equipment	56.8	6.7	1.8	8.5	15.0	1.2	0.1	(Z)	0.1	8.3
38	Instruments, related products	202.3	35.4	12.2	47.6	23.5	6.1	0.9	0.4	1.3	21.3
39	Miscellaneous manufacturing industries	48.0	1.2	0.7	1.9	4.0	2.5	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	0.9	(X)	0.1	0.1	(X)
	New Jersey	45,711.3	2,660.2	2,057.8	4,718.0	10.3	735.7	34.9	41.3	76.2	10.4
20	Food and kindred products	5,677.4	159.5	75.1	234.6	4.1	45.6	1.1	0.6	1.7	3.7
22	Textile mill products	878.4	8.6	35.2	43.8	5.0	19.0	0.1	0.7	0.8	4.2
23	Apparel, other textile products	1,431.3	32.7	18.2	50.9	3.6	60.0	0.5	0.6	1.1	1.8
24	Lumber and wood products	206.3	2.8	12.8	15.6	7.6	4.4	0.1	0.3	0.4	9.1
25	Furniture and fixtures	318.2	4.3	2.7	7.0	2.2	8.0	0.1	0.1	0.2	2.5
26	Paper and allied products	1,807.0	45.5	112.7	158.2	8.8	28.4	0.6	1.8	2.4	8.5
28	Chemicals and allied products	10,119.7	996.0	511.4	1,507.4	14.9	94.3	8.2	4.8	12.7	13.5
30	Rubber, miscellaneous plastics products	1,573.5	39.0	106.7	145.7	9.3	33.8	0.8	2.3	3.1	9.2
31	Leather and leather products	252.6	11.7	2.8	14.5	5.7	8.1	0.3	0.1	0.4	4.9
32	Stone, clay, glass products	1,544.6	46.9	79.3	126.2	8.2	31.9	0.9	1.7	2.6	8.2
33	Primary metal industries	2,308.0	52.9	340.4	393.3	17.0	24.0	0.5	3.5	4.0	16.7
34	Fabricated metal products	2,639.3	83.7	184.9	268.6	10.2	49.0	1.7	3.5	5.2	10.6
35	Machinery, except electrical	2,804.3	412.2	179.1	591.3	21.1	58.9	7.5	3.9	11.4	19.4
36	Electric, electronic equipment	2,888.0	242.2	148.9	391.1	13.5	70.6	6.1	3.9	10.0	14.2
37	Transportation equipment	3,399.9	228.0	85.9	313.9	9.2	20.0	1.2	0.5	1.7	8.5
38	Instruments, related products	1,318.1	162.4	43.0	205.4	15.6	26.1	3.8	0.9	4.7	18.0
39	Miscellaneous manufacturing industries	952.8	56.5	13.4	69.9	7.3	21.6	1.2	0.3	1.5	6.9
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	86.0	(X)	11.4	11.4	(X)

See footnotes at end of table.

Table 5b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	New Mexico	1,534.0	69.2	62.7	131.9	8.6	30.2	0.8	1.0	1.8	6.0
20	Food and kindred products	434.9	10.4	5.8	16.2	3.7	5.1	(Z)	0.1	0.1	2.0
23	Apparel, other textile products	71.3	1.7	0.6	2.3	3.2	2.3	0.1	(Z)	0.1	4.3
28	Chemicals and allied products	81.6	18.0	6.8	24.8	30.4	1.2	0.2	0.1	0.3	25.0
35	Machinery, except electrical	52.8	10.2	3.7	13.9	26.3	1.9	0.2	0.2	0.4	21.1
36	Electric, electronic equipment	97.3	0.9	2.5	3.4	3.5	3.1	(Z)	0.1	0.1	3.2
38	Instruments, related products	9.6	0.9	0.4	1.3	13.5	0.3	(Z)	(Z)	(Z)	(Z)
39	Miscellaneous manufacturing industries	109.1	14.4	1.4	15.8	14.5	3.8	0.3	0.1	0.4	10.5
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	0.3	(X)	(Z)	(Z)	(X)
	New York	76,087.1	5,320.2	3,072.8	8,393.0	11.0	1,455.3	84.0	69.5	153.5	10.5
20	Food and kindred products	8,086.9	104.3	108.1	212.9	2.6	76.2	1.2	1.0	2.2	2.9
22	Textile mill products	1,680.0	23.8	35.6	59.4	3.5	40.1	0.6	1.0	1.5	3.7
23	Apparel, other textile products	7,850.6	70.5	84.0	154.5	2.0	184.5	0.9	1.9	2.8	1.5
24	Lumber and wood products	510.5	12.5	30.4	42.9	8.4	13.6	0.2	0.8	1.0	7.4
25	Furniture and fixtures	777.9	9.3	6.7	16.0	2.1	23.7	0.2	0.2	0.4	1.7
26	Paper and allied products	2,620.2	66.2	158.2	224.4	8.6	44.2	1.1	2.7	3.8	8.6
27	Printing and publishing	7,907.4	211.3	77.3	288.6	3.6	147.8	3.7	1.7	5.4	3.7
28	Chemicals and allied products	5,144.2	478.4	221.4	699.8	13.6	52.1	4.3	2.3	6.6	12.7
30	Rubber, miscellaneous plastics products	1,315.2	44.9	88.4	133.3	10.1	30.7	0.7	2.0	2.7	8.8
31	Leather and leather products	790.7	25.2	6.4	31.6	4.0	30.1	0.5	0.2	0.7	2.3
32	Stone, clay, glass products	1,647.7	551.8	64.8	116.6	7.1	32.9	1.0	4.2	5.2	15.8
33	Primary metal industries	4,876.9	171.2	697.6	868.8	17.8	55.4	1.3	7.9	9.2	16.6
34	Fabricated metal products	3,597.2	223.2	226.7	449.9	12.5	81.9	4.8	4.5	9.3	11.4
35	Machinery, except electrical	7,905.4	1,358.5	434.7	1,793.2	22.7	129.2	19.8	8.1	27.9	21.6
36	Electric, electronic equipment	6,649.8	958.3	472.4	1,430.7	21.5	148.4	20.3	9.8	30.1	20.3
37	Transportation equipment	4,263.2	300.6	184.9	485.5	11.4	63.3	4.9	3.2	8.1	12.8
38	Instruments, related products	6,950.3	792.0	123.3	915.3	13.2	98.9	13.4	2.0	15.4	15.6
39	Miscellaneous manufacturing industries	2,763.1	407.0	35.2	442.2	16.0	64.0	4.9	0.8	5.7	8.9
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	135.5	(X)	15.2	15.2	(X)
	North Carolina	35,818.9	2,202.0	1,470.6	3,672.6	10.3	738.9	32.2	29.6	61.8	8.4
20	Food and kindred products	3,375.6	24.9	45.6	70.5	2.1	38.8	0.2	0.5	0.7	1.8
21	Tobacco products	4,171.1	484.0	138.9	622.9	14.9	24.8	4.4	0.8	5.2	21.0
22	Textile mill products	10,078.4	419.5	429.9	849.4	8.4	254.6	8.9	10.8	19.7	7.7
23	Apparel, other textile products	1,589.1	48.5	26.0	74.5	4.7	71.6	1.4	0.9	2.3	3.2
24	Lumber and wood products	1,208.0	45.0	67.9	112.9	9.4	31.2	0.7	1.8	2.5	8.0
25	Furniture and fixtures	2,101.3	32.1	15.6	47.7	2.3	72.4	1.2	0.5	1.7	2.3
26	Paper and allied products	1,319.1	69.6	77.1	146.7	11.1	15.9	0.9	1.0	1.9	12.0
27	Printing and publishing	504.0	0.5	5.9	6.4	1.3	17.2	(Z)	0.2	0.2	1.2
28	Chemicals and allied products	3,027.5	158.9	214.3	373.2	12.3	29.1	1.4	2.0	3.4	11.7
30	Rubber, miscellaneous plastics products	1,008.4	32.5	67.9	100.4	10.0	17.9	0.6	1.2	1.8	10.1
31	Leather and leather products	130.0	2.9	0.8	3.7	2.8	4.2	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	674.3	28.9	32.3	61.2	9.1	15.6	0.6	0.7	1.3	8.3
33	Primary metal industries	513.3	5.7	78.0	83.7	16.3	7.0	0.1	1.1	1.2	17.1
34	Fabricated metal products	1,108.6	40.4	53.8	94.2	8.5	21.0	0.8	1.1	1.9	9.0
35	Machinery, except electrical	2,097.5	504.2	87.9	592.1	28.2	32.7	5.2	1.6	6.8	20.8
36	Electric, electronic equipment	1,766.3	222.6	94.7	317.3	18.0	36.3	3.9	2.0	5.9	16.3
37	Transportation equipment	433.7	41.8	10.6	52.4	12.1	9.8	1.0	0.2	1.2	12.2
38	Instruments, related products	365.2	31.7	10.5	42.2	11.6	7.7	0.7	0.3	1.0	13.0
39	Miscellaneous manufacturing industries	216.1	7.7	3.1	10.8	5.0	6.3	0.2	0.1	0.3	4.8
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	24.0	(X)	2.7	2.7	(X)
	North Dakota	1,236.2	84.5	22.6	107.1	8.7	14.0	1.4	0.3	1.7	12.1
20	Food and kindred products	464.9	3.9	6.3	10.2	2.2	3.1	(Z)	(Z)	(Z)	(Z)
35	Machinery, except electrical	246.4	67.6	2.5	70.1	28.4	3.7	1.0	0.1	1.1	29.7
39	Miscellaneous manufacturing industries	13.6	3.7	0.1	3.8	27.9	0.5	0.3	(Z)	0.3	60.0
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	0.2	(X)	(Z)	(Z)	(X)
	Ohio	83,599.5	5,793.6	4,782.4	10,576.0	12.7	1,283.0	86.8	78.9	165.7	12.9
20	Food and kindred products	7,932.9	284.2	104.1	388.3	4.9	73.5	3.5	1.0	4.5	6.1
22	Textile mill products	353.7	45.2	11.7	56.9	16.1	6.7	0.5	0.2	0.7	10.4
23	Apparel, other textile products	754.0	12.0	13.7	25.7	3.4	17.5	0.2	0.3	0.5	2.9
24	Lumber and wood products	557.5	5.3	26.7	32.0	5.7	12.9	0.1	0.7	0.8	6.2
25	Furniture and fixtures	627.1	13.3	5.3	18.6	3.0	15.7	0.3	0.1	0.4	2.5

Table 5b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Ohio--Con.										
26	Paper and allied products	2,190.3	38.9	137.8	176.7	8.1	34.2	0.6	2.2	2.8	8.2
27	Printing and publishing	2,269.6	24.4	26.2	50.6	2.2	56.5	0.5	0.7	1.2	2.1
28	Chemicals and allied products	5,954.2	330.3	403.4	733.7	12.3	44.4	2.7	3.2	5.9	13.3
29	Petroleum and coal products	3,522.9	24.1	75.3	99.4	2.8	7.3	0.2	0.2	0.4	5.5
30	Rubber, miscellaneous plastics products	5,063.3	190.4	338.9	529.3	10.5	90.5	3.4	6.1	9.5	10.5
32	Stone, clay, glass products	2,720.4	182.5	120.6	303.1	11.1	58.2	3.4	2.6	6.0	10.3
33	Primary metal industries	11,772.0	245.0	1,636.8	1,881.8	16.0	141.5	3.2	20.0	23.2	16.4
34	Fabricated metal products	9,581.6	443.8	763.0	1,206.8	12.6	163.6	7.4	12.8	20.2	12.3
35	Machinery, except electrical	9,433.2	1,484.4	468.1	1,952.5	20.7	183.0	25.0	9.1	34.1	18.6
36	Electric, electronic equipment	5,666.8	680.7	242.2	922.9	16.3	102.5	12.3	4.8	17.1	16.7
37	Transportation equipment	13,588.3	1,647.4	373.7	2,021.1	14.9	155.4	20.0	4.8	24.8	16.0
38	Instruments, related products	675.2	109.1	22.5	131.6	19.5	21.5	3.1	0.7	3.8	17.7
39	Miscellaneous manufacturing industries	781.6	24.6	11.3	35.9	4.6	17.2	0.4	0.2	0.6	3.5
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	75.9	(X)	9.3	9.3	(X)
	Oklahoma	10,126.0	578.8	364.3	943.1	9.3	150.1	8.5	5.6	14.1	9.4
20	Food and kindred products	1,464.2	38.6	19.4	58.0	4.0	14.3	0.3	0.2	0.5	3.5
23	Apparel, other textile products	330.0	15.3	3.7	19.0	5.8	12.2	0.1	0.1	0.2	1.6
27	Printing and publishing	289.4	0.7	3.7	4.4	1.5	9.1	(Z)	0.7	0.1	1.1
29	Petroleum and coal products	2,605.3	9.1	55.9	65.0	2.5	5.2	0.1	0.1	0.2	3.8
30	Rubber, miscellaneous plastics products	532.7	20.0	35.7	55.7	10.5	7.7	0.3	0.5	0.8	10.4
32	Stone, clay, glass products	443.5	9.2	24.9	34.1	7.7	7.4	0.2	0.4	0.6	8.1
33	Primary metal industries	214.2	2.5	30.9	33.4	15.6	4.6	(Z)	0.7	0.7	15.2
34	Fabricated metal products	723.2	63.8	54.3	118.1	16.3	14.9	0.9	1.2	2.1	14.1
35	Machinery, except electrical	1,396.1	292.3	64.1	356.4	25.5	26.3	4.5	1.5	6.0	22.8
36	Electric, electronic equipment	650.6	40.5	22.4	62.9	9.7	10.6	1.0	0.4	1.4	13.2
37	Transportation equipment	461.1	45.8	19.4	65.2	14.1	9.7	0.6	0.4	1.0	10.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	12.8	(X)	0.8	0.8	(X)
	Oregon	12,229.2	824.2	601.7	1,425.9	11.7	187.8	13.0	9.2	22.2	11.8
20	Food and kindred products	1,818.6	34.9	24.3	59.2	3.3	21.8	0.4	0.3	0.7	3.2
24	Lumber and wood products	4,994.8	345.5	276.6	622.1	12.5	69.4	3.8	3.8	7.6	11.0
25	Furniture and fixtures	91.7	1.0	0.7	1.7	1.9	2.7	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	1,046.1	33.1	59.2	92.3	8.8	9.0	0.2	0.5	0.7	7.8
27	Printing and publishing	332.3	0.3	3.9	4.2	1.3	8.4	(Z)	0.1	0.1	1.2
28	Chemicals and allied products	325.7	22.4	29.0	51.4	15.8	2.2	0.1	0.2	0.3	13.6
30	Rubber, miscellaneous plastics products	64.1	2.1	4.3	6.4	10.0	1.7	(Z)	0.1	0.1	5.9
32	Stone, clay, glass products	192.5	4.6	7.1	11.7	6.1	3.8	0.1	0.1	0.2	5.3
34	Fabricated metal products	515.0	18.6	26.7	45.3	8.8	9.6	0.4	0.5	0.9	9.4
35	Machinery, except electrical	544.8	94.1	28.7	122.8	22.5	10.4	1.7	0.6	2.3	22.1
36	Electric, electronic equipment	210.0	12.2	9.7	21.9	10.4	4.3	0.4	0.2	0.6	14.0
38	Instruments, related products	526.8	188.5	22.7	211.2	40.1	12.8	4.8	0.6	5.4	42.2
39	Miscellaneous manufacturing industries	60.6	4.1	0.8	4.9	8.1	2.1	0.1	(Z)	0.1	4.8
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	4.8	(X)	0.5	0.5	(X)
	Pennsylvania	71,918.5	4,706.0	4,272.2	8,978.2	12.5	1,310.2	82.4	77.6	160.0	12.2
20	Food and kindred products	8,628.9	105.4	116.0	221.4	2.6	91.3	1.4	1.2	2.6	2.8
21	Tobacco products	151.5	8.8	5.4	14.2	9.4	3.9	0.2	0.1	0.3	7.7
22	Textile mill products	1,935.9	45.1	58.8	103.9	5.4	51.9	1.0	1.6	2.6	5.0
23	Apparel, other textile products	2,423.0	56.9	24.3	81.2	3.4	124.5	3.0	1.1	4.1	3.3
24	Lumber and wood products	817.4	25.9	43.2	69.1	8.5	19.7	0.4	1.1	1.5	7.6
25	Furniture and fixtures	629.6	8.8	5.4	14.2	2.3	18.0	0.2	0.2	0.4	2.2
26	Paper and allied products	3,075.2	51.1	187.8	238.9	7.8	38.6	0.5	2.4	2.9	7.5
27	Printing and publishing	2,693.4	53.8	30.8	84.6	3.1	72.5	1.5	0.8	2.3	3.2
28	Chemicals and allied products	4,452.9	357.4	239.6	597.0	13.4	42.4	3.3	2.4	5.7	13.4
29	Petroleum and coal products	4,841.9	73.4	102.7	176.1	3.6	11.4	0.3	0.2	0.5	4.4
30	Rubber, miscellaneous plastics products	1,681.4	78.2	111.5	189.7	11.3	35.5	1.5	2.4	3.9	11.0
31	Leather and leather products	515.3	12.5	4.6	17.1	3.3	20.5	0.4	0.1	0.5	2.4
32	Stone, clay, glass products	2,420.9	97.7	114.4	212.1	8.8	51.1	2.1	2.5	4.6	9.0
33	Primary metal industries	15,007.4	449.7	2,064.7	2,514.4	16.8	187.3	4.7	25.8	30.5	16.3
34	Fabricated metal products	5,488.9	316.9	338.5	655.4	11.9	102.6	6.2	6.3	12.5	12.2

See footnotes at end of table.

Table 5b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Pennsylvania--Con.										
35	Machinery, except electrical	6,200.7	1,271.2	353.2	1,624.4	26.2	125.7	23.5	7.5	31.0	24.7
36	Electric, electronic equipment	4,374.5	666.3	337.9	1,004.2	23.0	100.9	15.7	9.1	23.8	23.6
37	Transportation equipment	3,858.5	650.6	77.0	727.6	18.9	63.8	10.2	1.5	11.7	18.3
38	Instruments, related products	1,429.5	251.4	39.0	290.4	20.3	34.9	6.1	1.0	7.1	20.3
39	Miscellaneous manufacturing industries	1,291.8	124.7	17.5	142.2	11.0	26.4	1.8	0.4	2.2	8.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	87.0	(X)	11.0	11.0	(X)
	Rhode Island	4,532.7	268.5	246.7	515.2	11.4	115.1	5.8	5.3	11.1	9.6
20	Food and kindred products	206.2	1.7	2.8	4.5	2.2	3.3	(Z)	(Z)	(Z)	(Z)
22	Textile mill products	394.6	17.2	20.0	37.2	9.4	12.4	0.5	0.6	1.1	8.9
23	Apparel, other textile products	78.4	2.0	1.2	3.2	4.1	3.2	(Z)	(Z)	(Z)	(Z)
25	Furniture and fixtures	14.1	0.4	0.1	0.5	3.5	0.6	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	103.1	1.4	6.6	8.0	7.8	2.2	(Z)	0.2	0.2	9.1
28	Chemicals and allied products	168.9	21.8	12.7	34.5	20.4	2.9	0.2	0.2	0.4	13.8
30	Rubber, miscellaneous plastics products	220.9	10.6	14.6	25.2	11.4	5.7	0.2	0.4	0.6	10.5
31	Leather and leather products	71.0	2.7	0.2	2.9	4.1	2.3	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	90.0	3.4	5.3	8.7	9.7	1.6	0.1	0.1	0.2	12.5
33	Primary metal industries	661.8	25.2	96.6	121.8	18.4	9.3	0.1	1.3	1.4	15.1
34	Fabricated metal products	489.4	7.7	29.0	36.7	7.5	15.1	0.1	0.7	0.8	5.3
35	Machinery, except electrical	275.1	54.5	29.8	84.3	30.6	7.8	1.3	0.5	1.8	23.1
36	Electric, electronic equipment	305.4	19.3	15.3	34.6	11.3	7.8	0.6	0.4	1.0	12.8
37	Transportation equipment	70.4	3.7	1.2	4.9	7.0	2.1	0.1	(Z)	0.1	4.8
38	Instruments, related products	141.6	8.4	3.5	11.9	8.4	4.7	0.3	0.1	0.4	8.5
39	Miscellaneous manufacturing industries	1,065.5	88.7	14.6	103.3	9.7	28.3	2.3	0.4	2.7	9.5
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	1.0	(X)	0.1	0.1	(X)
	South Carolina	16,610.1	935.4	880.7	1,816.1	10.9	371.3	16.4	18.8	35.2	9.5
20	Food and kindred products	982.1	16.4	13.1	29.5	3.0	11.9	0.1	0.2	0.3	2.5
21	Tobacco products	22.2	13.3	0.3	13.6	61.3	0.9	0.4	(Z)	0.4	44.4
22	Textile mill products	6,004.8	145.0	324.2	469.2	7.8	145.4	3.5	8.0	11.5	7.9
23	Apparel, other textile products	1,153.0	50.0	15.9	65.9	5.7	47.9	1.1	0.6	1.7	3.5
24	Lumber and wood products	616.6	17.7	27.1	44.8	7.3	13.4	0.3	0.6	0.9	6.7
25	Furniture and fixtures	137.4	1.1	1.0	2.1	1.5	5.4	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	1,112.6	124.4	60.3	184.7	16.6	12.6	1.0	0.7	1.7	13.5
27	Printing and publishing	139.3	0.2	1.6	1.8	1.3	5.2	(Z)	0.1	0.1	1.9
28	Chemicals and allied products	2,170.7	192.0	179.8	371.8	17.1	29.0	2.4	2.5	4.9	16.9
32	Stone, clay, glass products	435.8	9.8	20.7	30.5	7.0	10.2	0.2	0.5	0.7	6.9
33	Primary metal industries	442.7	30.0	59.3	89.3	20.2	5.3	0.3	0.7	1.0	18.9
34	Fabricated metal products	595.0	22.3	33.1	55.4	9.3	11.7	0.5	0.7	1.2	10.3
35	Machinery, except electrical	1,174.9	172.8	63.7	236.5	20.1	24.1	2.9	1.3	4.2	17.4
36	Electric, electronic equipment	553.8	84.3	35.9	120.2	21.7	15.7	2.5	1.2	3.7	23.6
37	Transportation equipment	205.7	7.1	3.3	10.4	5.1	5.4	0.1	0.1	0.2	3.7
38	Instruments, related products	193.8	11.2	7.8	19.0	9.8	4.2	0.3	0.2	0.5	11.9
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	7.9	(X)	0.7	0.7	(X)
	South Dakota	1,608.5	68.3	33.8	102.1	6.3	21.8	1.0	0.6	1.6	7.3
20	Food and kindred products	1,081.9	33.7	14.3	48.0	4.4	8.4	0.2	0.1	0.3	3.6
30	Rubber, miscellaneous plastics products	13.5	8.9	0.3	9.2	68.1	0.4	0.3	(Z)	0.3	75.0
34	Fabricated metal products	63.0	1.8	1.8	3.6	5.7	1.0	(Z)	(Z)	(Z)	(Z)
35	Machinery, except electrical	108.5	7.7	4.5	12.2	11.2	2.5	0.1	0.1	0.2	8.0
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Tennessee	24,755.5	1,253.1	1,153.3	2,406.4	9.7	478.7	18.6	19.6	38.2	8.0
20	Food and kindred products	4,498.7	78.3	60.2	138.5	3.1	36.2	0.4	0.5	0.9	2.5
21	Tobacco products	63.3	6.5	2.1	8.6	13.6	1.1	0.1	(Z)	0.1	9.1
22	Textile mill products	1,015.0	15.8	39.1	54.9	5.4	27.4	0.4	0.9	1.3	4.7
23	Apparel, other textile products	1,482.0	60.4	14.7	75.1	5.1	67.3	1.4	0.6	2.0	3.0
24	Lumber and wood products	450.1	9.7	25.7	35.4	7.9	13.9	0.3	0.8	1.1	7.9
25	Furniture and fixtures	638.9	6.3	5.0	11.3	1.8	24.0	0.2	0.2	0.4	1.7
26	Paper and allied products	1,267.6	41.6	75.2	116.8	9.2	15.6	0.6	0.9	1.5	9.6
27	Printing and publishing	664.7	5.7	7.7	13.4	2.0	23.6	0.2	0.3	0.5	2.1
28	Chemicals and allied products	4,205.9	297.5	377.7	675.2	16.1	49.8	3.2	4.4	7.6	15.3
30	Rubber, miscellaneous plastics products	1,044.4	34.2	70.3	104.5	10.0	16.2	0.5	1.1	1.6	9.9

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Tennessee--Con.										
31	Leather and leather products	635.0	22.3	4.2	26.5	4.2	19.5	0.4	0.1	0.5	2.6
32	Stone, clay, glass products	761.9	46.3	38.1	84.4	11.1	17.8	0.9	0.8	1.7	9.6
33	Primary metal industries	1,384.7	89.6	194.2	283.8	20.5	16.3	0.7	2.3	3.0	18.4
34	Fabricated metal products	1,400.4	67.2	62.0	129.2	9.2	32.6	1.6	1.3	2.9	8.9
35	Machinery, except electrical	1,633.7	232.0	70.9	302.9	18.5	28.8	3.1	1.6	4.7	16.3
36	Electric, electronic equipment	1,682.4	133.7	65.6	199.3	11.8	32.5	2.4	1.4	3.8	11.7
37	Transportation equipment	1,106.3	73.8	25.2	99.0	8.9	22.7	1.5	0.6	2.1	9.3
38	Instruments, related products	135.1	15.0	3.9	18.9	14.0	3.3	0.3	0.1	0.4	12.1
39	Miscellaneous manufacturing industries	435.4	13.9	6.3	20.2	4.6	11.6	0.4	0.2	0.6	5.2
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	17.8	(X)	1.5	1.5	(X)
	Texas	77,120.1	5,200.6	3,446.5	8,647.1	11.2	824.6	59.4	38.1	97.5	11.8
20	Food and kindred products	9,936.4	504.7	128.4	633.1	6.4	84.0	2.1	1.1	3.2	3.8
22	Textile mill products	211.0	7.3	11.2	18.5	8.8	5.6	0.1	0.3	0.4	7.1
23	Apparel, other textile products	1,770.3	36.1	17.9	54.0	3.1	73.7	0.5	0.7	1.2	1.6
24	Lumber and wood products	1,227.6	105.0	59.2	164.2	13.4	27.1	1.5	1.4	2.9	10.7
25	Furniture and fixtures	438.5	4.0	3.6	7.6	1.7	15.0	0.1	0.1	0.2	1.3
26	Paper and allied products	1,402.9	37.3	85.2	122.5	8.7	18.8	0.4	1.2	1.6	8.5
27	Printing and publishing	1,580.4	6.9	18.4	25.3	1.6	46.5	0.3	0.5	0.8	1.7
28	Chemicals and allied products	14,567.2	1,427.3	1,333.3	2,760.6	19.0	63.2	6.3	5.4	11.7	18.5
30	Rubber, miscellaneous plastics products	1,123.8	86.6	72.1	158.7	14.1	20.1	1.2	1.3	2.5	12.4
32	Stone, clay, glass products	1,854.1	11.4	65.4	76.8	4.1	33.7	0.3	1.2	1.5	4.5
33	Primary metal industries	3,013.6	67.6	436.0	503.6	16.7	36.9	1.3	5.2	6.5	17.6
34	Fabricated metal products	3,883.7	251.8	174.3	426.1	11.0	73.8	4.4	3.2	7.6	10.3
35	Machinery, except electrical	5,505.9	1,266.1	237.9	1,504.0	27.3	107.1	21.8	5.3	27.1	25.3
36	Electric, electronic equipment	2,462.8	334.9	141.1	476.0	19.3	54.1	8.2	3.4	11.6	21.4
37	Transportation equipment	4,230.6	669.0	158.5	827.5	19.6	59.9	8.8	2.4	11.2	18.7
38	Instruments, related products	561.6	60.3	15.7	76.0	13.5	11.2	1.2	0.3	1.5	13.4
39	Miscellaneous manufacturing industries	523.5	23.0	7.5	30.5	5.8	11.5	0.2	0.2	0.4	3.5
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	40.4	(X)	4.1	4.1	(X)
	Utah	4,640.6	223.6	347.4	571.0	12.3	71.2	3.7	3.6	7.3	10.3
20	Food and kindred products	847.3	4.3	11.5	15.8	1.9	8.4	(Z)	0.1	0.1	1.2
23	Apparel, other textile products	95.2	2.5	1.5	4.0	4.2	4.6	(Z)	0.1	0.1	2.2
28	Chemicals and allied products	76.7	2.9	5.2	8.1	10.6	1.2	(Z)	(Z)	(Z)	(Z)
29	Petroleum and coal products	629.1	0.2	13.5	13.7	2.2	0.9	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	219.9	0.9	6.7	7.6	3.5	3.8	(Z)	0.1	0.1	2.6
34	Fabricated metal products	245.3	10.5	7.3	17.8	7.3	5.1	0.2	0.1	0.3	5.9
35	Machinery, except electrical	487.0	131.5	22.8	154.3	31.7	10.3	2.5	0.5	3.0	29.1
36	Electric, electronic equipment	151.1	18.3	5.8	24.1	15.9	3.7	0.4	0.2	0.6	16.2
37	Transportation equipment	294.5	14.5	17.2	31.7	10.8	5.8	0.3	0.4	0.7	12.1
39	Miscellaneous manufacturing industries	64.7	6.5	0.9	7.4	11.4	2.2	0.1	(Z)	0.1	4.5
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	5.5	(X)	0.3	0.3	(X)
	Vermont	2,056.2	199.8	110.8	310.6	15.1	41.1	3.5	2.1	5.6	13.6
20	Food and kindred products	337.3	1.3	4.6	5.9	1.7	2.2	(Z)	(Z)	(Z)	(Z)
24	Lumber and wood products	108.3	4.1	6.5	10.6	9.8	3.5	0.1	0.2	0.3	8.6
26	Paper and allied products	184.7	5.7	10.7	16.4	8.9	2.1	0.1	0.2	0.3	14.3
27	Printing and publishing	124.2	0.4	1.4	1.8	1.4	3.7	(Z)	(Z)	(Z)	(Z)
30	Rubber, miscellaneous plastics products	50.4	1.7	3.4	5.1	10.1	1.5	0.1	0.1	0.2	13.3
31	Leather and leather products	15.3	1.2	0.3	1.5	9.8	0.4	(Z)	(Z)	(Z)	(Z)
34	Fabricated metal products	170.6	63.1	3.1	66.2	38.8	3.3	1.2	0.1	1.3	39.4
35	Machinery, except electrical	227.3	33.6	12.8	46.4	20.4	5.6	0.7	0.3	1.0	17.9
38	Instruments, related products	43.8	9.4	0.9	10.3	23.5	1.3	0.3	(Z)	0.3	23.0
39	Miscellaneous manufacturing industries	30.3	3.6	0.4	4.0	13.2	1.2	0.1	(Z)	0.1	8.3
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	(D)	(X)	(D)	(D)	(X)
	Virginia	20,470.5	1,544.7	825.7	2,370.4	11.6	375.0	21.4	14.2	35.6	9.5
20	Food and kindred products	3,212.1	79.6	42.6	122.2	3.8	34.3	0.9	0.5	1.4	4.1
21	Tobacco products	2,373.2	453.9	72.3	526.2	22.2	16.0	3.2	0.5	3.7	23.1
22	Textile mill products	1,910.1	112.8	90.0	202.8	10.6	44.4	2.4	1.9	4.3	9.7
23	Apparel, other textile products	585.4	15.3	6.3	21.6	3.7	33.1	0.2	0.3	0.5	1.5
24	Lumber and wood products	843.4	15.1	50.6	65.7	7.8	21.0	0.4	1.3	1.7	8.1

See footnotes at end of table.

Table 5b. **Manufacturing Industries—Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Virginia--Con.										
25	Furniture and fixtures	685.3	10.9	5.1	16.0	2.3	23.5	0.4	0.2	0.6	2.6
26	Paper and allied products	1,100.4	41.9	64.7	106.6	9.7	14.7	0.4	0.7	1.1	7.5
27	Printing and publishing	602.1	2.9	7.0	9.9	1.6	16.4	(Z)	0.2	0.2	1.2
28	Chemicals and allied products	2,310.3	329.3	171.1	500.4	21.7	31.6	3.5	2.4	5.9	18.7
30	Rubber, miscellaneous plastics products	659.0	36.3	43.3	79.6	12.1	10.7	0.6	0.7	1.3	12.1
31	Leather and leather products	80.2	3.0	0.9	3.9	4.9	3.3	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	443.9	14.6	14.7	29.3	6.6	9.6	0.3	0.4	0.7	7.3
33	Primary metal industries	669.9	11.6	96.6	108.2	16.2	9.2	0.1	1.3	1.4	15.2
34	Fabricated metal products	919.7	38.7	40.8	79.5	8.6	16.0	0.6	0.7	1.3	8.1
35	Machinery, except electrical	752.0	89.9	37.8	127.7	17.0	16.9	2.1	0.9	3.0	17.8
36	Electric, electronic equipment	1,291.3	213.4	51.5	264.9	20.5	27.3	4.4	1.3	5.7	20.9
39	Miscellaneous manufacturing industries	134.0	5.6	1.9	7.5	5.6	3.9	0.1	0.1	0.2	5.1
--	Central admin. office, auxiliary	(X)	(X)	(X)	(X)	(X)	9.1	(X)	0.8	0.8	(X)
	Washington	18,842.8	3,234.7	884.0	4,118.7	21.9	244.1	30.4	11.7	42.1	17.2
20	Food and kindred products	2,773.7	151.1	35.7	186.8	6.7	27.9	1.2	0.4	1.6	5.7
23	Apparel, other textile products	146.5	12.7	1.5	14.2	9.7	5.2	0.2	0.1	0.3	5.8
24	Lumber and wood products	3,203.7	812.2	145.6	957.8	29.9	44.6	6.8	2.0	8.8	19.7
25	Furniture and fixtures	87.1	2.1	0.7	2.8	3.2	1.6	(Z)	(Z)	(Z)	(Z)
26	Paper and allied products	1,733.5	192.0	91.8	283.8	16.4	16.0	1.6	0.9	2.5	15.6
28	Chemicals and allied products	474.1	21.9	34.0	55.9	11.8	6.0	0.1	0.6	0.7	11.7
30	Rubber, miscellaneous plastics products	145.8	1.7	10.0	11.7	8.0	2.0	0.1	0.1	0.2	10.0
32	Stone, clay, glass products	413.5	2.7	14.0	16.7	4.0	6.7	(Z)	0.2	0.2	3.0
33	Primary metal industries	1,851.2	34.8	288.0	322.8	16.5	14.0	0.2	2.1	2.3	16.4
34	Fabricated metal products	886.6	7.0	50.8	57.8	6.5	13.8	0.1	0.9	1.0	7.3
35	Machinery, except electrical	535.1	150.9	30.5	181.4	33.9	11.9	2.9	0.8	3.7	31.1
36	Electric, electronic equipment	182.0	5.7	9.0	14.7	8.1	4.4	0.1	0.2	0.3	6.8
37	Transportation equipment	4,171.0	1,805.1	128.0	1,933.1	46.3	55.9	16.6	1.5	18.1	32.4
38	Instruments, related products	76.5	16.8	3.8	20.6	26.9	2.1	0.4	0.1	0.5	23.8
39	Miscellaneous manufacturing industries	172.2	4.9	2.5	7.4	4.3	4.2	(Z)	0.1	0.1	2.4
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	12.2	(X)	1.6	1.6	(X)
	West Virginia	7,937.6	447.1	694.2	1,141.3	14.4	120.0	4.5	9.5	14.0	11.7
24	Lumber and wood products	140.7	6.8	9.1	15.9	11.3	5.9	0.2	0.3	0.5	8.5
25	Furniture and fixtures	25.7	0.3	2.6	2.9	11.3	1.1	(Z)	0.1	0.1	9.1
26	Paper and allied products	90.3	0.4	6.0	6.4	7.1	1.7	(Z)	0.1	0.1	5.9
28	Chemicals and allied products	2,515.6	241.0	240.4	481.4	19.1	18.9	1.9	1.8	3.7	19.6
29	Petroleum and coal products	249.9	1.8	5.3	7.1	2.8	1.0	(Z)	(Z)	(Z)	(Z)
32	Stone, clay, glass products	638.1	19.7	38.4	58.1	9.1	18.7	0.5	1.1	1.6	8.6
33	Primary metal industries	2,225.0	64.9	314.1	379.0	17.0	23.7	0.6	3.3	3.9	16.5
34	Fabricated metal products	373.4	6.8	25.3	32.1	8.6	8.2	0.2	0.5	0.7	8.5
35	Machinery, except electrical	328.0	39.0	18.1	57.1	17.4	7.0	0.3	0.5	0.8	11.4
36	Electric, electronic equipment	256.7	15.4	16.2	31.6	12.3	4.9	0.2	0.3	0.5	10.2
37	Transportation equipment	256.0	17.2	5.3	22.5	8.8	2.8	0.2	0.1	0.3	10.7
39	Miscellaneous manufacturing industries	14.4	2.4	0.2	2.6	18.1	0.7	0.2	(Z)	0.2	28.6
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	7.0	(X)	1.1	1.1	(X)
	Wisconsin	35,427.3	2,209.2	1,498.7	3,707.9	10.5	519.9	32.1	27.6	59.7	11.5
20	Food and kindred products	8,275.1	121.0	111.0	232.0	2.8	59.3	0.7	0.8	1.5	2.5
22	Textile mill products	230.0	2.7	6.3	9.0	3.9	5.2	0.1	0.1	0.2	3.8
23	Apparel, other textile products	182.1	3.6	12.0	15.6	8.6	6.1	0.1	0.1	0.2	3.3
24	Lumber and wood products	860.4	11.6	48.7	60.3	7.0	20.9	0.5	1.2	1.7	8.1
25	Furniture and fixtures	313.7	3.1	2.7	5.8	1.8	8.0	0.1	0.1	0.2	2.5
26	Paper and allied products	3,704.6	67.9	216.4	284.3	7.7	40.2	0.7	2.4	3.1	7.7
27	Printing and publishing	1,146.6	4.1	13.3	17.4	1.5	29.4	0.1	0.3	0.4	1.4
28	Chemicals and allied products	921.3	52.4	48.4	100.8	10.9	8.1	0.5	0.4	0.9	11.1
29	Petroleum and coal products	173.7	0.5	3.7	4.2	2.4	0.3	(Z)	(Z)	(Z)	(Z)
30	Rubber, miscellaneous plastics products	713.8	19.1	48.3	67.8	9.4	15.3	0.3	1.0	1.3	8.5
32	Stone, clay, glass products	481.4	12.3	15.9	28.2	5.9	7.4	0.1	0.3	0.4	5.4
33	Primary metal industries	1,379.6	16.3	196.6	212.9	15.4	29.7	0.3	4.2	4.5	15.2
34	Fabricated metal products	2,882.8	109.9	201.8	311.7	10.8	51.0	1.9	3.8	5.7	11.2
35	Machinery, except electrical	6,451.8	1,093.7	336.2	1,429.9	22.2	104.3	16.0	6.2	22.2	21.3
36	Electric, electronic equipment	2,041.2	258.5	117.5	376.0	18.4	43.8	5.2	2.6	7.8	17.8

See footnotes at end of table.

Table 5b. **Manufacturing Industries — Shipments and Employment Related to Manufactured Exports for States by Major Industry Group: 1976**—Con.

SIC code	State by major industry group	Value of manufacturers' shipments					Manufacturing employment				
		Total[1] (million dollars)	Direct exports[2] (million dollars)	Supporting exports[3] (million dollars)	Total export related[4] (million dollars)	Total export related as percent of total shipments	Total[5] (1,000)	Direct export related[6] (1,000)	Supporting exports[7] (1,000)	Total export related[8] (1,000)	Total export related as percent of total employment
		A	B	C	D	E	F	G	H	I	J
	Wisconsin--Con.										
37	Transportation equipment	4,514.3	317.9	106.4	424.3	9.4	39.0	3.3	0.9	4.2	10.8
38	Instruments, related products	368.7	46.1	10.3	56.4	15.3	10.3	1.1	0.3	1.4	13.6
39	Miscellaneous manufacturing industries	330.4	44.9	4.3	49.2	14.9	8.9	0.8	0.1	0.9	10.1
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	(X)	20.9	(X)	2.6	2.6	(X)
	Wyoming	833.2	10.3	27.1	37.4	4.5	7.0	(Z)	0.2	0.2	2.9
20	Food and kindred products	98.3	3.9	1.3	5.2	5.3	1.3	0.1	(Z)	0.1	7.7
32	Stone, clay, glass products	52.1	1.9	1.5	3.4	6.5	0.9	(Z)	(Z)	(Z)	(Z)
--	Central admin. offices, auxiliary	(X)	(X)	(X)	(X)	0.3	(X)	(X)	(Z)	(Z)	(X)

Note: Certain data lines have been withheld to avoid disclosing operations of individual companies. The data, however, are included in higher level totals.

- Represents zero. (D) Withheld to avoid disclosing operations of individual companies. (S) Withheld because the estimate did not meet publication standards. (X) Not applicable. (Z) Less than one-half of the unit of measurement shown.

[1] Includes total domestic and export shipments for all manufacturing establishments.

[2] Includes only the value of manufactured products exported by the producing plants.

[3] Includes shipments of components, parts, supplies, etc., used by plants producing the export product. Supporting shipments were estimated for the 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification (SIC) totals.

[4] Total export related shipments are the sum of columns B and C.

[5] Includes employees of central administrative offices (CAO's) and auxiliaries (warehouses, garages, repair shops, etc.) serving operating manufacturing establishments.

[6] Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by States, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

[7] Manufacturing employment at establishments producing components, parts, supplies, etc. for use by plants producing for export. The employment was estimated for 51 Bureau of Economic Analysis (BEA) input-output industries, allocated to States, and aggregated into State Standard Industrial Classification totals. This column also includes an estimate of 131.0 thousand employees in central administrative offices and auxiliary units that service manufacturing establishments.

[8] The employment totals shown are the sum of columns G and H.

Distribution of Sales by Class of Customer

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EXPLANATORY TEXT

GENERAL

This special report provides information on the primary channels through which manufacturers distributed their products in 1977, based on a survey conducted as part of the census of manufactures for that year. It is the fourth comprehensive survey of this type, the first three of which covered 1939, 1958, and 1967.

Excluded from the survey were products of the cut-and-sew apparel industries, standard industrial classification (SIC) Major Industry Group 23, and printing and publishing, Major Industry Group 27. Also, not all product groups could be shown because of the unreliability of the data tabulated, or because data were suppressed to avoid disclosing figures for individual companies. (See appendix L for a list of product groups that were not covered in the table.)

SCOPE OF THE SURVEY

While conducted as part of the 1977 Census of Manufactures, the survey was directed only to the Annual Survey of Manufactures (ASM) panel, excluding establishments classified in Major Groups 23 and 27. The 1977 ASM is a sample of 70,000 establishments selected from a universe of 312,000 establishments included in the 1972 Census of Manufactures. (See Introduction for relationship between Annual Survey of Manufactures and Census of Manufactures.)

Data were requested on a company basis. Thus, companies with more than one manufacturing establishment were requested to report for all manufacturing plants taken together. Companies with a single operating manufacturing location reported for that one establishment. The total number of companies mailed forms for this survey was 23,000, of which 8,100 were multiestablishment companies.

Companies were asked to include, in addition to products of their own manufacture, those bought and sold without further processing (resales). Manufacturers' shipments were to be valued at f.o.b. producing plant, and sales by sales branches and offices at sales price to customer. If the data could not be obtained from available records, except at considerable expense, or if existing sales records for product groupings differed significantly from the information requested in the survey, reasonable estimates were acceptable from reporting companies. Companies were informed that estimates were acceptable to a greater extent than in other census surveys.

Two report forms were employed for securing the data: NC-K4M and NC-K4S. (See appendix D for copies of the report forms.) Report form NC-K4M was mailed to all multiestablishment companies and to single-establishment companies with at least 1,000 employees, where such companies were included in the ASM sample panel. NC-K4S was mailed to single-establishment companies with less than 1,000 manufacturing employees, when similarly part of the ASM reporting panel.

Companies asked to report on form NC-K4M also received a booklet, Product Group Reference List (reproduced in appendix L). The booklet lists some 450 product groups, each carrying a "form NC-K4M code." Respondents were asked to report separately the distribution, by customer class, of shipments and sales for each product group, as applicable to the company's manufacture. Each such product group represented one 5-digit product class or more, as reported by the establishments of the company in the 1977 ASM.

Product classes are groupings of products coded within the SIC framework and, in the first four of their five digits, coded to the SIC 4-digit industry in which the products are primary. The coding system defined in the SIC Manual, 1972 edition, provided the basis for classification of establishments and products in the survey on distribution by class of customer as it did for the 1977 census and ASM. (See further description of product group codes and their relationship to the SIC system in the Introduction.)

Companies reporting on form NC-K4S were not required to supply information in terms of product group codes, but to furnish a single report covering all of the product shipments from their establishments, without regard to product diversity. Each NC-K4S report was coded to the SIC 4-digit industry assigned to the establishment in the 1977 Census of Manufactures; that is, the products of the establishment were assumed to be entirely primary to the SIC industry of the establishment's classification.

SAMPLING METHOD

As noted in Scope of the Survey, information for this survey on distribution of manufacturers' shipments and sales by class of customer was collected from a subsample of the 1977 ASM sample panel. The ASM sample panel, a probability sample, was selected from the 1972 Census of Manufactures list supplemented by Social Security Administration (SSA) lists of new manufacturers beginning operations after 1972. As in earlier ASM's, companies, rather than establishments, were defined as sampling units. The selected companies were required to report for all of their plants, therefore, new establishments of existing companies also were represented in the sample.

The probabilities of selection assigned to the smaller companies were proportional to measures of size determined for each company. For companies included in the 1972 Census of Manufactures, the measures of size depended directly upon each company's 1972 product-class values and the historic variability of the year-to-year shipments of each product class. Roughly equivalent measures of size were assigned to the post-census companies based on their industry codes and anticipated

employment. (More specific information was not available for them in the SSA lists used for sampling.) This method of assigning measures of size was used in order to maximize the precision (i.e., minimize the variance) of estimates.

ESTIMATING AND TABULATING PROCEDURES

Table totals—For the table presented, there are two values shown for product shipment totals. The first is the value as published in chapter 3, table 1, in the 1977 Census of Manufactures General Summary. This figure represents the value of product shipments as reported by the universe of manufacturing establishments in the 1977 Census of Manufactures. The second value, as reported in the class-of-customer survey, was derived by inflating each value reported for a given class of customer by the reciprocal of the company's probability of selection in the ASM sample, and summing the inflated values to produce the distribution of sales by class-of-customer totals and the product group totals.

The product groups shown in the table are those with a coverage ratio generally 60 percent or more and exhibiting a pattern of distribution by class of customer considered reasonable for that product group. A product group with a coverage ratio of less than 60 percent did not contain enough reported data to furnish a reliable base to present a pattern of distribution.

The sums of values and of percentages shown in the tables for classes of customer may not add to totals because of independent rounding.

Standard error of estimate—The estimates developed in the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists, but otherwise conducted under essentially the same conditions as the actual sample survey. The sampling errors—the differences between the estimates obtained and the results theoretically obtainable from a comparable complete-coverage survey—are unknown. Guides to the potential sizes of sampling errors, however, are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable complete-coverage values.

Estimates of the standard errors have been computed from the sample data. They are presented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals of the value items, ranges that would include the comparable complete-coverage value for specified percentages of all the possible samples. The complete-coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable complete survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. These proportions, therefore, may be interpreted as defining approximate probabilities that the estimates shown would differ from complete coverage results by as much as one, two, or three standard errors, respectively.

For example, if an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, the chances are roughly two out of three that the complete coverage total would lie between 49,000 and 51,000; the chances are roughly 19 out of 20 that the complete coverage total would lie between 48,000 and 52,000; and it is almost certain that the complete coverage total would lie between 47,000 and 53,000. The absolute standard error also may be used directly to define confidence intervals of the percent items. For example, if a percent figure is shown as 50 percent with an associated absolute standard error of 2 percent, the chances are roughly 2 out of 3 that the complete coverage percent would lie between 49 and 51 percent; the chances are roughly 19 out of 20 that the complete coverage percent would be between 48 and 52 percent; and it is almost certain that the complete coverage percent would be between 47 and 53 percent.

In addition to sampling errors, the estimates are subject to various operational errors: errors of collection, response, coding, transcription, etc. These operational errors would also occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects are generally not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown.

As derived, the estimated standard errors include part of the effect of the operational errors. The total error, which depends upon the joint effect of the sampling and operational error, is usually of the order of size indicated by the standard error or only moderately higher. For particular estimates, however, the total error may considerably exceed the standard errors shown.

Those figures for which the potential sampling error is very large, should be used with caution, or should be combined with a value figure or value figures for other classes of customer with less error rates. Where a value figure has been suppressed (marked (D)), to avoid disclosing data for individual companies, the standard error has been marked (X) as not applicable.

DEFINITIONS OF CLASSES OF CUSTOMER

Wholesale establishments of the same company (Including sales offices)—These are separately operated wholesale establishments owned by or affiliated with manufacturing companies. Included are all sales branches and offices operated as seperate establishments owned by manufacturing companies, utilized primarily for selling at wholesale the products manufactured by other establishments of the same company; although they deal to some extent, in products manufactured by other companies. Shipments by manufacturing establishments to or via such outlets include shipments made either directly to such branches and offices or to outside customers, on order, from such branches and offices.

Other wholesalers—This category comprises independent wholesalers purchasing primarily for resale to other businesses; that is, to retailers, to industrial, commercial, institutional, or professional customers, and to other wholesalers. Wholesalers typically do not sell directly to household consumers and farmers. Included as wholesalers are industrial distributors, drop shippers or desk jobbers, voluntary group wholesalers, and retail cooperative warehouses. For the purpose of this report, shipments by meat and poultry manufacturers to meat jobbers and retailers were to be reported as shipments to wholesalers. Textile mill products, other than knitting mill products, shipped to piece goods converters were to be reported as shipments to wholesalers. Shipments and sales to domestic exports were also treated as shipments to wholesalers.

Retailers—This category comprises establishments reselling merchandise at retail; that is, for personal, household, or farm consumption. This customer class includes chain stores, mail order houses, department stores, independent retailers, including independent route salesmen such as bakery and dairy truck distributors selling directly to households. Retail stores operated by a manufacturing company were reported separately from independent retailers.

Manufacturers—For other manufacturing plants of the same company, this item represents interplant transfers (for further processing or manufacture) from one manufacturing plant of the same company to another. For manufacturers outside the company, it represents shipments or sales to other company manufacturing establishments. Manufacture, in addition to activities commonly recognized as such, includes such activities as meatpacking, bakeries and bottling plants, jobbers and converters of knit goods, sheet metal fabricators fabricating products away from construction sites, feed mixers, logging camps, sawmills, machine shops, and lapidary work.

Federal government—This category includes shipments and sales to branches and agencies of the Federal Government, including military post exchanges, ship's stores, and similar units. Corporations owned by the Federal Government are similarly included as are shipments and sales under the Mutual Security Program and the Military Defense Assistance Program. Only direct shipments and sales to the Federal Government are covered in this customer class; that is, indirect sales by subcontractors were treated as the class of customer of the prime contractor, usually as a manufacturer.

State and local governments, construction companies, and other users—Aside from State and local governments and construction companies, this catergory includes private firms and businesses and institutions not considered manufacturers, wholesalers, or retailers. Included are mining establishments, transportation, utilities, and hotels, restaurants, and other service-type businesses. Hospitals and schools are similarly included. Also included are export shipments and sales directly to foreign customers and sales to the company's foreign subsidiaries and affiliates. Shipments and sales to domestic exports were treated as shipments to wholesalers. Shipments to State and local governments include shipments to agencies of State and local governments.

Manufacturers' Shipments by Product Group and Class of Customer: 1977

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	All product groups, except 23 and 27[6]				20, Food and kindred products				201, Meat products			
Product shipments												
As reported in census of manufactures[2]	1,203,827.6	(X)	(X)	(X)	177,357.2	(X)	(X)	(X)	41,380.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	987,435.8	100	(NA)	(X)	144,889.0	100	5	(X)	33,640.5	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	168,519.5	17	1	1	21,264.0	15	1	1	3,331.4	10	1	1
Retail stores and outlets	39,696.6	4	1	1	5,461.5	4	3	1	1,244.1	4	2	1
Other manufacturing plants	105,459.9	11	1	1	5,780.5	4	1	1	2,177.5	6	1	1
Other nonmanufacturing plants	4,706.6	(Z)	2	1	405.4	(Z)	1	1	100.1	(Z)	1	1
Shipments to all other customers:												
Wholesalers	190,050.6	19	(NA)	(NA)	53,300.6	37	(NA)	(NA)	16,521.3	49	(NA)	(NA)
Retailers	108,083.2	11	(NA)	(NA)	33,657.4	23	(NA)	(NA)	7,296.5	22	(NA)	(NA)
Manufacturers	243,675.6	25	(NA)	(NA)	16,137.4	11	(NA)	(NA)	1 907.8	6	(NA)	(NA)
Federal Government	35,616.7	4	1	1	1,838.1	1	7	1	407.3	1	5	1
State and local Government	4,246.8	(Z)	2	1	485.3	(Z)	9	1	90.1	(Z)	13	1
Construction companies	17,531.2	2	20	1	20.1	(Z)	17	1	.1	(Z)	1	1
All other	69,847.0	7	13	1	6,538.7	5	6	1	564.2	2	7	(NA)
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	10	(X)	(NA)	(X)	18	(X)	(NA)
	2011, Meatpacking plants				2016, Poultry dressing plants				2017, Poultry and egg processing			
Product shipments:												
As reported in census of manufactures[2]	23,359.4	(X)	(X)	(X)	5,291.9	(X)	(X)	(X)	1,066.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	22,267.6	100	2	(X)	5,074.3	100	14	(X)	713.1	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	2,176.8	10	1	1	368.7	7	2	1	51.1	7	1	1
Retail stores and outlets	952.9	4	1	1	43.3	1	49	1	56.0	8	31	2
Other manufacturing plants	1,612.0	7	1	1	162.9	3	2	1	31.9	4	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	10,557.1	47	(NA)	(NA)	3,397.8	67	20	4	374.3	52	8	3
Retailers	4,769.0	21	(NA)	(NA)	680.1	13	7	2	79.6	11	12	1
Manufacturers	1,571.1	7	(NA)	(NA)	126.7	2	2	1	85.0	12	26	3
Federal Government	155.3	1	4	1	142.5	3	4	1	27.7	4	53	2
State and local Government	68.1	2	8	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	405.1	18	8	(NA)	59.8	1	18	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	21	(X)	(NA)	(X)	5	(X)	1	(X)	10	(X)	1
	202, Dairy products				2021, Creamery butter				2022, Cheese, natural and processed			
Product shipments:												
As reported in census of manufactures[2]	23,556.1	(X)	(X)	(X)	1,109.7	(X)	(X)	(X)	5,528.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	18,060.3	100	2	(X)	814.4	100	7	(X)	4,899.3	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	2,686.3	15	3	1	42.1	5	1	1	453.1	9	5	1
Retail stores and outlets	1,505.0	8	4	1	1.0	(Z)	23	1	(D)	(D)	(X)	(X)
Other manufacturing plants	631.1	3	3	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	5,652.8	31	3	1	438.2	54	9	3	2,503.9	51	4	1
Retailers	4,461.9	25	3	1	95.9	12	20	2	797.4	16	11	1
Manufacturers	1,532.2	8	5	1	140.6	17	15	2	420.6	9	10	1
Federal Government	471.9	3	3	1	74.7	9	3	1	187.3	4	1	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	1,015.7	6	10	1	6.6	1	21	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	8	(X)	1	(X)	10	(X)	1	(X)	7	(X)	1
	2023, Condensed and evaporated milk				2024, Ice cream and frozen desserts				2026, Fluid milk			
Product shipments:												
As reported in census of manufactures[2]	3,086.1	(X)	(X)	(X)	2,229.4	(X)	(X)	(X)	11,602.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,241.0	100	4	(X)	1,679.3	100	4	(X)	8,426.2	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	164.6	7	4	1	441.0	26	3	1	1,585.4	19	4	1
Retail stores and outlets	16.1	1	1	1	329.6	20	14	2	1,042.7	12	3	1
Other manufacturing plants	79.4	4	6	1	7.1	(Z)	1	1	296.3	4	5	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	625.5	28	6	1	259.8	15	7	1	1,825.3	22	5	1
Retailers	791.2	35	8	2	522.1	31	4	1	2,255.3	27	5	1
Manufacturers	348.9	16	6	1	29.5	2	49	1	592.6	7	9	1
Federal Government	110.4	5	10	1	9.0	1	16	1	90.5	1	11	1
State and local Government	(D)	(D)	1	(X)	17.5	1	1	1	(D)	(D)	1	(X)
Construction companies	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
All other	99.8	4	22	1	63.6	4	20	1	662.2	8	16	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	11	(X)	1	(X)	8	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	203, Preserved fruits and vegetables				2032, Canned specialties				2033, Canned fruits and vegetables			
Product shipments:												
As reported in census of manufactures[2]	18,452.5	(X)	(X)	(X)	2,429.0	(X)	(X)	(X)	6,621.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	16,326.6	100	2	(X)	1,972.3	100	2	(X)	6,482.9	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,106.6	7	2	1	(D)	(D)	(X)	(X)	252.7	4	2	1
Retail stores and outlets	110.3	1	1	1	(D)	(D)	(X)	(X)	29.3	(Z)	1	1
Other manufacturing plants	332.5	2	2	1	(D)	(D)	(X)	(X)	156.3	2	4	1
Other nonmanufacturing plants	1.2	(Z)	1	1	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	7,735.4	47	2	1	1,128.7	57	2	1	3,093.8	48	2	1
Retailers	5,267.0	32	2	1	690.1	35	2	1	2,279.1	35	3	1
Manufacturers	732.1	4	9	1	(D)	(D)	(X)	(X)	252.2	4	22	1
Federal Government	305.0	2	2	1	34.8	2	4	1	139.4	2	3	1
State and local Government	17.4	(Z)	10	1	2.9	(Z)	24	1	7.2	(Z)	15	1
Construction companies	2.0	(Z)	34	1	-	-	-	-	-	-	-	-
All other	717.0	4	3	1	98.5	5	3	1	272.8	4	7	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	1	(X)	1	(X)	8	(X)	1
	2034, Dehydrated fruits, vegetables, soups				2035, Pickles, sauces, salad dressings				2037, Frozen fruits and vegetables			
Product shipments:												
As reported in census of manufactures[2]	1,200.2	(X)	(X)	(X)	2,242.8	(X)	(X)	(X)	3,047.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,167.6	100	7	(X)	1,791.0	100	5	(X)	2,693.0	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	110.6	6	6	1	442.0	16	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	7.6	(Z)	5	1	103.4	4	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	588.3	50	7	3	654.8	37	12	3	1,038.0	39	8	2
Retailers	238.0	20	26	4	708.3	40	6	2	726.5	27	5	1
Manufacturers	124.6	11	8	1	67.3	4	1	1	244.9	9	9	1
Federal Government	24.4	2	6	1	35.3	2	2	1	42.5	2	12	1
State and local Government	(D)	(D)	(X)	(X)	3.5	(Z)	29	1	(D)	(D)	1	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	54.9	5	12	1	176.5	10	3	1	65.9	2	3	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	4	(X)	1	(X)	5	(X)	1
	2038, Frozen specialties				204, Grain mill products				2041, Flour, other grain mill products			
Product shipments:												
As reported in census of manufactures[2]	2,911.9	(X)	(X)	(X)	21,325.4	(X)	(X)	(X)	3,678.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,219.9	100	2	(X)	15,021.0	100	2	(X)	2,430.0	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	177.5	8	10	1	3,053.2	20	1	1	380.6	16	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	358.9	2	11	1	(D)	(D)	(X)	(X)
Other manufacturing plants	44.8	2	1	1	566.5	4	10	1	83.9	3	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	109.2	1	1	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	1,231.9	55	2	1	3,046.0	20	3	1	683.6	28	7	1
Retailers	625.0	28	1	1	3,175.6	21	3	1	214.2	9	16	1
Manufacturers	39.4	2	33	1	2,991.6	20	3	1	957.8	39	1	1
Federal Government	28.6	1	11	1	138.1	1	3	1	84.3	3	1	1
State and local Government	(D)	(D)	(X)	(X)	14.6	(Z)	11	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	.2	(Z)	63	1	-	-	-	-
All other	48.5	2	1	1	1,566.9	10	8	1	20.6	1	5	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	7	(X)	1	(X)	6	(X)	1
	2043, Cereal breakfast foods				2045, Blended and prepared flour				2046, Wet corn milling			
Product shipments:												
As reported in census of manufactures[2]	1,832.9	(X)	(X)	(X)	1,204.3	(X)	(X)	(X)	1,946.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,171.4	100	2	(X)	913.9	100	5	(X)	1,408.9	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	990.3	46	1	1	451.3	49	1	3	1.5	(Z)	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	174.2	12	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	258.2	12	13	1	208.1	23	13	2	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	141.8	16	9	1	(D)	(D)	(X)	(X)
Manufacturers	5.9	(Z)	13	1	73.7	8	23	2	1,164.0	83	1	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	9.8	1	1	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	6	(X)	1	(X)	15	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2047, Dog, cat, and other pet food				2048, Prepared feeds, n.e.c.				205, Bakery products			
Product shipments:												
As reported in census of manufactures[2]	3,071.0	(X)	(X)	(X)	8,350.2	(X)	(X)	(X)	10,778.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,120.4	100	3	(X)	5,248.0	100	4	(X)	8,342.5	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	830.9	39	1	1	362.2	7	5	1	2,167.8	26	2	1
Retail stores and outlets	15.2	1	1	1	338.2	6	12	1	703.5	8	10	1
Other manufacturing plants	(D)	(D)	(X)	(X)	197.6	4	28	1	57.5	1	1	1
Other nonmanufacturing plants	-	-	-	-	108.5	2	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	507.2	24	8	1	1,068.5	20	4	1	1,289.4	15	8	1
Retailers	583.4	28	4	1	1,221.7	23	5	1	3,550.6	43	8	2
Manufacturers	77.5	4	40	1	672.7	13	12	1	94.4	1	28	1
Federal Government	8.3	(Z)	1	1	(D)	(D)	(X)	(X)	44.2	1	4	1
State and local Government	-	-	-	-	5.3	(Z)	30	1	29.8	(Z)	9	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	1,270.8	24	10	2	390.1	5	18	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	8	(X)	1	(X)	9	(X)	1
	2051, Bread, cake, and related products				2052, Cookies and crackers				206, Sugar, confectionery products			
Product shipments:												
As reported in census of manufactures[2]	7,965.9	(X)	(X)	(X)	2,812.4	(X)	(X)	(X)	10,458.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,910.0	100	7	(X)	2,432.5	100	3	(X)	7,488.5	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	770.2	13	6	1	(D)	(D)	(X)	(X)	462.7	6	2	1
Retail stores and outlets	624.3	11	11	1	79.2	3	5	1	391.8	5	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	429.2	6	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	.1	(Z)	1	1
Shipments to all other customers:												
Wholesalers	836.8	14	11	2	452.6	19	10	1	2,236.1	30	2	1
Retailers	3,112.3	53	9	2	438.4	18	8	1	1,473.2	20	2	1
Manufacturers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	2,221.9	30	1	1
Federal Government	35.2	1	5	1	9.0	(Z)	9	1	73.1	1	1	1
State and local Government	28.0	(Z)	10	1	1.8	(Z)	23	1	2.8	(Z)	48	1
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	367.7	6	19	1	22.3	1	1	1	197.6	3	1	1
Resales (percent of total)[5]	(X)	11	(X)	1	(X)	5	(X)	1	(X)	2	(X)	1
	2061, Raw cane sugar				2062, Cane sugar refining				2063, Beet sugar			
Product shipments:												
As reported in census of manufactures[2]	707.6	(X)	(X)	(X)	2,168.0	(X)	(X)	(X)	1,160.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	577.2	100	3	(X)	1,598.0	100	1	(X)	1,120.9	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	45.4	8	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	36.2	6	2	1	218.3	14	1	1	316.8	28	1	1
Retailers	(D)	(D)	(X)	(X)	225.5	14	1	1	84.7	8	1	1
Manufacturers	470.6	82	4	1	713.9	45	1	1	582.0	52	1	1
Federal Government	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	52.9	3	1	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	1	(X)	1	(D)	(D)	(X)	(X)
	2065, Confectionery products				2066, Chocolate and cocoa products				207, Fats and oils			
Product shipments:												
As reported in census of manufactures[2]	4,170.2	(X)	(X)	(X)	1,603.3	(X)	(X)	(X)	13,655.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,597.4	100	3	(X)	1,224.4	100	1	(X)	10,585.9	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1,149.5	11	1	1
Retail stores and outlets	190.6	7	1	1	(D)	(D)	(X)	(X)	11.9	(Z)	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	147.2	12	1	1	750.0	7	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	130.0	1	1	1
Shipments to all other customers:												
Wholesalers	1,029.2	40	4	1	319.3	26	1	1	2,167.5	20	4	1
Retailers	899.0	35	4	1	(D)	(D)	(X)	(X)	775.2	7	2	1
Manufacturers	202.3	8	13	1	252.6	21	1	1	4,935.2	47	3	1
Federal Government	47.2	2	1	1	(D)	(D)	(X)	(X)	69.9	1	1	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	2.3	(Z)	1	1
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	86.4	3	2	1	2.9	(Z)	27	1	594.3	6	10	1
Resales (percent of total)[5]	(X)	5	(X)	1	(D)	(D)	(X)	(X)	(X)	7	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2074, Cottonseed oil mills				2075, Soybean oil mills				2076, Vegetable oil mills, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	763.1	(X)	(X)	(X)	6,116.5	(X)	(X)	(X)	401.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	699.9	100	10	(X)	4,710.4	100	1	(X)	367.7	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	73.2	10	1	1	285.4	6	1	1	26.7	7	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	307.4	44	7	3	630.9	13	1	1	40.8	11	18	2
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	4.2	1	1	1
Manufacturers	197.9	28	24	4	2,934.1	62	1	1	277.3	75	1	2
Federal Government	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	63.2	9	13	1	356.2	8	5	1	12.1	3	1	1
Resales (percent of total)[5]	(X)	17	(X)	1	(X)	6	(X)	1	(D)	(D)	(X)	(X)
	2079, Shortening and cooking oils				208, Beverages				2082, Malt beverages			
Product shipments:												
As reported in census of manufactures[2]	4,272.2	(X)	(X)	(X)	21,538.8	(X)	(X)	(X)	6,612.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	3,610.9	100	1	(X)	19,915.3	100	2	(X)	6,525.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	795.9	22	1	1	1,529.0	8	2	1	126.5	2	4	1
Retail stores and outlets	(D)	(D)	(X)	(X)	670.0	3	21	1	(D)	(D)	(X)	(X)
Other manufacturing plants	313.3	9	1	1	521.0	3	5	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	57.1	(Z)	1	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	908.8	25	2	1	10,910.6	55	1	1	5,983.8	92	1	1
Retailers	640.4	18	1	1	4,481.0	23	4	1	209.0	3	2	1
Manufacturers	837.4	23	4	1	1,132.0	6	8	1	33.7	1	1	1
Federal Government	36.5	1	1	1	86.5	(Z)	16	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	157.3	1	4	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	3.6	(Z)	14	1	-	-	-	-
All other	31.3	1	2	1	367.1	2	12	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	9	(X)	1	(X)	1	(X)	1
	2083, Malt				2084, Wines, brandy, and brandy spirits				2085, Distilled liquor, except brandy			
Product shipments:												
As reported in census of manufactures[2]	488.9	(X)	(X)	(X)	1,357.7	(X)	(X)	(X)	1,955.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	408.0	100	9	(X)	1,248.8	100	6	(X)	1,744.6	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	34.4	3	25	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	77.0	19	34	5	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	850.5	68	3	4	1,286.7	74	4	1
Retailers	(D)	(D)	(X)	(X)	84.4	7	8	1	(D)	(D)	(X)	(X)
Manufacturers	309.1	76	8	5	20.3	2	53	1	(D)	(D)	(X)	(X)
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	117.6	7	4	1
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	56.8	5	52	2	2.1	(Z)	1	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	31	(X)	2	(X)	10	(X)	1
	2086, Bottled and canned soft drinks				2087, Flavoring extracts, sirup, n.e.c.				209, Misc. foods, kindred products			
Product shipments:												
As reported in census of manufactures[2]	8,503.6	(X)	(X)	(X)	2,620.7	(X)	(X)	(X)	16,211.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,401.4	100	4	(X)	2,587.6	100	4	(X)	15,269.9	100	32	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	302.6	4	6	1	(D)	(D)	(X)	(X)	5,777.5	38	1	8
Retail stores and outlets	601.6	8	23	2	(D)	(D)	(X)	(X)	466.1	3	5	1
Other manufacturing plants	(D)	(D)	(X)	(X)	174.2	7	1	1	298.3	2	1	1
Other nonmanufacturing plants	56.9	1	1	1	(D)	(D)	(X)	(X)	1.4	(Z)	1	1
Shipments to all other customers:												
Wholesalers	1,853.2	25	6	1	(D)	(D)	(X)	(X)	3,714.5	24	6	5
Retailers	4,036.2	55	5	2	111.6	4	12	1	3,005.3	20	65	16
Manufacturers	238.6	3	23	1	(D)	(D)	(X)	(X)	565.6	4	14	1
Federal Government	66.6	1	21	1	1.3	(Z)	18	1	241.9	2	50	1
State and local Government	19.4	(Z)	13	1	1.0	(Z)	15	1	69.4	(Z)	56	1
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	4.0	(Z)	81	1
All other	197.0	3	16	1	10.8	(Z)	36	1	1,125.6	7	32	2
Resales (percent of total)[5]	(X)	15	(X)	1	(X)	3	(X)	1	(X)	7	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2091, Canned and cured seafoods				2092, Fresh or frozen packaged fish				2095, Roasted coffee			
Product shipments:												
As reported in census of manufactures[2]	1,025.5	(X)	(X)	(X)	2,459.2	(X)	(X)	(X)	5,217.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	845.9	100	12	(X)	2,397.5	100	29	(X)	5,663.4	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	222.8	4	5	1
Other manufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	425.6	50	12	3	1,069.2	45	15	10	255.1	5	18	1
Retailers	349.1	41	13	3	456.9	19	22	2	407.0	7	7	1
Manufacturers	(D)	(D)	(X)	(X)	146.8	6	11	2	-	-	-	-
Federal Government	(D)	(D)	(X)	(X)	147.8	6	82	3	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	4.0	(Z)	55	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
All other	50.4	6	38	1	473.0	20	74	9	370.0	7	24	1
Resales (percent of total)[5]	(X)	10	(X)	(X)	(X)	14	(X)	5	(D)	(D)	(X)	(X)
	2098, Macaroni and spaghetti				2099, Food preparations, n.e.c.				21, Tobacco products			
Product shipments:												
As reported in census of manufactures[2]	751.7	(X)	(X)	(X)	6,616.7	(X)	(X)	(X)	8,524.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	459.7	100	9	(X)	5,653.7	100	3	(X)	7,461.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	1,528.5	27	1	1	394.3	5	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	162.2	3	7	1	2.1	(Z)	1	1
Other manufacturing plants	-	-	-	-	124.1	2	1	1	469.1	6	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	33.4	(Z)	1	1
Shipments to all other customers:												
Wholesalers	141.7	31	13	3	1,808.9	32	6	1	4,230.4	57	1	1
Retailers	248.9	54	13	4	1,468.1	26	5	1	1,316.1	18	1	1
Manufacturers	(D)	(D)	(X)	(X)	378.7	7	20	1	221.6	3	12	1
Federal Government	4.0	1	14	-	52.6	1	22	1	216.4	3	1	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1.3	(Z)	1	1
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	24.5	5	55	3	107.0	2	18	1	576.3	8	18	1
Resales (percent of total)[5]	(X)	5	(X)	2	(X)	4	(X)	1	(X)	3	(X)	1
	22, Textile mill products				2211, Weaving mills, cotton				2241, Narrow fabric mills			
Product shipments:												
As reported in census of manufactures[2]	39,366.8	(X)	(X)	(X)	4,197.4	(X)	(X)	(X)	645.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	26,428.8	100	1	(X)	3,395.8	100	1	(X)	398.6	100	11	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	2,765.6	10	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	173.7	1	1	1	16.1	(Z)	4	1	(D)	(D)	(X)	(X)
Other manufacturing plants	5,005.4	19	1	1	686.2	20	3	1	32.8	8	29	2
Other nonmanufacturing plants	5.0	(Z)	1	1	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	4,751.5	18	1	1	1,074.8	32	1	1	56.6	14	23	3
Retailers	3,921.7	15	2	1	416.7	12	1	1	18.9	5	13	1
Manufacturers	9,173.0	35	2	1	644.9	19	4	1	250.1	63	14	4
Federal Government	167.5	1	8	1	65.9	2	1	1	9.2	2	31	1
State and local Government	3.1	(Z)	38	1	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	27.3	(Z)	1	1	(D)	(D)	(X)	(X)	-	-	-	-
All other	434.9	2	19	1	92.1	3	1	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	2	(X)	1	(D)	(D)	(X)	(X)	(X)	7	(X)	2
	2251, Women's hosiery, except socks				2252, Hosiery, n.e.c.				2254, Knit underwear mills			
Product shipments:												
As reported in census of manufactures[2]	819.1	(X)	(X)	(X)	893.6	(X)	(X)	(X)	579.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	595.4	100	3	(X)	701.2	100	8	(X)	437.5	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	59.3	10	20	2	132.4	19	15	2	66.5	15	20	3
Retailers	272.8	46	3	1	361.0	51	10	4	258.6	59	8	3
Manufacturers	27.8	5	27	1	98.0	14	34	4	(D)	(D)	(X)	(X)
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	2	(X)	1	(D)	(D)	(X)	(X)

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	226, Textile finishing, except wool				2261, Finishing plants, cotton				2262, Finish. plants, manmade fiber, silk			
Product shipments:												
As reported in census of manufactures[2]	3,581.6	(X)	(X)	(X)	751.7	(X)	(X)	(X)	2,137.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,621.6	100	5	(X)	585.4	100	5	(X)	1,557.6	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	370.4	14	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	3.8	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	333.5	13	2	1	56.7	10	11	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	365.9	14	4	1	202.2	35	6	1	133.6	9	6	1
Retailers	118.4	5	9	1	(D)	(D)	(X)	(X)	77.7	5	13	1
Manufacturers	1,355.5	52	9	1	256.0	44	9	2	753.4	48	8	2
Federal Government	6.1	(Z)	12	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	1	1	-	-	-	-	-	-	-	-
Construction companies	-	-	1	1	-	-	-	-	-	-	(X)	(X)
All other	68.0	3	25	1	(D)	(D)	(X)	(X)	62.0	4	28	1
Resales (percent of total)[5]	(X)	1	(X)	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
	2269, Finishing plants, n.e.c.				227, Floor covering mills				2271, Woven carpets and rugs			
Product shipments:												
As reported in census of manufactures[2]	692.2	(X)	(X)	(X)	4,433.1	(X)	(X)	(X)	167.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	478.6	100	21	(X)	3,061.2	100	3	(X)	264.4	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	47.8	10	1	2	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	32.8	1	1	1	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	154.8	5	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	30.1	6	20	2	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	1,242.7	41	5	1	90.2	34	2	1
Manufacturers	346.2	72	30	6	256.7	8	5	1	(D)	(D)	(X)	(X)
Federal Government	-	-	-	-	12.9	(Z)	5	1	3.2	1	26	1
State and local Government	-	-	(X)	(X)	.8	(Z)	1	1	-	-	-	-
Construction companies	-	-	-	-	12.5	(Z)	1	1	(D)	(D)	(X)	(X)
All other	-	-	-	-	16.3	1	1	1	2.8	1	1	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	2	(X)	1	(X)	-	(X)	-
	2272, Tufted carpets and rugs				2279, Carpets and rugs, n.e.c.				228, Yarn and thread mills			
Product shipments:												
As reported in census of manufactures[2]	4,172.2	(X)	(X)	(X)	93.0	(X)	(X)	(X)	6,500.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,711.4	100	3	(X)	85.5	100	12	(X)	4,667.0	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	369.5	14	1	1	-	-	-	-	284.0	6	1	1
Retail stores and outlets	32.8	1	1	1	-	-	-	-	(D)	(D)	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1,071.3	23	2	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	799.7	29	2	1	41.6	49	19	5	359.2	8	5	1
Retailers	1,134.6	42	6	2	18.0	21	25	4	317.3	7	1	1
Manufacturers	236.1	9	6	1	(D)	(D)	(X)	(X)	2,607.8	56	3	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	3.8	(Z)	23	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	1	1
Construction companies	10.5	(Z)	1	1	(D)	(D)	(X)	(X)	-	-	-	-
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	23.3	1	31	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	5	(X)	3	(X)	1	(X)	1
	2281, Yarn mills, except wool				2282, Throwing and winding mills				2283, Wool yarn mills			
Product shipments:												
As reported in census of manufactures[2]	4,156.4	(X)	(X)	(X)	1,558.3	(X)	(X)	(X)	234.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,927.1	100	1	(X)	1,097.2	100	6	(X)	162.6	100	14	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	121.4	4	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Other manufacturing plants	693.9	24	2	1	227.8	21	1	1	38.0	23	25	5
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	235.7	8	3	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retailers	184.3	6	1	1	18.1	2	1	1	(D)	(D)	(X)	(X)
Manufacturers	1,682.6	57	2	1	694.5	63	9	2	49.8	31	29	7
Federal Government	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
State and local Government	-	-	-	-	-	-	-	-	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	12.2	1	45	1	-	-	-	-
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	1	(X)	1	(D)	(D)	(X)	(X)

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2284, Thread mills				229, Miscellaneous textile goods				2291, Felt goods, except woven felt, hats			
Product shipments:												
As reported in census of manufactures[2]	551.1	(X)	(X)	(X)	4,225.4	(X)	(X)	(X)	186.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	480.1	100	3	(X)	3,321.7	100	2	(X)	153.8	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	98.4	3	2	1	-	-	-	-
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	111.6	23	1	1	1,139.3	34	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	69.3	14	8	1	473.7	14	6	1	23.3	15	17	2
Retailers	(D)	(D)	(X)	(X)	161.0	5	13	1	(D)	(D)	(X)	(X)
Manufacturers	180.9	38	7	2	1,336.4	40	3	1	76.4	50	1	3
Federal Government	(D)	(D)	(X)	(X)	23.4	1	9	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	.9	(Z)	41	1	-	-	-	-
Construction companies	-	-	-	-	14.7	(Z)	2	1	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	73.3	2	8	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	4	(X)	1	(X)	1	(X)	-
	2292, Lace goods				2294, Processed textile waste				2295, Coated fabrics, not rubberized			
Product shipments:												
As reported in census of manufactures[2]	39.8	(X)	(X)	(X)	164.2	(X)	(X)	(X)	987.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	33.1	100	17	(X)	166.7	100	22	(X)	756.8	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	-	-	-	-	15.7	2	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	131.6	17	7	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	167.7	22	10	1
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	(D)	(D)	(X)	(X)	122.4	73	28	8	407.7	54	2	2
Federal Government	-	-	-	-	-	-	-	-	2.4	(Z)	16	1
State and local Government	-	-	-	-	-	-	-	-	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
All other	-	-	-	-	(D)	(D)	(X)	(X)	4.6	1	1	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(X)	2	(X)	1
	2296, Tire cord and fabric				2297, Nonwoven fabrics				2298, Cordage and twine			
Product shipments:												
As reported in census of manufactures[2]	919.8	(X)	(X)	(X)	1,095.2	(X)	(X)	(X)	291.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	899.0	100	1	(X)	719.7	100	2	(X)	188.9	100	11	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	842.2	94	1	1	68.3	9	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	-	-	-	-	87.7	12	15	2	93.1	49	15	3
Retailers	-	-	-	-	89.2	12	7	1	14.6	8	23	1
Manufacturers	(D)	(D)	(X)	(X)	431.1	60	1	1	16.0	8	13	1
Federal Government	-	-	-	-	(D)	(D)	(X)	(X)	15.7	8	2	1
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	-	-	-	-	(D)	(D)	(X)	(X)	12.3	7	41	2
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	1	(X)	1	(X)	8	(X)	1
	2299, Textile goods, n.e.c.				24, Lumber and wood products				2411, Logging camps, log contractors			
Product shipments:												
As reported in census of manufactures[2]	280.8	(X)	(X)	(X)	38,110.2	(X)	(X)	(X)	5,757.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	279.5	100	8	(X)	28,544.9	100	19	(X)	4,781.6	100	54	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	1,583.6	6	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	209.6	1	8	1	-	-	-	-
Other manufacturing plants	32.3	12	28	3	1,499.8	5	3	1	573.5	12	2	6
Other nonmanufacturing plants	-	-	-	-	102.6	(Z)	9	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	81.2	29	10	3	10,370.5	36	2	6	489.6	10	15	6
Retailers	4.8	2	32	1	4,092.9	14	5	2	9.4	(Z)	20	1
Manufacturers	114.1	41	13	4	7,336.1	26	35	7	3,424.5	72	75	15
Federal Government	(D)	(D)	(X)	(X)	60.6	(Z)	21	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	34.3	(Z)	14	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	1,646.3	6	73	10	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	1,608.5	6	48	3	147.0	3	18	2
Resales (percent of total)[5]	(X)	12	(X)	5	(X)	6	(X)	1	(X)	4	(X)	3

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	242, Sawmills and planing mills				2421, Sawmills, planing mills, general				2426, Hardwood dimension and flooring			
Product shipments:												
As reported in census of manufactures[2]	11,531.9	(X)	(X)	(X)	10,465.7	(X)	(X)	(X)	807.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	8,385.0	100	2	(X)	7,636.4	100	3	(X)	594.1	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	465.6	6	2	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	21.2	(Z)	5	1	21.2	(Z)	5	1	-	-	-	-
Other manufacturing plants	572.3	7	6	1	513.0	7	6	1	56.2	9	5	1
Other nonmanufacturing plants	1.2	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	4,234.0	50	3	1	3,943.1	52	3	1	174.3	29	15	4
Retailers	786.3	9	5	1	746.4	10	5	1	36.1	6	39	2
Manufacturers	1,821.9	22	6	1	1,513.5	20	7	1	302.9	51	12	4
Federal Government	19.7	(Z)	47	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	5.5	(Z)	13	1	4.6	(Z)	16	1	-	-	-	-
Construction companies	179.1	2	8	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	278.0	3	12	1	274.2	4	12	1	1.4	(Z)	45	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	4	(X)	1	(X)	2	(X)	1
	243, Millwork, plywood, structural members				2431, Millwork				2434, Wood kitchen cabinets			
Product shipments:												
As reported in census of manufactures[2]	10,780.7	(X)	(X)	(X)	3,693.3	(X)	(X)	(X)	1,563.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	8,010.0	100	43	(X)	2,948.6	100	67	(X)	1,084.9	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	814.1	10	2	2	124.2	4	11	1	10.0	1	15	1
Retail stores and outlets	33.7	(Z)	8	1	9.1	(Z)	25	1	4.7	(Z)	16	1
Other manufacturing plants	239.2	3	8	1	(D)	(D)	(X)	(X)	34.6	3	1	1
Other nonmanufacturing plants	11.6	(Z)	71	1	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	3,644.2	45	2	11	1,401.3	48	5	10	494.9	46	7	3
Retailers	1,091.3	14	14	3	614.8	21	24	5	139.2	13	19	2
Manufacturers	967.0	12	7	3	298.1	10	18	2	39.3	4	27	1
Federal Government	5.5	(Z)	19	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	6.6	(Z)	17	1	.8	(Z)	51	1	2.6	(Z)	39	1
Construction companies	852.0	11	83	16	321.7	11	(X)	(X)	241.5	22	16	3
All other	344.6	4	81	5	(D)	(D)	(X)	(X)	(D)	(D)	1	3
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	11	(X)	1	(X)	5	(X)	2
	2435, Hardwood veneer and plywood				2436, Softwood veneer and plywood				2439, Structural wood members, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	1,160.2	(X)	(X)	(X)	3,582.3	(X)	(X)	(X)	781.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	755.0	100	5	(X)	2,620.4	100	2	(X)	596.7	100	10	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	607.0	23	1	1	12.9	2	57	1
Retail stores and outlets	(D)	(D)	(X)	(X)	8.9	(Z)	1	1	10.7	2	11	1
Other manufacturing plants	34.0	4	2	1	124.3	5	15	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	263.4	35	9	2	1,383.1	53	2	1	101.4	17	24	4
Retailers	91.3	12	1	1	127.4	5	8	1	118.5	20	21	3
Manufacturers	280.5	37	11	3	326.3	12	4	1	18.6	3	25	1
Federal Government	-	-	-	-	4.1	(Z)	13	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	275.7	46	14	5
All other	23.3	3	9	1	25.3	1	19	1	40.2	7	26	2
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	3	(X)	1	(X)	4	(X)	1
	244, Wood containers				2441, Nailed wood boxes and shook				2448, Wood pallets and skids			
Product shipments:												
As reported in census of manufactures[2]	1,143.5	(X)	(X)	(X)	265.3	(X)	(X)	(X)	642.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	910.0	100	11	(X)	211.9	100	16	(X)	498.3	100	18	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	30.2	3	8	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	11.6	1	86	1	-	-	-	-	-	-	-	-
Other manufacturing plants	20.2	2	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	202.8	22	15	3	61.0	29	27	6	109.6	22	22	5
Retailers	47.0	5	30	2	(D)	(D)	(X)	(X)	34.4	7	34	2
Manufacturers	501.9	55	17	5	84.4	40	30	8	303.1	61	26	7
Federal Government	7.1	1	28	1	(D)	(D)	(X)	(X)	4.9	1	33	1
State and local Government	-	-	1	(NA)	-	-	-	-	-	-	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
All other	81.1	9	25	2	27.7	13	48	6	34.4	7	42	3
Resales (percent of total)[5]	(X)	11	(X)	3	(X)	11	(X)	7	(X)	15	(X)	4

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2449, Wood containers, n.e.c.				245, Wood buildings and mobile homes				2451, Mobile homes			
Product shipments:												
As reported in census of manufactures[2]	235.3	(X)	(X)	(X)	5,039.2	(X)	(X)	(X)	3,175.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	199.7	100	13	(X)	3,602.4	100	3	(X)	2,474.7	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	41.0	2	10	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	122.7	5	7	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	87.0	2	5	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	32.2	16	27	4	999.9	28	4	1	853.7	34	3	1
Retailers	(D)	(D)	(X)	(X)	1,471.0	41	5	2	1,274.3	51	5	2
Manufacturers	114.4	57	17	6	9.5	(Z)	2	1	(D)	(D)	(X)	(X)
Federal Government	(D)	(D)	(X)	(X)	9.9	(Z)	3	1	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	6.3	(Z)	66	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	486.3	13	7	1	(D)	(D)	(X)	(X)
All other	18.9	9	28	3	355.6	10	10	1	129.5	5	26	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	7	(X)	1	(X)	5	(X)	1
	2452, Prefabricated wood buildings				249, Miscellaneous wood products				2491, Wood preserving			
Product shipments:												
As reported in census of manufactures[2]	1,863.8	(X)	(X)	(X)	3,857.4	(X)	(X)	(X)	892.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,126.2	100	5	(X)	2,856.4	100	6	(X)	627.3	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	104.3	4	4	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	15.6	1	56	1	-	-	-	-
Other manufacturing plants	-	-	-	-	93.0	3	6	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	.2	(Z)	1	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	146.1	13	22	3	800.1	28	5	2	76.1	12	11	1
Retailers	196.8	17	21	3	687.9	24	19	3	66.4	11	26	2
Manufacturers	(D)	(D)	(X)	(X)	611.4	21	10	2	46.4	7	13	1
Federal Government	(D)	(D)	(X)	(X)	7.0	(Z)	20	1	3.3	1	4	1
State and local Government	(D)	(D)	(X)	(X)	14.3	1	10	1	13.5	2	11	1
Construction companies	456.1	40	5	2	120.4	4	22	1	83.9	13	31	3
All other	225.6	20	6	1	402.1	14	5	1	329.8	53	5	3
Resales (percent of total)[5]	(X)	11	(X)	1	(X)	12	(X)	4	(X)	5	(X)	1
	2492, Particleboard				2499, Wood products, n.e.c.				25, Furniture and fixtures			
Product shipments:												
As reported in census of manufactures[2]	476.5	(X)	(X)	(X)	2,488.7	(X)	(X)	(X)	16,099.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	363.4	100	4	(X)	1,847.4	100	8	(X)	12,192.5	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	47.6	3	9	1	466.6	4	3	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	452.0	4	5	1
Other manufacturing plants	10.7	3	1	1	(D)	(D)	(X)	(X)	234.7	2	9	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	3.4	(Z)	65	1
Shipments to all other customers:												
Wholesalers	193.4	53	5	2	530.5	29	6	2	2,289.0	19	4	1
Retailers	19.3	5	1	1	586.8	32	22	5	6,810.5	56	3	1
Manufacturers	81.1	22	12	2	483.8	26	12	3	865.4	7	10	1
Federal Government	-	-	-	-	3.8	(Z)	37	1	143.5	1	6	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	63.4	1	17	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	141.8	1	18	1
All other	1.4	(Z)	18	1	70.9	4	17	1	722.3	6	7	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	16	(X)	6	(X)	5	(X)	1
	251, Household furniture				2511, Wood household furniture				2512, Upholstered household furniture			
Product shipments:												
As reported in census of manufactures[2]	9,870.7	(X)	(X)	(X)	3,890.7	(X)	(X)	(X)	2,735.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,556.8	100	2	(X)	3,341.4	100	3	(X)	2,276.3	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	300.5	4	3	1	169.6	5	5	1	48.2	2	1	1
Retail stores and outlets	305.5	4	7	1	129.0	4	7	1	55.9	2	1	1
Other manufacturing plants	135.3	2	5	1	25.0	1	7	1	19.3	1	35	1
Other nonmanufacturing plants	.5	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	848.7	11	6	1	406.8	12	10	1	230.1	10	12	1
Retailers	5,369.0	71	3	1	2,375.2	71	4	1	1,828.5	80	7	1
Manufacturers	382.6	5	10	1	119.8	4	22	1	(D)	(D)	(X)	(X)
Federal Government	50.9	1	12	1	39.9	1	13	1	6.9	(Z)	39	1
State and local Government	2.7	(Z)	39	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	8.5	(Z)	31	1	-	-	-	-
All other	(D)	(D)	(X)	(X)	67.0	2	35	1	6.6	(Z)	51	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	3	(X)	1	(X)	2	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2514, Metal household furniture				2517, Wood TV and radio cabinets				252, Office furniture			
Product shipments:												
As reported in census of manufactures[2]	1,231.2	(X)	(X)	(X)	312.8	(X)	(X)	(X)	1,915.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	806.9	100	6	(X)	197.6	100	8	(X)	1,444.1	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	66.5	5	5	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	34.5	2	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	34.3	2	2	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	130.0	16	10	1	15.0	8	14	1	653.9	45	3	1
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	431.8	30	6	1
Manufacturers	70.8	9	36	3	(D)	(D)	(X)	(X)	53.8	4	21	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	59.8	4	3	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	6.0	(Z)	7	1
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	2.0	(Z)	82	1
All other	23.3	3	33	1	(D)	(D)	(X)	(X)	101.4	7	4	1
Resales (percent of total)[5]	(X)	2	(X)	1	(D)	(D)	(X)	(X)	(X)	4	(X)	1
	2521, Wood office furniture				2522, Metal office furniture				2531, Public building, related furniture			
Product shipments:												
As reported in census of manufactures[2]	562.2	(X)	(X)	(X)	1,353.0	(X)	(X)	(X)	724.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	363.1	100	9	(X)	1,075.3	100	2	(X)	669.9	100	12	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	31.5	9	1	1	29.7	3	12	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	95.6	26	19	4	558.3	52	1	1	145.6	22	9	3
Retailers	168.2	46	15	4	263.6	25	5	1	100.2	15	14	2
Manufacturers	7.8	2	16	1	46.0	4	25	1	131.5	20	51	8
Federal Government	3.7	1	1	1	56.1	5	3	1	7.3	1	33	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	37.4	6	28	2
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	49.6	7	35	2
All other	28.6	8	13	1	72.5	7	2	1	159.1	24	9	3
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	3	(X)	1	(X)	12	(X)	1
	254, Partitions and fixtures				2541, Wood partitions and fixtures				2542, Metal partitions and fixtures			
Product shipments:												
As reported in census of manufactures[2]	2,286.6	(X)	(X)	(X)	1,070.8	(X)	(X)	(X)	1,215.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,618.6	100	5	(X)	776.0	100	10	(X)	842.7	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	17.6	1	20	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	17.9	1	9	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	40.1	2	27	1	22.5	3	1	1	17.7	2	60	1
Other nonmanufacturing plants	-	-	1	1	-	-	-	-	-	-	(X)	(X)
Shipments to all other customers:												
Wholesalers	437.9	27	12	2	194.3	25	24	5	243.6	29	8	2
Retailers	566.6	35	8	2	271.0	35	15	4	295.6	35	7	2
Manufacturers	257.9	16	12	2	100.6	13	24	3	157.3	19	11	2
Federal Government	16.8	1	8	1	5.9	1	23	1	10.9	1	4	1
State and local Government	11.1	1	18	1	3.2	(Z)	23	1	8.0	1	23	1
Construction companies	72.6	4	25	1	54.2	7	32	2	18.4	2	32	1
All other	180.0	11	15	2	102.7	13	22	3	77.3	9	20	2
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	6	(X)	1	(X)	8	(X)	2
	259, Miscellaneous furniture and fixtures				2591, Drapery hardware, blinds, shades				2599, Furniture and fixtures, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	1,302.7	(X)	(X)	(X)	615.3	(X)	(X)	(X)	687.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	897.6	100	7	(X)	477.2	100	6	(X)	420.4	100	12	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	60.2	7	15	1	38.3	8	15	1	21.9	5	31	2
Retail stores and outlets	93.4	10	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	6.7	1	42	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	202.9	23	17	3	44.4	9	20	2	158.5	38	21	5
Retailers	342.9	38	7	3	248.8	52	5	3	94.1	22	24	4
Manufacturers	39.0	4	34	1	(D)	(D)	(X)	(X)	22.4	5	29	1
Federal Government	8.6	1	52	1	(D)	(D)	(X)	(X)	7.9	2	57	1
State and local Government	(D)	(D)	(X)	(X)	1.2	(Z)	54	1	(D)	(D)	(X)	(X)
Construction companies	8.6	1	45	1	(D)	(D)	(X)	(X)	8.4	2	46	1
All other	126.6	14	17	2	33.7	7	48	3	92.9	22	16	3
Resales (percent of total)[5]	(X)	11	(X)	2	(X)	10	(X)	1	(X)	12	(X)	4

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	26, Paper and allied products				2611, Pulpmills				2621, Papermills, except building paper			
Product shipments:												
As reported in census of manufactures[2]	50,350.7	(X)	(X)	(X)	2,466.4	(X)	(X)	(X)	12,438.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	38,001.0	100	5	(X)	1,724.4	100	3	(X)	8,565.6	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,858.0	5	1	1	(D)	(D)	(X)	(X)	186.9	2	1	1
Retail stores and outlets	40.9	(Z)	1	1	-	-	-	-	-	-	-	-
Other manufacturing plants	4,640.5	12	1	1	520.0	30	9	2	1,391.0	16	1	1
Other nonmanufacturing plants	6.2	(Z)	14	1	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	8,780.7	23	17	3	203.7	12	1	1	2,489.6	29	1	1
Retailers	3,414.5	9	15	1	-	-	-	-	128.1	1	8	1
Manufacturers	17,275.5	45	1	2	750.7	44	4	1	4,018.4	47	1	1
Federal Government	179.6	(Z)	7	1	(D)	(D)	(X)	(X)	21.1	(Z)	1	1
State and local Government	30.8	(Z)	12	1	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	56.3	(Z)	5	1	-	-	-	-	-	-	-	-
All other	1,717.8	5	2	1	(D)	(D)	(X)	(X)	324.9	4	1	1
Resales (percent of total)[5]	(X)	8	(X)	4	(D)	(D)	(X)	(X)	(X)	1	(X)	1
	2631, Paperboard mills				264, Misc. converted paper products				2641, Paper coating and glazing			
Product shipments:												
As reported in census of manufactures[2]	6,434.7	(X)	(X)	(X)	15,537.9	(X)	(X)	(X)	3,037.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,593.7	100	1	(X)	13,118.4	100	16	(X)	2,127.5	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	91.5	2	1	1	1,445.7	11	1	2	13.8	1	23	1
Retail stores and outlets	(D)	(D)	(X)	(X)	39.7	(Z)	1	1	-	-	-	-
Other manufacturing plants	1,561.2	34	1	1	556.5	4	2	1	153.2	7	4	1
Other nonmanufacturing plants	-	-	-	-	6.2	(Z)	14	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	113.4	2	8	1	4,553.5	35	34	6	506.2	24	5	1
Retailers	(D)	(D)	(X)	(X)	2,494.4	19	21	1	73.4	3	15	1
Manufacturers	2,527.4	55	1	1	3,357.6	26	4	4	1,250.6	59	8	2
Federal Government	(D)	(D)	(X)	(X)	121.2	1	7	1	13.6	1	37	1
State and local Government	-	-	-	-	22.8	(Z)	16	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	27.4	(Z)	10	1	(D)	(D)	(X)	(X)
All other	271.0	6	1	1	493.4	4	5	1	96.0	5	6	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	19	(X)	11	(X)	2	(X)	1
	2642, Envelopes				2643, Bags, except textile bags				2647, Sanitary paper products			
Product shipments:												
As reported in census of manufactures[2]	980.6	(X)	(X)	(X)	3,304.1	(X)	(X)	(X)	4,562.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	656.9	100	6	(X)	2,502.3	100	5	(X)	3,407.7	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	15.4	2	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	9.8	1	37	1	78.2	3	10	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	180.6	27	10	2	656.0	26	9	2	831.0	24	1	1
Retailers	122.9	19	17	3	347.5	14	10	1	677.3	20	7	1
Manufacturers	129.1	20	11	2	1,314.3	53	6	2	(D)	(D)	(X)	(X)
Federal Government	26.4	4	3	1	19.3	1	24	1	33.7	1	6	1
State and local Government	7.6	1	15	1	4.6	(Z)	17	1	-	-	-	-
Construction companies	1.7	(Z)	1	1	4.0	(Z)	7	1	-	-	-	-
All other	163.3	25	6	1	69.2	3	15	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	3	(X)	1	(X)	3	(X)	1
	2648, Stationery products				265, Paperboard containers and boxes				2651, Folding paperboard boxes			
Product shipments:												
As reported in census of manufactures[2]	630.5	(X)	(X)	(X)	12,959.2	(X)	(X)	(X)	2,393.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	428.0	100	9	(X)	9,468.1	100	2	(X)	1,762.8	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	99.2	1	5	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	1.2	(Z)	1	1	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	475.6	5	1	1	136.8	8	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	96.0	22	19	3	1,123.8	12	5	1	104.2	6	19	1
Retailers	298.2	70	10	4	760.4	8	6	1	94.0	5	30	1
Manufacturers	18.1	4	13	1	6,590.6	70	2	1	1,321.8	75	4	2
Federal Government	4.9	1	36	1	34.9	(Z)	29	1	2.0	(Z)	30	1
State and local Government	(D)	(D)	(X)	(X)	2.4	(Z)	6	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	1.7	(Z)	1	1	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	378.2	4	4	1	26.1	1	14	1
Resales (percent of total)[5]	(X)	17	(X)	4	(X)	1	(X)	1	(X)	1	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2652, Setup paperboard boxes				2653, Corrugated and solid fiber boxes				2654, Sanitary food containers			
Product shipments:												
As reported in census of manufactures[2]	377.7	(X)	(X)	(X)	7,182.8	(X)	(X)	(X)	1,964.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	271.4	100	16	(X)	5,252.3	100	2	(X)	1,451.9	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	17.5	(Z)	27	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	175.1	3	3	1	69.1	5	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	65.1	24	31	6	308.9	6	11	1	605.4	42	3	1
Retailers	61.3	23	30	5	442.8	8	4	1	(D)	(D)	(X)	(X)
Manufacturers	123.1	45	21	7	4,031.3	77	2	1	551.7	38	3	1
Federal Government	1.1	(Z)	60	1	11.4	(Z)	8	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	2.3	(Z)	6	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	1.6	(Z)	1	1	-	-	-	-
All other	(D)	(D)	(X)	(X)	261.4	5	4	1	66.3	5	4	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	1	(X)	1	(X)	2	(X)	1
	2655, Fiber cans, drums, similar products				2661, Building paper and board mills				28, Chemicals and allied products			
Product shipments:												
As reported in census of manufactures[2]	1,040.4	(X)	(X)	(X)	514.3	(X)	(X)	(X)	109,341.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	722.0	100	5	(X)	529.1	100	1	(X)	98,580.2	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	33.1	6	1	1	10,302.4	10	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	12,688.0	13	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	136.0	26	1	1	10,734.9	11	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	16.7	(Z)	2	1
Shipments to all other customers:												
Wholesalers	39.6	5	52	3	296.6	56	1	1	13,166.3	13	1	1
Retailers	(D)	(D)	(X)	(X)	3.8	1	1	1	8,104.3	8	1	1
Manufacturers	562.6	78	4	3	29.3	6	14	1	36,997.9	38	1	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	724.7	1	2	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	369.1	(Z)	12	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	311.9	(Z)	15	1
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	5,163.6	5	2	1
Resales (percent of total)[5]	(X)	1	(X)	1	(D)	(D)	(X)	(X)	(X)	4	(X)	1
	281, Industrial inorganic chemicals				2816, Inorganic pigments				282, Plastics materials, synthetics			
Product shipments:												
As reported in census of manufactures[2]	11,245.3	(X)	(X)	(X)	1,339.2	(X)	(X)	(X)	20,857.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	18,718.3	100	1	(X)	900.9	100	4	(X)	17,003.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	643.0	3	1	1	(D)	(D)	(X)	(X)	1,147.5	7	1	1
Retail stores and outlets	11,202.4	60	1	1	-	-	-	-	2.1	(Z)	12	1
Other manufacturing plants	1,260.6	7	1	1	40.4	4	1	1	1,854.7	11	1	1
Other nonmanufacturing plants	2.8	(Z)	1	1	-	-	-	-	.4	(Z)	1	1
Shipments to all other customers:												
Wholesalers	393.9	2	5	1	40.8	5	30	1	469.9	3	3	1
Retailers	32.5	(Z)	9	1	(D)	(D)	(X)	(X)	20.3	(Z)	11	1
Manufacturers	4,571.7	24	1	1	794.4	88	4	1	13,173.9	77	1	1
Federal Government	198.6	1	1	1	(D)	(D)	(X)	(X)	6.5	(Z)	2	1
State and local Government	27.9	(Z)	4	1	(D)	(D)	(X)	(X)	1.9	(Z)	61	1
Construction companies	4.4	(Z)	10	1	-	-	-	-	4.2	(Z)	1	1
All other	380.5	2	2	1	15.5	2	1	1	321.7	2	1	1
Resales (percent of total)[5]	(X)	1	(X)	1	(D)	(D)	(X)	(X)	(X)	1	(X)	1
	2821, Plastics materials and resins				2822, Synthetic rubber				2823, Cellulosic manmade fibers			
Product shipments:												
As reported in census of manufactures[2]	12,181.1	(X)	(X)	(X)	2,354.1	(X)	(X)	(X)	851.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	8,533.3	100	1	(X)	2,207.7	100	1	(X)	838.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	673.3	8	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	884.7	10	1	1	640.3	29	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	244.3	3	6	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Manufacturers	6,547.8	77	1	1	1,116.0	51	1	1	765.1	91	1	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
All other	159.4	2	1	1	35.7	2	1	1	.3	(Z)	1	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	2	(X)	1	(D)	(D)	(X)	(X)

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2824, Organic fibers, noncellulosic				283, Drugs				2831, Biological products			
Product shipments:												
As reported in census of manufactures[2]	5,471.5	(X)	(X)	(X)	12,912.9	(X)	(X)	(X)	1,067.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,403.3	100	1	(X)	10,752.1	100	1	(X)	796.5	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	1,651.8	15	1	1	280.3	35	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	973.0	9	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	3,829.2	36	1	1	94.1	12	6	1
Retailers	-	-	-	-	1,898.2	18	2	1	40.4	5	1	1
Manufacturers	4,733.0	88	1	1	599.2	6	7	1	(D)	(D)	3	(X)
Federal Government	(D)	(D)	(X)	(X)	204.2	2	1	1	27.5	3	1	1
State and local Government	-	-	-	-	193.8	2	1	1	30.5	4	1	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	1	1	(D)	(D)	(X)	(X)
All other	126.2	2	1	1	1,396.0	13	2	1	193.0	24	3	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	6	(X)	1	(X)	6	(X)	1
	2833, Medicinals and botanicals				2834, Pharmaceutical preparations				284, Soaps, cleaners, toilet goods			
Product shipments:												
As reported in census of manufactures[2]	2,205.9	(X)	(X)	(X)	9,639.5	(X)	(X)	(X)	15,402.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,081.4	100	3	(X)	7,874.1	100	1	(X)	12,699.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	1,241.8	16	1	1	3,772.8	30	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	229.8	2	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	164.2	2	1	1	363.8	3	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	5.0	(Z)	1	1
Shipments to all other customers:												
Wholesalers	343.5	17	7	1	3,391.6	43	1	1	3,045.3	24	2	1
Retailers	171.1	8	8	1	1,686.6	21	2	1	3,347.5	26	2	1
Manufacturers	389.2	19	6	1	(D)	(D)	(X)	(X)	1,321.6	10	5	1
Federal Government	12.9	1	3	1	163.8	2	1	1	113.2	1	3	1
State and local Government	(D)	(D)	(X)	(X)	146.0	2	1	1	65.3	1	65	1
Construction companies	-	-	-	-	-	-	-	-	6.6	(Z)	33	1
All other	242.7	12	13	1	960.4	12	1	1	428.0	3	7	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	6	(X)	1	(X)	5	(X)	1
	2841, Soap and other detergents				2842, Polishes and sanitation goods				2843, Surface active agents			
Product shipments:												
As reported in census of manufactures[2]	4,999.6	(X)	(X)	(X)	2,668.5	(X)	(X)	(X)	1,341.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,759.9	100	1	(X)	1,793.2	100	4	(X)	961.2	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	463.9	26	1	1	51.4	5	1	1
Retail stores and outlets	68.8	1	1	1	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	83.6	9	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,089.3	23	2	1	635.2	35	5	1	52.3	5	21	1
Retailers	988.1	21	3	1	396.7	22	9	2	14.3	1	41	1
Manufacturers	321.9	7	6	1	121.2	7	23	1	733.7	76	6	2
Federal Government	33.3	1	1	1	19.3	1	18	1	1.1	(Z)	30	1
State and local Government	13.0	(Z)	11	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	6.2	(Z)	35	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	296.3	6	8	1	80.2	4	18	1	22.2	2	26	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	14	(X)	2	(X)	2	(X)	1
	2844, Toilet preparations				2851, Paints and allied products				286, Industrial organic chemicals			
Product shipments:												
As reported in census of manufactures[2]	6,393.5	(X)	(X)	(X)	6,123.0	(X)	(X)	(X)	25,328.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,184.5	100	1	(X)	5,404.0	100	4	(X)	20,020.6	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	442.8	8	17	1	1,409.5	7	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	918.8	17	11	2	57.4	(Z)	1	1
Other manufacturing plants	103.5	2	1	1	292.0	5	4	1	4,587.8	23	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	2.4	(Z)	1	1
Shipments to all other customers:												
Wholesalers	1,268.5	24	4	1	634.1	12	7	1	1,558.3	8	1	1
Retailers	1,948.4	38	1	1	816.0	15	7	1	142.8	1	8	1
Manufacturers	144.6	3	21	1	1,482.9	27	6	1	11,292.8	56	1	1
Federal Government	59.4	1	2	1	(D)	(D)	13	(X)	43.6	(Z)	1	1
State and local Government	2.8	(Z)	37	1	60.8	1	20	1	.8	(Z)	1	1
Construction companies	-	-	-	-	224.9	4	13	1	23.5	(Z)	1	1
All other	29.3	1	10	1	489.3	9	1	1	901.7	5	1	1
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	10	(X)	1	(X)	3	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2865, Cyclic crudes and intermediates				2869, Industrial organic chemicals, n.e.c.				287, Agricultural chemicals			
Product shipments:												
As reported in census of manufactures[2]	5,514.3	(X)	(X)	(X)	19,377.6	(X)	(X)	(X)	9,549.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	3,672.8	100	1	(X)	16,149.5	100	1	(X)	8,096.8	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	619.3	17	1	1	788.7	5	1	1	998.0	12	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	266.1	3	5	1
Other manufacturing plants	928.9	25	1	1	3,652.0	23	1	1	1,001.6	12	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	180.2	5	1	1	1,364.5	8	1	1	2,332.8	29	3	1
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1,596.5	20	4	1
Manufacturers	1,726.4	47	2	1	9,459.6	59	1	1	1,089.2	13	2	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	13.7	(Z)	4	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	8.8	(Z)	19	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1.1	(Z)	18	1
All other	114.9	3	1	1	775.3	5	1	1	788.9	10	6	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	3	(X)	1	(X)	9	(X)	1
	2873, Nitrogenous fertilizers				2874, Phosphatic fertilizers				2875, Fertilizers, mixing only			
Product shipments:												
As reported in census of manufactures[2]	2,811.5	(X)	(X)	(X)	2,552.6	(X)	(X)	(X)	1,480.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,682.1	100	3	(X)	2,289.2	100	1	(X)	1,061.8	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	441.4	16	1	1	379.1	17	2	1	99.8	9	10	1
Retail stores and outlets	21.1	1	2	1	24.2	1	1	1	207.3	20	7	2
Other manufacturing plants	352.4	13	1	1	475.2	21	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	474.4	18	6	1	316.0	14	5	1	192.0	18	16	2
Retailers	640.5	24	10	2	545.1	24	1	1	312.3	29	9	2
Manufacturers	522.2	19	1	1	379.5	17	1	1	29.0	3	28	1
Federal Government	7.1	(Z)	6	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1.0	(Z)	20	1
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	.6	(Z)	35	1
All other	222.7	8	9	1	170.0	7	3	1	207.0	19	16	3
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	5	(X)	1	(X)	26	(X)	2
	2879, Agricultural chemicals, n.e.c.				289, Miscellaneous chemical products				2891, Adhesives and sealants			
Product shipments:												
As reported in census of manufactures[2]	2,704.0	(X)	(X)	(X)	7,922.6	(X)	(X)	(X)	1,873.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,063.7	100	3	(X)	5,875.1	100	3	(X)	1,877.7	100	8	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	77.6	4	1	1	237.0	4	8	1	35.1	2	18	1
Retail stores and outlets	13.4	1	7	1	4.8	(Z)	8	1	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	401.3	7	3	1	231.7	12	6	1
Other nonmanufacturing plants	-	-	-	-	4.1	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,350.4	65	3	1	893.0	15	7	1	351.5	19	12	2
Retailers	98.6	5	9	1	250.4	4	9	1	84.5	4	11	1
Manufacturers	158.5	8	9	1	3,465.6	59	4	1	1,091.1	58	12	3
Federal Government	5.2	(Z)	5	1	104.4	2	3	1	7.0	(Z)	22	1
State and local Government	7.7	(Z)	22	1	9.9	(Z)	13	1	.1	(Z)	1	1
Construction companies	(D)	(D)	(X)	(X)	47.1	1	23	1	36.9	2	29	1
All other	189.2	9	12	1	457.5	8	4	1	35.1	2	11	1
Resales (percent of total)[5]	(X)	12	(X)	1	(X)	4	(X)	1	(X)	8	(X)	1
	2892, Explosives				2893, Printing ink				2895, Carbon black			
Product shipments:												
As reported in census of manufactures[2]	435.5	(X)	(X)	(X)	904.0	(X)	(X)	(X)	466.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	411.0	100	1	(X)	654.6	100	11	(X)	334.6	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	36.9	6	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	149.5	36	1	1	8.1	1	51	1	-	-	-	-
Retailers	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Manufacturers	30.9	8	1	1	607.2	93	11	1	(D)	(D)	(X)	(X)
Federal Government	61.4	15	1	1	(D)	(D)	(X)	(X)	-	-	-	-
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	153.7	37	3	1	(D)	(D)	(X)	(X)	-	-	-	-
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(X)	1	(X)	-

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	2899, Chemical preparations, n.e.c.				29, Petroleum and coal products				2911, Petroleum refining			
Product shipments:												
As reported in census of manufactures[2]	4,243.8	(X)	(X)	(X)	93,945.7	(X)	(X)	(X)	88,589.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,587.8	100	3	(X)	76,210.5	100	1	(X)	71,526.4	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	201.7	8	9	1	28,071.1	37	1	1	27,919.1	39	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	1,429.8	2	1	1	1,424.1	2	1	1
Other manufacturing plants	118.5	5	1	1	3,632.0	5	1	1	3,389.9	5	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	312.9	(Z)	14	1	229.2	(Z)	12	1
Shipments to all other customers:												
Wholesalers	374.7	14	12	1	21,507.0	28	2	1	19,874.1	28	3	1
Retailers	(D)	(D)	(X)	(X)	8,652.8	11	1	1	8,102.8	11	1	1
Manufacturers	1,409.9	54	3	1	4,937.0	6	1	1	3,952.3	5	1	1
Federal Government	(D)	(D)	(X)	(X)	1,077.3	1	1	1	1,045.3	1	1	1
State and local Government	9.5	(Z)	13	1	540.0	1	7	1	338.9	(Z)	1	1
Construction companies	(D)	(D)	(X)	(X)	585.9	1	7	1	243.8	(Z)	6	1
All other	(D)	(D)	(X)	(X)	5,464.6	7	2	1	5,007.0	7	1	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	11	(X)	1	(X)	11	(X)	1
	295, Paving and roofing materials				2951, Paving mixtures and blocks				2952, Asphalt felts and coatings			
Product shipments:												
As reported in census of manufactures[2]	3,347.2	(X)	(X)	(X)	1,518.6	(X)	(X)	(X)	1,828.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,390.9	100	9	(X)	1,035.3	100	19	(X)	1,343.7	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	76.5	3	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	74.8	3	16	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	83.5	3	41	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,015.3	42	4	4	135.5	13	13	3	879.8	65	4	3
Retailers	292.5	12	36	4	131.3	13	69	7	151.1	11	36	4
Manufacturers	105.6	4	15	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Federal Government	18.8	1	40	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	192.2	8	20	1	179.2	17	21	4	12.9	1	60	1
Construction companies	326.0	14	11	2	286.2	28	12	5	37.9	3	38	1
All other	205.8	9	44	3	134.0	13	67	7	71.7	5	22	1
Resales (percent of total)[5]	(X)	12	(X)	6	(X)	22	(X)	13	(X)	5	(X)	1
	299, Miscellaneous petroleum, coal products				2992, Lubricating oils and greases				30, Rubber, misc. plastics products			
Product shipments:												
As reported in census of manufactures[2]	2,009.0	(X)	(X)	(X)	1,514.4	(X)	(X)	(X)	38,237.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,289.3	100	5	(X)	1,482.0	100	7	(X)	29,000.2	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	75.6	3	1	1	74.7	5	1	1	1,802.9	6	2	1
Retail stores and outlets	5.8	(Z)	54	1	(D)	(D)	(X)	(X)	861.3	3	3	1
Other manufacturing plants	167.3	7	16	1	71.0	5	25	1	1,753.6	6	2	1
Other nonmanufacturing plants	.2	(Z)	1	1	-	-	-	-	80.4	(Z)	3	1
Shipments to all other customers:												
Wholesalers	617.6	27	8	2	560.9	38	8	2	6,562.4	23	7	1
Retailers	257.5	11	9	1	167.6	11	13	1	3,446.6	12	5	1
Manufacturers	875.3	38	6	2	427.6	29	12	3	13,154.8	45	2	1
Federal Government	13.1	1	26	1	10.4	1	33	1	255.6	1	6	1
State and local Government	8.9	(Z)	40	1	6.5	(Z)	55	1	66.4	(Z)	21	1
Construction companies	16.1	1	62	1	(D)	(D)	(X)	(X)	298.7	1	34	1
All other	251.8	11	21	2	150.6	10	27	2	717.4	2	6	1
Resales (percent of total)[5]	(X)	10	(X)	1	(X)	3	(X)	1	(X)	5	(X)	1
	3011, Tires and inner tubes				3021, Rubber and plastics footwear				3041, Rubber, plastics hose and belting			
Product shipments:												
As reported in census of manufactures[2]	8,127.6	(X)	(X)	(X)	404.8	(X)	(X)	(X)	1,541.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,531.2	100	1	(X)	348.7	100	8	(X)	1,500.1	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,086.5	14	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	783.3	10	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	101.8	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,491.0	20	2	1	84.7	24	12	2	858.7	57	3	1
Retailers	1,812.7	24	4	1	216.8	62	10	2	57.7	4	23	1
Manufacturers	2,066.9	27	1	1	3.8	1	1	1	401.9	27	3	1
Federal Government	37.0	(Z)	1	1	9.5	3	1	1	15.0	1	45	1
State and local Government	11.3	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	121.4	2	1	1	17.0	5	22	1	41.3	3	12	1
Resales (percent of total)[5]	(X)	6	(X)	1	(D)	(D)	(X)	(X)	(X)	2	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3069, Fabricated rubber products, n.e.c.				3079, Miscellaneous plastics products				31, Leather and leather products			
Product shipments:												
As reported in census of manufactures[2]	4,223.2	(X)	(X)	(X)	23,878.7	(X)	(X)	(X)	7,122.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	3,346.7	100	4	(X)	16,246.6	100	4	(X)	4,941.6	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	116.1	3	13	1	559.4	3	7	1	211.5	4	26	1
Retail stores and outlets	(D)	(D)	(X)	(X)	76.9	(Z)	35	1	350.9	7	1	1
Other manufacturing plants	316.1	9	1	1	1,241.7	8	2	1	166.8	3	18	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	54.1	(Z)	4	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	478.3	14	7	1	3,634.1	22	13	2	729.8	15	5	1
Retailers	252.5	8	41	3	1,106.9	7	9	1	2,210.2	45	5	2
Manufacturers	1,914.4	57	4	2	8,763.8	54	3	2	1,110.8	22	8	2
Federal Government	128.2	4	2	1	65.5	(Z)	20	1	66.8	1	23	1
State and local Government	3.9	(Z)	50	1	39.5	(Z)	34	1	4.0	(Z)	6	1
Construction companies	29.8	1	52	1	267.4	2	38	1	1.7	(Z)	29	1
All other	100.6	3	15	1	437.0	3	9	1	89.1	2	22	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	4	(X)	1	(X)	9	(X)	1
	3111, Leather tanning and finishing				3131, Boot, shoe cut stock and findings				314, Footwear, except rubber			
Product shipments:												
As reported in census of manufactures[2]	1,380.1	(X)	(X)	(X)	255.1	(X)	(X)	(X)	3,737.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,013.2	100	10	(X)	249.7	100	13	(X)	2,742.7	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	-	-	-	-	84.1	3	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	334.7	12	1	1
Other manufacturing plants	54.6	5	55	3	(D)	(D)	(X)	(X)	83.3	3	7	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	80.7	8	17	1	(D)	(D)	(X)	(X)	414.2	15	3	1
Retailers	17.7	2	18	1	(D)	(D)	(X)	(X)	1,725.7	63	6	1
Manufacturers	780.7	77	9	6	209.9	84	15	2	5.0	(Z)	22	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	41.4	2	30	1
State and local Government	-	-	-	-	-	-	-	-	.4	(Z)	1	1
Construction companies	-	-	-	-	-	-	-	-	.4	(Z)	1	1
All other	9.7	1	1	1	1.4	1	55	1	53.5	2	8	1
Resales (percent of total)[5]	(X)	2	(X)	1	(D)	(D)	(X)	(X)	(X)	9	(X)	1
	3143, Men's footwear, except athletic				3144, Women's footwear, except athletic				3151, Leather gloves and mittens			
Product shipments:												
As reported in census of manufactures[2]	1,592.1	(X)	(X)	(X)	1,386.8	(X)	(X)	(X)	121.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	953.7	100	2	(X)	962.7	100	10	(X)	76.9	100	12	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	24.1	3	1	1	20.2	2	1	1	-	-	-	-
Retail stores and outlets	122.5	13	1	1	56.6	6	1	1	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	165.6	17	1	1	148.6	15	1	2	10.5	14	17	3
Retailers	565.8	59	3	1	723.5	75	13	2	43.7	57	1	7
Manufacturers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	8	(X)	1	(D)	(D)	(X)	(X)
	3172, Personal leather goods, n.e.c.				3199, Leather goods, n.e.c.				32, Stone, clay, glass products			
Product shipments:												
As reported in census of manufactures[2]	369.2	(X)	(X)	(X)	237.4	(X)	(X)	(X)	33,780.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	235.7	100	13	(X)	207.3	100	27	(X)	24,939.2	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	-	-	-	-	1,893.8	8	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	32.4	(Z)	36	1
Other manufacturing plants	(D)	(D)	(X)	(X)	4.3	2	13	1	1,390.3	6	12	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	115.8	(Z)	28	1
Shipments to all other customers:												
Wholesalers	36.6	16	17	3	66.0	32	43	10	3,840.2	15	3	1
Retailers	117.0	50	24	6	54.9	26	32	8	2,399.1	10	4	1
Manufacturers	(D)	(D)	(X)	(X)	78.5	38	47	13	8,515.2	34	12	2
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	98.4	(Z)	12	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	304.8	1	7	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	4,721.0	19	5	1
All other	(D)	(D)	(X)	(X)	.7	(Z)	43	1	1,628.2	7	8	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	29	(X)	6	(X)	7	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	322, Glass, pressed or blown				3221, Glass containers				3229, Pressed and blown glass, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	5,718.7	(X)	(X)	(X)	3,618.0	(X)	(X)	(X)	2,100.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,061.4	100	1	(X)	3,354.0	100	1	(X)	1,707.4	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	278.2	5	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	1.6	(Z)	59	1	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	462.9	9	1	1	321.4	10	1	1	141.5	8	1	1
Other nonmanufacturing plants	.1	(Z)	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	558.8	11	2	1	(D)	(D)	(X)	(X)	378.6	22	3	1
Retailers	361.6	7	2	1	(D)	(D)	(X)	(X)	314.4	18	3	1
Manufacturers	3,245.8	64	1	1	2,785.3	83	1	1	460.5	27	2	1
Federal Government	15.7	(Z)	1	1	-	-	-	-	15.7	1	3	1
State and local Government	-	-	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	.2	(Z)	1	1	-	-	-	-	(D)	(D)	(X)	(X)
All other	136.7	3	1	1	16.5	(Z)	1	1	120.2	7	1	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	1	(X)	1	(X)	1	(X)	1
	3241, Cement, hydraulic				325, Structural clay products				3251, Brick and structural clay tile			
Product shipments:												
As reported in census of manufactures[2]	2,971.0	(X)	(X)	(X)	1,682.1	(X)	(X)	(X)	715.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,219.6	100	1	(X)	1,143.6	100	6	(X)	593.2	100	8	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	157.6	14	5	1	101.4	17	8	2
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	109.3	5	1	1	56.8	5	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	322.5	15	2	1	299.1	26	12	2	156.8	26	19	4
Retailers	195.4	9	1	1	148.1	13	14	2	103.4	17	17	2
Manufacturers	1,216.2	55	1	1	151.1	13	17	2	12.4	2	7	1
Federal Government	.7	(Z)	1	1	2.2	(Z)	1	1	(D)	(D)	(X)	(X)
State and local Government	2.6	(Z)	1	(NA)	6.2	1	11	1	2.5	(Z)	27	1
Construction companies	170.3	8	1	1	236.1	21	9	2	125.5	21	15	3
All other	84.9	4	1	1	82.5	7	24	2	35.3	6	14	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	6	(X)	2	(X)	9	(X)	3
	3253, Ceramic wall and floor tile				3259, Structural clay products, n.e.c.				326, Pottery and related products			
Product shipments:												
As reported in census of manufactures[2]	222.4	(X)	(X)	(X)	204.3	(X)	(X)	(X)	1,219.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	187.3	100	9	(X)	181.0	100	16	(X)	943.1	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	22.7	2	4	1
Retail stores and outlets	-	-	-	-	-	-	-	-	4.8	1	18	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	19.4	2	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	92.7	49	18	5	37.9	21	32	5	517.1	55	3	1
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	174.0	18	8	1
Manufacturers	-	-	-	-	(D)	(D)	(X)	(X)	156.7	17	7	1
Federal Government	-	-	-	-	(D)	(D)	(X)	(X)	3.1	(Z)	1	1
State and local Government	-	-	-	-	3.0	2	1	1	.6	(Z)	16	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	4.5	(Z)	43	1
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	40.2	4	11	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	4	(X)	1	(X)	4	(X)	1
	3261, Vitreous plumbing fixtures				3262, Vitreous china food utensils				3269, Pottery products, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	367.8	(X)	(X)	(X)	140.9	(X)	(X)	(X)	240.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	365.3	100	3	(X)	80.9	100	1	(X)	170.1	100	17	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	17.8	5	5	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	.4	(Z)	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	302.2	83	2	1	47.3	58	1	1	38.0	22	36	5
Retailers	19.6	5	14	1	(D)	(D)	(X)	(X)	66.3	39	21	5
Manufacturers	6.7	2	26	1	(D)	(D)	(X)	(X)	57.1	34	14	4
Federal Government	-	-	-	-	.5	1	1	1	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	.3	(Z)	33	1
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1.5	1	35	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	1	(X)	-	(X)	7	(X)	2

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	327, Concrete, gypsum, plaster products				3271, Concrete block and brick				3272, Concrete products, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	10,686.7	(X)	(X)	(X)	1,005.1	(X)	(X)	(X)	2,596.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,936.6	100	4	(X)	816.9	100	11	(X)	1,690.3	100	8	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	380.2	5	1	1	(D)	(D)	(X)	(X)	4.8	(Z)	62	1
Retail stores and outlets	18.0	(Z)	63	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	67.4	1	19	1	(D)	(D)	(X)	(X)	13.1	1	1	1
Other nonmanufacturing plants	78.7	1	31	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	670.6	8	11	1	93.2	11	25	2	150.0	9	31	3
Retailers	1,015.5	13	9	1	208.9	26	20	4	125.6	7	21	2
Manufacturers	733.5	9	5	1	22.8	3	7	1	53.1	3	7	1
Federal Government	29.8	(Z)	17	1	.2	(Z)	1	(NA)	7.7	(Z)	41	1
State and local Government	264.4	3	8	1	4.0	(Z)	19	1	112.3	7	8	1
Construction companies	3,856.7	49	5	2	411.4	50	14	5	1,027.5	61	10	3
All other	821.4	10	14	1	71.1	9	19	1	189.7	11	14	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	15	(X)	2	(X)	8	(X)	2
	3273, Ready-mixed concrete				3274, Lime				3275, Gypsum products			
Product shipments:												
As reported in census of manufactures[2]	5,679.9	(X)	(X)	(X)	473.5	(X)	(X)	(X)	932.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,113.4	100	6	(X)	424.2	100	7	(X)	891.8	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	23.4	1	21	1	30.1	7	40	3	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	51.6	1	46	1	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	290.3	7	18	1	17.2	4	35	1	119.9	13	6	1
Retailers	365.7	9	19	2	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	362.5	9	9	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Federal Government	18.5	(Z)	21	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	131.0	3	15	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	2,361.1	57	3	2	8.8	2	1	1	47.9	5	22	1
All other	508.2	12	22	2	(D)	(D)	3	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	6	(X)	1	(D)	(D)	(X)	(X)	(X)	3	(X)	1
	3281, Cut stone and stone products				329, Misc. nonmetallic mineral products				3291, Abrasive products			
Product shipments:												
As reported in census of manufactures[2]	385.5	(X)	(X)	(X)	7,656.8	(X)	(X)	(X)	1,721.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	352.1	100	15	(X)	5,202.0	100	20	(X)	1,201.1	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	860.0	17	1	3	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	17.2	5	42	2	419.3	4	47	2	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	33.2	1	66	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	59.8	17	35	5	1,096.6	21	6	3	246.9	21	17	3
Retailers	78.6	22	32	6	269.9	5	13	1	74.0	6	19	1
Manufacturers	32.6	9	47	4	2,068.8	40	35	7	565.7	47	8	3
Federal Government	2.6	1	11	1	35.4	1	30	1	(D)	(D)	(X)	(X)
State and local Government	13.1	4	28	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	86.7	25	20	4	296.2	6	13	1	1.2	(Z)	39	1
All other	47.7	14	55	7	295.1	6	9	1	87.8	7	2	1
Resales (percent of total)[5]	(X)	10	(X)	4	(X)	5	(X)	1	(X)	4	(X)	1
	3292, Asbestos products				3293, Gaskets, packing, sealing devices				3296, Mineral wool			
Product shipments:												
As reported in census of manufactures[2]	960.1	(X)	(X)	(X)	1,254.8	(X)	(X)	(X)	1,684.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	646.4	100	4	(X)	892.2	100	6	(X)	1,183.4	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	61.6	10	8	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	38.5	4	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	411.2	64	3	2	218.4	24	11	2	120.5	10	8	1
Retailers	(D)	(D)	(X)	(X)	65.3	7	13	1	(D)	(D)	(X)	(X)
Manufacturers	135.4	21	12	2	516.8	58	7	2	146.9	12	25	3
Federal Government	1.9	(Z)	1	(NA)	16.5	2	19	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	153.6	13	10	1
All other	10.4	2	18	1	24.9	3	44	1	60.8	5	1	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	8	(X)	1	(X)	2	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3297, Nonclay refractories				3299, Nonmetallic mineral products, n.e.c.				33, Primary metal industries .			
Product shipments:												
As reported in census of manufactures[2]	734.0	(X)	(X)	(X)	301.1	(X)	(X)	(X)	99,044.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	459.7	100	10	(X)	403.3	100	17	(X)	77,896.1	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	6.1	1	23	1	(D)	(D)	(X)	(X)	3,139.5	4	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	16.2	(Z)	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	19.5	5	35	2	16,971.4	22	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	79.2	(Z)	1	1
Shipments to all other customers:												
Wholesalers	12.1	3	41	1	62.5	15	57	7	8,275.3	11	1	1
Retailers	(D)	(D)	(X)	(X)	38.5	10	46	4	914.5	1	5	1
Manufacturers	370.8	81	11	3	120.6	30	5	5	41,585.4	53	1	1
Federal Government	.6	(Z)	1	1	.9	(Z)	64	1	407.5	1	6	1
State and local Government	(D)	(D)	(X)	(X)	12.0	3	15	1	140.4	(Z)	6	1
Construction companies	(D)	(D)	(X)	(X)	109.1	27	31	7	2,677.0	3	1	1
All other	31.4	7	18	1	35.8	9	47	4	3,689.5	5	1	1
Resales (percent of total)[5]	(X)	2	(X)	1	(D)	(D)	(X)	(X)	(X)	4	(X)	1
	331, Blast furnace, basic steel products				3312, Blast furnaces and steel mills				3313, Electrometallurgical products			
Product shipments:												
As reported in census of manufactures[2]	48,103.6	(X)	(X)	(X)	39,368.0	(X)	(X)	(X)	944.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	39,676.3	100	1	(X)	33,900.4	100	1	(X)	760.8	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	684.1	2	1	1	592.2	2	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	5,941.4	15	1	1	5,572.2	16	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	5,959.0	15	1	1	4,575.1	13	1	1	(D)	(D)	(X)	(X)
Retailers	170.4	(Z)	7	1	(D)	(D)	(X)	(X)	-	-	-	-
Manufacturers	22,269.1	56	1	1	18,897.9	56	1	1	670.1	88	1	1
Federal Government	174.7	(Z)	9	1	117.8	(Z)	1	1	(D)	(D)	(X)	(X)
State and local Government	25.5	(Z)	4	1	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	2,294.2	6	1	1	2,173.6	6	1	1	-	-	-	-
All other	2,105.1	5	1	1	1,898.7	6	1	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	1	(X)	1	(X)	3	(X)	1
	3317, Steel pipe and tubes				332, Iron and steel foundries				3321, Gray iron foundries			
Product shipments:												
As reported in census of manufactures[2]	2,620.3	(X)	(X)	(X)	11,144.6	(X)	(X)	(X)	7,835.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,011.3	100	7	(X)	9,367.9	100	2	(X)	6,651.0	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	678.0	7	1	1	440.5	7	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	3,131.5	33	1	1	2,690.8	40	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	17.0	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	390.3	4	8	1	355.2	5	9	1
Retailers	16.1	1	11	1	253.3	3	14	1	222.5	3	9	1
Manufacturers	1,158.7	58	9	2	3,877.5	41	3	1	2,145.8	32	5	1
Federal Government	33.0	2	41	1	56.0	1	25	1	14.5	(Z)	4	1
State and local Government	4.7	(Z)	1	1	90.8	1	1	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	291.9	3	6	1	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	581.5	6	4	1	385.3	6	6	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	1	(X)	1	(X)	1	(X)	1
	3322, Malleable iron foundries				3324, Steel investment foundries				3325, Steel foundries, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	669.5	(X)	(X)	(X)	434.1	(X)	(X)	(X)	2,205.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	612.5	100	3	(X)	424.1	100	13	(X)	1,677.2	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	256.6	42	8	2	19.3	5	1	1	164.9	10	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	343.8	56	1	2	324.9	77	12	6	1,062.9	63	6	1
Federal Government	-	-	-	-	34.0	8	40	3	7.5	(Z)	27	1
State and local Government	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	175.8	10	6	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(X)	2	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	333, Primary nonferrous metal				3331, Primary copper				3334, Primary aluminum			
Product shipments:												
As reported in census of manufactures[2]	9,874.8	(X)	(X)	(X)	3,254.6	(X)	(X)	(X)	4,291.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	6,468.7	100	1	(X)	2,388.0	100	1	(X)	3,357.6	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	217.0	3	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	3,687.4	57	1	1	(D)	(D)	(X)	(X)	2,326.5	69	1	1
Other nonmanufacturing plants	.9	(Z)	1	1	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	70.0	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retailers	12.2	(Z)	91	1	-	-	-	-	-	-	-	-
Manufacturers	2,346.1	36	1	1	1,000.3	42	1	1	806.7	24	1	1
Federal Government	15.1	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	-	-	-	-	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	119.8	2	3	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	25	(X)	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
	3341, Secondary nonferrous metals				335, Nonferrous rolling and drawing				3351, Copper rolling and drawing			
Product shipments:												
As reported in census of manufactures[2]	3,194.9	(X)	(X)	(X)	21,267.4	(X)	(X)	(X)	3,536.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,886.7	100	12	(X)	15,172.3	100	1	(X)	2,570.1	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	1,603.3	11	1	1	36.5	1	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	1	1	-	-	-	-
Other manufacturing plants	550.2	19	2	2	2,997.8	20	2	1	491.2	19	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	11.5	(Z)	1	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	50.6	2	39	1	(D)	(D)	3	1	479.6	19	2	1
Retailers	23.5	1	51	1	379.9	3	2	1	(D)	(D)	(X)	(X)
Manufacturers	2,159.5	75	16	3	7,868.4	52	1	1	1,303.1	51	2	1
Federal Government	9.8	(Z)	22	1	92.6	1	1	1	14.4	1	1	1
State and local Government	(D)	(D)	(X)	(X)	20.1	(Z)	37	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	72.4	(Z)	1	1	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	656.0	4	2	1	11.9	(Z)	1	1
Resales (percent of total)[5]	(X)	10	(X)	1	(X)	1	(X)	1	(X)	1	(X)	1
	3353, Aluminum sheet, plate, and foil				3354, Aluminum extruded products				3355, Aluminum rolling and drawing, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	5,358.8	(X)	(X)	(X)	1,928.2	(X)	(X)	(X)	1,367.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,320.5	100	2	(X)	1,327.5	100	4	(X)	1,007.1	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	1,141.5	26	5	1	130.7	10	1	1	457.4	45	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	44.4	1	8	1	88.8	7	18	1	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	5.5	(Z)	45	1	-	-	-	-
Manufacturers	2,708.0	63	1	1	1,026.3	77	4	1	426.3	42	1	1
Federal Government	(D)	(D)	(X)	(X)	4.6	(Z)	5	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	22.0	2	1	1	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	16.8	1	16	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	1	(X)	1	(D)	(D)	(X)	(X)
	3356, Nonferrous rolling and drawing, n.e.c.				3357, Nonferrous wiredrawing, insulating				336, Nonferrous foundries			
Product shipments:												
As reported in census of manufactures[2]	2,616.5	(X)	(X)	(X)	6,460.3	(X)	(X)	(X)	3,787.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,301.4	100	3	(X)	4,645.6	100	2	(X)	2,781.3	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	45.2	2	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	106.2	8	1	1	670.7	14	1	1	503.8	18	2	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	1.1	(Z)	1	1
Shipments to all other customers:												
Wholesalers	88.2	7	30	2	675.3	15	4	1	248.1	9	22	2
Retailers	9.1	1	1	1	15.9	(Z)	34	1	56.1	2	23	1
Manufacturers	933.1	72	2	2	1,471.6	32	4	1	1,819.1	65	6	2
Federal Government	6.1	(Z)	1	1	39.6	1	1	1	21.9	1	6	1
State and local Government	(D)	(D)	(X)	(X)	18.0	(Z)	41	1	3.8	(Z)	96	1
Construction companies	(D)	(D)	(X)	(X)	43.6	1	1	1	2.0	(Z)	66	1
All other	63.1	5	2	1	431.0	9	2	1	80.2	3	46	1
Resales (percent of total)[5]	(X)	-	(X)	1	(X)	2	(X)	1	(X)	3	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3361, Aluminum foundries				339, Miscellaneous primary metal products				34, Fabricated metal products			
Product shipments:												
As reported in census of manufactures[2]	2,294.2	(X)	(X)	(X)	1,671.6	(X)	(X)	(X)	85,593.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,797.1	100	7	(X)	1,593.2	100	8	(X)	64,998.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	2.4	(Z)	36	1	1,623.9	2	2	1
Retail stores and outlets	-	-	-	-	-	-	-	-	332.8	1	6	1
Other manufacturing plants	451.3	25	1	2	155.6	10	1	1	8,819.8	14	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	316.2	(Z)	24	1
Shipments to all other customers:												
Wholesalers	122.0	7	27	2	83.1	5	29	1	12,756.7	20	2	1
Retailers	24.7	1	51	1	13.3	1	30	1	3,790.6	6	3	1
Manufacturers	1,113.2	62	9	3	1,242.1	78	9	2	25,050.7	39	3	1
Federal Government	2.4	(Z)	50	1	37.4	2	38	1	1,903.9	3	4	1
State and local Government	(D)	(D)	(X)	(X)	.1	(Z)	1	1	451.7	1	7	1
Construction companies	(D)	(D)	(X)	(X)	2.8	(Z)	45	1	4,439.9	7	3	1
All other	77.3	4	48	2	56.4	4	5	1	5,511.8	8	2	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	2	(X)	1	(X)	5	(X)	1
	341, Metal cans, shipping containers				3411, Metal cans				3412, Metal barrels, drums, and pails			
Product shipments:												
As reported in census of manufactures[2]	8,362.9	(X)	(X)	(X)	7,414.7	(X)	(X)	(X)	948.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	6,349.9	100	1	(X)	5,715.7	100	1	(X)	579.5	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	131.3	2	1	1	123.3	2	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	2,519.4	40	1	1	2,510.5	44	1	1	8.8	Z	12	1
Other nonmanufacturing plants	12.6	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	170.5	3	18	1	58.1	1	9	1	111.2	19	26	4
Retailers	1.5	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	3,439.5	54	1	1	2,948.2	52	1	1	443.9	77	6	4
Federal Government	46.8	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	-	-	1	(NA)	-	-	(X)	(X)	-	-	-	-
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
All other	13.4	(Z)	26	1	1.7	(Z)	1	(NA)	7.9	1	45	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	1	(X)	1	(X)	5	(X)	1
	342, Cutlery, handtools and hardware				3421, Cutlery				3423, Hand and edge tools, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	8,184.8	(X)	(X)	(X)	666.9	(X)	(X)	(X)	2,066.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,069.0	100	2	(X)	496.0	100	8	(X)	1,768.8	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	599.4	8	1	1	(D)	(D)	(X)	(X)	291.6	16	1	1
Retail stores and outlets	220.4	3	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	1,162.8	16	1	1	(D)	(D)	(X)	(X)	7.5	(Z)	15	1
Other nonmanufacturing plants	3.1	(Z)	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	2,566.3	36	5	1	225.4	45	9	3	865.3	49	6	2
Retailers	961.0	14	4	1	199.7	40	13	3	277.2	16	3	1
Manufacturers	1,160.9	16	4	1	25.4	5	30	2	175.8	10	10	1
Federal Government	102.6	1	10	1	19.1	4	15	1	38.8	2	22	1
State and local Government	9.6	(Z)	22	1	(D)	(D)	(X)	(X)	5.6	(Z)	36	1
Construction companies	24.9	(Z)	6	1	(D)	(D)	(X)	(X)	6.8	(Z)	22	1
All other	257.8	4	12	1	12.0	2	19	1	99.5	6	19	1
Resales (percent of total)[5]	(X)	9	(X)	2	(X)	4	(X)	1	(X)	12	(X)	1
	3425, Handsaws and saw blades				3429, Hardware, n.e.c.				343, Plumbing, heating, except electric			
Product shipments:												
As reported in census of manufactures[2]	369.3	(X)	(X)	(X)	5,082.5	(X)	(X)	(X)	2,898.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	290.3	100	6	(X)	4,457.0	100	3	(X)	2,187.6	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	22.4	8	1	1	(D)	(D)	(X)	(X)	58.7	3	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	193.2	67	9	2	1,228.1	28	10	2	1,361.3	62	4	2
Retailers	20.8	7	3	1	462.0	10	7	1	191.4	9	16	1
Manufacturers	34.7	12	6	1	925.0	21	4	1	341.3	16	19	2
Federal Government	2.2	1	39	1	41.3	1	13	1	28.1	1	22	1
State and local Government	(D)	(D)	(X)	(X)	3.4	(Z)	21	1	5.0	(Z)	48	1
Construction companies	(D)	(D)	(X)	(X)	12.9	(Z)	5	1	38.3	2	19	1
All other	7.9	3	3	1	138.4	3	18	1	70.7	3	52	2
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	8	(X)	3	(X)	4	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3431, Metal sanitary ware				3432, Plumbing fittings and brass goods				3433, Heating equipment, except electric			
Product shipments:												
As reported in census of manufactures[2]	392.3	(X)	(X)	(X)	1,109.1	(X)	(X)	(X)	1,396.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	360.4	100	5	(X)	968.5	100	5	(X)	858.7	100	11	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	19.8	2	2	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	65.8	7	1	1	6.2	1	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	280.6	78	4	1	696.9	72	5	1	383.9	45	10	5
Retailers	7.8	2	13	1	78.0	8	7	1	105.6	12	29	3
Manufacturers	41.0	11	12	1	78.9	8	10	1	221.4	26	28	6
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	23.4	3	27	1
State and local Government	-	-	-	-	.3	(Z)	1	1	4.7	1	50	1
Construction companies	-	-	-	-	2.7	(Z)	4	1	35.7	4	21	1
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	58.1	7	63	4
Resales (percent of total)[5]	(X)	6	(X)	3	(X)	2	(X)	1	(X)	7	(X)	1
	344, Fabricated structural metal products				3441, Fabricated structural metal				3442, Metal doors, sash, and trim			
Product shipments:												
As reported in census of manufactures[2]	23,023.5	(X)	(X)	(X)	4,860.9	(X)	(X)	(X)	2,974.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	16,865.5	100	2	(X)	4,017.1	100	4	(X)	2,076.5	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	507.4	3	5	1	43.2	1	30	1	197.4	10	11	1
Retail stores and outlets	44.0	(Z)	46	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	476.7	3	8	1	272.5	7	5	1	10.2	(Z)	1	1
Other nonmanufacturing plants	215.8	1	35	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	3,158.0	19	4	1	266.8	7	11	1	778.6	37	9	2
Retailers	1,306.3	8	7	1	120.1	3	21	1	448.4	22	13	2
Manufacturers	3,620.4	21	4	1	649.0	16	7	1	257.0	12	7	1
Federal Government	483.8	3	11	1	102.3	3	16	1	5.2	(Z)	12	1
State and local Government	346.9	2	8	1	160.0	4	9	1	4.6	(Z)	18	1
Construction companies	3,831.5	23	4	1	1,421.0	35	6	1	201.6	10	12	1
All other	2,874.4	17	4	1	852.7	21	5	1	162.8	8	20	2
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	8	(X)	1	(X)	3	(X)	1
	3443, Fabricated platework, boiler shop				3444, Sheet metalwork				3446, Architectural metalwork			
Product shipments:												
As reported in census of manufactures[2]	6,641.2	(X)	(X)	(X)	4,607.5	(X)	(X)	(X)	950.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,617.2	100	4	(X)	3,171.9	100	6	(X)	692.7	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	19.0	(Z)	11	1	172.2	5	4	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	87.8	2	26	1	44.6	1	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	55.1	1	30	1	10.3	(Z)	60	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	519.7	11	12	1	1,047.9	33	7	2	148.2	21	13	3
Retailers	222.7	5	12	1	253.9	8	19	1	57.6	8	18	2
Manufacturers	1,702.4	37	6	1	659.5	21	11	2	55.6	8	15	1
Federal Government	233.9	5	12	1	87.6	3	45	1	8.0	1	57	1
State and local Government	97.3	2	14	1	(D)	(D)	(X)	(X)	25.2	4	56	2
Construction companies	458.6	10	7	1	486.5	15	22	3	296.2	43	11	3
All other	1,220.6	26	6	1	334.5	11	10	1	91.2	13	32	4
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	7	(X)	2	(X)	5	(X)	3
	3448, Prefabricated metal buildings				3449, Miscellaneous metalwork				345, Screw machine products, bolts, etc.			
Product shipments:												
As reported in census of manufactures[2]	1,656.0	(X)	(X)	(X)	1,332.9	(X)	(X)	(X)	4,901.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,124.3	100	3	(X)	1,165.8	100	5	(X)	4,002.9	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	25.5	2	1	1	(D)	(D)	(X)	(X)	51.8	1	8	1
Retail stores and outlets	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	51.3	4	49	2	157.7	4	13	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	4.3	(Z)	15	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	159.1	14	4	1	237.6	20	11	2	660.6	17	6	1
Retailers	175.1	16	14	2	28.5	2	18	1	36.8	1	31	1
Manufacturers	138.0	12	11	1	158.9	14	16	2	2,906.8	73	5	1
Federal Government	6.2	1	1	1	40.6	3	26	1	49.9	1	27	1
State and local Government	5.9	1	33	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	481.7	43	1	1	485.9	42	3	2	28.9	1	11	1
All other	98.5	9	14	1	114.2	10	23	2	100.0	2	15	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	10	(X)	2	(X)	6	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3451, Screw machine products				3452, Bolts, nuts, rivets, and washers				346, Metal forgings and stampings			
Product shipments:												
As reported in census of manufactures[2]	1,771.4	(X)	(X)	(X)	3,130.3	(X)	(X)	(X)	18,242.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,329.5	100	8	(X)	2,673.5	100	5	(X)	13,303.3	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	16.0	1	15	1	35.8	1	9	1	51.0	-	30	1
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	25.3	2	21	1	132.4	5	15	1	3,715.5	28	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	152.3	11	16	2	508.3	19	6	1	660.8	5	9	1
Retailers	(D)	(D)	(X)	(X)	32.0	1	35	1	421.4	3	10	1
Manufacturers	1,095.7	82	9	2	1,811.1	68	6	2	7,724.8	58	8	2
Federal Government	30.3	2	44	1	19.6	1	6	1	82.9	1	22	1
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	19.0	(Z)	48	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	13.2	(Z)	62	1
All other	3.5	(Z)	6	1	96.5	4	15	1	594.4	4	1	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	6	(X)	2	(X)	2	(X)	1
	3462, Iron and steel forgings				3463, Nonferrous forgings				3465, Automotive stampings			
Product shipments:												
As reported in census of manufactures[2]	2,966.7	(X)	(X)	(X)	540.4	(X)	(X)	(X)	9,599.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,203.0	100	5	(X)	421.8	100	7	(X)	6,635.7	100	10	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	10.2	-	41	1	-	-	-	-	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	323.0	15	2	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	38.2	2	16	1	(D)	(D)	(X)	(X)	129.7	2	21	1
Retailers	8.2	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	1,583.6	72	7	1	300.9	71	10	2	3,206.3	48	20	5
Federal Government	31.1	1	2	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	203.3	9	1	1	11.3	3	1	1	290.2	4	2	1
Resales (percent of total)[5]	(X)	1	(X)	1	(D)	(D)	(X)	(X)	(X)	1	(X)	1
	3466, Crowns and closures				3469, Metal stampings, n.e.c.				347, Metal services, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	581.0	(X)	(X)	(X)	4,554.5	(X)	(X)	(X)	3,295.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	438.8	100	5	(X)	3,602.1	100	5	(X)	2,029.4	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	34.2	2	37	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	34.5	8	1	1	292.1	8	11	1	147.7	7	13	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	35.1	8	17	1	(D)	(D)	(X)	(X)	208.0	10	17	1
Retailers	(D)	(D)	(X)	(X)	358.4	10	10	1	43.8	2	35	1
Manufacturers	344.8	79	5	1	2,287.3	64	6	2	1,257.7	62	7	1
Federal Government	(D)	(D)	(X)	(X)	42.3	1	38	1	39.8	2	55	1
State and local Government	-	-	-	-	(D)	(D)	(X)	(X)	2.4	(Z)	39	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	15.1	1	41	1
All other	3.5	1	1	1	86.1	2	3	1	280.7	14	18	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	4	(X)	1	(X)	1	(X)	1
	3479, Metal coating and allied services				348, Ordnance and accessories, n.e.c.				3482, Small arms ammunition			
Product shipments:												
As reported in census of manufactures[2]	1,520.5	(X)	(X)	(X)	2,179.1	(X)	(X)	(X)	403.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	965.8	100	8	(X)	1,866.4	100	2	(X)	431.1	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	48.6	3	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	97.1	10	4	1	20.8	1	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	2.4	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	90.5	9	21	2	593.5	32	5	1	197.6	46	1	1
Retailers	19.6	2	58	1	92.1	5	2	1	7.7	2	5	1
Manufacturers	605.8	63	8	3	90.9	5	5	1	24.6	6	1	1
Federal Government	.8	(Z)	43	1	869.1	47	3	1	144.6	34	1	1
State and local Government	(D)	(D)	(X)	(X)	1.9	(Z)	8	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
All other	118.3	12	29	3	(D)	(D)	(X)	(X)	44.3	10	1	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	4	(X)	1	(D)	(D)	(X)	(X)

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3483, Ammunition, except small arms, n.e.c.				3484, Small arms				3489, Ordnance and accessories, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	629.3	(X)	(X)	(X)	662.6	(X)	(X)	(X)	483.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	380.9	100	2	(X)	686.6	100	5	(X)	366.6	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	9.1	1	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	4.7	1	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	383.0	56	9	2	(D)	(D)	(X)	(X)
Retailers	(D)	(D)	(X)	(X)	82.1	12	1	1	(D)	(D)	(X)	(X)
Manufacturers	7.0	2	5	1	20.4	3	18	1	37.8	10	5	1
Federal Government	356.7	94	1	1	128.4	19	10	2	239.5	65	9	2
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	56.1	8	1	1	7.4	2	24	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	5	(X)	3	(X)	1	(X)	1
	349, Misc. Fabricated metal products				3493, Steel springs, except wire				3494, Valves and pipe fittings			
Product shipments:												
As reported in census of manufactures[2]	14,505.7	(X)	(X)	(X)	571.0	(X)	(X)	(X)	5,403.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	11,312.4	100	2	(X)	525.6	100	8	(X)	3,691.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	141.5	1	6	1	(D)	(D)	(X)	(X)	22.4	1	1	1
Retail stores and outlets	10.5	(Z)	61	1	-	-	-	-	-	-	-	-
Other manufacturing plants	537.4	5	4	1	140.0	27	3	2	174.9	5	4	1
Other nonmanufacturing plants	52.6	(Z)	17	1	(D)	(D)	(X)	(X)	20.2	1	1	1
Shipments to all other customers:												
Wholesalers	3,377.5	30	3	1	74.9	14	33	4	1,514.1	41	50	1
Retailers	736.3	7	9	1	7.8	1	64	1	122.4	3	1	1
Manufacturers	4,496.2	40	3	1	266.4	51	10	3	1,215.9	33	1	1
Federal Government	201.1	2	11	1	2.0	(Z)	57	1	83.3	2	1	1
State and local Government	66.8	1	15	1	(D)	(D)	(X)	(X)	42.6	1	1	1
Construction companies	482.4	4	7	1	(D)	(D)	(X)	(X)	159.0	4	1	1
All other	1,209.9	11	3	1	18.3	3	2	1	336.1	9	1	1
Resales (percent of total)[5]	(X)	6	(X)	1	(D)	(D)	(X)	(X)	(X)	6	(X)	1
	3495, Wire springs				3496, Misc. fabricated wire products				3497, Metal foil and leaf			
Product shipments:												
As reported in census of manufactures[2]	933.0	(X)	(X)	(X)	1,440.0	(X)	(X)	(X)	1,070.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	689.9	100	12	(X)	1,055.1	100	8	(X)	752.8	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	8.9	1	1	1	20.5	2	2	1	41.5	6	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	361.8	34	13	3	111.2	15	1	1
Retailers	(D)	(D)	(X)	(X)	131.4	12	32	4	(D)	(D)	(X)	(X)
Manufacturers	622.4	90	11	4	423.7	40	11	4	450.1	60	20	-
Federal Government	.7	(Z)	29	1	7.3	1	17	1	(D)	(D)	(X)	(X)
State and local Government	-	-	-	-	6.4	1	13	1	-	-	-	-
Construction companies	-	-	-	-	19.3	2	46	1	1.5	(Z)	1	1
All other	(D)	(D)	(X)	(X)	34.4	3	29	1	3.5	(Z)	1	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	5	(X)	2	(X)	1	(X)	1
	3498, Fabricated pipe and fittings				3499, Fabricated metal products, n.e.c.				35, Machinery, except electrical			
Product shipments:												
As reported in census of manufactures[2]	1,698.1	(X)	(X)	(X)	3,390.3	(X)	(X)	(X)	115,329.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,195.4	100	7	(X)	3,378.7	100	4	(X)	95,936.5	100	15	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	47.9	1	16	1	15,694.7	16	1	2
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	541.6	(Z)	2	1
Other manufacturing plants	17.2	1	43	1	130.1	4	16	1	11,644.9	12	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	17.1	1	52	1	838.6	1	6	1
Shipments to all other customers:												
Wholesalers	355.1	30	11	2	(D)	(D)	(X)	(X)	14,992.0	16	25	3
Retailers	46.8	4	45	2	250.1	7	11	1	7,923.0	8	2	1
Manufacturers	284.5	24	14	3	1,221.2	36	7	2	27,221.0	28	24	5
Federal Government	16.4	1	28	1	(D)	(D)	(X)	(X)	1,857.0	2	4	1
State and local Government	1.8	(Z)	18	1	16.0	(Z)	35	1	755.6	4	2	1
Construction companies	201.1	17	13	2	101.5	3	15	1	1,945.4	2	7	1
All other	244.6	20	10	2	(D)	(D)	(X)	(X)	12,522.7	13	48	8
Resales (percent of total)[5]	(X)	11	(X)	2	(X)	7	(X)	1	(X)	5	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	351, Engines and turbines				3511, Turbines, turbine generator sets				3519, Internal combustion engines, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	10,361.1	(X)	(X)	(X)	2,813.1	(X)	(X)	(X)	7,548.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,514.8	100	1	(X)	1,846.0	100	1	(X)	5,666.6	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,099.5	15	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	2.2	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	1,996.0	27	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	32.7	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	872.8	12	2	1	30.5	2	8	1	842.3	15	2	1
Retailers	444.1	6	2	1	(D)	(D)	(X)	2	(D)	(D)	(X)	(X)
Manufacturers	1,950.5	26	1	1	392.7	21	3	1	1,555.7	27	1	1
Federal Government	230.6	3	1	1	105.9	6	1	1	124.6	2	1	1
State and local Government	50.8	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	43.1	1	1	1	24.5	1	1	1	(D)	(D)	(X)	(X)
All other	792.6	11	1	1	367.9	20	1	1	424.7	7	1	1
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	13	(X)	1	(X)	5	(X)	1
	352, Farm and garden machinery				3523, Farm machinery and equipment				3524, Lawn and garden equipment			
Product shipments:												
As reported in census of manufactures[2]	11,296.1	(X)	(X)	(X)	9,548.9	(X)	(X)	(X)	1,747.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	10,918.6	100	2	(X)	9,098.9	100	2	(X)	1,766.8	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	4,689.6	43	1	1	4,323.8	48	1	1	354.3	20	1	1
Retail stores and outlets	130.6	1	7	1	126.6	1	7	1	4.0	(Z)	5	1
Other manufacturing plants	434.5	4	1	1	410.7	5	1	1	22.4	1	13	1
Other nonmanufacturing plants	23.2	(Z)	11	1	23.2	(Z)	11	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	2,631.5	24	2	1	2,029.0	22	3	1	597.2	34	3	1
Retailers	1,719.8	16	6	1	1,070.3	12	10	1	648.4	37	4	1
Manufacturers	478.0	4	11	1	393.2	4	14	1	56.0	3	17	1
Federal Government	19.8	(Z)	29	1	4.7	(Z)	21	1	10.3	1	41	1
State and local Government	2.1	(Z)	25	1	1.5	(Z)	34	1	.6	(Z)	16	1
Construction companies	7.7	(Z)	59	1	7.7	(Z)	59	1	-	-	-	-
All other	781.7	7	7	1	707.9	8	8	1	73.6	4	9	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	4	(X)	1	(X)	7	(X)	1
	353, Construction, related machinery				3531, Construction machinery				3532, Mining machinery			
Product shipments:												
As reported in census of manufactures[2]	21,395.8	(X)	(X)	(X)	11,569.9	(X)	(X)	(X)	1,785.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	17,765.3	100	40	(X)	10,487.0	100	1	(X)	1,664.6	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	3,234.2	18	1	4	2,879.1	27	1	1	97.3	6	2	1
Retail stores and outlets	82.9	(Z)	1	1	24.3	(Z)	1	1	(D)	(D)	(X)	(X)
Other manufacturing plants	1,838.4	10	1	2	1,604.3	15	1	1	66.6	4	11	1
Other nonmanufacturing plants	452.6	3	1	1	(D)	(D)	(X)	(X)	55.0	3	11	1
Shipments to all other customers:												
Wholesalers	2,784.9	16	3	4	1,430.7	14	3	1	129.0	8	22	2
Retailers	3,159.9	18	1	4	2,439.4	23	1	1	(D)	(D)	(X)	(X)
Manufacturers	1,911.8	11	3	3	520.5	5	5	1	267.4	16	6	2
Federal Government	216.0	1	9	1	101.4	1	7	1	5.5	(Z)	48	1
State and local Government	58.5	(Z)	11	1	(D)	(D)	(X)	(X)	3.8	(Z)	45	1
Construction companies	600.3	3	7	1	335.2	3	12	1	56.7	3	12	1
All other	3,425.6	19	76	19	1,069.9	10	3	1	964.9	58	13	3
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	5	(X)	1	(X)	5	(X)	1
	3533, Oilfield machinery				3534, Elevators and moving stairways				3535, Conveyors and conveying equipment			
Product shipments:												
As reported in census of manufactures[2]	3,219.4	(X)	(X)	(X)	435.1	(X)	(X)	(X)	1,684.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,098.5	100	9	(X)	403.7	100	4	(X)	1,030.5	100	(X)	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	86.0	4	13	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	42.8	2	5	1	(D)	(D)	(X)	(X)	19.0	(Z)	3	1
Other nonmanufacturing plants	150.4	7	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	198.1	9	13	1	40.7	10	28	3	154.9	1	10	1
Retailers	265.7	13	5	1	(D)	(D)	(X)	(X)	83.1	1	26	1
Manufacturers	280.4	13	8	1	68.5	17	1	1	464.3	45	7	3
Federal Government	17.8	1	1	1	8.9	2	6	1	35.1	(Z)	44	1
State and local Government	(D)	(D)	(X)	(X)	11.0	3	16	1	(D)	(D)	(X)	(X)
Construction companies	34.9	2	1	1	(D)	(D)	(X)	(X)	27.5	(Z)	42	1
All other	1,004.6	48	18	4	42.6	11	14	1	170.7	17	(X)	(X)
Resales (percent of total)[5]	(X)	4	(X)	1	(D)	(D)	(X)	(X)	(X)	1	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3536, Hoists, cranes, and monorails				3537, Industrial trucks and tracks				354, Metalworking machinery			
Product shipments:												
As reported in census of manufactures[2]	901.3	(X)	(X)	(X)	1,799.9	(X)	(X)	(X)	13,130.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	564.3	100	8	(X)	1,516.8	100	3	(X)	10,352.5	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	154.2	10	1	1	643.8	6	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	100.7	7	1	1	1,134.1	11	2	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	56.5	1	1	1
Shipments to all other customers:												
Wholesalers	146.8	26	21	4	684.7	45	5	1	1,344.1	13	6	1
Retailers	53.2	9	13	1	296.9	20	9	1	504.7	5	6	1
Manufacturers	213.3	38	8	3	97.4	6	11	1	5,929.9	57	4	1
Federal Government	9.7	2	50	1	37.6	2	19	1	107.5	1	22	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	16.2	3	12	1	(D)	(D)	(X)	(X)	20.9	(Z)	17	1
All other	114.1	20	4	1	58.9	4	7	1	608.1	6	8	1
Resales (percent of total)[5]	(X)	8	(X)	2	(X)	12	(X)	1	(X)	4	(X)	1
	3541, Machine tools, metal-cutting				3542, Machine tools, metal-forming				3544, Special dies, tools, jigs, etc.			
Product shipments:												
As reported in census of manufactures[2]	2,560.5	(X)	(X)	(X)	1,114.7	(X)	(X)	(X)	4,450.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,003.8	100	3	(X)	847.0	100	6	(X)	3,812.8	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	6.4	1	1	1	16.8	(Z)	16	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	85.1	4	1	1	35.6	4	1	1	900.1	24	2	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	224.9	11	10	1	155.7	18	17	3	240.7	6	31	2
Retailers	53.0	3	4	1	11.1	1	33	1	46.7	1	34	1
Manufacturers	1,278.9	64	4	1	569.5	67	6	3	2,362.4	62	9	3
Federal Government	17.3	1	17	1	2.0	(Z)	49	1	59.9	2	38	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	.2	(Z)	1	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	156.7	8	6	1	65.6	8	12	1	129.7	3	30	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	3	(X)	1	(X)	2	(X)	1
	3545, Machine tool accessories				3546, Power driven handtools				3547, Rolling mill machinery			
Product shipments:												
As reported in census of manufactures[2]	2,238.9	(X)	(X)	(X)	1,496.5	(X)	(X)	(X)	361.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,672.4	100	6	(X)	1,114.8	100	6	(X)	316.3	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	58.9	4	6	1	31.9	3	2	1	7.5	2	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	298.9	18	7	1	270.2	24	10	1	(D)	(D)	(X)	(X)
Retailers	108.8	7	23	1	261.3	23	1	1	(D)	(D)	(X)	(X)
Manufacturers	1,015.1	61	7	2	230.8	21	88	1	209.0	66	4	2
Federal Government	14.2	1	14	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Construction companies	(D)	(D)	(X)	(X)	14.2	1	1	1	-	-	-	-
All other	86.2	5	23	1	30.9	3	1	1	94.9	30	6	2
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	5	(X)	1	(X)	9	(X)	1
	3549, Metalworking machinery, n.e.c.				355, Special industry machinery				3551, Food products machinery			
Product shipments:												
As reported in census of manufactures[2]	908.9	(X)	(X)	(X)	8,431.4	(X)	(X)	(X)	1,576.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	583.5	100	6	(X)	7,248.6	100	2	(X)	1,040.1	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	82.5	14	1	1	256.6	4	5	1	34.9	3	36	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	14.9	3	1	1	337.4	5	2	1	11.8	1	5	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	692.3	10	8	1	130.1	13	12	1
Retailers	(D)	(D)	(X)	(X)	350.3	5	6	1	77.5	7	13	1
Manufacturers	263.0	45	11	3	4,458.3	62	3	1	607.0	58	10	3
Federal Government	5.2	1	11	1	78.5	1	19	1	25.7	2	47	1
State and local Government	(D)	(D)	(X)	(X)	41.4	1	14	1	4.1	(Z)	46	1
Construction companies	(D)	(D)	(X)	(X)	15.4	-	35	1	(D)	(D)	(X)	(X)
All other	44.1	8	14	1	1,012.9	14	3	1	144.6	14	14	2
Resales (percent of total)[5]	(X)	10	(X)	1	(X)	7	(X)	1	(X)	6	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3552, Textile machinery				3553, Woodworking machinery				3554, Paper industries machinery			
Product shipments:												
As reported in census of manufactures[2]	857.1	(X)	(X)	(X)	547.3	(X)	(X)	(X)	698.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	794.7	100	7	(X)	469.5	100	9	(X)	573.1	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	35.2	4	18	1	5.9	1	1	1	11.8	2	3	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	63.7	8	31	2	107.5	23	22	4	82.6	14	26	3
Retailers	23.3	3	21	1	182.5	39	6	4	(D)	(D)	(X)	(X)
Manufacturers	583.6	73	8	3	136.7	29	18	4	424.6	74	6	3
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
All other	58.6	7	16	1	8.3	2	51	1	49.7	9	18	2
Resales (percent of total)[5]	(X)	8	(X)	1	(X)	3	(X)	1	(X)	7	(X)	1
	3555, Printing trades machinery				3559, Special industry machinery, n.e.c.				356, General industrial machinery			
Product shipments:												
As reported in census of manufactures[2]	1,287.3	(X)	(X)	(X)	3,465.2	(X)	(X)	(X)	16,032.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	960.8	100	3	(X)	3,410.4	100	4	(X)	15,482.4	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	68.1	7	1	1	100.4	3	1	1	550.8	4	2	1
Retail stores and outlets	-	-	-	-	-	-	-	-	20.1	(Z)	1	1
Other manufacturing plants	57.4	6	1	1	215.2	6	1	1	2,555.5	17	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	134.7	1	40	1
Shipments to all other customers:												
Wholesalers	41.5	4	38	2	266.9	8	13	1	2,502.9	16	3	1
Retailers	(D)	(D)	(X)	(X)	43.3	1	21	1	467.8	3	6	1
Manufacturers	610.8	64	4	2	2,095.7	61	6	2	6,196.0	40	3	1
Federal Government	12.2	1	65	1	39.0	1	2	1	203.9	1	6	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	216.9	1	3	1
Construction companies	-	-	-	-	8.5	(Z)	41	1	631.0	4	20	1
All other	147.5	15	1	1	604.1	18	4	1	2,002.7	13	19	2
Resales (percent of total)[5]	(X)	9	(X)	1	(X)	7	(X)	1	(X)	4	(X)	1
	3561, Pumps and pumping equipment				3562, Ball and roller bearings				3563, Air and gas compressors			
Product shipments:												
As reported in census of manufactures[2]	3,522.8	(X)	(X)	(X)	2,444.5	(X)	(X)	(X)	1,923.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	3,740.0	100	13	(X)	2,131.2	100	2	(X)	1,594.4	100	10	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	132.3	4	5	1	137.4	6	1	1	79.0	5	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	86.0	2	1	1	(D)	(D)	(X)	(X)	68.3	4	37	1
Other nonmanufacturing plants	39.1	1	50	1	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	844.9	23	6	3	219.4	10	6	1	436.4	27	5	3
Retailers	156.0	4	13	1	(D)	(D)	(X)	(X)	97.7	6	13	1
Manufacturers	1,269.9	34	2	4	944.5	44	3	1	413.9	26	6	1
Federal Government	67.5	2	2	1	26.2	1	17	1	33.5	2	19	1
State and local Government	22.8	1	10	1	(D)	(D)	(X)	(X)	14.1	1	33	1
Construction companies	184.1	5	50	2	-	-	-	-	160.5	10	35	3
All other	937.5	25	39	7	59.5	3	3	1	269.3	17	12	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	1	(X)	1	(X)	7	(X)	1
	3564, Blowers and fans				3566, Speed changers, drives, and gears				3568, Power transmission equipment, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	1,422.3	(X)	(X)	(X)	1,199.7	(X)	(X)	(X)	1,710.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,051.7	100	9	(X)	1,045.6	100	8	(X)	1,272.2	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	79.7	6	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	18.6	2	45	1	33.8	3	5	1	170.5	13	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	1.7	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	99.4	9	20	1	187.0	18	3	1	308.2	24	6	1
Retailers	34.3	3	4	1	40.6	4	11	1	(D)	(D)	(X)	(X)
Manufacturers	460.9	44	10	1	619.4	59	13	3	482.1	38	3	1
Federal Government	14.4	1	13	1	4.8	(Z)	23	1	26.0	2	23	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	2.9	(Z)	40	1
Construction companies	81.0	8	13	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	255.1	24	13	2	57.0	5	1	1	86.3	7	13	1
Resales (percent of total)[5]	(X)	8	(X)	1	(X)	2	(X)	1	(X)	6	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3569, General industrial machinery, n.e.c.				357, Office and computing machines				3573, Electronic computing equipment			
Product shipments:												
As reported in census of manufactures[2]	2,689.4	(X)	(X)	(X)	15,858.6	(X)	(X)	(X)	12,673.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,908.1	100	9	(X)	12,483.9	100	2	(X)	9,935.6	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	4,186.2	34	1	1	3,120.4	31	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	93.6	1	1	1	(D)	(D)	(X)	(X)
Other manufacturing plants	47.1	2	25	1	1,226.7	10	1	1	1,097.6	11	1	1
Other nonmanufacturing plants	20.0	1	1	1	124.9	1	4	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	252.5	13	19	2	1,001.8	8	11	1	638.4	6	9	1
Retailers	64.7	3	20	1	576.5	5	19	1	316.2	3	35	1
Manufacturers	891.0	47	13	4	1,718.3	14	6	1	1,495.2	15	6	1
Federal Government	29.1	2	18	1	722.6	6	5	1	653.8	7	4	1
State and local Government	159.0	8	2	1	282.9	2	4	1	258.2	3	4	1
Construction companies	129.9	7	42	3	51.6	(Z)	3	1	47.2	(Z)	1	1
All other	294.8	15	11	1	2,498.7	20	4	1	2,159.8	22	4	1
Resales (percent of total)[5]	(X)	8	(X)	4	(X)	5	(X)	1	(X)	4	(X)	1
	3574, Calculating, accounting machines				3576, Scales, balances, except laboratory				3579, Office machines, typewriters, etc.			
Product shipments:												
As reported in census of manufactures[2]	836.2	(X)	(X)	(X)	328.9	(X)	(X)	(X)	2,020.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	616.4	100	2	(X)	260.3	100	9	(X)	1,625.9	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	884.9	54	1	3
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	91.0	15	4	1	66.7	26	28	5	203.5	13	46	5
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	70.9	4	18	1
Manufacturers	70.2	11	3	1	93.4	36	4	2	52.3	3	13	1
Federal Government	15.5	3	1	1	1.3	1	21	1	47.9	3	53	2
State and local Government	1.6	(Z)	1	1	2.2	1	39	1	18.9	1	2	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	96.1	16	5	1	22.0	8	7	1	195.9	12	1	1
Resales (percent of total)[5]	(X)	12	(X)	1	(X)	1	(X)	1	(X)	12	(X)	1
	358, Refrigeration and service machinery				3581, Automatic merchandising machines				3582, Commercial laundry equipment			
Product shipments:												
As reported in census of manufactures[2]	11,084.7	(X)	(X)	(X)	396.2	(X)	(X)	(X)	233.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	8,854.6	100	1	(X)	355.0	100	8	(X)	161.4	100	14	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	956.4	11	1	1	(D)	(D)	(X)	(X)	7.0	4	15	1
Retail stores and outlets	4.4	(Z)	1	1	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	1,849.8	21	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	6.6	(Z)	1	1	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	2,638.5	30	2	1	150.0	42	10	3	84.9	53	17	4
Retailers	564.2	6	10	1	6.7	2	25	1	(D)	(D)	(X)	(X)
Manufacturers	1,301.7	15	2	1	75.5	21	1	2	10.1	6	33	2
Federal Government	69.3	1	10	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	92.3	1	8	1	(D)	(D)	(X)	(X)	6.3	4	31	1
Construction companies	512.1	6	2	1	-	-	-	-	(D)	(D)	(X)	(X)
All other	859.2	10	3	1	79.3	22	29	5	41.2	26	19	4
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	9	(X)	1	(X)	15	(X)	3
	3585, Refrigeration, heating equipment				3586, Measuring and dispensing pumps				3589, Service industry machinery, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	8,501.7	(X)	(X)	(X)	265.6	(X)	(X)	(X)	1,627.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	7,133.7	100	1	(X)	149.2	100	9	(X)	1,040.2	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	892.1	13	1	1	(D)	(D)	(X)	(X)	10.0	1	15	1
Retail stores and outlets	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	1,838.9	26	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,828.0	26	2	1	78.2	52	10	1	497.4	48	8	3
Retailers	344.5	5	7	1	(D)	(D)	(X)	(X)	193.7	19	26	4
Manufacturers	1,077.5	15	2	1	14.9	10	1	1	109.8	11	4	1
Federal Government	40.3	1	7	1	3.1	2	61	1	21.4	2	27	1
State and local Government	25.7	(Z)	2	1	(D)	(D)	(X)	(X)	57.4	6	12	1
Construction companies	481.6	7	2	1	-	-	-	-	28.4	3	5	1
All other	597.1	8	2	1	30.6	20	12	1	111.1	11	8	1
Resales (percent of total)[5]	(X)	4	(X)	1	(D)	(D)	(X)	(X)	(X)	7	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	359, Misc. machinery, except electrical				3592, Carburetors, pistons, rings, etc.				3599, Machinery, except electrical, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	7,739.5	(X)	(X)	(X)	1,298.5	(X)	(X)	(X)	6,441.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,310.0	100	66	(X)	1,233.4	100	1	(X)	4,076.5	100	70	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	77.7	1	7	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	206.5	4	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	272.5	5	4	1	164.4	13	1	1	108.1	3	10	1
Other nonmanufacturing plants	3.3	(Z)	95	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	523.1	10	88	6	88.8	7	9	1	434.3	11	(X)	(X)
Retailers	135.8	3	24	1	7.7	1	39	1	128.1	3	25	1
Manufacturers	3,272.4	62	65	3	674.3	55	2	1	2,598.1	64	68	3
Federal Government	208.6	4	20	1	3.7	(Z)	12	1	204.9	5	21	1
State and local Government	7.7	(Z)	27	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	63.3	1	47	1	-	-	11	-	63.3	2	47	1
All other	539.0	10	14	2	51.2	4	1	1	487.9	12	15	2
Resales (percent of total)[5]	(X)	6	(X)	1	(D)	(D)	(X)	(X)	(X)	4	(X)	1
	36, Electric, electronic equipment				361, Electric distributing equipment				3612, Transformers			
Product shipments:												
As reported in census of manufactures[2]	83,002.0	(X)	(X)	(X)	5,416.2	(X)	(X)	(X)	2,117.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	65,766.1	100	1	(X)	3,648.1	100	4	(X)	1,479.3	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	12,307.9	19	1	1	424.2	12	6	1	(D)	(D)	19	2
Retail stores and outlets	1,589.9	2	1	1	-	-	1	1	-	-	-	-
Other manufacturing plants	7,863.2	12	1	1	296.9	8	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	190.2	(Z)	1	1	4.2	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	11,789.3	18	1	1	911.5	25	4	1	294.4	20	3	1
Retailers	4,495.0	7	2	1	25.2	1	23	1	(D)	(D)	(X)	(X)
Manufacturers	14,419.2	22	1	1	822.9	23	5	1	319.2	22	7	2
Federal Government	6,049.9	9	1	1	78.7	2	4	1	24.2	2	14	1
State and local Government	278.6	(Z)	3	1	21.6	1	4	1	19.6	1	4	1
Construction companies	329.2	1	10	1	41.1	1	23	1	22.8	2	10	1
All other	6,453.6	10	3	1	1,021.9	28	11	2	566.2	38	12	3
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	7	(X)	1	(X)	3	(X)	2
	3613, Switchgear, switchboard apparatus				362, Electrical industrial apparatus				3621, Motors and generators			
Product shipments:												
As reported in census of manufactures[2]	3,298.4	(X)	(X)	(X)	9,802.9	(X)	(X)	(X)	4,976.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,168.9	100	5	(X)	7,755.6	100	2	(X)	3,887.3	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	497.4	6	2	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	(X)	(X)	2.3	(Z)	1	1	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	902.5	12	1	1	606.1	16	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	10.1	(Z)	6	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	617.1	28	6	2	1,372.8	18	3	1	440.6	11	4	1
Retailers	(D)	(D)	(X)	(X)	306.0	4	5	1	192.4	5	1	1
Manufacturers	503.7	23	7	2	3,779.8	49	3	1	1,942.9	50	2	1
Federal Government	54.5	3	2	1	210.0	3	15	1	143.2	4	19	1
State and local Government	2.0	(Z)	18	1	16.2	(Z)	14	1	8.8	(Z)	24	1
Construction companies	18.3	1	51	1	83.8	1	38	1	38.5	1	67	1
All other	455.7	21	21	3	574.8	7	6	1	202.4	5	12	1
Resales (percent of total)[5]	(X)	10	(X)	2	(X)	5	(X)	1	(X)	1	(X)	1
	3622, Industrial controls				3623, Welding apparatus, electric				3624, Carbon and graphite products			
Product shipments:												
As reported in census of manufactures[2]	2,429.1	(X)	(X)	(X)	1,035.0	(X)	(X)	(X)	663.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,611.2	100	3	(X)	888.5	100	10	(X)	686.7	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	62.9	4	18	1	105.3	12	1	1	3.5	1	13	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	160.4	10	1	1	(D)	(D)	(X)	(X)	49.1	7	1	1
Other nonmanufacturing plants	2.7	(Z)	23	1	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	575.3	36	3	1	275.5	31	9	3	10.8	2	2	1
Retailers	21.5	1	18	1	(D)	(D)	(X)	(X)	6.3	1	1	1
Manufacturers	595.0	37	7	2	368.9	42	21	5	550.5	80	3	1
Federal Government	19.6	1	4	1	5.6	1	15	1	8.9	1	2	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	15.2	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	154.6	10	1	1	38.1	4	7	1	55.9	8	1	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	16	(X)	2	(D)	(D)	(X)	(X)

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3629, Elec. industrial apparatus, n.e.c.				363, Household appliances				3631, Household cooking equipment			
Product shipments:												
As reported in census of manufactures[2]	699.6	(X)	(X)	(X)	10,167.2	(X)	(X)	(X)	1,806.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	677.3	100	6	(X)	8,908.5	100	1	(X)	1,641.7	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	3,407.7	38	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	202.5	2	1	1	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	172.5	2	7	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	1.3	(Z)	1	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	70.3	10	18	2	2,386.0	27	2	1	609.6	37	1	1
Retailers	(D)	(D)	(X)	(X)	1,925.3	22	3	1	480.4	29	1	1
Manufacturers	321.8	48	7	3	263.8	3	6	1	74.5	5	4	1
Federal Government	32.4	5	53	2	34.5	(Z)	2	1	14.1	1	4	1
State and local Government	3.8	1	16	1	6.9	(Z)	67	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	3.7	(Z)	19	1	.8	(Z)	1	1
All other	121.1	18	22	3	504.3	6	1	1	22.8	1	11	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	4	(X)	1	(X)	1	(X)	1
	3632, Household refrigerators, freezers				3633, Household laundry equipment				3634, Electric housewares and fans			
Product shipments:												
As reported in census of manufactures[2]	2,005.6	(X)	(X)	(X)	1,697.3	(X)	(X)	(X)	2,304.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,829.2	100	1	(X)	1,527.8	100	1	(X)	1,611.7	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,122.9	61	1	1	1,242.7	81	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	46.1	3	3	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	226.2	12	3	1	48.6	3	1	1	762.3	47	3	2
Retailers	206.6	11	1	1	136.8	9	1	1	456.4	28	11	2
Manufacturers	37.8	2	1	1	13.6	1	1	1	45.1	3	29	1
Federal Government	(D)	(D)	(X)	(X)	-	-	-	-	13.2	1	1	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
All other	(D)	(D)	(X)	(X)	66.5	4	1	1	45.0	3	4	1
Resales (percent of total)[5]	(X)	5	(X)	(NA)	(X)	1	(X)	1	(X)	8	(X)	1
	3635, Household vacuum cleaners				3636, Sewing machines				3639, Household appliances, n.e.c.			
Product shipments:												
As reported in census of manufactures[2]	710.4	(X)	(X)	(X)	260.4	(X)	(X)	(X)	1,383.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	574.3	100	5	(X)	261.1	100	6	(X)	1,462.7	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	294.2	20	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	75.2	5	16	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	138.6	24	16	3	29.1	11	30	3	571.7	39	2	1
Retailers	217.3	38	3	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	41.4	3	20	1
Federal Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	2.1	(Z)	7	1
State and local Government	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
All other	38.3	7	11	1	15.1	6	17	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	10	(X)	2	(X)	2	(X)	1
	364, Electric lighting, wiring equipment				3643, Current-carrying wiring devices				3644, Noncurrent-carrying wiring devices			
Product shipments:												
As reported in census of manufactures[2]	8,001.0	(X)	(X)	(X)	1,824.9	(X)	(X)	(X)	1,315.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,533.6	100	2	(X)	1,307.2	100	4	(X)	858.6	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,035.0	19	2	1	71.3	5	29	1	.7	(Z)	14	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	506.2	9	2	1	62.1	5	13	1	20.7	2	1	1
Other nonmanufacturing plants	2.6	(Z)	66	1	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	2,022.3	37	4	1	468.3	36	5	2	598.9	70	4	1
Retailers	494.6	9	8	1	33.5	3	42	1	6.4	1	3	1
Manufacturers	971.0	18	7	1	516.9	40	6	2	(D)	(D)	(X)	(X)
Federal Government	52.3	1	20	1	17.3	1	39	1	8.8	1	7	1
State and local Government	25.5	(Z)	11	1	3.8	(Z)	46	1	10.6	1	20	1
Construction companies	14.5	(Z)	37	1	(D)	(D)	(X)	(X)	11.2	1	47	1
All other	409.6	7	5	1	131.7	10	12	1	131.1	15	10	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	6	(X)	1	(X)	3	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3646, Commercial lighting fixtures				3647, Vehicular lighting equipment				365, Radio, TV receiving equipment			
Product shipments:												
As reported in census of manufactures[2]	935.0	(X)	(X)	(X)	646.1	(X)	(X)	(X)	5,869.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	593.2	100	7	(X)	663.7	100	4	(X)	4,738.8	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	156.3	26	2	2	-	-	-	-	852.9	18	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	255.1	5	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	786.3	17	2	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	1.0	(Z)	17	1
Shipments to all other customers:												
Wholesalers	318.1	54	10	2	(D)	(D)	(X)	(X)	1,686.5	36	2	1
Retailers	25.6	4	17	1	(D)	(D)	(X)	(X)	856.2	18	7	1
Manufacturers	54.8	9	8	1	123.1	19	15	2	155.6	3	11	1
Federal Government	(D)	(D)	(X)	(X)	14.9	2	51	1	10.2	(Z)	26	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	2.7	(Z)	57	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
All other	35.0	6	28	2	59.5	9	2	1	132.2	3	16	1
Resales (percent of total)[5]	(X)	1	(X)	1	(D)	(D)	(X)	(X)	(X)	4	(X)	1
	3651, Radio and TV receiving sets				366, Communication equipment				3661, Telephone and telegraph apparatus			
Product shipments:												
As reported in census of manufactures[2]	4,730.8	(X)	(X)	(X)	21,169.7	(X)	(X)	(X)	7,118.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,367.1	100	2	(X)	17,600.0	100	1	(X)	6,406.5	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	5,108.5	29	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	1,117.9	6	1	1	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	535.7	3	2	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	123.5	1	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,464.7	34	2	1	976.9	6	10	1	162.1	3	10	1
Retailers	761.0	17	7	1	293.7	2	7	1	14.4	(Z)	23	1
Manufacturers	150.9	3	11	1	1,971.4	11	3	1	158.0	2	2	1
Federal Government	(D)	(D)	(X)	(X)	4,901.4	28	1	1	76.5	1	4	1
State and local Government	(D)	(D)	(X)	(X)	172.8	1	1	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	113.4	1	4	1	(D)	(D)	(X)	(X)
All other	125.7	3	17	1	2,284.8	13	8	1	405.3	6	5	1
Resales (percent of total)[5]	(X)	4	(X)	1	(X)	5	(X)	1	(D)	(D)	(X)	(X)
	3662, Radio and TV communication equipment				367, Electronic components, accessories				3674, Semiconductors, related devices			
Product shipments:												
As reported in census of manufactures[2]	14,051.0	(X)	(X)	(X)	14,274.7	(X)	(X)	(X)	4,532.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	11,176.4	100	2	(X)	11,180.7	100	2	(X)	3,977.8	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	521.4	5	5	1	67.1	2	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	3,242.7	29	1	1	1,406.4	35	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	46.7	(Z)	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	814.9	7	11	1	1,102.2	10	2	1	376.5	9	3	1
Retailers	279.3	2	7	1	168.1	2	19	1	(D)	(D)	(X)	(X)
Manufacturers	1,813.4	16	3	1	4,829.8	43	3	1	1,821.9	46	7	2
Federal Government	4,824.9	43	1	1	529.8	5	5	1	89.6	2	1	1
State and local Government	(D)	(D)	(X)	(X)	7.5	(Z)	6	1	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	1,879.5	17	9	1	718.7	6	3	1	187.7	5	7	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	8	(X)	1	(X)	11	(X)	1
	3675, Electronic capacitors				3676, Electronic resistors				3677, Electronic coils and transformers			
Product shipments:												
As reported in census of manufactures[2]	736.1	(X)	(X)	(X)	583.0	(X)	(X)	(X)	605.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	500.8	100	6	(X)	530.9	100	3	(X)	494.0	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	25.8	5	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Other manufacturing plants	44.5	9	1	1	48.5	9	1	1	114.5	23	10	3
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	42.6	9	19	1	129.5	24	7	1	36.9	7	15	1
Retailers	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Manufacturers	371.0	74	5	2	323.3	61	4	1	259.3	52	16	4
Federal Government	17.8	4	55	2	7.6	1	3	1	25.0	5	28	1
State and local Government	-	-	-	-	-	-	-	-	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
All other	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	12.9	3	10	1
Resales (percent of total)[5]	(X)	9	(X)	1	(X)	12	(X)	1	(X)	3	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3678, Electronic connectors				3679, Electronic components, n.e.c.				369, Misc. electrical equipment, supplies			
Product shipments:												
As reported in census of manufactures[2]	986.0	(X)	(X)	(X)	5,574.1	(X)	(X)	(X)	8,300.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	760.0	100	2	(X)	4,090.4	100	2	(X)	6,394.0	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	51.7	7	1	1	346.9	8	8	1	460.6	7	3	1
Retail stores and outlets	-	-	-	-	-	-	-	-	.2	(Z)	1	1
Other manufacturing plants	29.3	4	1	1	1,341.8	33	1	1	1,420.4	22	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	.8	(Z)	1	1
Shipments to all other customers:												
Wholesalers	62.9	8	8	1	332.3	8	6	1	1,330.8	21	3	1
Retailers	(D)	(D)	(X)	(X)	117.7	3	21	1	425.9	7	3	1
Manufacturers	452.5	60	1	1	1,347.2	33	6	1	1,618.4	25	2	1
Federal Government	39.2	5	7	1	262.7	6	10	1	233.0	4	5	1
State and local Government	(D)	(D)	(X)	(X)	6.9	(Z)	8	1	25.5	(Z)	17	1
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	70.9	1	1	1
All other	114.8	15	4	1	308.5	8	4	1	807.4	13	4	1
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	7	(X)	1	(X)	9	(X)	1
	3694, Engine electrical equipment				3699, Electrical equip., supplies, n.e.c.				37, Transportation equipment			
Product shipments:												
As reported in census of manufactures[2]	3,049.3	(X)	(X)	(X)	878.8	(X)	(X)	(X)	163,607.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	2,616.1	100	1	(X)	755.1	100	5	(X)	157,319.9	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	11.5	2	1	1	59,941.8	38	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	15,296.8	10	1	1
Other manufacturing plants	(D)	(D)	(X)	(X)	144.2	19	1	1	23,717.2	15	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	1,844.8	1	2	1
Shipments to all other customers:												
Wholesalers	418.6	16	3	1	136.0	18	8	1	5,541.7	4	3	1
Retailers	24.1	1	22	1	47.8	6	15	1	5,511.4	4	6	1
Manufacturers	755.4	29	3	1	214.3	28	14	3	14,352.6	9	1	1
Federal Government	14.6	1	1	1	47.4	6	3	1	18,368.6	12	1	1
State and local Government	(D)	(D)	(X)	(X)	2.1	(Z)	7	1	394.1	(Z)	1	1
Construction companies	-	-	-	-	69.7	9	1	1	79.6	(Z)	15	1
All other	71.8	3	11	1	81.5	11	18	2	12,271.3	8	2	1
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	7	(X)	1	(X)	2	(X)	1
	371, Motor vehicles and equipment				3711, Motor vehicles and car bodies				3713, Truck and bus bodies			
Product shipments:												
As reported in census of manufactures[2]	116,003.4	(X)	(X)	(X)	72,979.1	(X)	(X)	(X)	1,880.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	116,332.2	100	1	(X)	66,417.7	100	1	(X)	1,197.9	100	11	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	59,339.7	51	1	1	(D)	(D)	(X)	(X)	15.7	1	1	1
Retail stores and outlets	15,244.2	13	1	1	277.6	(Z)	1	1	-	-	-	-
Other manufacturing plants	22,354.0	19	1	1	(D)	(D)	(X)	(X)	9.8	1	12	1
Other nonmanufacturing plants	258.6	(Z)	13	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	3,248.1	3	3	1	(D)	(D)	(X)	(X)	500.7	42	12	4
Retailers	2,337.5	2	9	1	(D)	(D)	(X)	(X)	241.3	20	25	4
Manufacturers	9,496.3	8	2	1	593.2	1	9	1	170.5	14	27	3
Federal Government	360.9	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	143.0	(Z)	2	1	109.1	(Z)	1	1	32.2	3	7	1
Construction companies	33.2	(Z)	35	1	-	-	-	2	22.2	2	52	1
All other	3,516.7	3	5	1	(D)	(D)	(X)	(X)	146.3	12	30	3
Resales (percent of total)[5]	(X)	2	(X)	1	(X)	1	(X)	1	(X)	3	(X)	1
	3715, Truck trailers				372, Aircraft and parts				3721, Aircraft			
Product shipments:												
As reported in census of manufactures[2]	1,807.0	(X)	(X)	(X)	22,808.9	(X)	(X)	(X)	12,052.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,391.0	100	3	(X)	20,046.1	100	1	(X)	10,161.9	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	680.9	49	1	2	218.7	1	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	219.9	2	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	1,295.8	6	1	1	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	58.6	4	15	1	978.8	5	1	1	813.1	8	1	1
Retailers	166.5	12	6	1	47.0	(Z)	8	1	(D)	(D)	(X)	(X)
Manufacturers	156.4	11	1	1	3,422.4	17	2	1	(D)	(D)	(X)	(X)
Federal Government	(D)	(D)	(X)	(X)	8,812.7	44	1	1	4,563.4	45	1	1
State and local Government	.5	(Z)	1	1	14.6	(Z)	1	1	(D)	(D)	(X)	(X)
Construction companies	1.9	(Z)	30	1	(D)	(D)	(X)	(X)	-	-	-	-
All other	232.9	17	17	2	4,434.3	22	1	1	3,675.7	36	1	1
Resales (percent of total)[5]	(X)	3	(X)	1	(X)	2	(X)	1	(X)	1	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3724, Aircraft engines and engine parts				3728, Aircraft equipment, n.e.c.				373, Ship, boat building, repairing			
Product shipments:												
As reported in census of manufactures[2]	4,994.6	(X)	(X)	(X)	5,761.5	(X)	(X)	(X)	8,092.4	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,594.8	100	2	(X)	4,274.4	100	2	(X)	7,212.6	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	58.3	1	1	1	3.8	(Z)	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	11.1	(Z)	3	1
Other manufacturing plants	(D)	(D)	(X)	(X)	437.7	10	1	1	33.7	(Z)	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	131.9	2	1	1
Shipments to all other customers:												
Wholesalers	43.4	1	5	1	122.3	3	1	1	393.0	5	23	1
Retailers	(D)	(D)	(X)	(X)	10.9	(Z)	17	1	1,031.4	14	26	3
Manufacturers	1,531.9	27	4	1	(D)	(D)	(X)	(X)	191.4	3	1	1
Federal Government	2,365.4	42	1	1	1,882.7	44	2	1	3,124.7	43	3	2
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	30.0	(Z)	2	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	24.9	(Z)	6	1
All other	189.6	3	8	1	569.1	13	2	1	2,236.7	31	8	2
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	2	(X)	1	(X)	1	(X)	1
	3731, Ship building and repairing				3732, Boat building and repairing				3743, Railroad equipment			
Product shipments:												
As reported in census of manufactures[2]	6,270.3	(X)	(X)	(X)	1,822.1	(X)	(X)	(X)	4,001.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	5,599.6	100	4	(X)	1,612.9	100	18	(X)	3,441.5	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	110.4	2	9	1	282.5	18	31	5	(D)	(D)	(X)	(X)
Retailers	139.2	2	34	1	892.2	55	29	8	(D)	(D)	(X)	(X)
Manufacturers	(D)	(D)	(X)	(X)	24.1	1	10	1	417.3	12	5	1
Federal Government	3,111.4	56	3	2	13.3	1	7	1	(D)	(D)	(X)	(X)
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	1,919.0	34	9	2	317.7	20	16	4	1,919.9	56	1	1
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	2	(X)	1	(X)	2	(X)	1
	376, Guided missiles, space vehicles				3761, Guided missiles, space vehicles				3764, Space propulsion units and parts			
Product shipments:												
As reported in census of manufactures[2]	8,660.7	(X)	(X)	(X)	4,848.2	(X)	(X)	(X)	930.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	6,102.4	100	1	(X)	4,764.4	100	1	(X)	728.9	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	-	-	-	-	-	-	-	-
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	104.2	2	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Retailers	(D)	(D)	(X)	(X)	-	-	-	-	-	-	-	-
Manufacturers	136.8	2	1	1	(D)	(D)	(X)	(X)	22.5	3	8	1
Federal Government	5,797.1	95	1	1	4,682.3	98	1	1	660.8	91	1	1
State and local Government	-	-	-	-	-	-	-	-	-	-	-	-
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	50.1	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	1	(X)	1	(X)	1	(X)	1	(D)	(D)	(X)	(X)
	3769, Space vehicle equipment, n.e.c.				379, Misc. transportation equipment				3792, Travel trailers and campers			
Product shipments:												
As reported in census of manufactures[2]	882.4	(X)	(X)	(X)	3,193.0	(X)	(X)	(X)	1,477.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	609.1	100	2	(X)	2,266.5	100	6	(X)	915.5	100	9	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	-	-	-	-	71.1	3	1	1	(D)	(D)	(X)	(X)
Retail stores and outlets	-	-	-	-	.3	(Z)	90	1	-	-	-	-
Other manufacturing plants	43.8	7	1	1	47.8	2	5	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	10.5	(Z)	84	1	-	-	-	-
Shipments to all other customers:												
Wholesalers	(D)	(D)	(X)	(X)	656.5	29	12	2	449.1	49	13	4
Retailers	(D)	(D)	(X)	(X)	570.8	25	11	2	379.7	41	13	4
Manufacturers	(D)	(D)	(X)	(X)	528.2	23	1	1	54.6	6	7	1
Federal Government	454.1	75	2	1	266.5	12	1	1	.7	(Z)	62	1
State and local Government	-	-	-	-	2.7	(Z)	59	1	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	.3	(Z)	1	1	-	-	-	-
All other	20.3	3	1	1	111.6	5	34	2	23.9	3	29	1
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	4	(X)	1	(X)	3	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	38, Instruments, related products				3811, Engineering, scientific instruments				382, Measuring, controlling devices			
Product shipments:												
As reported in census of manufactures[2]	26,949.1	(X)	(X)	(X)	1,849.5	(X)	(X)	(X)	7,441.1	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	19,403.3	100	1	(X)	1,756.4	100	4	(X)	5,436.3	100	3	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	4,095.7	21	1	1	117.0	7	12	1	325.8	6	1	1
Retail stores and outlets	8.4	(Z)	12	1	-	-	-	-	2.2	(Z)	1	1
Other manufacturing plants	997.6	5	2	1	39.1	2	1	1	331.6	6	6	1
Other nonmanufacturing plants	316.6	2	5	1	(D)	(D)	(X)	(X)	45.4	1	35	1
Shipments to all other customers:												
Wholesalers	2,599.8	13	4	1	170.5	10	15	1	623.9	11	9	1
Retailers	2,266.4	12	5	1	59.0	3	21	1	165.2	3	15	1
Manufacturers	3,563.1	18	3	1	447.8	25	7	1	2,322.5	43	3	1
Federal Government	1,464.7	8	2	1	407.8	23	3	1	553.8	10	4	1
State and local Government	245.8	1	16	1	(D)	(D)	(X)	(X)	133.6	2	27	1
Construction companies	183.8	1	19	1	38.3	2	23	1	108.1	2	31	1
All other	3,661.3	19	3	1	432.1	25	4	1	824.0	15	5	1
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	4	(X)	1	(X)	7	(X)	1
	3822, Environmental controls				3823, Process control instruments				3824, Fluid meters and counting devices			
Product shipments:												
As reported in census of manufactures[2]	1,106.4	(X)	(X)	(X)	2,061.1	(X)	(X)	(X)	634.3	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	965.1	100	3	(X)	1,405.4	100	5	(X)	436.2	100	2	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	35.3	3	1	1	23.5	5	1	1
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	62.1	6	6	1	24.5	2	4	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	32.5	3	48	2	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	239.8	25	10	2	87.3	6	22	1	57.0	13	1	1
Retailers	11.2	1	8	1	50.2	4	25	1	(D)	(D)	(X)	(X)
Manufacturers	462.9	48	1	1	878.7	63	6	2	107.7	25	8	1
Federal Government	9.5	1	12	1	26.4	2	10	1	9.6	2	1	1
State and local Government	8.8	1	5	1	(D)	(D)	(X)	(X)	53.1	12	4	1
Construction companies	(D)	(D)	(X)	(X)	70.9	5	47	2	3.1	1	5	1
All other	25.4	3	3	1	215.8	15	2	1	89.7	21	2	1
Resales (percent of total)[5]	(X)	18	(X)	1	(X)	5	(X)	1	(X)	9	(X)	1
	3825, Instruments to measure electricity				3829, Measur'g, control'g devices, n.e.c.				3832, Optical instruments and lenses			
Product shipments:												
As reported in census of manufactures[2]	2,566.2	(X)	(X)	(X)	1,073.1	(X)	(X)	(X)	1,299.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,615.4	100	5	(X)	1,004.8	100	8	(X)	953.9	100	6	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	139.1	9	1	1	(D)	(D)	(X)	(X)	16.9	2	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	118.0	7	1	1	(D)	(D)	(X)	(X)	27.9	3	1	1
Other nonmanufacturing plants	9.2	1	28	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	169.7	11	26	2	62.1	6	15	1	127.7	13	13	2
Retailers	56.1	3	13	1	(D)	(D)	(X)	(X)	68.9	7	15	1
Manufacturers	572.1	35	6	2	300.4	30	13	3	262.9	28	11	2
Federal Government	300.2	19	6	1	208.0	21	5	1	247.4	26	10	2
State and local Government	7.2	(Z)	15	1	49.9	5	72	3	(D)	(D)	(X)	(X)
Construction companies	4.4	(Z)	10	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	239.3	15	14	2	253.3	25	6	1	161.4	17	12	2
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	3	(X)	1	(X)	6	(X)	1
	384, Medical instruments, supplies				3841, Surgical and medical instruments				3842, Surgical appliances and supplies			
Product shipments:												
As reported in census of manufactures[2]	4,965.0	(X)	(X)	(X)	1,891.3	(X)	(X)	(X)	2,413.0	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	3,595.4	100	4	(X)	1,226.7	100	4	(X)	1,783.6	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	461.8	13	4	1	195.3	16	8	1	253.0	14	5	1
Retail stores and outlets	.8	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	107.2	3	1	1	56.7	5	1	1	48.7	3	2	1
Other nonmanufacturing plants	83.4	2	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	1,083.0	30	5	1	246.2	20	3	1	612.1	34	7	2
Retailers	559.8	16	18	2	109.7	9	11	1	213.5	12	5	1
Manufacturers	132.9	4	16	1	39.0	3	34	1	88.0	5	20	1
Federal Government	153.3	4	3	1	76.3	6	4	1	58.2	3	3	1
State and local Government	40.3	1	8	1	29.3	2	7	1	7.3	(Z)	9	1
Construction companies	18.7	1	8	1	10.7	1	13	1	8.0	(Z)	6	1
All other	954.2	27	8	2	458.9	37	8	2	417.4	23	14	3
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	5	(X)	1	(X)	5	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3843, Dental equipment and supplies				3851, Ophthalmic goods				3861, Photographic equipment and supplies			
Product shipments:												
As reported in census of manufactures[2]	660.7	(X)	(X)	(X)	844.3	(X)	(X)	(X)	9,217.5	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	582.3	100	20	(X)	513.6	100	8	(X)	6,416.4	100	1	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	13.4	2	12	1	52.2	10	1	1	3,076.2	48	1	1
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other manufacturing plants	1.8	(Z)	1	1	(D)	(D)	(X)	(X)	466.5	7	1	1
Other nonmanufacturing plants	(D)	(D)	(X)	(X)	-	-	-	-	(D)	(D)	(X)	(X)
Shipments to all other customers:												
Wholesalers	224.6	39	17	8	191.6	37	16	4	305.1	5	10	1
Retailers	236.6	41	41	10	176.7	34	6	2	780.6	12	4	1
Manufacturers	5.9	1	17	1	45.3	9	31	3	293.2	5	4	1
Federal Government	18.8	3	21	1	1.5	(Z)	25	1	95.7	1	5	1
State and local Government	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	18.1	(Z)	7	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
All other	75.0	13	17	3	33.1	6	1	1	1,227.1	19	3	1
Resales (percent of total)[5]	(X)	6	(X)	1	(X)	10	(X)	2	(X)	3	(X)	1
	39, Miscellaneous manufacturing industries				391, Jewelry, silver and plated ware				3911, Jewelry, precious metal			
Product shipments:												
As reported in census of manufactures[2]	18,064.1	(X)	(X)	(X)	3,036.9	(X)	(X)	(X)	1,907.7	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	14,926.8	100	45	(X)	2,250.1	100	4	(X)	1,623.7	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	1,102.3	7	3	2	356.5	16	3	1	(D)	(D)	(X)	(X)
Retail stores and outlets	208.4	1	9	1	54.3	2	23	1	25.0	2	51	1
Other manufacturing plants	138.4	1	4	1	17.9	1	21	1	17.1	1	21	1
Other nonmanufacturing plants	39.3	(Z)	1	1	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	4,567.3	30	3	7	650.7	29	8	2	454.7	28	9	2
Retailers	5,156.4	35	69	16	657.6	29	8	2	506.4	31	10	2
Manufacturers	1,758.8	12	5	3	293.7	13	17	2	109.2	7	33	2
Federal Government	736.7	5	1	1	2.8	(Z)	5	1	(D)	(D)	(X)	(X)
State and local Government	78.2	1	24	1	2.6	(Z)	7	1	2.4	(Z)	7	1
Construction companies	65.4	(Z)	30	1	-	-	-	-	-	-	-	-
All other	1,075.7	7	5	2	214.0	10	5	1	158.4	10	6	1
Resales (percent of total)[5]	(X)	11	(X)	3	(X)	17	(X)	1	(D)	(D)	(X)	(X)
	3931, Musical instruments				394, Toys and sporting goods				3942, Dolls			
Product shipments:												
As reported in census of manufactures[2]	878.9	(X)	(X)	(X)	5,058.3	(X)	(X)	(X)	508.2	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	706.2	100	5	(X)	4,438.9	100	4	(X)	479.2	100	7	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	205.2	29	3	2	157.1	4	6	1	(D)	(D)	(X)	(X)
Retail stores and outlets	(D)	(D)	(X)	(X)	101.9	2	1	1	-	-	-	-
Other manufacturing plants	17.9	3	15	1	47.1	1	1	1	-	-	-	-
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	110.2	16	8	1	1,234.7	28	5	1	123.1	26	13	3
Retailers	264.7	37	9	2	2,423.5	55	7	2	316.2	66	6	3
Manufacturers	51.4	7	26	2	199.9	5	10	1	22.0	5	67	3
Federal Government	1.2	(Z)	8	1	42.9	1	11	1	3.5	1	1	1
State and local Government	(D)	(D)	(X)	(X)	13.4	(Z)	22	1	-	-	-	-
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
All other	35.6	5	35	2	181.0	4	7	1	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	7	(X)	2	(X)	17	(X)	3	(X)	21	(X)	1
	3944, Games, toys, children's vehicles				3949, Sporting and athletic goods, n.e.c.				395, Pens, office and art goods			
Product shipments:												
As reported in census of manufactures[2]	2,333.2	(X)	(X)	(X)	2,216.9	(X)	(X)	(X)	1,535.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,832.6	100	2	(X)	2,090.4	100	9	(X)	1,151.1	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	79.3	4	11	1	162.2	14	1	1
Retail stores and outlets	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	-	-	1	1
Other manufacturing plants	31.1	2	2	1	16.0	1	1	1	18.0	2	1	1
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	487.4	27	5	1	623.7	30	8	3	458.4	40	5	2
Retailers	1,045.8	57	2	1	1,059.2	51	16	4	245.4	21	11	2
Manufacturers	33.0	2	30	1	144.9	7	7	1	166.9	15	13	2
Federal Government	10.4	1	1	1	28.7	1	16	1	12.7	1	2	1
State and local Government	-	-	-	-	13.4	1	22	1	2.7	(Z)	32	1
Construction companies	-	-	-	-	(D)	(D)	(X)	(X)	-	-	1	1
All other	(D)	(D)	(X)	(X)	100.9	5	8	1	84.8	7	12	1
Resales (percent of total)[5]	(X)	13	(X)	2	(X)	20	(X)	6	(X)	7	(X)	1

See footnotes at end of table.

Manufacturers' Shipments by Product Group and Class of Customer: 1977—Con.

Class of customer	Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--		Value (million dollars)	Percent of total	Standard error of estimate[1] (percent) for columns--	
	A	B	A	B	A	B	A	B	A	B	A	B
	3951, Pens and mechanical pencils				3952, Lead pencils and art goods				3955, Carbon paper and inked ribbons			
Product shipments:												
As reported in census of manufactures[2]	562.9	(X)	(X)	(X)	268.1	(X)	(X)	(X)	488.9	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	519.2	100	6	(X)	177.4	100	5	(X)	338.7	100	5	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	157.1	46	1	2
Retail stores and outlets	-	-	-	-	-	-	-	-	-	-	-	-
Other manufacturing plants	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)	10.6	3	1	1
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	229.0	44	2	3	130.8	74	6	1	64.1	19	14	2
Retailers	174.2	34	15	3	35.2	20	8	2	12.9	4	1	1
Manufacturers	42.6	8	33	2	4.5	3	1	1	82.2	24	17	3
Federal Government	5.5	1	3	1	1.9	1	14	1	4.2	1	1	1
State and local Government	1.7	(Z)	46	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Construction companies	-	-	-	-	-	-	-	-	-	-	-	-
All other	61.6	12	5	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	5	(X)	1	(X)	11	(X)	1	(X)	7	(X)	1
	396, Costume jewelry and notions				3961, Costume jewelry				3964, Needles, pins, and fasteners			
Product shipments:												
As reported in census of manufactures[2]	1,681.4	(X)	(X)	(X)	781.5	(X)	(X)	(X)	633.6	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	1,181.6	100	5	(X)	514.2	100	10	(X)	551.9	100	4	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	63.1	5	28	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	7.9	1	1	1	(D)	(D)	(X)	(X)	-	-	-	-
Other manufacturing plants	9.8	1	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	-	-	-	-	-	-	-	-	-	-	-	-
Shipments to all other customers:												
Wholesalers	545.9	46	7	2	178.3	35	20	5	338.0	61	2	2
Retailers	308.2	26	8	2	231.5	45	11	4	29.5	5	5	1
Manufacturers	224.0	19	9	2	39.3	8	27	2	155.7	28	10	2
Federal Government	2.1	(Z)	1	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
State and local Government	.1	(Z)	78	1	-	-	-	-	-	-	-	-
Construction companies	.2	(Z)	93	1	-	-	-	-	-	-	-	-
All other	20.2	2	31	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	8	(X)	1	(X)	10	(X)	1	(X)	3	(X)	1
	399, Miscellaneous manufactures				3991, Brooms and brushes				3995, Burial caskets			
Product shipments:												
As reported in census of manufactures[2]	5,872.8	(X)	(X)	(X)	620.8	(X)	(X)	(X)	494.8	(X)	(X)	(X)
As reported in class of customer survey (detail below)[3]	4,562.7	100	72	(X)	486.0	100	11	(X)	382.5	100	10	(X)
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	158.2	3	10	1	(D)	(D)	(X)	(X)	(D)	(D)	(X)	(X)
Retail stores and outlets	24.8	1	41	1	-	-	-	-	-	-	-	-
Other manufacturing plants	27.8	1	12	1	2.4	(Z)	1	1	(D)	(D)	(X)	(X)
Other nonmanufacturing plants	6.0	(Z)	1	1	(D)	(D)	(X)	(X)	-	-	-	-
Shipments to all other customers:												
Wholesalers	1,565.7	34	5	7	226.2	47	17	5	73.8	19	27	4
Retailers	1,255.6	28	89	14	109.9	23	8	3	249.6	65	10	4
Manufacturers	815.1	18	9	3	82.4	17	27	4	(D)	(D)	(X)	(X)
Federal Government	72.4	2	10	1	9.4	2	58	1	-	-	-	-
State and local Government	58.1	1	32	1	2.8	1	31	1	-	-	-	-
Construction companies	51.7	1	38	1	1.8	(Z)	1	1	-	-	-	-
All other	527.4	12	8	2	33.9	7	41	3	(D)	(D)	(X)	(X)
Resales (percent of total)[5]	(X)	7	(X)	1	(X)	8	(X)	1	(X)	4	(X)	1
	3996, Hard surface floor coverings				3999, Manufacturing industries, n.e.c.							
Product shipments:												
As reported in census of manufactures[2]	561.3	(X)	(X)	(X)	2,589.0	(X)	(X)	(X)				
As reported in class of customer survey (detail below)[3]	485.5	100	5	(X)	2,221.4	100	83	(X)				
Shipments to other establishments of same company:												
Wholesale establishments (including sales offices)[4]	(D)	(D)	(X)	(X)	114.5	5	13	1				
Retail stores and outlets	-	-	-	-	(D)	(D)	(X)	(X)				
Other manufacturing plants	-	-	-	-	18.0	1	1	1				
Other nonmanufacturing plants	-	-	-	-	(D)	(D)	(X)	(X)				
Shipments to all other customers:												
Wholesalers	405.1	83	1	4	699.6	31	10	4				
Retailers	(D)	(D)	(X)	(X)	588.7	27	(X)	(X)				
Manufacturers	(D)	(D)	(X)	(X)	496.4	22	11	3				
Federal Government	(D)	(D)	(X)	(X)	51.7	2	5	1				
State and local Government	-	-	-	-	13.8	1	43	1				
Construction companies	(D)	(D)	(X)	(X)	10.5	1	37	1				
All other	(D)	(D)	(X)	(X)	209.3	9	6	1				
Resales (percent of total)[5]	(D)	(D)	(X)	(X)	(X)	9	(X)	1				

Footnotes are on next page.

- Represents zero. (A) Indicates standard errors of 100 percent or more. The estimates are of limited reliability and should be used with caution. (D) Withheld to avoid disclosing operations of individual companies. n.e.c. Not elsewhere classified. (X) Not applicable. (Z) Less than half the unit of measure specified.

[1]Standard error of column A represents the relative standard error; that of column B the absolute standard error.
[2]As published in chapter 3, table 1, of the 1977 Census of Manufactures General Summary, and in table 6C of the final 1977 Census of Manufactures Industry reports.
[3]Includes only the data for those establishments reporting on class of customer report forms NC-K4S and NC-K4M.
[4]Includes sales branches, sales offices, and administrative offices.
[5]Data for resales are included in the categories above. Figure shown represents total resales, as a percent of total product shipments, that was reported on class of customer survey.
[6]Establishments classified in major groups 23 and 27 were not mailed class of customer report forms.

APPENDIX A. Explanation of Terms

This appendix is in three sections. Section 1 includes items for which all establishments that were mailed census of manufactures forms were requested to supply information. Section 2 covers supplementary items for which only establishments included in the annual survey of manufactures (ASM) sample were requested to supply information. Section 3 covers items collected on the water use report forms.

SECTION 1. ITEMS COLLECTED ON ALL CENSUS OF MANUFACTURES REPORT FORMS

Employment and related items—The regular report forms requested separate information on production workers as of a payroll period for each quarter of the year and on other employees as of the payroll period which included the 12th of March.

All employees—This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the mid-month payroll periods of March, May, August, and November.

Production workers—This item includes workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and watchman services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Supervisory employees above the working foreman level are excluded from this category.

All other employees—This item covers nonproduction personnel of the manufacturing establishment, including those engaged in factory supervision above the working foreman level, sales (including driver salesmen), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical. Also included are employees on the payroll of the manufacturing establishment who are engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls was also requested of administrative offices or auxiliary units (e.g., warehouses and research and development laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual industries shown in this report. They are included in the Summary and Geographic Area reports and in the final bound volumes as a separate category.

Administrative office and auxiliary unit employees—As noted in the Introduction, companies were asked to file a special report form for any administrative office that was at a different location than the establishments managed or served, or at the same location as one of the establishments but not operated as an integral part of the establishment. Employees in **administrative offices** are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include (1) program planning, including sales research and coordination of purchasing, production, and distribution; (2) company purchasing, including general contracts and purchasing methods; (3) company financial policy and accounting, tax accounting, company sales and profits reports, and personnel accounting; (4) general engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations; (5) direction of company personnel matters; and (6) legal and patent matters. **Auxiliaries** are separate storage facilities, garages, repair shops, purchasing offices, sales promotion offices, research and development organizations, etc., serving the plants or central management of the company.

The employment and payrolls of the administrative offices and auxiliaries serving manufacturing establishments are included in all tables at the "all industries" level. In tables where industry detail is shown, the data for these units appear as a separate industry group.

Payrolls—This item includes the gross earnings paid in the calendar year 1977 to all employees on the payroll of operating

manufacturing establishments. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations, but excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payroll of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Federal Statistical Policy and Standards. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' supplemental labor costs, both those required by Federal and State laws and those incurred voluntarily or as part of collective bargaining agreements. (Supplemental labor costs are explained later in this appendix.)

As in the case of employment figures, the payrolls of separate administrative offices and auxiliary units of multi-establishment companies are included in all tables at the "all industries" level. In tables where industry detail is shown, the data for these units appear as a separate industry group.

Production worker hours—This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials—This item refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, regardless of whether what was consumed was purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (1) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (2) electric energy purchased; (3) fuels consumed for heat, power, or generating electricity; (4) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (5) products bought and resold in the same condition. (See discussion of duplication of data.)

Value of shipments—This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishments from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, i.e., including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead) and profit. (See discussion of duplication of data.)

Duplication in cost of materials and value of shipments—The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. With some important exceptions, such as for motor vehicles and parts, this duplication is not significant at the 4-digit industry level. However, it is significant at the 2-digit and 3-digit industry group level because these totals often include industries which represent successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the "Food" group and the addition of pulp mills to paper mills in the "Paper and Allied Products" group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication—the value of finished manufactures—tends to approximate two-thirds of the total value of products reported in the census of manufactures.

Value added by manufacture—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is then adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

"Value added" avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

New and used capital expenditures—For establishments in operation and establishments under construction but not yet in operation, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to manufacturing establishments, and (2) machinery and equip-

ment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures exclude that portion of expenditures leased from nonmanufacturing concerns, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

Manufacturers were also requested to report the value of all used buildings and equipment purchased during the year at the purchase price. For any equipment or structure transferred to the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. Furthermore, if the establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported under used capital expenditures.

Total expenditures for used plant and equipment is a universe figure; i.e., it is collected on all census forms. However, the breakdown of this figure between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form and is subject to sampling error (see table 3b, chapters 2 and 4).

End-of-year inventories—Respondents were asked to report their 1977 and 1976 end-of-year inventories at approximate current costs, if feasible; otherwise, at book values. Since different methods of inventory valuation are used (last-in-first-out (LIFO), first-in-first-out (FIFO), etc.), the definition of the value of inventories aggregate for all establishments in an industry is not precise. The change in inventory between years is of considerably greater significance.

In using inventory data by stage of fabrication for "all industries" and at the 2-digit industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and "all manufacturing" which are aggregates of figures reported by establishments in specified industries.

SECTION 2. ITEMS COLLECTED ONLY ON ASM REPORT FORM

Cost of purchased services—ASM establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery and communication services. Included in the cost of purchased services for the repair of building and machinery are payments made for all maintenance and repair work on buildings and equipment such as painting, roof repairs, replacing parts, and overhauling equipment. Such payments made to other establishments of the same company and for repair and maintenance of any leased property are also included. Extensive repairs or reconstruction that were capitalized are considered capital expenditures for used buildings and machinery and are, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract and incurred directly by an establishment in using its own work force are also excluded.

The response coverage ratio for each of the three types of purchased services listed above is a measure of the extent to which respondents reported for each item. It is derived for each item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight; see appendix B) for those ASM establishments that reported the specific inquiry to the weighted total employment for all ASM establishments classified in the industry (see table 3c, chapters 2 and 4).

Rental payments—This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets, and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets were to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company, and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

Supplemental labor costs—Supplemental labor costs are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees. While the excluded items do benefit employees, and all or part of their cost is generally similar to the items covered in the annual survey labor costs statistics, accounting records do not generally provide reliable figures on net employee benefits of these types.

Beginning and end-of-year depreciable assets—The data encompass all fixed depreciable assets on the books of establishments at the beginning and at the end of the year. The values shown represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets, including inventories and intangible assets such as patent rights and royalties. Also excluded are land and depletable assets such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year, rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress. In addition, respondents were requested to make certain that assets at the beginning of the year plus new and used capital expenditures, less retirements, equaled assets at the end of the year.

New and used capital expenditures—The data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used capital expenditures are collected on all census forms. However, the breakdown between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. (See further explanation on capital expenditures in section 1.)

Breakdown of new capital expenditures for machinery and equipment—ASM establishments were requested to separate their capital expenditures for new machinery and equipment into (1) automobiles, trucks, etc., for highway use; (2) computers and peripheral data processing equipment; and (3) all other.

The category "automobiles, trucks, etc., for highway use" is intended to measure expenditures for vehicles designed for highway use which were acquired through a purchase of lease-purchase agreement. Vehicles normally operating off public highways—vehicles specifically designed to transport materials, property, or equipment on mining, construction, logging, and petroleum development projects—are excluded from this item.

The "not specified by kind" or n.s.k. item for expenditures for new machinery and buildings shown in table 3b represents the total machinery and equipment expenditures for establishments that did not break down their expenditures for the three specific categories. This means that for most industries the specific categories are understated.

Retirements—Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during 1977. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent was also requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

Depreciation charges—This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

Natural gas—Natural gas excludes manufactured gas, mixed gas, blast furnace gas, still gas, coke-oven gas, etc.

Bituminous coal, lignite, and anthracite—Most coal of metallurgical grade (coking coal) is not included in this survey because it is considered a material for consumption rather than a fuel. Consequently, the average cost of coal purchased by manufacturing establishments is lower than it would be if coking coal were classified as a fuel.

Residual fuel oil—Residual fuel oil includes grades 5 and 6 fuel oils, heavy diesel type fuel oil, bunker "C" fuel oils, heavy gas-enrichment oil, etc. Quantities are published in barrels (42 gallons).

Distillate fuel oil—Distillate fuel oil includes grades 1, 2, and 4 fuel oils, light diesel-type fuel oil, light gas-enrichment oil, etc. Quantities are published in barrels (42 gallons).

Coke and breeze—The quantity of coke covered by this survey represents only a small fraction of coke consumed in manufacturing. Most metallurgical coke is produced and consumed at the same establishment and is therefore excluded from this report. Breeze (coke fines) are included here even though their unit cost is considerably lower than beehive or slot oven coke.

Other fuels—Other fuels consists mainly of purchased steam, liquified petroleum gases, and gasoline, it also includes mixed gases, coke-oven gases, still gases, blast furnace gases, wood, and small amounts of other miscellaneous fuels.

Fuels not specified by kind—Some small establishments reported total cost of fuels but failed to report the cost and quantity of specified fuels used. Estimates of their total cost of fuels are included in the tables under Fuels not specified by kind. To the extent that information on detailed fuels consumed was not given, data shown for individual fuels in this report tend to be understated.

Further limitations apply to the estimates of cost of fuels, not specified by kind. They are residual balancing figures derived by subtraction the sum of the linear estimates for the specified fuels from the total cost of fuels, which is a census total. They include the cost not allocated by kind because of nonresponse, additional adjustment for unresolved imbalances between the sum of the detail and the total in individual reports, and the statistical deviation resulting from the use of two methods of compilation.

SECTION 3. ITEMS COLLECTED ON THE WATER USE REPORT FORM

Water Intake by Source

Public water system—Water supplied by a water system (whether municipally or privately owned) whose primary purpose is to supply water to the general public. The data also include water supplied by systems whose principal function is to supply water to industrial users.

Company water system—Water supplied from a company's water supply system or obtained from another company where the supplying company is not primarily a water supplier to the general public and/or industrial users. The data also include that portion of water obtained from a joint water supply system operated by the reporting company.

Brackish water—Water with 1,000 to 10,000 parts per million of dissolved solids.

Salt water—Water with more than 10,000 parts per million of dissolved solids.

Water Intake by Purpose

Process—Water that comes directly in contact with products and/or materials, including water which is consumed in production.

Sanitary service—Water used for drinking, lunchrooms or cafeterias, and domestic sewage.

Public utility sewer—Water discharged to public utility sewer systems, whether municipally or privately owned.

Ground—Quantities of water which seep into the ground from collection basins, such as ponds and lagoons.

Transferred to other users—Quantities of water transferred, after use, to another establishment of either the same company or another company.

Treated water—Includes a wide variety of techniques used to cool, detoxify, decompose, separate-to-store, or ameliorate effluent as it reaches the discharge point.

Gross Water Used

Total—Estimated quantity of water that would have been required if no water had been recirculated or reused. For example, if total water intake was 400 million gallons and, of these 400 million gallons, 100 million gallons were used twice for cooling purposes and once for washing products or materials, the total water required would be 300 million gallons, plus the 300 million gallons not recirculated, for a total of 600 million gallons (less consumption and evaporation loss).

Water Discharged

Total—Quantity of water brought to ultimate discharge point. The data exclude quantities of water held in ponds, lagoons, or basins, for reuse or treatment, or water discharged by evaporation processes.

APPENDIX B. Annual Survey of Manufactures

DESCRIPTION OF SURVEY SAMPLE

The annual survey of manufactures (ASM) is a survey based on a probability sample of about 70,000 manufacturing establishments selected from the census of manufactures universe. The current sample was selected from the manufacturing establishments included in the 1972 Census of Manufactures supplemented by Social Security Administration (SSA) files of manufacturers that opened after 1972. As in the earlier surveys, companies rather than establishments were defined as the sampling units. The selected companies were required to report for all of their plants, so that new establishments of existing companies also were represented in the sample.

All companies that had any manufacturing establishments with 250 employees or more in the 1972 census were included in the survey sample. These large companies, included with certainty, collectively account for more than two-thirds of total manufacturing employment.

Smaller companies were selected for the ASM in accordance with mathematical theory for optimum allocation of a sample. Their probabilities of inclusion ranged from 1.000 to 0.005 and were proportional to measures of size determined for each company. The measures of size of companies included in the 1972 Census of Manufactures depended directly upon each company's 1972 product class values and the historic variability of the year-to-year shipments of each product class. Roughly equivalent measures of size were assigned to the postcensus companies based on their industry codes and anticipated employment. (More specific information was not available for them in the SSA files used for sampling.)

To improve the reliability of the industry statistics for geographic areas, two features were incorporated into the sample design. First, some weight was given to the total value of shipments of each establishment relative to the total value of shipments for the State in which the establishment was located. Second, product class values for establishments in those States in which the total level of manufacturing was relatively low or was rapidly expanding (but for which the reliability of estimates was not expected to be much improved by the first sample design feature) were multiplied by factors ranging from 1.15 to 1.25 before measures of size were developed.

This method of assigning measures of size was used to maximize the precision (i.e., minimize the variance) of estimates of the year-to-year change in the value of product class shipments. Implicitly, it also gave weight to differences in employment, value added, and other industry statistics. These items are highly correlated with total value of shipments, and the assigned size measures varied directly with that total for each company.

The cost of collecting and processing data for a company is roughly proportional to the number of its establishment reports. To maximize the sample information obtained for a fixed total cost, each company's initial size measure was divided by the square root of its number of establishments. Sample selection probabilities then were obtained by multiplying each company's final measure of size by an overall sampling fraction calculated to yield the total expected sample size.

The sample selection procedure gave each company in the sampling frame an independent chance of selection. This method of selection differs from the method of systematic selection used in annual surveys prior to 1959. (With systematic selection, only certain combinations of companies can fall into the sample depending on the order in which they are arrayed at the time the sample is drawn.) Independent selection permits the rotation of the smaller companies into and out of a given sample panel without introducing a bias into the survey estimates.

ESTIMATING PROCEDURES

Most of the historical data compiled from the annual survey of manufactures sample were computed by the "difference estimate formula." For each item, linear estimates of the totals for both the most recent census of manufactures year and the ASM year were developed by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values to publication levels. Then the difference between the two linear estimates was added to the complete (universe) total for the census year to produce the estimate for the ASM year. Estimates developed by the difference estimate formula usually are far more reliable than the comparable linear estimates developed from the current sample data alone.

The 1977 sample data were also developed using difference estimates. However, since the universe totals for the census year (either 1972 or 1977) were not known, a modification of the procedure described above was necessary. For each item, except purchased services and the breakdown of expenditures for new machinery and equipment (see further description in appendix A), linear estimates of the publication totals from the ASM sample were adjusted by the difference between imputed census totals and the corresponding ASM sample estimates of these imputed totals. These imputed totals are obtained by applying industry average ratios to control item values at the establishment level. For example, an imputed total beginning assets figure is obtained by multiplying each establishment's total value of shipments by the industry (4-digit SIC) average for the ratio of beginning assets to shipments.

QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The sampling errors—the differences between the estimates obtained and the results theoretically obtainable from a comparable complete coverage survey—are unknown. Guides to the potential size of the sampling errors, however, are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable, complete coverage values.

Estimates of the standard errors have been computed from the sample data for the current statistics, as well as the historical ASM data. They are presented in the form of relative standard errors, i.e., the standard errors divided by the estimated values to which they refer.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals—ranges that would include the comparable complete coverage value for specified percentages of all the possible samples. The complete coverage value would be included in the range:

a. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
b. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
c. From three standard errors below to three standard errors above the derived estimate for nearly all possible samples.

An inference that the comparable complete survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence with which the estimates from a particular sample would differ from complete coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, i.e., a standard error of 1,000 (2 percent of 50,000). Then there is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete coverage total.

In addition to the sample errors, the estimates are subject to various operational errors (errors of collection, reporting, coding, transcription, imputation for nonresponse, etc.). These errors would also occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. When they were detected too late to correct, the data were suppressed or were specifically qualified in the tables. The small operational errors usually remain; to some extent, they are compensating in the aggregated totals shown.

As derived, the estimated standard errors include part of the effect of the operational errors. The total error, which depends upon the joint effect of the sampling and operation errors, is usually of the order of size indicated by the standard error or only moderately higher. For particular estimates, however, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the annual surveys of manufactures is not identical to the complete coverage of the censuses of manufactures as conducted. Nearly all types of operational errors that affect the surveys also occur in the censuses. The surveys and the censuses, however, are conducted under quite different conditions, and operational errors can be controlled more tightly in the surveys than in the censuses. As a result, errors in many of the census figures are of the same order of size as the total errors in the corresponding annual survey estimates. The differences between the census and the survey operating conditions also disturb, to some degree, the comparability of the census and annual survey data.

Any figure shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with other totals, creating a broader aggregate, which may then be of acceptable reliability.

APPENDIX C. Industry Descriptions

This appendix contains descriptions of the 450 4-digit industries for which data were compiled and published in the 1977 Census of Manufactures. With two exceptions, the industries are the same as those described in the 1972 edition of the Standard Industrial Classification (SIC) Manual. SIC Industry 3572, Typewriters, was combined with Industry 3579, Office Machines, N.E.C., in the census tabulations and SIC Industry 3716, Motor Homes Produced on Purchased Chassis, was added

The industry titles and descriptions, in general, agree with those appearing in the SIC Manual, but the descriptions have been expanded, in some instances, to include references to additional products classified in other industries.

20 FOOD AND KINDRED PRODUCTS

This major group includes establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

201 MEAT PRODUCTS

2011 Meatpacking Plants.—Establishments primarily engaged in the slaughtering, for their own account or on a contract basis for the trade, of cattle, hogs, sheep, lambs, and calves for meat to be sold or to be used on the same premises in canning and curing, and in making sausage, lard and other products. Establishments primarily engaged in killing, dressing, and packing poultry, rabbits, and other small game are classified in industry 2016; and those primarily engaged in killing and processing horses and other nonfood animals are classified in industry 2047. Establishments primarily engaged in manufacturing sausages and meat specialties from purchased meats are classified in industry 2013; and establishments primarily engaged in canning meat for baby food are classified in industry 2032.

2013 Sausages and Other Prepared Meat Products.—Establishments primarily engaged in manufacturing sausages, cured meats, smoked meats, canned meats, frozen meats, natural sausage casings, and other prepared meats and meat specialties from purchased carcasses and other materials. Sausage kitchens and other prepared meat plants operated by packing houses as separate establishments are also included in this industry. Establishments primarily engaged in canning or otherwise processing poultry, rabbits, and other small game are classified in industries 2016 and 2017. Establishments primarily engaged in the cutting up and resale of purchased fresh carcasses are classified in trade industries. Establishments primarily engaged in canning meat for baby food are classified in industry 2032.

2016 Poultry Dressing Plants.—Establishments primarily engaged in slaughtering and dressing poultry for their own account or on a contract basis for the trade for meat to be sold or to be used on the same premises in further processing, including cooking, smoking, raw-boning, canning, freezing, and dehydrating. This industry also includes the killing, dressing, and packing of rabbits and other small game. Establishments primarily engaged in processing purchased carcasses are classified in industry 2017.

2017 Poultry and Egg Processing.—Establishments primarily engaged in the preparation of processed poultry products from purchased carcasses, including cooking, smoking, raw-boning, canning, freezing, and dehydrating, for their own account or on a contract basis for the trade; or in the drying, freezing, and breaking of eggs. The cleaning, oil treating, packing, and grading of eggs are classified in industry 5144. Establishments primarily engaged in the cutting up and resale of purchased fresh carcasses are classified in the trade industries.

202 DAIRY PRODUCTS

This group includes establishments primarily engaged in (1) manufacturing creamery butter, natural cheese, condensed and evaporated milk, ice cream and frozen desserts, and special dairy products such as processed cheese and malted milk and (2) processing (pasteurizing, homogenizing, vitaminizing, bottling) fluid milk and cream for wholesale or retail distribution. Independently operated milk receiving stations primarily engaged in the assembly and reshipment of bulk milk for the use of manufacturing or processing plants are classified in industry 5143.

2021 Creamery Butter.—Establishments primarily engaged in manufacturing creamery butter.

2022 Cheese, Natural and Processed.—Establishments primarily engaged in manufacturing all types of natural cheese (except cottage cheese—industry 2026), processed cheese, cheese foods, and cheese spreads.

2023 Condensed and Evaporated Milk.—Establishments primarily engaged in manufacturing condensed and evaporated milk and related products, including ice-cream mix and ice-milk mix made for sale as such, and dry milk products. Also included in the manufacture of nondairy-base cream substitutes and dietary supplements.

2024 Ice Cream and Frozen Desserts.—Establishments primarily engaged in manufacturing ice cream and other frozen desserts.

2026 **Fluid Milk.**—Establishments primarily engaged in processing (pasteurizing, homogenizing, vitaminizing, bottling) and distributing fluid milk and cream, and related products, including cottage cheese.

203 CANNED AND PRESERVED FRUITS AND VEGETABLES

2032 **Canned Specialties.**—Establishments primarily engaged in canning specialty products, such as baby foods, "native foods," health foods, and soups except seafood. Establishments primarily engaged in canning seafoods other than frozen are classified in industry 2091, frozen seafoods in industry 2092, and those primarily engaged in quick freezing canned specialties in industry 2038.

2033 **Canned Fruits, Vegetables, Preserves, Jams, and Jellies.**—Establishments primarily engaged in canning fruits and vegetables, and fruit and vegetable juices; and manufacturing catsup and similar tomato sauces, preserves, jams, and jellies. Establishments primarily engaged in canning seafoods (except frozen) are classified in industry 2091; and canned specialties, baby foods, and soups (except seafood) in industry 2032.

2034 **Dried and Dehydrated Fruits, Vegetables, and Soup Mixes.**—Establishments primarily engaged in sun drying or artificially dehydrating fruits and vegetables, or in manufacturing packaged soup mixes from dehydrated ingredients. Establishments primarily engaged in the grading and marketing of farm dried fruits, such as prunes and raisins, are classified in industry 5149.

2035 **Pickled Fruits and Vegetables, Vegetable Sauces and Seasonings, and Salad Dressings.**—Establishments primarily engaged in pickling and brining fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Establishments primarily engaged in manufacturing catsup and similar tomato sauces are classified in industry 2033, and those packing purchased pickles and olives in trade industries.

2037 **Frozen Fruits, Fruit Juices and Vegetables.**—Establishments primarily engaged in freezing and coldpacking (freezing) fruits, fruit juices, and vegetables.

2038 **Frozen Specialties.**—Establishments primarily engaged in freezing and coldpacking (freezing) food specialties such as frozen dinners and frozen pizza.

204 GRAIN MILL PRODUCTS

2041 **Flour and Other Grain Mill Products.**—Establishments primarily engaged in milling flour or meal from grain, except rice. The products of flour mills may be sold plain or in the form of prepared mixes or doughs for specific purposes. Establishments primarily engaged in manufacturing prepared flour mixes or doughs from purchased ingredients are classified in industry 2045, and rice milling in industry 2044.

2043 **Cereal Breakfast Foods.**—Establishments primarily engaged in manufacturing cereal breakfast foods and related preparations.

2044 **Rice Milling.**—Establishments primarily engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Other important products of this industry include brown rice, milled rice (including polished rice), rice polish, and rice bran.

2045 **Blended and Prepared Flour.**—Establishments primarily engaged in the preparation of blended flours and flour mixes or doughs from purchased flour. Establishments primarily engaged in milling flour from grain are classified in industry 2041.

2046 **Wet Corn Milling.**—Establishments primarily engaged in milling corn or sorghum grain (milo) by the wet process, and producing starch, sirup, oil, sugar, and byproducts such as gluten feed and meal. Establishments primarily engaged in manufacturing starch from other vegetable sources (potato, wheat, etc.) are also included. Establishments primarily engaged in manufacturing table sirups from corn sirup and other ingredients and those manufacturing starch-base dessert powders are classified in industry 2099.

2047 **Dog, Cat and Other Pet Food.**—Establishments primarily engaged in manufacturing dog, cat, and other pet food from cereal, meat, and other ingredients. These preparations may be canned, frozen, or dry. This industry also includes establishments slaughtering animals for pet food. Establishments primarily engaged in manufacturing feed for animals, other than pets, are classified in industry 2048.

2048 **Prepared Feeds and Feed Ingredients for Animals and Fowls, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing prepared feeds and feed ingredients and adjuncts, for animals and fowls, not elsewhere classified. This industry in-

cludes poultry and livestock feed and feed ingredients, such as alfalfa meal, feed supplements, feed concentrates, and feed premixes. Establishments primarily engaged in manufacturing pet foods are classified in industry 2047.

205 BAKERY PRODUCTS

2051 **Bread and Other Bakery Products, Except Cookies and Crackers.**—Establishments primarily engaged in manufacturing bread, cakes, and other "perishable" bakery products. Establishments manufacturing bakery products for sale primarily for home service delivery, or through one or more non-baking retail outlets, are included in this industry. Establishments primarily engaged in producing "dry" bakery products, such as biscuits, crackers, and cookies, are classified in industry 2052. Establishments producing bakery products primarily for direct sale on the premises to household consumers are classified in Retail Trade, industry 5462.

2052 **Cookies and Crackers.**—Establishments primarily engaged in manufacturing cookies, crackers, pretzels, and similar "dry" bakery products. Establishments primarily engaged in producing "perishable" bakery products are classified in industry 2051.

206 SUGAR AND CONFECTIONERY PRODUCTS

2061 **Cane Sugar, Except Refining Only.**—Establishments primarily engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugarcane. Establishments primarily engaged in refining sugar from purchased raw cane sirup or sugar sirups are classified in industry 2062.

2062 **Cane Sugar Refining.**—Establishments primarily engaged in refining purchased raw cane sugar and sugar sirup.

2063 **Beet Sugar.**—Establishments primarily engaged in manufacturing sugar from sugar beets.

2065 **Candy and Other Confectionery Products.**—Establishments primarily engaged in manufacturing candy, including chocolate candy, salted nuts, other confections, and related products. Establishments primarily engaged in manufacturing solid chocolate bars are classified in industry 2066 and chewing gum in industry 2067. Establishments primarily engaged in manufacturing confectionery for direct sale on the premises are classified in industry 5441, and those primarily engaged in shelling and roasting nuts are classified in industry 5145.

2066 **Chocolate and Cocoa Products.**—Establishments primarily engaged in shelling, roasting, and grinding cacao beans for the purpose of making chocolate liquor, from which cocoa powder and cocoa butter are derived, and in the further manufacture of solid chocolate bars and chocolate coatings. Establishments primarily engaged in manufacturing products, except candy, from purchased chocolate and cocoa are classified in industry 2099, and chocolate candy in industry 2065.

2067 **Chewing Gum.**—Establishments primarily engaged in manufacturing chewing gum or chewing gum base.

207 FATS AND OILS

2074 **Cottonseed Oil Mills.**—Establishments primarily engaged in manufacturing cottonseed oil and byproduct cake, meal, and linters. Establishments primarily engaged in refining cottonseed oil into edible cooking oils are classified in industry 2079.

2075 **Soybean Oil Mills.**—Establishments primarily engaged in manufacturing soybean oil and byproduct cake and meal. Establishments primarily engaged in refining soybean oil into edible cooking oils are classified in industry 2079.

2076 **Vegetable Oil Mills, Except Corn, Cottonseed, and Soybean.**—Establishments primarily engaged in manufacturing vegetable oils and byproduct cake and meal, except corn, cottonseed, and soybean. Establishments primarily engaged in manufacturing corn oil and its byproducts are classified in industry 2046, those which are refining vegetable oils into edible cooking oils are classified in industry 2079, and those refining these oils for medicinal purposes in industry 2833.

2077 **Animal and Marine Fats and Oils.**—Establishments primarily engaged in manufacturing animal oils, including fish oil and other marine animal oils and fish and animal meal; and those rendering inedible grease and tallow from animal fat, bones, and meat scraps. Establishments primarily engaged in manufacturing lard and edible tallow and stearin are classified in group 201; those refining marine animal oils for medicinal purposes in industry 2833; and those manufacturing fatty acids in industry 2899.

2079 **Shortening, Table Oils, Margarine and Other Edible Fats and Oils, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified, by further processing of purchased animal and vegetable oils. Establishments primarily engaged in producing corn oil are classified in industry 2046.

208 BEVERAGES

2082 **Malt Beverages.**—Establishments primarily engaged in manufacturing all kinds of malt beverages. Establishments primarily engaged in bottling purchased malt beverages are classified in industry 5181.

2083 **Malt.**—Establishments primarily engaged in manufacturing malt or malt byproducts from barley or other grains.

2084 **Wines, Brandy, and Brandy Spirits.**—Establishments primarily engaged in manufacturing wines, brandy, and brandy spirits. This industry also includes bonded storerooms which are engaged in blending wines. Establishments primarily bottling purchased wines, brandy, and brandy spirits, but which do not manufacture wines and brandy, are classified in industry 5182.

2085 **Distilled, Rectified, and Blended Liquors.**—Establishments primarily engaged in manufacturing alcoholic liquors by distillation and rectification and in manufacturing cordials and alcoholic cocktails by blending processes or by mixing liquors and other ingredients. Establishments primarily engaged in manufacturing industrial alcohol are classified in industry 2869, and those only bottling purchased liquors in industry 5182.

2086 **Bottled and Canned Soft Drinks and Carbonated Waters.**—Establishments primarily engaged in manufacturing soft drinks (nonalcoholic beverages) and carbonated waters. Establishments primarily engaged in manufacturing fruit and vegetable juices are classified in group 203, fruit sirups for flavoring in industry 2087, and cider in industry 2099. Establishments primarily engaged in bottling natural spring waters are classified in industry 5149.

2087 **Flavoring Extracts and Flavoring Sirups, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing flavoring extracts, sirups, and fruit juices, not elsewhere classified, for soda fountain use or for the manufacture of soft drinks, and colors for bakers' and confectioners' use. Establishments primarily engaged in manufacturing chocolate sirup are classified in industry 2066 if from cacao beans and in industry 2099 if from purchased chocolate.

209 MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS

2091 **Canned and Cured Fish and Seafoods.**—Establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other seafoods, including soups; and those engaged in smoking, salting, drying, or otherwise curing fish for the trade. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers, or in freezing and packaging fresh fish, are classified in industry 2092.

2092 **Fresh or Frozen Packaged Fish and Seafoods.**—Establishments primarily engaged in preparing fresh and raw or cooked frozen packaged fish and other seafood, including soups. This industry also includes establishments primarily engaged in the shucking and packing of fresh oysters in nonsealed containers.

2095 **Roasted Coffee.**—Establishments primarily engaged in roasting coffee and in manufacturing coffee concentrates and extracts in powdered, liquid, or frozen form, including freeze-dried.

2097 **Manufactured Ice.**—Establishments primarily engaged in manufacturing ice for sale. Ice plants operated by public utility companies are included in this industry when separate reports are available. When separate reports are not available, they should be classified in SIC Major Group 49. Establishments primarily engaged in manufacturing dry ice are classified in industry 2813.

2098 **Macaroni, Spaghetti, Vermicelli, and Noodles.**—Establishments primarily engaged in manufacturing dry macaroni, spaghetti, vermicelli, and noodles. Establishments primarily engaged in manufacturing canned macaroni, spaghetti, etc., are classified in industry 2032.

2099 **Food Preparations, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing prepared foods and miscellaneous food specialties, not elsewhere classified, such as baking powder, yeast, and other leavening compounds; chocolate and cocoa products, except confectionery, made from purchased materials; peanut butter; packaged tea including instant; ground spices; potato, corn, and other chips; and vinegar and cider.

21 TOBACCO MANUFACTURES

This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and snuff, and in stemming and redrying tobacco. The manufacture of insecticides from tobacco byproducts is included in SIC Major Group 28.

211 CIGARETTES

2111 **Cigarettes.**—Establishments engaged in manufacturing cigarettes.

212 CIGARS

2121 **Cigars.**—Establishments engaged in manufacturing cigars. Retail stores producing cigars are classified in trade industries.

213 TOBACCO (CHEWING AND SMOKING) AND SNUFF

2131 **Tobacco (Chewing and Smoking) and Snuff.**—Establishments engaged in manufacturing smoking and chewing tobaccos, and snuff.

214 TOBACCO STEMMING AND REDRYING

2141 **Tobacco Stemming and Redrying.**—Establishments primarily engaged in the stemming and redrying of tobacco. Establishments which sell leaf tobacco as merchant wholesalers, agents, or brokers, and which may be also engaged in stemming tobacco, are classified in SIC Major Group 51. Leaf tobacco warehouses which may be also engaged in stemming tobacco are classified in SIC Major Group 42.

22 TEXTILE MILL PRODUCTS

This major group includes establishments engaged in performing any of the following operations: (1) Preparation of fiber and subsequent manufacturing yarn, thread, braids, twine, and cordage; (2) manufacturing broadwoven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabric, and knit apparel; (4) coating, waterproofing, or otherwise treating fabric; (5) the integrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

This classification makes no distinction between the two types of organizations which operate in the textile industry: (1) The "integrated" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products; and (2) the "contract" or "commission" mill which processes materials owned by others. Converters or other nonmanufacturing establishments which assign materials to contract mills for processing (other than knitting) are classified in nonmanufacturing industries; establishments which assign yarns to outside contractors or commission knitters for the production of knit products are classified in group 225.

221 BROADWOVEN FABRIC MILLS, COTTON

2211 **Broadwoven Fabric Mills, Cotton.**—Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly by weight of cotton. Establishments primarily engaged in weaving cotton carpets and rugs are classified in industry 2271; those tufting carpets and rugs in industry 2272; those making tire cord and fabric in industry 2296; and finishers of cotton broadwoven fabrics in industry 2261.

222 BROAD WOVEN FABRIC MILLS, MANMADE FIBER AND SILK

2221 **Broadwoven Fabric Mills, Manmade Fiber and Silk.**—Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly by weight of silk and manmade fibers, including glass. Establishments primarily engaged in weaving carpets and rugs from these fibers are classified in industry 2271; those tufting carpets and rugs from these fibers in industry 2272; those making tire cord and fabric in industry 2296; and finishers of manmade fiber and silk broadwoven goods in industry 2262.

223 BROADWOVEN FABRIC MILLS, WOOL (INCLUDING DYEING AND FINISHING)

2231 **Broadwoven Fabric Mills, Wool (Including Dyeing and Finishing).**—Establishments primarily engaged in

weaving fabrics over 12 inches in width, wholly or chiefly by weight of wool, mohair, or similar animal fibers; those dyeing and finishing all woven wool fabrics or dyeing wool, tops, or yarn; and those shrinking and sponging wool goods for the trade. Establishments primarily engaged in weaving wool carpets and rugs are classified in industry 2271, and those tufting wool carpets and rugs in industry 2272.

224 NARROW FABRICS AND OTHER SMALLWARES MILLS: COTTON, WOOL, SILK, AND MANMADE FIBER

2241 Narrow Fabrics and Other Smallwares Mills: Cotton, Wool, Silk, and Manmade Fiber.—Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, and manmade fibers, including glass fibers. Establishments primarily engaged in producing fabric-covered elastic yarn or thread are also included in this industry.

225 KNITTING MILLS

This group includes three types of organizations which operate in the knitting mill industry: (1) The "integrated" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products; (2) the "contract" or "commission" mill which processes materials owned by others; and (3) establishments commonly known as jobbers or converters of knit goods which perform the entrepreneurial functions of a manufacturing company, such as buying the raw material, designing and preparing samples, and assigning yarns to others for knitting products on their account.

2251 Women's Full Length and Knee Length Hosiery.—Establishments primarily engaged in knitting, dyeing, or finishing women's and misses' full length and knee length hosiery, both seamless and full-fashioned, and panty hose.

2252 Hosiery, Except Women's Full Length and Knee Length Hosiery.—Establishments primarily engaged in knitting, dyeing, or finishing hosiery except women's and misses' full length and knee length seamless and full-fashioned hosiery and panty hose.

2253 Knit Outerwear Mills.—Establishments primarily engaged in knitting outerwear from yarn or in manufacturing outerwear from knit fabric produced in the same establishment. Establishments primarily engaged in handknitting outerwear for the trade are included in this industry. Establishments primarily engaged in knitting gloves and mittens are classified in industry 2259, and those manufacturing outerwear from purchased knit fabric in SIC Major Group 23.

2254 Knit Underwear Mills.—Establishments primarily engaged in knitting underwear and nightwear from yarn or in manufacturing underwear and nightwear from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing underwear and nightwear from purchased knit fabric are classified in SIC Major Group 23.

2257 Circular Knit Fabric Mills.—Establishments primarily engaged in knitting circular (tubular) fabric or in dyeing or finishing circular (tubular) knit fabric. Establishments primarily engaged in knitting, dyeing, or finishing warp fabric are classified in industry 2258.

2258 Warp Knit Fabric Mills.—Establishments primarily engaged in knitting warp (flat) fabric or in dyeing or finishing warp (flat) knit fabric. Establishments primarily engaged in knitting, dyeing, or finishing circular fabric are classified in industry 2257.

2259 Knitting Mills, Not Elsewhere Classified.—Establishments primarily engaged in knitting gloves and other articles not elsewhere classified. Establishments primarily engaged in manufacturing woven or knit fabric gloves and mittens from purchased fabrics are classified in industry 2381.

226 DYEING AND FINISHING TEXTILES, EXCEPT WOOL FABRICS AND KNIT GOODS

2261 Finishers of Broadwoven Fabrics of Cotton.—Establishments primarily engaged in finishing purchased cotton broadwoven fabrics or finishing such fabrics on a commission basis. These finishing operations include bleaching, dyeing, printing (roller, screen, flock, plisse), and other mechanical finishing such as preshrinking, calendering, and napping. This industry also includes the shrinking and sponging of cloth for the trade, and chemical finishing for water repellency, fire resistance, and mildew proofing. Establishments primarily engaged in finishing wool broadwoven fabrics are classified in industry 2231; knit goods in group 225; and those coating or impregnating fabrics in industry 2295.

2262 **Finishers of Broadwoven Fabrics of Manmade Fiber and Silk.**—Establishments primarily engaged in finishing purchased manmade fiber and silk broadwoven fabrics or finishing such fabrics on a commission basis. These finishing operations include bleaching, dyeing, printing (roller, screen, flock, plisse), and other mechanical finishing such as preshrinking, calendering, and napping. Establishments primarily engaged in finishing wool broadwoven fabrics are classified in industry 2231; knit goods in group 225; and those coating or impregnating fabrics in industry 2295.

2269 **Finishers of Textiles, Not Elsewhere Classified.**—Establishments primarily engaged in dyeing and finishing textiles, not elsewhere classified, such as bleaching, dyeing, printing, and finishing of raw stock, yarn, braided goods, and narrow fabrics, except wool and knit fabrics. These establishments perform finishing operations on purchased textiles or on a commission basis.

227 FLOOR COVERING MILLS

2271 **Woven Carpets and Rugs.**—Establishments primarily engaged in weaving carpets and rugs from any textile yarn. Important products of this industry include Axminster, Wilton, velvet, and similar woven carpets and rugs; and woven automobile and aircraft floor coverings.

2272 **Tufted Carpets and Rugs.**—Establishments primarily engaged in tufting carpets and rugs from any textile fiber. Important products of this industry include tufted carpets, rugs, scatter rugs, and bathmats and bathmat sets except terry woven. Finishers of these products are also included in this industry.

2279 **Carpets and Rugs, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing rugs, carpets, art squares, floor mattings, needle punch carpeting, and doormats and mattings from twisted paper, grasses, reeds, coir, sisal, jute, or rags. Establishments primarily engaged in manufacturing hard-surface floor coverings, except rubber and cork, are classified in industry 3996.

228 YARN AND THREAD MILLS

2281 **Yarn Spinning Mills: Cotton, Manmade Fibers and Silk.**—Establishments primarily engaged in spinning yarn wholly or chiefly by weight of cotton, manmade fibers, or silk. Establishments primarily engaged in dyeing or finishing purchased yarns or finishing yarns on a commission basis are classified in industry 2269.

2282 **Yarn Texturizing, Throwing, Twisting, and Winding Mills: Cotton, Manmade Fibers and Silk.**—Establishments primarily engaged in texturizing, throwing, twisting, winding or spooling yarn wholly or chiefly by weight of cotton, manmade fibers, or silk. Establishments primarily engaged in dyeing or finishing purchased yarns or finishing yarns on a commission basis are classified in industry 2269.

2283 **Yarn Mills, Wool, Including Carpet and Rug Yarn.**—Establishments primarily engaged in spinning, twisting, winding, or spooling yarn (including carpet and rug yarn) wholly or chiefly by weight of wool, mohair, or similar animal fibers. Establishments primarily engaged in dyeing or finishing purchased wool yarn or finishing wool yarn on a commission basis are classified in industry 2231.

2284 **Thread Mills.**—Establishments primarily engaged in manufacturing thread from natural or manmade fiber except flax (industry 2299) and wool (industry 2283). Important products of this industry include sewing, crochet, darning, embroidery, tatting, handknitting, and other handicraft threads.

229 MISCELLANEOUS TEXTILE GOODS

2291 **Felt Goods, Except Woven Felts and Hats.**—Establishments primarily engaged in manufacturing pressed felt, regardless of fiber, by means of heat, moisture, and pressure; and those making punched felt for rugs, cushions, and other products from hair, jute, wool, or other fibers by the needle loom process. Establishments primarily engaged in manufacturing woven wool felts and wool haircloth are classified in industry 2231, those manufacturing felt hats in group 235, and those manufacturing needle punch carpeting in industry 2279.

2292 **Lace Goods.**—Establishments primarily engaged in manufacturing lace machine products, and those primarily engaged in dyeing and finishing lace goods. Establishments primarily engaged in manufacturing Schiffli machine embroideries are classified in industry 2397. Establishments primarily engaged in manufacturing knitted lace and netting are classified in industry 2258.

2293 Paddings and Upholstery Filling.—Establishments primarily engaged in manufacturing batting, padding, wadding, and filling for upholstery, pillows, quilts, and apparel, from curled hair, cotton-mill waste, moss, hemp tow, flax tow, kapok, and related materials. Establishments primarily engaged in manufacturing wood excelsior pads and wrappers are classified in industry 2429.

2294 Processed Waste and Recovered Fibers and Flock.—Establishments primarily engaged in processing textile mill waste for spinning, padding, batting, or other uses; in recovering textile fibers from clippings and rags; in cutting flock from waste, recovered fibers, or new fiber stock; and in manufacturing oakum and twisted jute packing. Establishments primarily engaged in cleaning and sorting wiping rags or waste are classified in industry 5093.

2295 Coated Fabrics, Not Rubberized.—Establishments primarily engaged in manufacturing coated and impregnated textiles and in the special finishing of textiles, such as varnishing and waxing. Establishments primarily engaged in rubberizing purchased fabrics are classified in industry 3069, and those primarily engaged in dyeing and finishing textiles in group 226.

2296 Tire Cord and Fabric.—Establishments primarily engaged in manufacturing cord and fabric for use in reinforcing rubber tires, industrial belting, fuel cells, and similar uses.

2297 Nonwoven Fabrics.—Establishments primarily engaged in manufacturing nonwoven fabrics (by bonding and/or interlocking of fibers) by mechanical, chemical, thermal, or solvent means or by combinations thereof. Establishments primarily engaged in producing fabrics by the wool felting process are classified in other industries in this major group.

2298 Cordage and Twine.—Establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from abaca (Manila), sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass, and other fibers.

2299 Textile Goods, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing linen goods, jute goods except felt, and other textile goods not elsewhere classified. Establishments primarily engaged in processing textile fibers to prepare them for spinning, such as wool scouring and carbonizing and combing and converting tow to top, are also classified here. Establishments primarily engaged in manufacturing woven felts are classified in industry 2231, nonwoven felts in industry 2291, nonwoven textiles in industry 2297, and cordage and twine in industry 2298.

23 APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS

This major group, known as the cutting-up and needle trades, includes establishments producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics and related materials such as leather, rubberized fabrics, plastics, and furs.

Included in the apparel industries are three types of establishments: (1) The "regular" or inside factories, (2) contract factories, and (3) apparel jobbers. The regular factories perform all of the usual manufacturing functions within their own plant; the contract factories manufacture apparel from materials owned by others; and apparel jobbers perform the entrepreneurial functions of a manufacturing company, such as buying raw materials, designing and preparing samples, arranging for the manufacture of the garments from their materials, and selling of the finished apparel.

Custom tailors and dressmakers not operating on a factory basis are classified in industry 5699; establishments which purchase and resell finished garments but do not perform the functions of the apparel jobbers are classified in group 513.

231 MEN'S, YOUTHS', AND BOYS' SUITS, COATS, AND OVERCOATS

2311 Men's, Youths', and Boys' Suits, Coats, and Overcoats.—Establishments primarily engaged in manufacturing men's, youths', and boys' tailored suits, coats, and overcoats. Establishments primarily engaged in manufacturing uniforms (except athletic uniforms) are also included in this industry. Establishments primarily engaged in manufacturing men's work garments are classified in industry 2328.

232 MEN'S, YOUTHS', AND BOYS' FURNISHINGS, WORK CLOTHING, AND ALLIED GARMENTS

2321 Men's, Youths', and Boys' Shirts (Except Work Shirts) and Nightwear.—Establishments primarily

engaged in manufacturing men's, youths', and boys' shirts (including polo and sports shirts) and nightwear, cut and sewed from purchased woven or knit fabric. Establishments primarily engaged in manufacturing work shirts are classified in industry 2328. Knitting mills primarily engaged in manufacturing nightwear are classified in industry 2254, and outerwear in industry 2253.

2322 **Men's, Youths', and Boys' Underwear.**—Establishments primarily engaged in manufacturing men's, youths', and boys' underwear, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear are classified in industry 2254.

2323 **Men's, Youths', and Boys' Neckwear.**—Establishments primarily engaged in manufacturing men's, youths', and boys' neckties, scarfs, and mufflers, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckties, scarfs, and mufflers are classified in industry 2253.

2327 **Men's, Youths', and Boys' Separate Trousers.**—Establishments primarily engaged in manufacturing men's, youths', and boys' separate trousers and slacks. Establishments primarily engaged in manufacturing complete suits are classified in industry 2311, and work pants and jeans in industry 2328.

2328 **Men's, Youths', and Boys' Work Clothing.**—Establishments primarily engaged in manufacturing men's, youths', and boys' work shirts, pants, jeans, and other work clothing and washable service apparel.

2329 **Men's, Youths', and Boys' Clothing, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing men's, youths', and boys' clothing not elsewhere classified. Establishments primarily engaged in manufacturing polo and sport shirts from purchased woven or knit materials are classified in industry 2321; separate trousers in industry 2327; work clothing in industry 2328; and leather and sheep lined garments in industry 2386. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253.

233 WOMEN'S, MISSES', AND JUNIORS' OUTERWEAR

2331 **Women's, Misses', and Juniors' Blouses, Waists, and Shirts.**—Establishments primarily engaged in manufacturing women's, misses', and juniors' blouses, waists, and shirts. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253. Establishments primarily engaged in manufacturing girls', children's, and infants' blouses, waists, and shirts are classified in industry 2361.

2335 **Women's, Misses', and Juniors' Dresses.**—Establishments primarily engaged in manufacturing women's, misses', and juniors' dresses, including ensemble dresses and pants dresses, whether sold by the piece or by the dozen. Establishments primarily engaged in manufacturing girls', children's, and infants' dresses are classified in industry 2361.

2337 **Women's, Misses', and Juniors' Suits, Skirts, and Coats.**—Establishments primarily engaged in manufacturing women's, misses', and juniors' suits, pantsuits, skirts, and coats except furcoats and raincoats. These garments are generally tailored and usually lined. Establishments primarily engaged in manufacturing fur garments are classified in industry 2371, raincoats in industry 2385, and knitting mills primarily engaged in manufacturing knit outerwear in industry 2253.

2339 **Women's, Misses', and Juniors' Outerwear, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing women's, misses', and juniors' outerwear, not elsewhere classified, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253.

234 WOMEN'S, MISSES', CHILDREN'S, AND INFANTS' UNDERGARMENTS

2341 **Women's, Misses', Children's, and Infants' Underwear and Nightwear.**—Establishments primarily engaged in manufacturing women's, misses', children's, and infants' underwear and nightwear, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear and nightwear are classified in industry 2254.

2342 **Brassieres, Girdles, and Allied Garments.**—Establishments primarily engaged in manufacturing brassieres, girdles, corsets, corset accessories, and allied garments. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in industry 3842.

235 HATS, CAPS, AND MILLINERY

2351 Millinery.—Establishments primarily engaged in manufacturing women's, misses', children's, and infants' millinery. Establishments primarily engaged in manufacturing millinery braid and trimmings are classified in industry 2396.

2352 Hats and Caps, Except Millinery.—Establishments primarily engaged in manufacturing hats and caps (except millinery) and all hat bodies. Knitting mills primarily engaged in manufacturing caps are classified in industry 2253.

236 GIRLS', CHILDREN'S, AND INFANTS' OUTERWEAR

2361 Girls', Children's, and Infants' Dresses, Blouses, Waists, and Shirts.—Establishments primarily engaged in manufacturing girls', children's, and infants' dresses, blouses, waists, and shirts, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253.

2363 Girls', Children's, and Infants' Coats and Suits.—Establishments primarily engaged in manufacturing girls', children's, and infants' coats and suits, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253.

2369 Girls', Children's, and Infants' Outerwear, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing girls', children's, and infants' outerwear, not elsewhere classified, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in industry 2253.

237 FUR GOODS

2371 Fur Goods.—Establishments primarily engaged in manufacturing furcoats, and other garments, accessories, and trimmings made of fur. Establishments primarily engaged in manufacturing sheep lined clothing are classified in industry 2386, and those engaged in dyeing and dressing of furs in industry 3999.

238 MISCELLANEOUS APPAREL AND ACCESSORIES

2381 Dress and Work Gloves, Except Knit and All-Leather.—Establishments primarily engaged in manufacturing dress, semidress, and work gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather or plastic. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in industry 2259, establishments primarily engaged in manufacturing leather gloves in industry 3151, those manufacturing rubber gloves in industry 3069, and plastic gloves in industry 3079.

2384 Robes and Dressing Gowns.—Establishments primarily engaged in manufacturing men's and women's robes and dressing gowns.

2385 Raincoats and Other Waterproof Outer Garments.—Establishments primarily engaged in manufacturing raincoats from purchased rubberized fabrics and other waterproof outer garments made from such material as pliofilm and cellophane. Establishments primarily engaged in manufacturing oiled fabric work garments are classified in industry 2328, and those manufacturing vulcanized rubber garments and garments made from rubberized fabrics produced in the same establishment are classified in industry 3069.

2386 Leather and Sheep Lined Clothing.—Establishments primarily engaged in manufacturing leather and sheep lined garments. Establishments primarily engaged in manufacturing leather gloves and mittens are classified in industry 3151, and fur garments in industry 2371.

2387 Apparel Belts.—Establishments primarily engaged in manufacturing men's and women's apparel belts, regardless of material.

2389 Apparel and Accessories, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing suspenders, garters, handkerchiefs, and other apparel, not elsewhere classified, such as academic caps and gowns, vestments, and theatrical costumes.

239 MISCELLANEOUS FABRICATED TEXTILE PRODUCTS

2391 Curtains and Draperies.—Establishments primarily engaged in manufacturing curtains and draperies from

purchased materials. Establishments primarily engaged in manufacturing lace curtains on lace machines are classified in industry 2292.

2392 **Housefurnishings, Except Curtains and Draperies.**—Establishments primarily engaged in manufacturing housefurnishings, such as blankets, bedspreads, sheets, tablecloths, and towels from purchased materials. Establishments primarily engaged in manufacturing curtains and draperies are classified in industry 2391. Establishments producing housefurnishings primarily of fabric woven at the same establishment are classified according to fiber in industries 2211, 2221, or 2231.

2393 **Textile Bags.**—Establishments primarily engaged in manufacturing shipping and other industrial bags from purchased fabric. Establishments primarily engaged in manufacturing plastic bags are classified in industry 2643; laundry, wardrobe, shoe, and other textile housefurnishing bags in industry 2392; and luggage in industry 3161.

2394 **Canvas and Related Products.**—Establishments primarily engaged in manufacturing awnings, tents, and related products from purchased fabric. Establishments primarily engaged in manufacturing canvas bags are classified in industry 2393.

2395 **Pleating, Decorative and Novelty Stitching, and Tucking for the Trade.**—Establishments primarily engaged in pleating, decorative and novelty stitching, and tucking for the trade. Establishments primarily engaged in performing similar services for individuals are classified in service industries. Establishments primarily engaged in manufacturing trimmings are classifled in industry 2396.

2396 **Automotive Trimmings, Apparel Findings, and Related Products.**—Establishments primarily engaged in manufacturing automotive trimmings and apparel findings and related products.

2397 **Schiffli Machine Embroideries.**—Establishments primarily engaged in manufacturing Schiffli machine embroideries.

2399 **Fabricated Textile Products, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing fabricated textile products not elsewhere classified.

24 LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE

This major group includes logging camps engaged in cutting timber and pulpwood; merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood mills and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Certain types of establishments producing wood products are classified elsewhere. For example, furniture and office and store fixtures are classified in SIC Major Group 25; musical instruments, toys, playground equipment, and caskets in SIC Major Group 39. Woodworking in connection with construction in the nature of reconditioning and repair or performed to individual order, is classified in nonmanufacturing industries.

241 LOGGING CAMPS AND LOGGING CONTRACTORS

2411 **Logging Camps and Logging Contractors.**—Logging camps and logging contractors primarily engaged in cutting timber and in producing rough, round, hewn, or riven primary forest or wood raw materials. Independent contractors engaged in estimating or trucking timber, but who perform no cutting operations, are classified in nonmanufacturing industries. Logging and woods operations conducted in combination with sawmills, pulpmills, or other converting establishments, and not separately reported, are classified in their respective industry groups; namely, with sawmills in SIC group 242, veneer and plywood mills in SIC group 243, pulpmills in SIC Major Group 26, and charcoal and wood distillation plants in SIC group 286. Establishments primarily engaged in the collection of bark, sap, gum, and other forest byproducts are classified in SIC Major Group 08.

242 SAWMILLS AND PLANING MILLS

2421 **Sawmills and Planing Mills, General.**—Establishments primarily engaged in sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock; planing mills combined with sawmills; and separately operated planing mills which are engaged primarily in producing surfaced

lumber and standard workings or patterns of lumber. This industry includes establishments primarily engaged in sawing lath and railroad ties and in producing tobacco hogshead stock, wood chips, and snow fence lath. Establishments primarily engaged in manufacturing box shook or boxes are classified in SIC group 244; sash, doors, wood molding, window and door frames, and other fabricated millwork in SIC group 243; and hardwood dimension and flooring in industry 2426. Logging camps combined with sawmills, when not separately reported, are included in this industry.

2426 **Hardwood Dimension and Flooring Mills.**—Establishments primarily engaged in manufacturing hardwood dimension lumber and workings therefrom; other hardwood dimension, semifabricated or ready for assembly; hardwood flooring; and wood frames for household furniture. Establishments primarily engaged in manufacturing stairwork, molding, and trim are classified in industry 2431; and those manufacturing textile machinery bobbins, picker sticks, and shuttles in industry 3552.

2429 **Special Product Sawmills, Not Elsewhere Classified.**—Mills primarily engaged in manufacturing excelsior, wood shingles, and cooperage stock; and in sawing special products not elsewhere classified.

243 MILLWORK, VENEER, PLYWOOD, AND STRUCTURAL WOOD MEMBERS

2431 **Millwork.**—Establishments primarily engaged in manufacturing fabricated millwork. Planing mills primarily engaged in producing millwork are included in this industry, but planing mills primarily producing standard workings or patterns of lumber are classified in industry 2421. Establishments primarily manufacturing wood kitchen cabinets and bathroom vanities are classified in industry 2434.

2434 **Wood Kitchen Cabinets.**—Establishments primarily engaged in manufacturing wood kitchen cabinets and wood bathroom vanities.

2435 **Hardwood Veneer and Plywood.**—Establishments primarily engaged in producing commercial hardwood veneer, either face or technical, and those primarily engaged in manufacturing commercial plywood or prefinished hardwood plywood. This includes nonwood backed or faced veneer and nonwood faced plywood from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of end products such as fruit and vegetable baskets and wood boxes are classified in industries 2441 and 2449.

2436 **Softwood Veneer and Plywood.**—Establishments primarily engaged in producing commercial softwood veneer and plywood from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in producing commercial hardwood veneer and plywood are classified in industry 2435. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of end products such as fruit and vegetable baskets and wood boxes are classified in industries 2441 and 2449.

2439 **Structural Wood Members, Not Elsewhere Classified.**—Establishments primarily engaged in producing laminated or fabricated trusses, arches, and other structural members of lumber. Establishments primarily engaged in fabrication on the site of construction are classified in Division C, Construction. Establishments primarily engaged in producing prefabricated wooden buildings, sections, and panels are classified in industry 2452.

244 WOOD CONTAINERS

2441 **Nailed and Lock Corner Wood Boxes and Shook.**—Establishments primarily engaged in manufacturing nailed and lock corner wood boxes (lumber or plywood) and those which also may produce shook for nailed and lock corner boxes.

2448 **Wood Pallets and Skids.**—Establishments primarily engaged in manufacturing wood and wood-metal combination pallets and skids.

2449 **Wood Containers, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing wood containers, not elsewhere classified, such as cooperage, wirebound boxes and crates, and other veneer and plywood containers. Establishments primarily engaged in manufacturing tobacco hogshead stock are classified in industry 2421, and those manufacturing cooperage stock in industry 2429.

245 WOOD BUILDINGS AND MOBILE HOMES

2451 Mobile Homes.—Establishments primarily engaged in manufacturing mobile homes. These mobile homes are generally over 35 feet long, at least 8 feet wide, do not have facilities for storage of water or waste, and are equipped with wheels. These products may also have nonresidential uses such as classrooms or offices. Trailers that are generally 35 feet long or less, 8 feet wide or less, and with self-contained facilities are classified in industry 3792. Portable buildings not equipped with wheels are classified in industry 2452.

2452 Prefabricated Wood Buildings and Components.—Establishments primarily engaged in manufacturing prefabricated wood buildings, sections, and panels. Establishments primarily engaged in fabricating buildings on the site of construction are classified in Division C, Construction.

249 MISCELLANEOUS WOOD PRODUCTS

2491 Wood Preserving.—Establishments primarily engaged in treating wood, sawed or planed in other establishments, with creosote or other preservatives to prevent decay and to protect against fire and insects. This industry also includes the cutting, treating, and selling of poles, posts, and piling, but establishments primarily engaged in manufacturing other wood products, which they may also treat with preservatives, are not included.

2492 Particleboard.—Establishments primarily engaged in manufacturing wood panel products from small wood particles. This includes preparation of small particles of wood, drying, mixing with a synthetic resin binder, and compressing. Pressing may take place in hydraulic presses with heated platens or by extrusion.

2499 Wood Products, Not Elsewhere Classified.—Establishments primarily engaged in turning and shaping wood and manufacturing miscellaneous wood products, not elsewhere classified, from rattan, reed, splint, straw, veneer, veneer strips, wicker, and willow. This industry also includes establishments manufacturing lasts and related products, cork products, hardboard, and wood or metal mirror and picture frames. Establishments primarily engaged in manufacturing particleboard are classified in industry 2492, and those manufacturing pallets and skids in industry 2448.

25 FURNITURE AND FIXTURES

This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures. Establishments primarily engaged in the production of millwork are classified in industry 2431; wood kitchen cabinets in industry 2434; cut stone and concrete furniture in SIC Major Group 32; laboratory and hospital furniture in SIC Major Group 38; beauty and barber shop furniture in SIC Major Group 39; and woodworking to individual order or in the nature of reconditioning and repair in nonmanufacturing industries.

251 HOUSEHOLD FURNITURE

2511 Wood Household Furniture, Except Upholstered.—Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes establishments manufacturing camp furniture. Establishments primarily engaged in manufacturing upholstered furniture are classified in industry 2512; reed and rattan furniture in industry 2519; television, radio, phonograph, and sewing machine cabinets in industry 2517; and kitchen cabinets and bathroom vanities in industry 2434.

2512 Wood Household Furniture, Upholstered.—Establishments primarily engaged in manufacturing upholstered furniture on wood frames. Shops primarily engaged in reupholstering furniture, or upholstering frames to individual order, are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing dual-purpose sleep furniture, such as studio couches, sofa beds, and chair beds, are classified in industry 2515, regardless of the material used in the frame. Establishments primarily engaged in manufacturing wood frames for upholstered furniture are classified in industry 2426.

2514 Metal Household Furniture.—Establishments primarily engaged in manufacturing padded or plain metal household furniture of a type commonly used in dwellings. Establishments primarily engaged in manufacturing dual-purpose sleep furniture, such as studio couches, sofa beds, and chair beds, are classified in industry 2515, regardless of the material used in the frame.

2515 **Mattresses and Bedsprings.**—Establishments primarily engaged in manufacturing innerspring mattresses, box spring mattresses, and noninnerspring mattresses containing felt, form rubber, urethane, hair, or any other filling material; and assembled wire springs (fabric, coil, or box) for use on beds, couches, and cots. This industry also includes establishments primarily engaged in manufacturing dual-purpose sleep furniture, such as studio couches, sofa beds, and chair beds, regardless of the material used in the frame. Establishments primarily engaged in manufacturing automobile seats and backs are classified in industry 2531; individual wire springs in industry 3495; and paddings and upholstery filling in industry 2293.

2517 **Wood Television, Radio, Phonograph, and Sewing Machine Cabinets.**—Establishments primarily engaged in manufacturing wood cabinets for radios, television sets, phonographs, and sewing machines.

2519 **Household Furniture, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing reed, rattan, and other wicker furniture, plastics and fiberglass household furniture and cabinets, and household furniture not elsewhere classified.

252 OFFICE FURNITURE

2521 **Wood Office Furniture.**—Establishments primarily engaged in manufacturing wood office furniture, whether padded, upholstered, or plain.

2522 **Metal Office Furniture.**—Establishments primarily engaged in manufacturing metal office furniture, whether padded or plain. Establishments primarily engaged in manufacturing safes and vaults are classified in industry 3499.

253 PUBLIC BUILDING AND RELATED FURNITURE

2531 **Public Building and Related Furniture.**—Establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries. Establishments primarily engaged in manufacturing seats for public conveyances, as well as seats for automobiles and aircraft, are included in this industry. Establishments primarily engaged in manufacturing stone furniture are classified in industry 3281, and concrete furniture in industry 3272.

254 PARTITIONS, SHELVING, LOCKERS, AND OFFICE AND STORE FIXTURES

2541 **Wood Partitions, Shelving, Lockers, and Office and Store Fixtures.**—Establishments primarily engaged in manufacturing wood shelving, lockers, office and store fixtures, prefabricated partitions, plastic laminated fixture tops, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in industry 3585, and safes and vaults in industry 3499.

2542 **Metal Partitions, Shelving, Lockers, and Office and Store Fixtures.**—Establishments primarily engaged in manufacturing metal shelving, storage racks, lockers, office and store fixtures, prefabricated partitions, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in industry 3585, and safes and vaults in industry 3499.

259 MISCELLANEOUS FURNITURE AND FIXTURES

2591 **Drapery Hardware and Window Blinds and Shades.**—Establishments primarily engaged in manufacturing curtain and drapery rods, poles, and fixtures; and venetian blinds and other window blinds and shades, regardless of the materials used, except canvas shades and awnings (industry 2394).

2599 **Furniture and Fixtures, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing furniture and fixtures, not elsewhere classified, including furniture specially designed for use in restaurants, bars, cafeterias, bowling establishments, and ships.

26 PAPER AND ALLIED PRODUCTS

This major group includes the manufacture of pulps from wood and other cellulose fibers, and from rags; the manufacture of paper and paperboard; and the manufacture of paper and paperboard into converted products such as paper coated off the paper machine, paper bags, paper boxes and envelopes. Certain types of converted paper products are classified elsewhere, such as abrasive paper in industry 3291, carbon paper in industry 3955, and photosensitized and blueprint paper in industry 3861.

261 PULPMILLS

2611 Pulpmills.—Establishments primarily engaged in manufacturing pulp from wood or from other materials such as rags, linters, wastepaper, and straw. Logging camps operated by pulpmills, and not separately reported, are also included in this industry. Establishments primarily engaged in cutting pulpwood are classified in industry 2411; and pulpmills combined with papermills or paperboard mills, and not separately reported, are classified with the latter in industries 2621 and 2631, respectively.

262 PAPERMILLS, EXCEPT BUILDING PAPERMILLS

2621 Papermills, Except Building Papermills.—Establishments primarily engaged in manufacturing paper (except building paper—industry 2661) from woodpulp and other fibers, and which may also manufacture converted paper products. Pulpmills combined with papermills, and not separately reported, are also included in this industry; where separately reported, they are classified in industry 2611. Establishments primarily engaged in manufacturing converted paper products from purchased paper stock are classified in SIC groups 264 or 265.

263 PAPERBOARD MILLS

2631 Paperboard Mills.—Establishments primarily engaged in manufacturing paperboard, including paperboard coated on the paperboard machine, from woodpulp and other fibers; and which may also manufacture converted paperboard products. Pulpmills combined with paperboard mills, and not separately reported, are also included in this industry; where separately reported, they are classified in industry 2611. Establishments primarily engaged in manufacturing converted paperboard products from purchased paperboard are classified in SIC groups 264 or 265, and building board in industry 2661.

264 CONVERTED PAPER AND PAPERBOARD PRODUCTS, EXCEPT CONTAINERS AND BOXES

2641 Paper Coating and Glazing.—Establishments primarily engaged in manufacturing coated, glazed, or varnished paper from purchased paper. Also included are establishments primarily manufacturing pressure sensitive tape with backing of any material other than rubber. Establishments primarily engaged in manufacturing carbon paper are classified in industry 3955, and photographic and blueprint paper in industry 3861.

2642 Envelopes.—Establishments primarily engaged in manufacturing envelopes of any description from purchased paper and paperboard. Establishments primarily engaged in manufacturing papeteries (boxed stationery) are classified in industry 2648.

2643 Bags, Except Textile Bags.—Establishments primarily engaged in manufacturing bags from purchased paper, cellophane, acetate, polyethylene, polypropylene, pliofilm, foil, and similar sheet or film materials.

2645 Die-Cut Paper and Paperboard and Cardboard.—Establishments primarily engaged in diecutting purchased paper and paperboard; and in manufacturing cardboard by laminating, lining, or surface coating paperboard. Establishments primarily engaged in laminating building paper or building board from purchased paper or board are classified in industry 2649.

2646 Pressed and Molded Pulp Goods.—Establishments primarily engaged in manufacturing all kinds of pressed and molded pulp goods, including papier-mache articles other than statuary and art goods (industry 3299). Establishments primarily engaged in manufacturing plates and utensils from paper are classified in industry 2654.

2647 Sanitary Paper Products.—Establishments primarily engaged in manufacturing, from purchased paper, sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, and sanitary napkins and tampons.

2648 Stationery, Tablets, and Related Products.—Establishments primarily engaged in manufacturing stationery, tablets, looseleaf fillers, and related items from purchased paper. Establishments primarily engaged in manufacturing envelopes are classified in industry 2642.

2649 Converted Paper and Paperboard Products, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing from purchased paper or paperboard miscellaneous converted paper or paperboard

products not elsewhere classified. Establishments primarily engaged in manufacturing sanitary paper products from purchased paper are classified in industry 2647. The paper stock used for wallpaper, called "hanging paper," is classified in industry 2621. Establishments primarily engaged in manufacturing stationery, tablets, and related products are classified in industry 2648.

265 PAPERBOARD CONTAINERS AND BOXES

2651 Folding Paperboard Boxes.—Establishments primarily engaged in manufacturing folding paperboard boxes from purchased paperboard.

2652 Set-up Paperboard Boxes.—Establishments primarily engaged in manufacturing set-up paperboard boxes from purchased paperboard.

2653 Corrugated and Solid Fiber Boxes.—Establishments primarily engaged in manufacturing corrugated and solid fiber boxes and related products from purchased paperboard of fiber stock. Important products of this industry include corrugated and solid fiberboard boxes, pads, partitions, display items, pallets, single-face products, and corrugated sheets.

2654 Sanitary Food Containers.—Establishments primarily engaged in manufacturing food containers from special food board. Important products of this industry include fluid milk containers; folding paraffined cartons for butter, margarine, and shortening; ice cream containers; frozen food containers; liquid tight containers; round nested food containers; paper cups for hot or cold drinks; pails for food and ice cream; and stamped plates, dishes, spoons, and similar products. Establishments primarily engaged in manufacturing similar items of plastics materials are classified in industry 3079.

2655 Fiber Cans, Tubes, Drums, and Similar Products.—Establishments primarily engaged in manufacturing from purchased materials fiber cans, cones, drums, similar products with or without metal ends, and vulcanized fiber boxes.

266 BUILDING PAPER AND BUILDING BOARD MILLS

2661 Building Paper and Building Board Mills.—Establishments primarily engaged in manufacturing building paper and building board from woodpulp and other fibrous materials. Pulpmills combined with building paper and building board mills, and not separately reported, are also included in this industry; where separately reported, they are classified in industry 2611.

27 PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. News syndicates are classified in service industries, (industry 7351) and textile printing and finishing in SIC Major Group 22.

271 NEWSPAPERS: PUBLISHING, PUBLISHING AND PRINTING

2711 Newspapers: Publishing, Publishing and Printing.—Establishments primarily engaged in publishing newspapers or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing. Commercial printing is frequently carried on by establishments engaged in publishing and printing newspapers, but, even though the commercial printing may be of major importance, such establishments are included in this industry. Establishments not engaged in publishing newspapers, but which print or lithograph newspapers for publishers, are classified in SIC group 275. News syndicates are classified in service industries (industry 7351).

272 PERIODICALS: PUBLISHING, PUBLISHING AND PRINTING

2721 Periodicals: Publishing, Publishing and Printing.—Establishments primarily engaged in publishing periodicals or in preparing, publishing, and printing

periodicals. These establishments carry on the various operations necessary for issuing periodicals, but may or may not perform their own printing. Establishments not engaged in publishing periodicals, but which print or lithograph periodicals for publishers, are classified in SIC group 275.

273 BOOKS

2731 Books: Publishing, Publishing and Printing.—Establishments primarily engaged in publishing only, or in publishing and printing books and pamphlets. Establishments primarily engaged in printing or in printing and binding (but not publishing) books and pamphlets are classified in industry 2732.

2732 Book Printing.—Establishments primarily engaged in printing only or in printing and binding books and pamphlets, but not engaged in publishing. Establishments primarily engaged in publishing, or in publishing and printing books and pamphlets, are classified in industry 2731. Establishments engaged in both printing and binding books, but primarily binding books printed elsewhere, are classified in industry 2789.

274 MISCELLANEOUS PUBLISHING

2741 Miscellaneous Publishing.—Establishments primarily engaged in miscellaneous publishing activities, not elsewhere classified, whether or not engaged in printing. Establishments primarily engaged in offering financial, credit, or other business services, and which may publish directories as part of this service, are not included in this industry but are classified in service industries.

275 COMMERCIAL PRINTING

2751 Commercial Printing, Letterpress and Screen.—Establishments primarily engaged in letterpress and screen commercial or job printing, including flexographic. This industry includes general printing shops, as well as shops specializing in printing newspapers and periodicals for others, and those which specialize in screen printing. Establishments primarily engaged in printing books, without publishing, are classified in industry 2732, and greeting cards in industry 2771. Establishments primarily engaged in printing from lithographic plates are classified in industry 2752, and gravure and rotogravure printing in industry 2754.

2752 Commercial Printing, Lithographic.—Establishments primarily engaged in printing by the lithographic process. The greater part of the work in this industry is performed on a job or custom basis; but, in some cases, lithographed calendars, maps, posters, decalcomanias, etc., are made for sale. Offset printing, photo-offset printing, and photolithographing are also included in this industry. Establishments primarily engaged in lithographing books and pamphlets, without publishing, are classified in industry 2732, and greeting cards in industry 2771. Establishments primarily engaged in preparing lithographic plates and in related services are classified in industry 2795.

2753 Engraving and Plate Printing.—Establishments primarily engaged in engraving and etching steel, copper, wood, or rubber plates; in using these plates to print stationery, visiting and other cards, invitations, maps, etc.; and in making woodcuts for use in printing illustrations, posters, etc. Engraving for purposes other than printing is classified in industry 3479.

2754 Commercial Printing, Gravure.—Establishments primarily engaged in gravure printing.

276 MANIFOLD BUSINESS FORMS

2761 Manifold Business Forms.—Establishments primarily engaged in designing and printing, by any process, special forms for use in the operation of a business, in single and multiple sets, including carbonized or interleaved with carbon or otherwise processed for multiple reproduction.

277 GREETING CARD PUBLISHING

2771 Greeting Card Publishing.—Establishments primarily engaged in the designing, publishing, and printing by any process of greeting cards for all occasions.

278 BLANKBOOKS, LOOSELEAF BINDERS, AND BOOKBINDING AND RELATED WORK

2782 Blankbooks, Looseleaf Binders, and Devices.—Establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and library binders; and in ruling paper.

2789 Bookbinding and Related Work.—Establishments primarily engaged in edition, trade, job, and library bookbinding; in book or paper bronzing, gilding, and edging; in map and sample mounting; and other services related to bookbinding. Establishments primarily binding books printed elsewhere are classified in this industry, but those primarily binding books printed in the same establishment are classified in SIC group 273.

279 SERVICE INDUSTRIES FOR THE PRINTING TRADE

2791 Typesetting.—Establishments primarily engaged in typesetting for the trade, including advertisement typesetting.

2793 Photoengraving.—Establishments primarily engaged in preparing photoengraved plates (halftones and linecuts). These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.

2794 Electrotyping and Stereotyping.—Establishments primarily engaged in preparing electrotype and stereotype plates. These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.

2795 Lithographic Platemaking and Related Services.—Establishments primarily engaged in making lithographic plates and positives or negatives from which lithographic plates are made, and in related services. Establishments primarily engaged in printing by the lithographic process are classified in industry 2752.

28 CHEMICALS AND ALLIED PRODUCTS

This major group includes establishments producing basic chemical and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) Basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, dry colors, and pigments; (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries, such as paints, fertilizers, and explosives. The mining of natural rock salt is classified in mining industries. Establishments primarily engaged in manufacturing nonferrous metals and high-percentage ferroalloys are classified in SIC Major Group 33; silicon carbide in SIC Major Group 32; baking powder, other leavening compounds, and starches in SIC Major Group 20; and artists' colors in SIC Major Group 39. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products, but not engaged in manufacturing chemicals and allied products, are classified in trade industries.

281 INDUSTRIAL INORGANIC CHEMICALS

This group includes establishments primarily engaged in manufacturing basic industrial inorganic chemicals. Establishments primarily engaged in manufacturing formulated agricultural pesticides are classified in industry 2879; medicinal chemicals, drugs, and medicines in industry 2833; and soap and cosmetics in SIC group 284.

2812 Alkalies and Chlorine.—Establishments primarily engaged in manufacturing alkalies and chlorine.

2813 Industrial Gases.—Establishments primarily engaged in manufacturing gases for sale in compressed, liquid, and solid forms. Establishments primarily engaged in manufacturing fluorine and sulfur dioxide are classified in industry 2819; household ammonia in industry 2842, and other ammonia in industry 2873; and cholorine in industry 2812. Distributors of industrial gases and establishments primarily engaged in shipping liquid oxygen are classified in trade.

2816 Inorganic Pigments.—Establishments primarily engaged in manufacturing inorganic pigments. Important products of this industry include black pigments (except carbon black, industry 2895), white pigments, and color pigments. Organic color pigments, except animal black and bone black, are classified in industry 2865.

2819 Industrial Inorganic Chemicals, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing industrial inorganic chemicals not elsewhere classified. Important products of this industry include inorganic salts of sodium (excluding refined sodium chloride), potassium, aluminum, calcium, chromium, magnesium, mercury, nickel, silver, tin; inorganic compounds such as alums, calcium carbide, hydrogen peroxide, sodium silicate,

ammonia compounds (except fertilizers), rare earth metal salts and elemental bromine, fluorine, iodine, phosphorus, and alkali metals (sodium, potassium, lithium, etc.). Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt) are classified in industry 1474. Establishments primarily engaged in manufacturing household bleaches are classified in industry 2842; phosphoric acid in industry 2874; and nitric acid, anhydrous ammonia, and other nitrogenous fertilizer materials in industry 2873.

282 PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MANMADE FIBERS, EXCEPT GLASS

This group includes chemical establishments primarily engaged in manufacturing plastics materials and synthetic resins, synthetic rubbers, and cellulosic and manmade organic fibers. Establishments primarily engaged in the manufacture of rubber products and those primarily engaged in the compounding of purchased resins or the fabrication of plastics sheets, rods, and miscellaneous plastics products are classified in SIC Major Group 30; and textile mills primarily engaged in throwing, spinning, weaving, or knitting textile products from manufactured fibers are classified in SIC Major Group 22.

2821 **Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers.**—Establishments primarily engaged in manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers. Important products of this industry include: Cellulose plastic materials; phenolic and other tar acid resins; urea and melamine resins; vinyl resins; styrene resins; alkyd resins; acrylic resins; polyethylene resins; polypropylene resins; rosin modified resins; coumarone-indene and petroleum polymer resins; and miscellaneous resins including polyamide resins, silicones, polyisobutylenes, polyesters, polycarbonate resins, acetal resins, fluorohydrocarbon resins; and casein plastics. Establishments primarily engaged in manufacturing fabricated plastics products or plastics film, sheet, rod, nontextile monofilaments and regenerated cellulose products, and vulcanized fiber are classified in industry 3079, whether from purchased resins or from resins produced in the same plant. Establishments primarily engaged in compounding purchased resins are also classified in industry 3079. Establishments primarily manufacturing adhesives are classified in industry 2891.

2822 **Synthetic Rubber (Vulcanizable Elastomers).**—Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. An elastomer for the purpose of this classification is a rubber-like material capable of vulcanization, such as copolymers of butadiene and styrene, or butadiene and acrylonitrile, polybutadienes, chloroprene rubbers, and isobutylene-isoprene copolymers. Butadiene copolymers containing less than 50% butadiene are classified in industry 2821. Natural chlorinated rubbers and cyclized rubbers are considered as semifinished products and are classified in industry 3069.

2823 **Cellulosic Manmade Fibers.**—Establishments primarily engaged in manufacturing cellulosic fibers (including cellulose acetate and regenerated cellulose such as rayon by the viscose or cuprammonium process) in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment. Establishments primarily engaged in manufacturing textile glass fibers are classified in industry 3229.

2824 **Synthetic Organic Fibers, Except Cellulosic.**—Establishments primarily engaged in manufacturing synthetic organic fibers, except cellulosic (including those of regenerated proteins, and of polymers or copolymers of such components as vinyl chloride, vinylidene chloride, linear esters, vinyl alcohols, acrylonitrile, ethylenes, amides, and related polymeric materials) in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment. Establishments primarily engaged in manufacturing textile glass fibers are classified in industry 3229.

283 DRUGS

This group includes establishments primarily engaged in manufacturing, fabricating, or processing medicinal chemicals and pharmaceutical products. Also included in this group are establishments primarily engaged in the grading, grinding, and milling of botanicals.

2831 **Biological Products.**—Establishments primarily engaged in the production of bacterial and virus vaccine, toxoids and analogous products (such as allergenic extracts), serums, plasmas, and other blood derivatives for human or veterinary use.

2833 **Medicinal Chemicals and Botanical Products.**—Establishments primarily engaged in (1) manufacturing bulk organic and inorganic medicinal chemicals and their derivatives; and (2) processing (grading, grinding, and milling) bulk botanical drugs and herbs. Establishments primarily engaged in manufacturing agar-agar and similar products of natural origin, endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principals such as alkaloids from botanical drugs and herbs are also included in this industry.

2834 **Pharmaceutical Preparations.**—Establishments primarily engaged in manufacturing, fabricating, or processing drugs in pharmaceutical preparations for human or veterinary use. The greater part of the products of these establishments are finished in the form intended for final consumption, such as ampoules, tablets, capsules, vials, ointments, medicinal powders, solutions, and suspensions. Products of this industry consist of two important lines, namely: (1) Pharmaceutical preparations promoted primarily to the dental, medical, or veterinary professions; and (2) pharmaceutical preparations promoted primarily to the public.

284 SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS

This group includes establishments primarily engaged in manufacturing soap and other detergents and in producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; and surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations.

2841 **Soap and Other Detergents, Except Specialty Cleaners.**—Establishments primarily engaged in manufacturing soap, synthetic organic detergents, inorganic alkaline detergents, or any combination thereof, and establishments producing crude and refined glycerin from vegetable and animal fats and oils. Establishments primarily engaged in manufacturing shampoos or shaving products, whether from soap or synthetic detergents, are classified in industry 2844; and synthetic glycerin in industry 2869.

2842 **Specialty Cleaning, Polishing, and Sanitation Preparations.**—Establishments primarily engaged in manufacturing furniture, metal, and other polishes; waxes and dressings for fabricated leather and other materials; household, institutional and industrial plant disinfectants, deodorants; dry cleaning preparations; household bleaches; and other sanitation preparations. Establishments primarily manufacturing household pesticidal preparations are classified in industry 2879.

2843 **Surface Active Agents, Finishing Agents, Sulfonated Oils and Assistants.**—Establishments primarily engaged in producing surface active preparations for use as wetting agents, emulsifiers, and penetrants. Establishments engaged in producing sulfonated oils and fats and related products are also included.

2844 **Perfumes, Cosmetics, and Other Toilet Preparations.**—Establishments primarily engaged in manufacturing perfumes (natural and synthetic), cosmetics, and other toilet preparations. This industry also includes establishments primarily engaged in blending and compounding perfume bases; and those manufacturing shampoos and shaving products, whether from soap or synthetic detergents. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in industry 2869, and essential oils in industry 2899.

285 PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS

2851 **Paints, Varnishes, Lacquers, Enamels, and Allied Products.**—Establishments primarily engaged in manufacturing paints (in paste and ready-mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers and sealers; paint and varnish removers; and paint brush cleaners and allied paint products. Establishments primarily engaged in manufacturing carbon black are classified in industry 2895; boneblack, lampblack, and inorganic color pigments in industry 2816; organic color pigments in industry 2865; plastics materials in industry 2821; printing ink in industry 2893; calking compounds and sealants in industry 2891; and artists' paints in industry 3952.

286 INDUSTRIAL ORGANIC CHEMICALS

Establishments primarily engaged in manufacturing industrial organic chemicals. Important products of this group include: (1) Noncyclic organic chemicals such as

acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde, and methylamine; (2) solvents such as amyl, butyl, and ethyl alcohols; methanol; amyl, butyl and ethyl acetates; ethel ether, ethylene glycol ether and diethylene glycol ether; acetone, carbon disulfide, and chlorinated solvents such as carbon tetrachloride, perchloroethylene and trichloroethylene; (3) polyhydric alcohols such as ethylene glycol, sorbitol, pentaerythritol, synthetic glycerin; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber processing chemicals such as accelerators and antioxidants, both cyclic and acyclic; (6) plasticizers, both cyclic and acyclic, such as esters of phosphoric acid, phthalic anhydride, adipic acid, lauric acid, oleic acid, sebacic acid, and stearic acid; (7) synthetic tanning agents such as naphthalene sulfonic acid condensates, (8) chemical warfare gases; (9) esters, amines, etc., of polyhydric alcohols and fatty and other acids; (10) cyclic crudes and intermediates; (11) cyclic dyes and organic pigments; and (12) natural gum and wood chemicals. Establishments primarily engaged in manufacturing plastics materials and nonvulcanizable elastomers are classified in industry 2821; synthetic rubber in industry 2822; essential oils in industry 2899; rayon and other synthetic fibers in industries 2823 and 2824; specialty cleaning, polishing and sanitation preparations in industry 2842; paints in industry 2851; and inorganic pigments in industry 2816. Distilleries engaged in the manufacture of grain alcohol for beverage purposes are classified in industry 2085.

2861 **Gum and Wood Chemicals.**—Establishments primarily engaged in manufacturing hardwood and softwood distillation products, wood and gum naval stores, charcoal, natural dyestuffs, and natural tanning materials. Establishments primarily engaged in manufacturing synthetic tanning materials and synthetic organic chemicals are classified in industry 2869, and synthetic organic dyes in industry 2865.

2865 **Cyclic (Coal Tar) Crudes, and Cyclic Intermediates, Dyes, and Organic Pigments (Lakes and Toners).**—Establishments primarily engaged in manufacturing coal tar crudes and cyclic organic intermediates, dyes, color lakes, and toners. Important products of this industry include: (1) Derivatives of benzene, toluene, naphthaline, anthracene, pyridine, carbazole, and other cyclic chemical products; (2) synthetic organic dyes; (3) synthetic organic pigments; and (4) cyclic (coal tar) crudes, such as light oils and light oil products; coal tar acids; and products of medium and heavy oil such as creosote oil, naphthalene, anthracene, and their higher homologues, and tar. Establishments primarily engaged in manufacturing coal tar crudes in chemical recovery ovens are classified in industry 3312, and petroleum refineries which produce such products in industry 2911.

2869 **Industrial Organic Chemicals, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing industrial organic chemicals not elsewhere classified. Important products of this industry include: (1) Noncyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde and methylamine; (2) solvents such as amyl, butyl, and ethyl alcohols; methanol; amyl, butyl and ethyl acetates; ethel ether, ethylene glycol ether and diethylene glycol ether; acetone, carbon disulfide and chlorinated solvents such as carbon tetrachloride, perchloroethylene and trichloroethylene; (3) polyhydric alcohols such as ethylene glycol, sorbitol, pentaerythritol, synthetic glycerin; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber processing chemicals such as accelerators and antioxidants, both cyclic and acyclic; (6) plasticizers, both cyclic and acyclic, such as esters of phosphoric acid, phthalic anhydride, adipic acid, lauric acid, oleic acid, sebacic acid, and stearic acid; (7) synthetic tanning agents such as naphthalene sulfonic acid condensates; (8) chemical warfare gases; and (9) esters, amines, etc., of polyhydric alcohols and fatty and other acids. Establishments primarily engaged in manufacturing plastics materials and nonvulcanizable elastomers are classified in industry 2821; synthetic rubber in industry 2822; essential oils in industry 2899; wood distillation products, naval stores, and natural dyeing and tanning materials in industry 2861; rayon and other synthetic fibers in industries 2823 and 2824; specialty cleaning, polishing, and sanitation preparations in industry 2842; paints in industry 2851; urea in industry 2873; organic pigments in industry 2865; and inorganic pigments in industry 2816. Distilleries engaged in the manufacture of grain alcohol for beverage purposes are classified in industry 2085.

287 AGRICULTURAL CHEMICALS

This group includes establishments primarily engaged in manufacturing nitrogenous and phosphatic basic fertilizers, mixed fertilizers, pesticides, and other agricultural chemicals. Establishments primarily engaged in manufacturing basic chemicals which require further processing or formulation before use as agricultural pest-control agents are classified in SIC group 281 or 286.

2873 Nitrogenous Fertilizers.—Establishments primarily engaged in manufacturing nitrogenous fertilizer material or mixed fertilizers from nitrogenous materials produced in the same establishment. Included are ammonia fertilizer compounds and anhydrous ammonia, nitric acid, ammonium nitrate, ammonium sulfate and nitrogen solutions, urea, and natural organic fertilizers (except compost) and mixtures.

2874 Phosphatic Fertilizers.—Establishments primarily engaged in manufacturing phosphatic fertilizer materials or mixed fertilizers from phosphatic materials produced in the same establishment. Included are phosphoric acid; normal, enriched, and concentrated superphosphates; ammonium phosphates; nitrophosphates; and calcium metaphosphates.

2875 Fertilizers, Mixing Only.—Establishments primarily engaged in mixing fertilizers from purchased fertilizer materials.

2879 Pesticides and Agricultural Chemicals, Not Elsewhere Classified.—Establishments primarily engaged in the formulation and preparation of ready-to-use agricultural and household pest-control chemicals, including insecticides, fungicides, and herbicides from technical chemicals or concentrates; and the production of concentrates which require further processing before use as agricultural pesticides. This industry also includes establishments primarily engaged in manufacturing or formulating agricultural chemicals, not elsewhere classified, such as minor or trace elements and soil conditioners. Establishments primarily engaged in manufacturing basic or technical agricultural pest-control chemicals including insecticides, fungicides, and herbicides such as lead and calcium arsenates, and copper sulfate are classified in SIC group 281, and DDT, BHC, 2,4-D carbamates, etc., in SIC group 286. Establishments primarily engaged in manufacturing agricultural lime products are classified in SIC Major Group 32.

289 MISCELLANEOUS CHEMICAL PRODUCTS

2891 Adhesives and Sealants.—Establishments primarily engaged in manufacturing industrial and household adhesives, glues, calking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials, purchased or produced in the same establishment. Establishments primarily engaged in manufacturing gelatin and sizes are classified in industry 2899, and vegetable gelatin or agar-agar in industry 2833.

2892 Explosives.—Establishments primarily engaged in manufacturing explosives. Establishments primarily engaged in manufacturing ammunition for small arms are classified in industry 3482, and fireworks in industry 2899.

2893 Printing Ink.—Establishments primarily engaged in manufacturing printing ink, gravure ink, screen process ink, and lithographic ink.

2895 Carbon Black.—Establishments primarily engaged in manufacturing carbon black (channel and furnace black).

2899 Chemicals and Chemical Preparations, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing miscellaneous chemical preparations, not elsewhere classified, such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry sours, writing and stamp pad inks; industrial compounds, such as boiler and heat insulating compounds, metal, oil and water treating compounds, and waterproofing compounds and chemical supplies for foundries. Establishments primarily engaged in manufacturing vegetable gelatin (agar-agar) are classified in industry 2833; and dessert preparations based on gelatin in industry 2099.

29 PETROLEUM REFINING AND RELATED INDUSTRIES

This major group includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Establishments manufacturing and distributing gas to consumers are classified in public utilities industries, and those primarily engaged in producing coke and byproducts in SIC Major Group 33.

291 PETROLEUM REFINING

2911 Petroleum Refining.—Establishments primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes. Establishments primarily engaged in producing natural gasoline from natural gas are classified in mining industries. Those manufacturing lubricating oils and greases by blending and compounding purchased materials are included in industry 2992. Establishments primarily re-refining used lubricating oils are classified in industry 2992.

295 PAVING AND ROOFING MATERIALS

2951 Paving Mixtures and Blocks.—Establishments primarily engaged in manufacturing asphalt and tar paving mixtures; and paving blocks made of asphalt, creosoted wood, and various compositions of asphalt or tar with other materials. Establishments primarily engaged in manufacturing brick, concrete, granite, and stone paving blocks are classified in SIC Major Group 32.

2952 Asphalt Felts and Coatings.—Establishments primarily engaged in manufacturing asphalt and other saturated felts in roll or shingle form, either smooth or faced with grit, and in manufacturing roofing cements and coatings. Establishments primarily engaged in manufacturing paint are classified in industry 2851, and linoleum and tile cement in industry 2891.

299 MISCELLANEOUS PRODUCTS OF PETROLEUM AND COAL

2992 Lubricating Oils and Greases.—Establishments primarily engaged in blending, compounding, and re-refining lubricating oils and greases from purchased mineral, animal, and vegetable materials. Petroleum refineries engaged in the production of lubricating oils and greases are classified in industry 2911.

2999 Products of Petroleum and Coal, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing fuel briquettes, boulets, packaged fuel, powdered fuel, and other products of petroleum and coal not elsewhere classified.

30 RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS

This major group includes establishments manufacturing from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak, rubber products such as tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries. This group also includes establishments primarily manufacturing tires, but establishments primarily recapping and retreading automobile tires are classified in industry 7534. This group also includes establishments engaged in molding primary plastics for the trade and manufacturing miscellaneous finished plastics products. The manufacture of elastic webbing is classified in SIC Major Group 22; products made of elastic webbing and garments made from rubberized fabrics in SIC Major Group 23; and synthetic rubber in industry 2822.

301 TIRES AND INNER TUBES

3011 Tires and Inner Tubes.—Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles, airplanes, farm equipment, and children's vehicles; tiring; and camelback, and tire repair and retreading materials. Establishments primarily engaged in retreading tires are classified in industry 7534.

302 RUBBER AND PLASTICS FOOTWEAR

3021 Rubber and Plastics Footwear.—Establishments primarily engaged in manufacturing all rubber and plastics footwear, waterproof fabric upper footwear, and other fabric upper footwear having rubber or plastic soles vulcanized to the uppers. Establishments primarily engaged in manufacturing rubber, composition, and fiber heels, soles, soling strips, and related shoemaking and repairing materials are classified in industry 3069; plastic soles and soling strips in industry 3079.

303 RECLAIMED RUBBER

3031 Reclaimed Rubber.—Establishments primarily engaged in reclaiming rubber from scrap rubber tires, tubes, and miscellaneous waste rubber articles by processes which result in devulcanized, depolymerized, or regenerated replasticized products containing added ingredients. These products are sold

for use as a raw material in the manufacture of rubber goods with or without admixture with crude rubber or synthetic rubber. Establishments primarily engaged in the assembly and wholesale sale of scrap rubber are classified in trade industries.

304 RUBBER AND PLASTICS HOSE AND BELTING

3041 Rubber and Plastics Hose and Belting.—Establishments primarily engaged in manufacturing rubber and plastics hose and belting, including garden hose. Establishments primarily engaged in manufacturing rubber tubing are classified in industry 3069; plastic tubing in industry 3079; and flexible metallic hose in industry 3599.

306 FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED

3069 Fabricated Rubber Products, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing industrial and mechanical rubber goods, rubberized fabrics, vulcanized rubber clothing, and miscellaneous rubber specialties and sundries. Establishments primarily engaged in rebuilding and retreading tires are classified in industry 7534; and gaskets and packing in industry 3293.

307 MISCELLANEOUS PLASTICS PRODUCTS

3079 Miscellaneous Plastics Products.—Establishments primarily engaged in molding primary plastics for the trade, and fabricating miscellaneous finished plastics products. Establishments primarily engaged in manufacturing fabricated plastics products or plastics film, sheet, rod, nontextile monofilaments and regenerated cellulose products, and vulcanized fiber are classified in this industry, whether from purchased resins or from resins produced in the same plant. Establishments primarily engaged in compounding purchased resins are also classified in this industry. Establishments primarily engaged in manufacturing artificial leather are classified in industry 2295.

31 LEATHER AND LEATHER PRODUCTS

This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather, artificial leather products, and some similar products made of other materials. Leather converters are also included.

311 LEATHER TANNING AND FINISHING

3111 Leather Tanning and Finishing.—Establishments primarily engaged in tanning, currying, and finishing hides and skins into leather. This industry also includes leather converters who buy hides and skins and have them processed into leather on a contract basis by others.

313 BOOT AND SHOE CUT STOCK AND FINDINGS

3131 Boot and Shoe Cut Stock and Findings.—Establishments primarily engaged in manufacturing leather soles, inner soles, and other boot and shoe cut stock and findings. This industry also includes finished wood heels. Establishments primarily engaged in manufacturing heels, soling strips, and soles made of rubber, composition, plastics, and fiber are classified in SIC Major Group 30.

314 FOOTWEAR, EXCEPT RUBBER

3142 House Slippers.—Establishments primarily engaged in manufacturing house slippers of leather or other materials.

3143 Men's Footwear, Except Athletic.—Establishments primarily engaged in the production of men's footwear designed primarily for dress, street, and work. Establishments primarily engaged in the production of such protective footwear as rubbers, rubber boots, storm shoes, galoshes, and other footwear with rubber soles vulcanized to the uppers are classified in industry 3021. Establishments primarily engaged in the production of athletic shoes and youths' and boys' shoes are classified in industry 3149.

3144 Women's Footwear, Except Athletic.—Establishments primarily engaged in the production of women's footwear designed primarily for dress, street, and work. Establishments primarily engaged in the production of athletic shoes and misses', children's, infants', and babies' footwear are classified in industry 3149 Establishments primarily engaged in the production of rubber or plastics footwear are classified in industry 3021.

3149 Footwear, Except Rubber, Not Elsewhere Classified.—Establishments primarily engaged in the production of shoes, not elsewhere classified, such as misses', youths', boys', children's, infants', and babies' footwear, and athletic footwear. Establishments primarily engaged in the production of rubber or plastics footwear are classified in industry 3021.

315 LEATHER GLOVES AND MITTENS

3151 Leather Gloves and Mittens.—Establishments primarily engaged in manufacturing dress, semidress, and work gloves exclusively of leather or leather with lining of other material. Establishments primarily engaged in manufacturing sporting and athletic gloves are classified in industry 3949; and dress, semidress, and work gloves and mittens of cloth or cloth and leather combined in industry 2381.

316 LUGGAGE

3161 Luggage.—Establishments primarily engaged in manufacturing luggage of leather or other materials.

317 HANDBAGS AND OTHER PERSONAL LEATHER GOODS

3171 Women's Handbags and Purses.—Establishments primarily engaged in manufacturing women's handbags and purses of leather or other materials, except precious metal (industry 3911).

3172 Personal Leather Goods, Except Women's Handbags and Purses.—Establishments primarily engaged in manufacturing small articles, such as billfolds, key cases, and coin purses of leather or other materials, except precious metal (industry 3911).

319 LEATHER GOODS, NOT ELSEWHERE CLASSIFIED

3199 Leather Goods, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing leather goods, not elsewhere classified, such as saddlery, harness, whips, embossed leather goods, leather desk sets, razor strops, and leather belting. Establishments primarily engaged in manufacturing gaskets and packing are classified in industry 3293.

32 STONE, CLAY, GLASS, AND CONCRETE PRODUCTS

This major group includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, etc., from materials taken principally from the earth in the form of stone, clay, and sand. When separate reports are available for mines and quarries operated by manufacturing establishments classified in this major group, the mining and quarrying activities are classified in Division B. When separate reports are not available, the mining and quarrying activities other than those of industry 3295 are classified herein with the manufacturing operations.

If separate reports are not available for crushing, grinding, and other preparation activities of industry 3295, these establishments are classified in Division B.

321 FLAT GLASS

3211 Flat Glass.—Establishments primarily engaged in manufacturing flat glass. This industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in industry 3231.

322 GLASS AND GLASSWARE, PRESSED OR BLOWN

This group includes establishments primarily engaged in manufacturing glass and glassware, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing glass products from purchased glass are classified in industry 3231.

3221 Glass Containers.—Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling and for home canning.

3229 Pressed and Blown Glass and Glassware, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing glass and glassware, not elsewhere classified, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing textile glass fibers are also included in this industry, but establishments primarily engaged in manufacturing glass wool insulation products are classified in industry

3296. Establishments primarily engaged in the production of pressed lenses for vehicular lighting, beacons, and lanterns are also included in this industry, but establishments primarily engaged in the production of optical lenses are classified in industry 3832. Establishments primarily engaged in manufacturing glass containers are classified in industry 3221, and complete electric light bulbs in industry 3641.

323 GLASS PRODUCTS, MADE OF PURCHASED GLASS

3231 Glass Products, Made of Purchased Glass.—Establishments primarily engaged in manufacturing glass products from purchased glass. Establishments primarily engaged in manufacturing optical lenses and ophthalmic lenses are classified in SIC Major Group 38.

324 CEMENT, HYDRAULIC

3241 Cement, Hydraulic.—Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and pozzolan cements.

325 STRUCTURAL CLAY PRODUCTS

3251 Brick and Structural Clay Tile.—Establishments primarily engaged in manufacturing brick and structural clay tile. Establishments primarily engaged in manufacturing clay firebrick are classified in industry 3255, nonclay firebrick in industry 3297, sand lime brick in industry 3299, and glass brick in industry 3229.

3253 Ceramic Wall and Floor Tile.—Establishments primarily engaged in manufacturing ceramic wall and floor tile. Establishments primarily engaged in manufacturing structural clay tile are classified in industry 3251, and drain tile in industry 3259.

3255 Clay Refractories.—Establishments primarily engaged in manufacturing clay firebrick and other heat-resisting clay products. Establishments primarily engaged in manufacturing nonclay refractories, as well as all graphite refractories whether of carbon bond or ceramic bond, are classified in industry 3297.

3259 Structural Clay Products, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing clay sewer pipe and structural clay products not elsewhere classified.

326 POTTERY AND RELATED PRODUCTS

3261 Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories.—Establishments primarily engaged in manufacturing china plumbing fixtures and china and earthenware fittings and bathroom accessories.

3262 Vitreous China Table and Kitchen Articles.—Establishments primarily engaged in manufacturing vitreous china table and kitchen articles for use in households and in hotels, restaurants, and other commercial institutions for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware (whiteware) table and kitchen articles are classified in industry 3263.

3263 Fine Earthenware (Whiteware) Table and Kitchen Articles.—Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware table and kitchen articles for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing vitreous china table and kitchen articles are classified in industry 3262.

3264 Porcelain Electrical Supplies.—Establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, spark plug and steatitic porcelain, and other electrical supplies from clay and other ceramic materials.

3269 Pottery Products, Not Elsewhere Classified.—Establishments primarily engaged in firing and decorating white china and earthenware for the trade and manufacturing art and ornamental pottery, industrial and laboratory pottery, stoneware and coarse earthenware table and kitchen articles, unglazed red earthenware florists' articles, and other pottery products, not elsewhere classified.

327 CONCRETE, GYPSUM, AND PLASTER PRODUCTS

3271 Concrete Block and Brick.—Establishments primarily engaged in manufacturing concrete building block and brick from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in the construction industries, and establishments primarily engaged in mixing and delivering ready-mixed concrete in industry 3273.

3272 **Concrete Products, Except Block and Brick.**—Establishments primarily engaged in manufacturing concrete products, except block and brick, from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in the construction industries, and establishments primarily engaged in mixing and delivering ready-mixed concrete in industry 3273.

3273 **Ready-Mixed Concrete.**—Establishments primarily engaged in manufacturing portland cement concrete manufactured and delivered to a purchaser in a plastic and unhardened state. This industry includes production and sale of central-mixed concrete, shrink-mixed concrete, and transit-mixed concrete.

3274 **Lime.**—Establishments primarily engaged in manufacturing quicklime, hydrated lime, and "dead-burned" dolomite from limestone, dolomite shells, or other substances.

3275 **Gypsum Products.**—Establishments primarily engaged in manufacturing plaster, plasterboard, and other products composed wholly or chiefly of gypsum.

328 CUT STONE AND STONE PRODUCTS

3281 **Cut Stone and Stone Products.**—Establishments primarily engaged in cutting, shaping, and finishing marble, granite, slate, and other stone for building and miscellaneous uses. Establishments primarily engaged in buying or selling partly finished monuments and tombstones, but performing no work on the stones other than lettering, finishing, or shaping to custom order, are classified in trade industries. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in Division B.

329 ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS

3291 **Abrasive Products.**—Establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials and other abrasive products. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in mining industries.

3292 **Asbestos Products.**—Establishments primarily engaged in manufacturing asbestos textiles, asbestos building materials, except asbestos paper (industry 2661), insulating materials for covering boilers and pipes, and other commodities composed wholly or chiefly of asbestos. Establishments primarily engaged in manufacturing gaskets and steam and other packing are classified in industry 3293.

3293 **Gaskets, Packing, and Sealing Devices.**—Establishments primarily engaged in manufacturing gaskets, gasketing materials, compression packings, molded packings, oil seals, and mechanical seals. Included are gaskets, packing, and sealing devices made of leather, rubber, metal, asbestos, and plastics.

3295 **Minerals and Earths, Ground or Otherwise Treated.**—Establishments operating without a mine or quarry and primarily engaged in the crushing, grinding, pulverizing, or otherwise preparing clay, ceramic, and refractory minerals; barite; and miscellaneous nonmetallic minerals, except fuels. These minerals are the crude products mined by establishments of SIC groups 145 and 149 and industry 1472. Also included are establishments primarily crushing slag and preparing roofing granules. The beneficiation or preparation of other minerals and metallic ores, and the cleaning and grading of coal, are classified in the mining industries, whether or not the operation is associated with a mine.

3296 **Mineral Wool.**—Establishments primarily engaged in manufacturing mineral wool and mineral wool insulation products made of such siliceous materials as rock, slag, and glass, or combinations thereof. Establishments primarily engaged in manufacturing asbestos insulation products are classified in industry 3292, and textile glass fibers in industry 3229.

3297 **Nonclay Refractories.**—Establishments primarily engaged in manufacturing refractories and crucibles made of materials other than clay. This industry also includes establishments primarily engaged in manufacturing all graphite refractories, whether of carbon bond or ceramic bond. Establishments primarily engaged in manufacturing clay refractories are classified in industry 3255.

3299 **Nonmetallic Mineral Products, Not Elsewhere Classified.**—Establishments primarily engaged in the factory production of statuary and art goods made of plaster of paris and papier mache, and in manufacturing sand lime products and other nonmetallic mineral products not elsewhere classified.

33 PRIMARY METAL INDUSTRIES

This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; in the manufacture of castings and other basic products of ferrous and nonferrous metals; and in the manufacture of nails, spikes, and insulated wire and cable. This major group also includes the production of coke. Establishments primarily engaged in manufacturing metal forgings or stampings are classified in SIC group 346.

331 BLAST FURNACES, STEELWORKS, AND ROLLING AND FINISHING MILLS

3312 Blast Furnaces (Including Coke Ovens), Steelworks, and Rolling Mills.—Establishments primarily engaged in manufacturing hot metal, pig iron, silvery pig iron, and ferroalloys from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; and in hot rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing. Merchant blast furnaces and byproduct or beehive coke ovens are also included in this industry. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in industry 3313.

3313 Electrometallurgical Products.—Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical or metallothermic processes, including high percentage ferroalloys and high percentage nonferrous additive alloys.

3315 Steel Wiredrawing and Steel Nails and Spikes.—Establishments primarily engaged in drawing wire from purchased iron or steel rods, bars, or wire, and which may be engaged in the further manufacture of products made from wire; establishments primarily engaged in manufacturing steel nails and spikes from purchased materials are also included in this industry. Rolling mills engaged in the production of ferrous wire from wire rods or hot rolled bars produced in the same establishment are classified in industry 3312. Establishments primarily engaged in drawing nonferrous wire are classified in SIC group 335.

3316 Cold Rolled Steel Sheet, Strip, and Bars.—Establishments primarily engaged in (1) cold rolling steel sheets and strip from purchased hot rolled sheets; (2) cold drawing steel bars and steel shapes from purchased hot rolled steel bars; and (3) producing other cold finished steel. Establishments primarily engaged in the production of steel, including hot rolled steel sheets, and further cold rolling such sheets are classified in industry 3312.

3317 Steel Pipe and Tubes.—Establishments primarily engaged in the production of welded or seamless steel pipe and tubes and heavy riveted steel pipe from purchased materials. Establishments primarily engaged in the production of steel, including steel skelp or steel blanks, tube rounds, or pierced billets, are classified in industry 3312.

332 IRON AND STEEL FOUNDRIES

This group includes establishments primarily engaged in manufacturing iron and steel castings. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer. Establishments which produce iron and steel castings and which are also engaged in fabricating operations, such as machining, assembling, etc., in manufacturing a specified product are classified in the industry of the specified product. Iron and steel castings are made to a considerable extent by establishments classified in other industries, that operate foundry departments for the production of castings for incorporation, in the same establishment, into such products as stoves, furnaces, plumbing fixtures, motor vehicles, etc. Establishments primarily engaged in the manufacture and rolling of steel and also making steel castings are classified in industry 3312. Establishments primarily engaged in manufacturing nonferrous castings are classified in SIC group 336.

3321 Gray Iron Foundries.—Establishments primarily engaged in manufacturing gray iron castings, including cast iron pressure and soil pipes and fittings.

3322 Malleable Iron Foundries.—Establishments primarily engaged in manufacturing malleable iron castings.

3324 Steel Investment Foundries.—Establishments primarily engaged in manufacturing steel investment castings.

3325 **Steel Foundries, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing steel castings not elsewhere classified.

333 PRIMARY SMELTING AND REFINING OF NONFERROUS METALS

3331 **Primary Smelting and Refining of Copper.**—Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes. Establishments primarily engaged in rolling, drawing, or extruding copper are classified in industry 3351.

3332 **Primary Smelting and Refining of Lead.**—Establishments primarily engaged in smelting lead from the ore and in refining lead by any process. Establishments primarily engaged in rolling, drawing, or extruding lead are classified in industry 3356.

3333 **Primary Smelting and Refining of Zinc.**—Establishments primarily engaged in smelting zinc from the ore and in refining zinc by any process. Establishments primarily engaged in rolling, drawing, or extruding zinc are classified in industry 3356.

3334 **Primary Production of Aluminum.**—Establishments primarily engaged in producing aluminum from aluminua and in refining aluminum by any process. Establishments primarily engaged in rolling, drawing, or extruding aluminum are classified in industries 3353, 3354, and 3355.

3339 **Primary Smelting and Refining of Nonferrous Metals, Not Elsewhere Classified.**—Establishments primarily engaged in smelting and refining nonferrous metals not elsewhere classified. Establishments primarily engaged in rolling, drawing, and extruding these nonferrous primary metals are classified in industry 3356, and the production of bullion at the site of the mine is classified in the mining industries.

334 SECONDARY SMELTING AND REFINING OF NONFERROUS METALS

3341 **Secondary Smelting and Refining of Nonferrous Metals.**—Establishments primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross. This industry includes establishments engaged in both the recovery and alloying of precious metals. Plants engaged in the recovery of tin through secondary smelting and refining, as well as by chemical processes, are included in this industry. Establishments primarily engaged in assembling, sorting, and breaking up scrap metal, without smelting and refining, are classified in trade industries.

335 ROLLING, DRAWING, AND EXTRUDING OF NONFERROUS METALS

3351 **Rolling, Drawing, and Extruding of Copper.**—Establishments primarily engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper base alloy basic shapes, such as plate, sheet, strip, bar, and tubing. Establishments primarily engaged in recovering copper and its alloys from scrap or dross are classified in industry 3341.

3353 **Aluminum Sheet, Plate, and Foil.**—Establishments primarily engaged in flat rolling aluminum and aluminum base alloy basic shapes such as sheet, plate, and foil, including establishments producing welded tube. Also included are establishments primarily producing similar products by continuous casting.

3354 **Aluminum Extruded Products.**—Establishments primarily engaged in extruding aluminum and aluminum base alloy basic shapes such as rod and bar, pipe and tube, and tube blooms, including establishments producing tube by drawing.

3355 **Aluminum Rolling and Drawing, Not Elsewhere Classified.**—Establishments primarily engaged in rolling, drawing, and other operations resulting in the production of aluminum ingot, including extrusion ingot, and aluminum and aluminum base alloy basic shapes, not elsewhere classified, such as rolled and continuous cast rod and bar. Establishments primarily engaged in producing aluminum powder, flake, and paste are classified in industry 3399, and those producing aluminum wire and cable from purchased wire bars, rods, or wire are classified in industry 3357.

3356 **Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum.**—Establishments primarily engaged in rolling, drawing, and extruding nonferrous metals other than copper (industry 3351) and aluminum (industries 3353, 3354, and 3355). The products of this industry are

produced in the form of basic shapes such as plate, sheet, strip, bar, and tubing. Establishments primarily engaged in recovering nonferrous metals and alloys from scrap or dross are classified in industry 3341; in manufacturing gold, silver, tin, and other foils except aluminum in industry 3497; and aluminum foil in industry 3353.

3357 **Drawing and Insulating of Nonferrous Wire.**—Establishments primarily engaged in drawing and insulating, and insulating wire and cable of nonferrous metals from purchased wire bars, rods, or wire.

336 NONFERROUS FOUNDRIES (CASTINGS)

This group includes establishments primarily engaged in manufacturing castings and die castings of aluminum, brass, bronze and other nonferrous metals and alloys. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer. Establishments which produce nonferrous castings and which are also engaged in fabricating operations, such as machining, assembling, etc., in manufacturing a specified product are classified in the industry of the specified product. Nonferrous castings are made to a considerable extent by establishments classified in other industries that operate foundry departments for the production of castings for incorporation, in the same establishment, into such products as machinery, motor vehicles, etc. Establishments primarily engaged in manufacturing iron and steel castings are classified in SIC group 332.

3361 **Aluminum Foundries (Castings).**—Establishments primarily engaged in manufacturing castings and die castings of aluminum and aluminum-base alloys.

3362 **Brass, Bronze, Copper, Copper Base Alloy Foundries (Castings).**—Establishments primarily engaged in manufacturing castings and die castings of copper and copper-base alloys.

3369 **Nonferrous Foundries (Castings), Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing castings and die castings of nonferrous materials except aluminum, copper, and copper base alloys.

339 MISCELLANEOUS PRIMARY METAL PRODUCTS

3398 **Metal Heat Treating.**—Establishments primarily engaged in heat treating of metal for the trade.

3399 **Primary Metal Products, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing primary metal products, not elsewhere classified, such as nonferrous nails, brads, and spikes; and metal powder, flakes, and paste.

34 FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT

This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, handtools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products not elsewhere classified. Certain important segments of the metal fabricating industries are classified in other major groups such as machinery in SIC Major Groups 35 and 36; transportation equipment, including tanks, in SIC Major Group 37; professional scientific and controlling instruments, watches, and clocks in SIC Major Group 38; and jewelry and silverware in SIC Major Group 39. Establishments primarily engaged in producing ferrous and nonferrous metals and their alloys are classified in SIC Major Group 33.

341 METAL CANS AND SHIPPING CONTAINERS

3411 **Metal Cans.**—Establishments primarily engaged in manufacturing metal cans from purchased materials. Establishments primarily engaged in manufacturing foil containers are classified in industry 3497.

3412 **Metal Shipping Barrels, Drums, Kegs, and Pails.**—Establishments primarily engaged in manufacturing ferrous and nonferrous metal shipping barrels, drums, kegs, and pails.

342 CUTLERY, HANDTOOLS, AND GENERAL HARDWARE

3421 **Cutlery.**—Establishments primarily engaged in manufacturing cutlery. Establishments primarily engaged in manufacturing table cutlery made entirely of metal are classified in industry 3914; those manufacturing electric razors in industry 3634; and those manufacturing hair clippers for human use in industry 3999, and for animal use in industry 3523.

3423 **Hand and Edge Tools, Except Machine Tools and Handsaws.**—Establishments primarily engaged in manufacturing files and other hand and edge tools for metalworking, woodworking, and general maintenance. Establishments primarily engaged in manufacturing saws are classified in industry 3425; and metal-cutting dies, power-driven handtools, and attachments and accessories for machine tools in SIC Major Group 35.

3425 **Handsaws and Saw Blades.**—Establishments primarily engaged in manufacturing handsaws and saw blades for hand and power-driven saws. Establishments primarily engaged in manufacturing power-driven sawing machines are classified in SIC Major Group 35.

3429 **Hardware, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing miscellaneous metal products usually termed "hardware," not elsewhere classified. Establishments primarily engaged in manufacturing bolts and nuts are classified in industry 3452, nails and spikes in SIC Major Group 33, cutlery in industry 3421, handtools in industry 3423, and pole line and transmission hardware in SIC Major Group 36.

343 HEATING EQUIPMENT, EXCEPT ELECTRIC AND WARM AIR; AND PLUMBING FIXTURES

3431 **Enameled Iron and Metal Sanitary Ware.**—Establishments primarily engaged in manufacturing enameled iron, cast iron, or pressed metal sanitary ware. Establishments primarily engaged in manufacturing vitreous and semivitreous pottery sanitary ware are classified in industry 3261; and those manufacturing porcelain enameled kitchen, household, and hospital ware in industry 3469.

3432 **Plumbing Fixture Fittings and Trim (Brass Goods).**—Establishments primarily engaged in manufacturing plumbing fixture fittings and trim (brass goods). Establishments primarily engaged in the manufacture of steam or water line valves are classified in industry 3494.

3433 **Heating Equipment, Except Electric and Warm Air Furnaces.**—Establishments primarily engaged in manufacturing heating equipment, except electric and warm air furnaces, including gas, oil, and stoker coal-fired equipment for the automatic utilization of gaseous, liquid, and solid fuels. Establishments primarily engaged in manufacturing warm air furnaces are classified in industry 3585; cooking stoves and ranges in industry 3631; boiler shops primarily engaged in the production of industrial, power and marine boilers in industry 3443; and industrial process furnaces and ovens in industry 3567.

344 FABRICATED STRUCTURAL METAL PRODUCTS

3441 **Fabricated Structural Metal.**—Establishments primarily engaged in manufacturing fabricated iron and steel or other metal for structural purposes, such as bridges, buildings, and sections for ships, boats, and barges. Establishments primarily engaged in manufacturing metal doors, sash, frames, molding, and trim are classified in industry 3442; and establishments doing fabrication work at the site of construction are classified in Division C.

3442 **Metal Doors, Sash, Frames, Molding, and Trim.**—Establishments primarily engaged in manufacturing ferrous and nonferrous metal and metal covered doors and sash, window and door frames and screens, molding, and trim.

3443 **Fabricated Platework (Boiler Shops).**—Establishments primarily engaged in manufacturing power and marine boilers, pressure and nonpressure tanks, processing and storage vessels, heat exchangers, weldments, and similar products by the process of cutting, forming, and joining metal plates, shapes, bars, sheet, pipe mill products, and tubing to custom or standard design for factory or field assembly. Establishments primarily engaged in manufacturing warm air heating furnaces are classified in industry 3585, other nonelectric heating apparatus except power boilers in industry 3433, and household cooking apparatus in industry 3631.

3444 **Sheet Metalwork.**—Establishments primarily engaged in manufacturing sheet metalwork for buildings (not including fabrication work done by construction contractors at the place of construction), and manufacturing sheet metal stovepipes, light tanks, etc.

3446 **Architectural and Ornamental Metalwork.**—Establishments primarily engaged in manufacturing architectural and ornamental metalwork of ferrous and nonferrous metals, such as stairs and staircases, open

steel flooring (grating), fire escapes, grilles, railings, and fences and gates, except those made from wire. Establishments primarily engaged in manufacturing prefabricated and portable metal buildings and parts are classified in industry 3448, and miscellaneous metalwork in industry 3449.

3448 **Prefabricated Metal Buildings and Components.**—Establishments primarily engaged in manufacturing prefabricated and portable metal buildings and parts, and prefabricated exterior metal panels.

3449 **Miscellaneous Metalwork.**—Establishments primarily engaged in manufacturing miscellaneous ferrous and nonferrous metalwork, such as metal plaster bases, fabricated bar joists, and concrete reinforcing bars.

345 SCREW MACHINE PRODUCTS, AND BOLTS, NUTS, SCREWS, RIVETS, AND WASHERS

3451 **Screw Machine Products.**—Establishments primarily engaged in manufacturing automatic or hand screw machine products from rod, bar, or tube stock of metal, fiber, plastics, or other material. The products of this industry consist of a wide variety of unassembled parts and are usually manufactured on a job or order basis. Establishments primarily engaged in manufacturing standard bolts, nuts, rivets, screws, and other industrial fasteners on headers, threaders, and nut forming machines are classified in industry 3452.

3452 **Bolts, Nuts, Screws, Rivets, and Washers.**—Establishments primarily engaged in manufacturing bolts, nuts, screws, rivets, washers, formed and threaded wire goods, and special industrial fasteners. Rolling mills engaged in manufacturing similar products are classified in SIC Major Group 33, and establishments primarily engaged in manufacturing screw machine products in industry 3451.

346 METAL FORGINGS AND STAMPINGS

This group includes establishments primarily engaged in manufacturing metal forgings or metal stampings. These establishments generally operate on a job or order basis, manufacturing metal stampings or forgings for sale to others or for interplant transfer. Establishments which produce metal stampings or forgings for incorporation in end products produced in the same establishment are classified on the basis of the end product.

3462 **Iron and Steel Forgings.**—Establishments primarily engaged in manufacturing iron and steel forgings, with or without the use of dies.

3463 **Nonferrous Forgings.**—Establishments primarily engaged in manufacturing nonferrous forgings, with or without the use of dies.

3465 **Automotive Stampings.**—Establishments primarily engaged in manufacturing automotive stampings such as body parts, hubs, and trim.

3466 **Crowns and Closures.**—Establishments primarily engaged in manufacturing metal crowns and closures.

3469 **Metal Stampings, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing metal stampings and spun products, not elsewhere classified, including porcelain enameled products such as household appliance housings and parts; utensils and consumer stamped and spun products such as cooking and kitchen utensils; and other nonautomotive job stampings.

347 COATING, ENGRAVING, AND ALLIED SERVICES

3471 **Electroplating, Plating, Polishing, Anodizing, and Coloring.**—Establishments primarily engaged in all types of electroplating, plating, anodizing, coloring, and finishing of metals and formed products for the trade. Most of the work done in this industry is done on materials owned by others.

3479 **Coating, Engraving, and Allied Services, Not Elsewhere Classified.**—Establishments primarily engaged in performing the following types of services on metals: (1) Enameling, lacquering, and varnishing metal products for the trade; (2) hot-dip galvanizing of mill sheets, plates and bars, castings, and formed products fabricated of iron and steel; hot-dip coating such items with aluminum, lead, or zinc; retinning cans and utensils; (3) engraving, chasing and etching jewelry, silverware, notarial and other seals, and other metal products for the trade and for job contracting for purposes other than printing; and (4) other metal services, not elsewhere classified. Establishments primarily engaged in electroplating, plating, polishing, anodizing, coloring, and finishing of metals and formed products for the trade are classified in industry 3471; and those producing porcelain enameled products in industry 3469.

348 ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES

3482 Small Arms Ammunition.—Establishments primarily engaged in manufacturing ammunition for small arms having a bore of 30 mm (or 1.18 inch) and below. Establishments primarily engaged in manufacturing ammunition except for small arms are classified in industry 3483, blasting and detonating caps and safety fuses in industry 2892, and fireworks in industry 2899.

3483 Ammunition, Except for Small Arms, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing ammunition, not elsewhere classified, or in loading and assembling ammunition over 30 mm (or over 1.18 inch) for naval, aircraft, antiaircraft, tank, coast, and field artillery; including component parts. This industry also includes establishments primarily engaged in manufacturing bombs, mines, torpedoes, grenades, depth charges, chemical warfare projectiles, and their component parts. Establishments primarily engaged in manufacturing small arms ammunition are classified in industry 3482, explosives in industry 2892, and military pyrotechnics in industry 2899.

3484 Small Arms.—Establishments primarily engaged in manufacturing small firearms having a bore 30 mm (or 1.18 inch) and below, and parts for small firearms. Also included in this industry are establishments primarily engaged in manufacturing certain weapons over 30 mm which are carried and employed by the individual, such as grenade launchers and heavy field machine guns. Establishments primarily engaged in manufacturing artillery and mortars having a bore over 30 mm (or over 1.18 inch) and component parts are classified in industry 3489.

3489 Ordnance and Accessories, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing ordnance and accessories, not elsewhere classified, such as naval, aircraft, antiaircraft, tank, coast, and field artillery having a bore over 30 mm (or over 1.18 inch) and components. Establishments primarily engaged in manufacturing small arms and parts 30 mm (or 1.18 inch) and below are classified in industry 3484; tanks in industry 3795; and guided missiles in SIC group 376.

349 MISCELLANEOUS FABRICATED METAL PRODUCTS

3493 Steel Springs, Except Wire.—Establishments primarily engaged in manufacturing leaf springs, hot wound springs, and coiled flat springs. Establishments primarily engaged in manufacturing wire springs are classified in industry 3495.

3494 Valves and Pipe Fittings, Except Plumbers' Brass Goods.—Establishments primarily engaged in manufacturing pipe fittings and valves for controlling the flow of liquids or gases in pipes and mains, and for machinery. Establishments primarily engaged in manufacturing faucets, spigots, and similar plumbers' brass goods and fittings are classified in industry 3432, flexible metal hose and tubing in industry 3599, and fittings and couplings for garden hose in industry 3429.

3495 Wire Springs.—Establishments primarily engaged in manufacturing wire springs. Establishments primarily engaged in assembling wire bedsprings or seats are classified in SIC Major Group 25.

3496 Miscellaneous Fabricated Wire Products.—Establishments primarily engaged in manufacturing miscellaneous fabricated wire products from purchased wire, such as noninsulated wire rope and cable; fencing; screening, netting, paper machine wire cloth; and hangers, paper clips, kitchenware, and wire carts. Rolling mills engaged in manufacturing wire products are classified in SIC Major Group 33; establishments manufacturing nonferrous wire nails and spikes in industry 3399; those drawing and insulating nonferrous wire in industry 3357; and those manufacturing wire springs in industry 3495.

3497 Metal Foil and Leaf.—Establishments primarily engaged in manufacturing gold, silver, tin, and other metal foil (including converted metal foil) and leaf. Also included are establishments primarily engaged in converting metal foil (including aluminum) into wrappers, cookware, dinnerware, and containers, except bags and liners. Establishments primarily engaged in manufacturing plain aluminum foil are classified in industry 3353.

3498 Fabricated Pipe and Fabricated Pipe Fittings.—Establishments primarily engaged in fabricating pipe and pipe fittings from purchased pipe, by cutting,

threading, bending, etc. Establishments primarily engaged in manufacturing cast iron pipe and fittings, including cast and forged pipe fittings which have been machined and threaded, are classified in industry 3321; and welded and heavy riveted pipe and seamless steel pipe in industry 3317. Establishments primarily engaged in manufacturing products such as bannisters, railings, and guards from pipe are classified in industry 3446.

3499 **Fabricated Metal Products, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing fabricated metal products, not elsewhere classified, such as fire or burglary resistive steel safes and vaults and similar fire or burglary resistive products; and collapsible tubes of thin flexible metal. Also included are establishments primarily engaged in manufacturing metal boxes, metal ladders, and metal household articles such as ice cream freezers and ironing boards. Establishments primarily engaged in manufacturing concrete grave vaults are classified in industry 3722, and metal grave vaults in industry 3995. Establishments primarily engaged in manufacturing advertising novelties are classified in industry 3993.

35 MACHINERY, EXCEPT ELECTRICAL

This major group includes establishments engaged in manufacturing machinery and equipment other than electrical equipment (SIC Major Group 36) and transportation equipment (SIC Major Group 37). Machines powered by built-in or detachable motors are ordinarily included in this major group, with the exception of electrical household appliances (SIC Major Group 36). Portable tools, both electric and pneumatic powered, are included in this major group, but handtools are classified in SIC Major Group 34.

351 ENGINES AND TURBINES

3511 **Steam, Gas, and Hydraulic Turbine Generator Set Units.**—Establishments primarily engaged in manufacturing steam turbines; hydraulic turbines; gas turbines, except aircraft; complete steam, gas, and hydraulic turbine generator set units; and steam engines. Establishments primarily engaged in building or rebuilding locomotives are classified in industry 3743; and those manufacturing nonautomotive type generators which are not part of a turbine generator set in industry 3621.

3519 **Internal Combustion Engines, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing diesel, semi-diesel, or other internal combustion engines, not elsewhere classified, for stationary, marine, traction, and other uses. Establishments primarily engaged in manufacturing aircraft engines are classified in industry 3724; automotive engines (except diesel) in industry 3714; engine generator sets in industry 3621; and guided missile and space vehicle propulsion units in industry 3764.

352 FARM AND GARDEN MACHINERY AND EQUIPMENT

3523 **Farm Machinery and Equipment.**—Establishments primarily engaged in manufacturing farm machinery and equipment, including wheel tractors, for use in the preparation and maintenance of the soil; planting and harvesting of the crop; preparing crops for market, on the farm; or for use in performing other farm operations and processes. Establishments primarily engaged in manufacturing industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in industry 3537; contractors' off-highway tractors are classified in industry 3531; farm handtools in SIC group 342; and garden tractors, lawn mowers and other lawn and garden equipment in industry 3524.

3524 **Garden Tractors and Lawn and Garden Equipment.**—Establishments primarily engaged in manufacturing lawn mowers, garden tractors, and other lawn and garden equipment used for home lawn and garden care. Also included are establishments primarily manufacturing snow blowers and throwers for residential use. Establishments primarily engaged in manufacturing farm machinery and equipment are classified in industry 3523; hand lawn and garden shears and pruners in industry 3421; and other garden handtools in industry 3423.

353 CONSTRUCTION, MINING, AND MATERIALS HANDLING MACHINERY AND EQUIPMENT

3531 **Construction Machinery and Equipment.**—Establishments primarily engaged in manufacturing heavy machinery and equipment used by the construction industries, such as bulldozers; concrete mixers; cranes, except industrial plant type; dredging machinery; pavers; and power shovels. Establish-

ments primarily engaged in manufacturing mining equipment are classified in industry 3532, and well-drilling machinery in industry 3533.

3532 **Mining Machinery and Equipment, Except Oilfield Machinery and Equipment.**—Establishments primarily engaged in manufacturing heavy machinery and equipment used by the mining industries, such as coal breakers, mine cars, mineral cleaning machinery, concentration machinery, core drills, coal cutters, portable rock drills, and rock crushing machinery. Establishments primarily engaged in manufacturing construction machinery are classified in industry 3531; well-drilling machinery in industry 3533; and coal and ore conveyors in industry 3535.

3533 **Oilfield Machinery and Equipment.**—Establishments primarily engaged in manufacturing machinery and equipment for use in oil and gas fields or for drilling water wells.

3534 **Elevators and Moving Stairways.**—Establishments primarily engaged in manufacturing passenger or freight elevators, automobile lifts, dumbwaiters, and moving stairways. Establishments primarily engaged in manufacturing commercial conveyor systems and equipment are classified in industry 3535, and farm elevators in industry 3523.

3535 **Conveyors and Conveying Equipment.**—Establishments primarily engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, and other industrial and commercial establishments. Establishments primarily engaged in manufacturing passenger or freight elevators, dumbwaiters, and moving stairways are classified in industry 3534; and overhead traveling cranes and monorail systems in industry 3536.

3536 **Hoists, Industrial Cranes, and Monorail Systems.**—Establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems for installation in factories, warehouses, and other industrial and commercial establishments.

3537 **Industrial Trucks, Tractors, Trailers, and Stackers.**—Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, stackers (truck type), and related equipment, used for handling materials on floors and paved surfaces in and around industrial and commercial plants, depots, docks, and terminals. Establishments primarily engaged in manufacturing motor vehicles and motor vehicle type trailers are classified in SIC group 371; farm-type wheel tractors in industry 3523; wheel tractor shovel loaders and tracklaying tractors in industry 3531; and wood pallets and skids in industry 2448.

354 METALWORKING MACHINERY AND EQUIPMENT

3541 **Machine Tools, Metal-Cutting Types.**—Establishments primarily engaged in manufacturing machines, not supported in the hands of an operator when in use, that shape metal by cutting or use of electrical techniques; the rebuilding of such machine tools; and the manufacture of replacement parts for them. Metalworking, or primarily metalworking, machine tools designed primarily for home workshops are also included. Establishments primarily engaged in the manufacture of electric welding equipment are classified in industry 3623; portable power-driven handtools in industry 3546; and gas welding and cutting equipment and automotive maintenance equipment in industry 3549.

3542 **Machine Tools, Metal-Forming Types.**—Establishments primarily engaged in manufacturing machines, not supported in the hands of an operator while in use, for pressing, hammering, extruding, shearing, die-casting, or otherwise forming metal into shape. This industry also includes rebuilding such machine tools and manufacturing repair parts for them. Establishments primarily engaged in the manufacture of electric welding equipment are classified in industry 3623; portable power-driven handtools in industry 3546; rolling mill machinery and equipment in industry 3547; and gas welding and cutting equipment and automotive maintenance equipment in industry 3549.

3544 **Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds.**—Establishments commonly known as contract tool and die shops and primarily engaged in manufacturing, on a job or order basis, special tools and fixtures for use with machine tools, hammers, die-casting machines, and presses. The products of establishments classified in this industry include a wide variety of special toolings, such as dies; punches; die sets and components and subpresses; jigs and fixtures; and special checking devices. Establishments primarily engaged in manufacturing molds for die casting and foundry casting; metal molds for plasterworking, rubber working,

plastic working, glassworking and similar machinery are also included. Establishments primarily engaged in manufacturing molds for heavy steel ingots are classified in industry 3321.

3545 Machine Tool Accessories and Measuring Devices.—Establishments primarily engaged in manufacturing cutting tools, machinist's precision measuring tools, and attachments and accessories for machine tools and for other metalworking machinery not elsewhere classified. Establishments primarily engaged in manufacturing handtools, except power-driven types, are classified in SIC group 342.

3546 Power-Driven Handtools.—Establishments primarily engaged in manufacturing power-driven handtools, such as drills and drilling tools, pneumatic and snagging grinders, and electric hammers. Establishments primarily engaged in manufacturing automotive maintenance equipment are classified in industry 3549; those primarily manufacturing machine tools for metal cutting and metal forming (including home workshop tools) which are not supported in the hands of an operator, are classified in industries 3541 and 3542; and those primarily manufacturing power-driven heavy construction or mining handtools in SIC group 353.

3547 Rolling Mill Machinery and Equipment.—Establishments primarily engaged in manufacturing rolling mill machinery and processing equipment for metal production such as cold forming mills, structural mills, and finishing equipment.

3549 Metalworking Machinery, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing metalworking machinery, not elsewhere classified, such as gas cutting and welding equipment, wire fabricating machinery and equipment, except wire-drawing dies, and automotive maintenance machinery and equipment. Establishments primarily engaged in manufacturing metal-cutting machine tools are classified in industry 3541; metal-forming machine tools in industry 3542; power-driven handtools in industry 3546; and rolling mill machinery in industry 3547.

355 SPECIAL INDUSTRY MACHINERY, EXCEPT METALWORKING MACHINERY

3551 Food Products Machinery.—Establishments primarily engaged in manufacturing machinery for use by the food products and beverage manufacturing industries in the preparation, canning, or packaging of food products; and parts and attachments for such machinery. Establishments primarily engaged in manufacturing industrial refrigeration machinery are classified in SIC group 358.

3552 Textile Machinery.—Establishments primarily engaged in manufacturing machinery for the textile industries, including parts, attachments, and accessories. Establishments primarily engaged in manufacturing domestic or industrial sewing machines are classified in industry 3636.

3553 Woodworking Machinery.—Establishments primarily engaged in manufacturing machinery for sawmills, planing mills, cabinet and furniture makers, patternmakers, and veneer workers. Establishments primarily engaged in manufacturing handtools such as planes, axes, drawknives, and handsaws are classified in SIC group 342; and portable power-driven handtools in industry 3546.

3554 Paper Industries Machinery.—Establishments primarily engaged in manufacturing machinery for the pulp, paper, and paper product industries. Establishments primarily engaged in manufacturing printing trades machinery are classified in industry 3555.

3555 Printing Trades Machinery and Equipment.—Establishments primarily engaged in manufacturing machinery and equipment used by the printing and bookbinding trades. Establishments primarily engaged in manufacturing textile printing machinery are classified in industry 3552.

3559 Special Industry Machinery, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing special industry machinery, not elsewhere classified, such as smelting and refining equipment, cementmaking, clayworking, cotton ginning, glassmaking, hatmaking, incandescent lampmaking, leatherworking, paintmaking, rubberworking, cigar and cigarette making, tobacco working, shoemaking, and stoneworking machinery.

356 GENERAL INDUSTRIAL MACHINERY AND EQUIPMENT

3561 Pumps and Pumping Equipment.—Establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial use. Establish-

ments primarily engaged in manufacturing measuring and dispensing pumps for gasoline service station use are classified in industry 3586; and air and gas compressors in industry 3563.

3562 **Ball and Roller Bearings.**—Establishments primarily engaged in manufacturing ball and roller bearings (including ball or roller bearing pillow block, flange, take-up cartridge, and hanger units) and parts. Establishments primarily engaged in manufacturing bearings, except ball and roller, are classified in industry 3568.

3563 **Air and Gas Compressors.**—Establishments primarily engaged in manufacturing air and gas compressors for general industrial use. Establishments primarily engaged in manufacturing refrigeration compressors and compressing units are classified in industry 3585; and pumps and pumping equipment in industry 3561.

3564 **Blowers and Exhaust and Ventilation Fans.**—Establishments primarily engaged in manufacturing industrial and commercial blowers, industrial and commercial exhaust and ventilating fans, and attic fans. Establishments primarily engaged in manufacturing air-conditioning units are classified in industry 3585, and free air-circulating fans for use on desks, pedestals, or wall brackets as well as household window-type fans and roll-abouts, kitchen and household ventilating and exhaust fans in industry 3634.

3565 **Industrial Patterns.**—Establishments primarily engaged in manufacturing industrial patterns.

3566 **Speed Changers, Industrial High Speed Drives, and Gears.**—Establishments primarily engaged in manufacturing speed changers, industrial high-speed drives, and gears. Establishments primarily engaged in manufacturing these items for motor vehicles are classified in industry 3714, and for aircraft in industry 3728.

3567 **Industrial Process Furnaces and Ovens.**—Establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and related devices.

3568 **Mechanical Power Transmission Equipment, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing mechanical power transmission equipment and parts for industrial machinery. Establishments primarily engaged in manufacturing automotive, tank, and tractor power transmission equipment are classified in industry 3714; aircraft power transmission equipment in industry 3728; ball and roller bearings in industry 3562; and speed changers, industrial high speed drives, and gears in industry 3566.

3569 **General Industrial Machinery and Equipment, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing machinery, equipment, and components for general industrial use, and for which no special classification is provided. Machine shops primarily engaged in producing machine and equipment parts, usually on a job or order basis, are classified in industry 3599.

357 OFFICE, COMPUTING, AND ACCOUNTING MACHINES

3572 and 3579 **Typewriters and Office Machines, Not Elsewhere Classified.**—The Typewriters Industry includes establishments primarily engaged in manufacturing typewriters and parts, including coded media typewriters and specialized composing typewriters. This industry is combined with the Office Machines, N.E.C., Industry which includes establishments primarily engaged in manufacturing office machines and devices not elsewhere classified. Establishments primarily engaged in manufacturing computing machines are classified in industry 3573, cash registers in industry 3574, and photocopy and microfilm equipment in industry 3861 (Photographic Equipment and Supplies).

The classification of establishments for which data are tabulated in this report is based upon the definitions and coding structure contained in the 1972 edition of the Standard Industrial Classification (SIC) Manual, published by the Office of Management and Budget, Executive Office of the President. The statistics for these industries as classified under the 1972 edition of the SIC manual were unchanged as to code number or content from the previous classification system. However, it was necessary to combine industry 3572, Typewriters, with industry 3579, Office Machines, N.E.C., to avoid disclosing the operation of individual companies.

3573 **Electronic Computing Equipment.**—Establishments primarily engaged in manufacturing electronic computers and peripheral equipment and/or major

logical components intended for use in electronic computer systems. Included are general-purpose electronic analog computers, electronic digital computers, military, ruggedized, and special purpose computers. The electronic computers may be used for data processing or may be incorporated as components of control equipment for industrial use, and as components of equipment used in weapons and weapons systems, space and oceanographic exploration, and transportation and other systems. Electronic computer systems contain high-speed arithmetic and program control units, on-line information storage devices, input/output equipment, terminals, data communication devices, and punched card equipment. Examples of input/output equipment are converters (card and/or tape) and readers and printers. Examples of storage devices are magnetic drums and disks magnetic cores and magnetic film memories. In addition to providing technical manuals necessary for the operation and maintenance of the equipment, establishments in this industry usually furnish general-purpose computer programs and basic operating systems programs needed for effective use of the computer system. Establishments primarily producing rebuilt electronic computers are also included in this industry. Establishments primarily engaged in manufacturing desk calculators, cash registers, accounting machines and similar equipment that are operator-paced are classified in industry 3574; electrical and electronic test equipment in industry 3825; industrial controls, including electronic, in industry 3622; and industrial process instruments in industry 3823.

3574 Calculating and Accounting Machines, Except Electronic Computing Equipment.—Establishments primarily engaged in manufacturing desk calculators, adding and accounting machines, cash registers, and similar equipment. Included are electronic calculating and accounting machines which, even when augmented by attachments or which include program control or have input/output capabilities, must be paced by operator intervention. Establishments primarily engaged in manufacturing electronic computing equipment are classified in industry 3573; typewriters in industry 3572; and office duplicating machines and devices, autographic registers, and other office machines in industry 3579.

3576 Scales and Balances, Except Laboratory.—Establishments primarily engaged in manufacturing weighing and force measuring machines and devices of all types, except those regarded as scientific apparatus for laboratory and experimental work, which are classified in industry 3811.

3579 Typewriters and Office Machines, Not Elsewhere Classified.—(See 3572.)

358 REFRIGERATION AND SERVICE INDUSTRY MACHINERY

3581 Automatic Merchandising Machines.—Establishments primarily engaged in manufacturing automatic merchandising units, also referred to as vending machines (excluding music, amusement, or gaming machines), and coin-operated mechanisms for such machines.

3582 Commercial Laundry, Dry Cleaning, and Pressing Machines.—Establishments primarily engaged in manufacturing laundry and dry cleaning equipment and pressing machines for commercial and industrial use. Establishments primarily engaged in manufacturing household laundry equipment, including coin-operated washers and driers, are classified in industry 3633.

3585 Air-Conditioning and Warm-Air Heating Equipment and Commercial and Industrial Refrigeration Equipment.—Establishments primarily engaged in manufacturing refrigeration equipment and systems and similar equipment for commercial and industrial use; complete air-conditioning units for domestic, commercial, and industrial use; and warm-air furnaces, except electric. Establishments primarily engaged in manufacturing soda fountains and beer dispensing equipment and humidifiers and dehumidifiers, except for rooms, are also classified in this industry. Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers are classified in industry 3632; electric air space heaters in industry 3634; and electric warm-air furnaces and other electric comfort heating equipment in industry 3699.

3586 Measuring and Dispensing Pumps.—Establishments primarily engaged in manufacturing measuring and dispensing pumps commonly used in service and filling stations for dispensing gasoline, oil, and grease, including grease guns. Establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial use are classified in industry 3561.

3589 **Service Industry Machines, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing machines and equipment, not elsewhere classified, for use in service industries, such as floor sanding machines, industrial vacuum cleaners, scrubbing machines, commercial cooking and food warming equipment, and commercial dishwashing machines. Establishments primarily engaged in manufacturing household electrical appliances are classified in group 363.

359 MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL

3592 **Carburetors, Pistons, Piston Rings, and Valves.**—Establishments primarily engaged in manufacturing carburetors, pistons, piston rings, and valves. Establishments primarily engaged in manufacturing metallic packing are classified in industry 3293; and those primarily engaged in manufacturing machine repair and equipment parts (except electric), on a job or order basis for others, are classified in industry 3599.

3599 **Machinery, Except Electrical, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing machinery and parts except electrical, not elsewhere classified, such as amusement park equipment, pneumatic and hydraulic cylinders, and flexible metal hose and tubing. This industry also includes establishments primarily engaged in producing or repairing machine and equipment parts, not elsewhere classified, on a job or order basis for others.

36 ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES

This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. The manufacture of household appliances is included in this group, but industrial machinery and equipment powered by built-in or detachable electric motors is classified in SIC Major Group 35. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities are classified in industry 3825.

361 ELECTRIC TRANSMISSION AND DISTRIBUTION EQUIPMENT

3612 **Power, Distribution, and Specialty Transformers.**—Establishments primarily engaged in manufacturing power, distribution, instrument, and specialty transformers. Establishments primarily engaged in manufacturing radio frequency or voice frequency transformers, coils, or chokes are classified in industry 3677, and resistance welder transformers in industry 3623.

3613 **Switchgear and Switchboard Apparatus.**—Establishments primarily engaged in manufacturing switchgear and switchboard apparatus. Important products of this industry include power switches, circuit breakers, power switching equipment, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels, power fuse mountings, and similar switchboard apparatus and supplies. Establishments primarily engaged in manufacturing industrial controls are classified in industry 3622, and those manufacturing current-carrying wiring devices in industry 3643.

362 ELECTRICAL INDUSTRIAL APPARATUS

3621 **Motors and Generators.**—Establishments primarily engaged in manufacturing electric motors (except starting motors) and power generators; motor generator sets; railway motors and control equipment; and motors, generators, and control equipment for gasoline, electric, and oil-electric buses and trucks. Establishments primarily engaged in manufacturing turbo-generators are classified in industry 3511, and starting motors and battery charging generators for internal combustion engines in industry 3694.

3622 **Industrial Controls.**—Establishments primarily engaged in manufacturing motor starters and controllers; control accessories, electronic controls, and other industrial controls. Establishments primarily engaged in manufacturing automatic temperature controls are classified in industry 3822, and industrial process instruments in industry 3823.

3623 **Welding Apparatus, Electric.**—Establishments primarily engaged in manufacturing electric welding apparatus and accessories. Establishments primarily engaged in coating welding wire from purchased wire or from wire drawn in the same establishment are also included. Establishments primarily engaged

in manufacturing gas welding apparatus are classified in industry 3549, and laser, electron beam, and ultrasonic welding machines and equipment in industry 3662.

3624 **Carbon and Graphite Products.**—Establishments primarily engaged in manufacturing lighting carbons; carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; and other carbon, graphite, and metal-graphite products.

3629 **Electrical Industrial Apparatus, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing industrial and commercial electric apparatus and equipment, not elsewhere classified, such as blasting machines, and fixed and variable capacitors, condensers, and rectifiers for industrial applications. Establishments primarily engaged in manufacturing condensers, capacitors, and rectifiers for electronic end products are classified in SIC group 367.

363 HOUSEHOLD APPLIANCES

3631 **Household Cooking Equipment.**—Establishments primarily engaged in manufacturing household cooking equipment, such as stoves, ranges, and ovens, including both electric and nonelectric types. Establishments primarily engaged in manufacturing household cooking appliances, such as hot plates, grills, percolators, and toasters, are classified in industry 3634. Establishments primarily engaged in manufacturing commercial cooking equipment are classified in industry 3589.

3632 **Household Refrigerators and Home and Farm Freezers.**—Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers. Establishments primarily engaged in manufacturing commercial and industrial refrigeration equipment, packaged room coolers, and all refrigeration compressor and condenser units are classified in industry 3585, and room dehumidifiers are classified in industry 3634.

3633 **Household Laundry Equipment.**—Establishments primarily engaged in manufacturing laundry equipment, such as washing machines, wringers, driers, and ironers, for household use. This industry also includes coin-operated washers and driers. Establishments primarily engaged in manufacturing commercial laundry equipment are classified in industry 3582.

3634 **Electric Housewares and Fans.**—Establishments primarily engaged in manufacturing electric housewares for heating, cooking, and other purposes; and electric fans, including ventilating and exhaust household-type fans. Important products of this industry include electric air heaters, electrically heated bed coverings, blenders, broilers, deep-fat fryers, flat irons, food mixers, hot plates, percolators and coffeemakers, roasters, toasters, desk and bracket fans, hassock or floor fans, window-type propeller fans, roll-about fans and household and kitchen ventilating and exhaust fans. Establishments primarily engaged in manufacturing industrial and commercial blowers, industrial and commercial exhaust and ventilating fans, and attic fans are classified in industry 3564.

3635 **Household Vacuum Cleaners.**—Establishments primarily engaged in manufacturing vacuum cleaners for household use. Establishments primarily engaged in manufacturing vacuum cleaners for industrial use are classified in industry 3589, and built-in vacuum cleaner systems in industry 1796.

3636 **Sewing Machines.**—Establishments primarily engaged in manufacturing sewing machines for domestic and industrial use.

3639 **Household Appliances, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing household appliances, not elsewhere classified, such as water heaters, dishwashers, and food waste disposal units.

364 ELECTRIC LIGHTING AND WIRING EQUIPMENT

3641 **Electric Lamps.**—Establishments primarily engaged in manufacturing electric bulbs, tubes, and related light sources. Important products of this industry include incandescent filament lamps, vapor and fluorescent lamps, photoflash and photoflood lamps, electrotherapeutic lamp units for ultra-violet and infra-red radiation, and other electric light sources. Establishments primarily engaged in manufacturing glass blanks for bulbs are classified in industry 3229; and lamp components, such as supports, filaments, lead-in wires, and cold cathode fluorescent lamp electrodes, in industry 3699.

3643 Current-Carrying Wiring Devices.—Establishments primarily engaged in manufacturing current-carrying wiring devices. Important products of this industry include attachment plugs and caps, convenience outlets, lamp sockets and receptacles, snap switches, conductor connectors, overhead trolley line material, rail bonds for both propulsion and signal circuits, lightning arrestors, and other lightning protective equipment.

3644 Noncurrent-Carrying Wiring Devices.—Establishments primarily engaged in manufacturing noncurrent-carrying wiring devices. Important products of this industry include conduits and fittings; electrical insulators and insulation materials, except porcelain insulators (industry 3264) and glass insulators (industry 3229); outlet, switch and fuse boxes; and pole line hardware.

3645 Residential Electric Lighting Fixtures.—Establishments primarily engaged in manufacturing residential electric lighting fixtures and equipment, fixed or portable. Establishments primarily engaged in producing glassware for lighting fixtures are classified in SIC Major Group 32; electric light bulbs, tubes, and related light sources in industry 3641; lampshades except glass and metal in industry 3999; and nonelectric fixtures and portable electric flashlights, lanterns, and similar lamps in industry 3648.

3646 Commercial, Industrial, and Institutional Electric Lighting Fixtures.—Establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures. Establishments primarily engaged in producing glassware for lighting fixtures are classified in SIC Major Group 32; residential lighting fixtures in industry 3645; and vehicular lighting fixtures in industry 3647.

3647 Vehicular Lighting Equipment.—Establishments primarily engaged in manufacturing vehicular lighting equipment.

3648 Lighting Equipment, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing lighting fixtures and equipment, electric and nonelectric, not elsewhere classified, including flashlights and similar portable lamps, searchlights, ultraviolet lamp fixtures, and infra-red lamp fixtures. Establishments primarily engaged in manufacturing electric light bulbs, tubes, and related light sources are classified in industry 3641, and those producing glassware for lighting fixtures are classified in SIC Major Group 32.

365 RADIO AND TELEVISION RECEIVING EQUIPMENT, EXCEPT COMMUNICATION TYPES

3651 Radio and Television Receiving Sets, Except Communication Types.—Establishments primarily engaged in manufacturing electronic equipment for home entertainment, including auto radios and tape players. This industry also includes establishments primarily engaged in manufacturing public address systems and music distribution apparatus. Establishments primarily engaged in manufacturing phonograph records and prerecorded tape are classified in industry 3652. Establishments primarily engaged in manufacturing separate cabinets for home electronic equipment are classified in SIC Major Group 25.

3652 Phonograph Records and Prerecorded Magnetic Tape.—Establishments primarily engaged in manufacturing phonograph records and prerecorded magnetic tape. Establishments primarily engaged in manufacturing electronic equipment for home entertainment, except records and prerecorded magnetic tape, are classified in industry 3651.

366 COMMUNICATION EQUIPMENT

3661 Telephone and Telegraph Apparatus.—Establishments primarily engaged in manufacturing wire telephone and telegraph equipment and parts especially designed for telephone and telegraph use.

3662 Radio and Television Transmitting, Signaling, and Detection Equipment and Apparatus.—Establishments primarily engaged in manufacturing (1) radio and television broadcasting equipment; (2) electric communication equipment and parts, except telephone and telegraph; (3) electronic field detection apparatus, light and heat emission operating apparatus, object detection apparatus and navigational electronic equipment, and aircraft and missile control systems; (4) high-energy particle accelerator systems and equipment designed and sold as a complete package for radiation therapy, irradiation, radiographic inspection, and research (linear accelerators, betatrons, dynamotrons, Vandergraff generators, resonant transformers, insulating core transformers, etc.); (5) high-energy particle electronic equipment and accessories sold separately for the construction of linear accelerators, cyclotrons, synchrotrons, and other high-energy research installations (transmitters/modulators, accelerating wave-

guide structures, pulsed electron guns, vacuum systems, cooling systems, etc.); and (6) other electric and electronic communication and signaling products not elsewhere classified. Establishments primarily engaged in manufacturing transmitting tubes are classified in industry 3673.

367 ELECTRONIC COMPONENTS AND ACCESSORIES

3671 Radio and Television Receiving-Type Electron Tubes, Except Cathode Ray.—Establishments primarily engaged in manufacturing radio and television receiving-type electron tubes, except cathode ray tubes. Establishments primarily engaged in manufacturing television receiving-type cathode ray tubes are classified in industry 3672; transmitting tubes in industry 3673; and X-ray tubes in industry 3693.

3672 Cathode Ray Television Picture Tubes.—Establishments primarily engaged in manufacturing television receiving-type cathode ray tubes. Establishments primarily engaged in manufacturing other radio and television receiving-type electron tubes are classified in industry 3671; and transmitting tubes in industry 3673.

3673 Transmitting, Industrial, and Special Purpose Electron Tubes.—Establishments primarily engaged in manufacturing transmitting, industrial, and special purpose electron tubes. Establishments primarily engaged in manufacturing radio and television receiving tubes are classified in industry 3671; television receiving-type cathode ray tubes in industry 3672; and X-ray tubes in industry 3693.

3674 Semiconductors and Related Devices.—Establishments primarily engaged in manufacturing semiconductor and related solid state devices, such as semiconductor diodes and stacks, including rectifiers, integrated microcircuits (semiconductor networks), transistors, solar cells, and light sensing and emitting semiconductor (solid state) devices.

3675 Electronic Capacitors.—Establishments primarily engaged in manufacturing electronic capacitors.

3676 Resistors, for Electronic Applications.—Establishments primarily engaged in manufacturing resistors for electronic end products. Establishments primarily engaged in manufacturing resistors for telephone and telegraph apparatus are classified in industry 3661.

3677 Electronic Coils, Transformers, and Other Inductors.—Establishments primarily engaged in manufacturing electronic coils, transformers, and inductors. Establishments primarily engaged in manufacturing transformers and inductors for telephone and telegraph apparatus are classified in industry 3661; electric lamps in industry 3641; and semiconductor (solid state) and related devices in industry 3674.

3678 Connectors, for Electronic Applications.—Establishments primarily engaged in manufacturing electronic connectors. Establishments primarily engaged in manufacturing electronic capacitors are classified in industry 3675; and electronic coils, transformers, and other inductors in industry 3677.

3679 Electronic Components, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing electronic components, not elsewhere classified, such as receiving antennas, printed circuits, switches, and wave guides.

369 MISCELLANEOUS ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

3691 Storage Batteries.—Establishments primarily engaged in manufacturing storage batteries.

3692 Primary Batteries, Dry and Wet.—Establishments primarily engaged in manufacturing primary batteries, dry or wet.

3693 Radiographic X-ray, Fluoroscopic X-ray, Therapeutic X-ray, and Other X-ray Apparatus and Tubes; Electromedical and Electrotherapeutic Apparatus.—Establishments primarily engaged in manufacturing radiographic X-ray, fluoroscopic X-ray, and therapeutic X-ray apparatus and tubes for medical, industrial, research and control applications. This industry also includes establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus except electrotherapeutic lamp units for ultra-violet and infra-red radiation (industry 3641). Establishments primarily engaged in manufacturing radio receiving-type tubes are classified in industry 3671; television receiving cathode ray tubes in industry 3672; and transmitting tubes in industry 3673.

3694 Electrical Equipment for Internal Combustion Engines.—Establishments primarily engaged in manufacturing electrical equipment for internal combustion engines. Important products of this industry

include armatures, starting motors, alternators, and generators for automobiles and aircraft; and ignition apparatus for internal combustion engines, including spark plugs, magnetos, coils, and distributors.

3699 **Electrical Machinery, Equipment, and Supplies, Not Elsewhere Classified.**—Establishments primarily in manufacturing electrical machinery, equipment, and supplies, not elsewhere classified, such as appliance and extension cords, bells and chimes, and insect traps.

37 TRANSPORTATION EQUIPMENT

This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment such as motorcycles, bicycles, and snowmobiles. Establishments primarily engaged in manufacturing mobile homes are classified in industry 2451.

371 MOTOR VEHICLES AND MOTOR VEHICLE EQUIPMENT

3711 **Motor Vehicles and Car Bodies.**—This industry comprises establishments primarily engaged in the manufacture of passenger cars, passenger car bodies, trucks, buses, and wheeled combat vehicles. Complete car chassis and complete truck chassis, with or without cab, are also included in this industry. Establishments primarily engaged in the manufacture of trucks or buses on purchased chassis are classified in industry 3713; tanks, self-propelled weapons, and other military vehicles in industry 3795; and motor homes produced on purchased chassis in industry 3716.

3713 **Truck and Bus Bodies.**—Establishments primarily engaged in manufacturing truck and bus bodies for sale separately or for assembly on purchased chassis. Establishments primarily engaged in manufacturing complete trucks and buses are classified in industry 3711, stamped body parts for trucks and buses in industry 3465, and truck trailers and demountable cargo containers in industry 3715.

3714 **Motor Vehicle Parts and Accessories.**—Establishments primarily engaged in manufacturing motor vehicle parts and accessories, but not engaged in manufacturing complete motor vehicles or passenger car bodies. Establishments primarily engaged in manufacturing or assembling complete automobiles and trucks are classified in industry 3711, tires and tubes in industry 3011, automobile glass in SIC Major Group 32, automobile stampings in industry 3465, ignition systems in industry 3694, storage batteries in industry 3691, and carburetors, pistons, rings, and valves in industry 3592.

3715 **Truck Trailers.**—Establishments primarily engaged in manufacturing truck trailers, truck trailer chassis for sale separately, detachable trailer bodies (cargo containers) for sale separately, and detachable trailer (cargo container) chasis for sale separately.

3716 **Motor Homes Produced on Purchased Chassis.**—This industry comprises establishments primarily engaged in the manufacture of motor homes produced on purchased chassis. Establishments primarily engaged in the manufacture of motor homes produced on chassis of own manufacture are classified in industry 3711.

The Motor Homes Produced on Purchased Chassis is included for the first time in the 1977 census.

372 AIRCRAFT AND PARTS

3721 **Aircraft.**—Establishments primarily engaged in manufacturing or assembling complete aircraft. This industry also includes establishments primarily engaged in research and development on aircraft or in factory-type aircraft modification on a contract or fee basis. Establishments primarily engaged in manufacturing engines, propellers, and other aircraft parts and auxiliary equipment are classified in industries 3724 and 3728; and those producing guided missiles and space vehicles and parts are classified in SIC group 376.

3724 **Aircraft Engines and Engine Parts.**—Establishments primarily engaged in manufacturing aircraft engines and engine parts. Research and development on aircraft engines is included in this industry. Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and parts are classified in industry 3764.

3728 **Aircraft Parts and Auxiliary Equipment, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing aircraft parts and auxiliary equip-

ment not elsewhere classified. Research and development on aircraft parts is included in this industry. Establishments primarily engaged in manufacturing or assembling complete aircraft are classified in industry 3721, aircraft engines and parts in industry 3724, aeronautical instruments in industry 3811, aeronautical electrical equipment in industry 3694, and guided missile and space vehicle parts and auxiliary equipment in industry 3769.

373 SHIP AND BOAT BUILDING AND REPAIRING

3731 Ship Building and Repairing.—Establishments primarily engaged in building and repairing all types of ships, barges, and lighters, whether propelled by sail or motor power or towed by other craft. This industry also includes the conversion and alteration of ships. Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc., are classified in other industries.

3732 Boat Building and Repairing.—Establishments primarily engaged in building and repairing all types of boats. Establishments primarily engaged in cleaning and storing boats and in the rental of dock space and yacht clubs are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing rubber and nonrigid plastic boats are classified in SIC Major Group 30.

374 RAILROAD EQUIPMENT

3743 Railroad Equipment.—Establishments primarily engaged in building and rebuilding locomotives (including frames and parts not elsewhere classified) of any type or gage; and railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service. This industry also includes establishments primarily engaged in manufacturing trackless trolley buses. Establishments primarily engaged in manufacturing mining cars are classified in industry 3532. Repair shops, owned and operated by railroads or local transit companies, rebuilding or repairing locomotives or cars, or building new locomotives or cars for their own account, are classified in SIC Major Groups 40 and 41.

375 MOTORCYCLES, BICYCLES, AND PARTS

3751 Motorcycles, Bicycles, and Parts.—Establishments primarily engaged in manufacturing motorcycles, bicycles, and similar equipment and parts. Establishments primarily engaged in assembling motorcycles or bicycles from purchased parts are also included in this industry. Establishments primarily engaged in manufacturing children's vehicles, except bicycles, are classified in industry 3944. Establishments primarily engaged in manufacturing golf carts and other similar personnel carriers are classified in industry 3799.

376 GUIDED MISSILES AND SPACE VEHICLES AND PARTS

3761 Guided Missiles and Space Vehicles.—Establishments primarily engaged in manufacturing complete guided missiles and space vehicles. Research and development and other services on or for guided missiles and space vehicles are included in this industry. Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and propulsion unit parts are classified in industry 3764; space satellite and guided missile and space vehicle airborne and ground guidance, checkout, and launch electronic systems and components in industry 3662; and guided missile and space vehicle airframes, nose cones, and space capsules in industry 3769.

3764 Guided Missile and Space Vehicle Propulsion Units and Propulsion Unit Parts.—Establishments primarily engaged in manufacturing guided missile propulsion units and propulsion unit parts. Research and development on guided missile and space vehicle propulsion units and propulsion unit parts is also included in this industry.

3769 Guided Missile and Space Vehicle Parts and Auxiliary Equipment, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing guided missile and space vehicle parts and auxiliary equipment not elsewhere classified. Research and development on guided missile and space vehicle parts and auxiliary equipment, not elsewhere classified, is also included in this industry. Establishments primarily engaged in manufacturing navigational and guidance systems are classified in industry 3662.

379 MISCELLANEOUS TRANSPORTATION EQUIPMENT

3792 **Travel Trailers and Campers.**—Establishments primarily engaged in manufacturing travel trailers for attachment to passenger cars or other vehicles, pickup coaches (campers) or caps (covers) for mounting on pickup trucks and self-contained motor homes. Travel trailers are generally 35 feet long or less, 8 feet wide or less, and have storage facilities for water and waste. Establishments primarily engaged in manufacturing mobile homes are classified in industry 2451.

3795 **Tanks and Tank Components.**—Establishments primarily engaged in manufacturing or assembling complete tanks and specialized components for tanks. Establishments primarily engaged in manufacturing military vehicles other than tanks are classified in SIC group 371, and tank engines in industry 3519.

3799 **Transportation Equipment, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing transportation equipment not elsewhere classified. Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers are classified in industry 3537, and children's vehicles except bicycles in industry 3944.

38 MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS; WATCHES AND CLOCKS

This major group includes establishments engaged in manufacturing instruments (including professional and scientific) for measuring, testing, analyzing, and controlling, and their associated sensors and accessories; optical instruments and lenses; surveying and drafting instruments; surgical, medical, and dental instruments, equipment, and supplies; opthalmic goods; photographic equipment and supplies; and watches and clocks.

381 ENGINEERING, LABORATORY, SCIENTIFIC, AND RESEARCH INSTRUMENTS AND ASSOCIATED EQUIPMENT

3811 **Engineering, Laboratory, Scientific, and Research Instruments and Associated Equipment.**—Establishments primarily engaged in manufacturing engineering, laboratory, and scientific instruments, including nautical, navigational, aeronautical, surveying, and drafting equipment and instruments for laboratory work and scientific research (except optical instruments—industry 3832). Establishments primarily engaged in manufacturing surgical and medical instruments are classified in industry 3841; dental instruments and equipment in industry 3843; measuring, analyzing, and controlling instruments, including instruments for measuring electrical quantities and characteristics, in SIC group 382; watches and clocks in industry 3873; machinists' precision measuring tools in industry 3545; and measuring and dispensing pumps in industry 3586.

382 MEASURING AND CONTROLLING INSTRUMENTS

3822 **Automatic Controls for Regulating Residential and Commercial Environments and Appliances.**—Establishments primarily engaged in manufacturing temperature and related controls for heating and air-conditioning installations and refrigeration applications, which are electrically, electronically, or pneumatically actuated, and which measure and control variables such as temperature and humidity; and automatic regulators used as components of household appliances. Establishments primarily engaged in manufacturing industrial process controls are classified in industry 3823; motor control switches in industry 3622, switches for household appliances in industry 3643, and appliance timers in industry 3873.

3823 **Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products.**—Establishments primarily engaged in manufacturing industrial instruments and related products for measuring, displaying (indicating and/or recording), transmitting, and controlling process variables in manufacturing, energy conversion, and public service utilities. These instruments operate mechanically, pneumatically, electronically, or electrically to measure process variables such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, alkalinity, specific gravity, gas and liquid concentration, sequence, time interval, mechanical motion, and rotation. Establishments primarily engaged in manufacturing electrical integrating meters are classified in industry 3825; residential and commercial comfort controls in industry 3822; all liquid-in-glass and bimetal thermometers and glass hydrometers in industry 3829; recorder charts in SIC group 275, and optical instruments in industry 3832.

3824 **Totalizing Fluid Meters and Counting Devices.**—Establishments primarily engaged in manufacturing totalizing (registering) meters, monitoring fluid flows, such as watermeters and gasmeters; and producers of mechanical and electromechanical counters and associated metering devices. Establishments primarily engaged in manufacturing electricity integrating meters and electronic frequency counters are classified in industry 3825; and industrial process instruments in industry 3823.

3825 **Instruments for Measuring and Testing of Electricity and Electrical Signals.**—Establishments primarily engaged in manufacturing instruments for measuring the characteristics of electricity and electrical signals, such as voltmeters, ammeters, watt-meters, watt-hour meters, demand meters, and equipment for testing the electrical characteristics of electrical, radio, and communication circuits and of internal combustion engines. Establishments primarily engaged in the manufacturing of electronic checkout, monitoring, evaluating, and other electronic support equipment for electronic navigational, radar, sonar, and other communications systems are classified in industry 3662.

3829 **Measuring and Controlling Devices, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing measuring and controlling devices, not elsewhere classified, including testing instruments to determine the physical properties of materials, nuclear instruments, aircraft engine instruments, and liquid-in-glass and bimetal thermometers.

383 OPTICAL INSTRUMENTS AND LENSES

3832 **Optical Instruments and Lenses.**—Establishments primarily engaged in manufacturing instruments that measure an optical property; apparatus, except photographic, that projects or magnifies, such as binoculars, prisms, and lenses; optical sighting and fire control equipment; and related analytical instruments. Establishments primarily engaged in manufacturing eyeglass lenses, frames, or fittings are classified in industry 3851; separate computers in industry 3573; and electronic tracking and fire control systems in industry 3662.

384 SURGICAL, MEDICAL, AND DENTAL INSTRUMENTS AND SUPPLIES

3841 **Surgical and Medical Instruments and Apparatus.**—Establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in industry 3842; and electrotherapeutic, electromedical, and X-ray apparatus in industry 3693.

3842 **Orthopedic, Prosthetic, and Surgical Appliances and Supplies.**—Establishments primarily engaged in manufacturing orthopedic, prosthetic, and surgical appliances and supplies, arch supports, and other foot appliances; fracture appliances, elastic hosiery, abdominal supporters, braces, and trusses; bandages; surgical gauze and dressings; sutures; adhesive tapes and medicated plasters; and personal safety appliances and equipment. Establishments primarily engaged in manufacturing surgical and medical instruments are classified in industry 3841. Establishments primarily engaged in manufacturing appliances and in the personal fitting to the individual prescription of a physician are classified in trade industries.

3843 **Dental Equipment and Supplies.**—Establishments primarily engaged in manufacturing artificial teeth, dental metals, alloys and amalgams, and a wide variety of equipment, instruments, and supplies used by dentists, dental laboratories, and dental colleges. Dental laboratories constructing artificial dentures, bridges, inlays, and other dental restorations on specifications from dentists are classified in industry 8072.

385 OPHTHALMIC GOODS

3851 **Ophthalmic Goods.**—Establishments primarily engaged in manufacturing opthalmic frames, lenses, and sunglass lenses. Establishments primarily engaged in manufacturing slit lamps are classified in industry 3841, and molded glass blanks in industry 3229. Establishments primarily engaged in grinding lenses and fitting glasses to prescription are classified in trade.

386 PHOTOGRAPHIC EQUIPMENT AND SUPPLIES

3861 **Photographic Equipment and Supplies.**—Establishments primarily engaged in manufacturing (1) photographic apparatus, equipment, parts, attachments, and accessories, such as still and motion

picture cameras and projection apparatus; photocopy and microfilm equipment; blueprinting and diazotype (white printing) apparatus and equipment; and other photographic equipment; and (2) sensitized film, paper, cloth, plates, and prepared photographic chemicals for use therewith. Establishments primarily engaged in manufacturing photographic paper stock (unsensitized), and paper mats, mounts, easels, and folders for photographic use are classified in SIC Major Group 26; photographic lenses in industry 3832; photographic glass in SIC Major Group 32; chemicals for technical purposes, not specifically prepared and packaged for use in photography, in SIC Major Group 28; and photographic flash, flood enlarger, and projection lamps in industry 3641.

387 WATCHES, CLOCKS, CLOCKWORK OPERATED DEVICES, AND PARTS

3873 **Watches, Clocks, Clockwork Operated Devices, and Parts.**—Establishments primarily engaged in manufacturing clocks (including electric), watches, watchcases, mechanisms for clockwork operated devices, and clock and watch parts. This industry includes establishments primarily engaged in assembling clocks and watches from purchased movements and cases. Establishments primarily engaged in manufacturing time clocks are classified in industry 3579, glass crystals in industry 3231, and unbreakable crystals in industry 3079.

39 MISCELLANEOUS MANUFACTURING INDUSTRIES

This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing group. Industries in this group fall into the following categories: Jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; caskets; and other miscellaneous manufacturing industries.

391 JEWELRY, SILVERWARE, AND PLATED WARE

3911 **Jewelry, Precious Metal.**—Establishments primarily engaged in manufacturing jewelry and other articles worn on or carried about the person, made of precious metals with or without stones (including the setting of stones where used), including cigarette cases and lighters, vanity cases and compacts; trimmings for umbrellas and canes; and jewel settings and mountings. Establishments primarily engaged in manufacturing costume jewelry from nonprecious metals and other materials are classified in industry 3961.

3914 **Silverware, Plated Ware, and Stainless Steel Ware.**—Establishments primarily engaged in manufacturing flatware (including knives, forks, and spoons), hollowware, toiletware, ecclesiastical ware, and related products made of sterling silver; of metal plated with silver, gold, or other metal; of nickel silver; of pewter; or of stainless steel.

3915 **Jewelers' Findings and Materials and Lapidary Work.**—Establishments primarily engaged in manufacturing unassembled jewelry parts, and stock shop products such as sheet, wire, and tubing; and establishments of lapidaries primarily engaged in cutting, slabbing, tumbling, carving, engraving, polishing, or faceting stones from natural or manmade precious or semiprecious gem raw materials, either for sale or on a contract basis for the trade; in recutting, repolishing, and setting gem stones; or in cutting, drilling, and otherwise preparing jewels for instruments, dies, watches, chronometers, and other industrial uses. This industry includes the drilling, sawing, and peeling of real or cultured pearls, but does not include the manufacture of artificial pearls (industry 3961).

393 MUSICAL INSTRUMENTS

3931 **Musical Instruments.**—Establishments primarily engaged in manufacturing pianos, with or without player attachments; organs; other musical instruments; and parts and accessories for musical instruments.

394 TOYS AND AMUSEMENT, SPORTING, AND ATHLETIC GOODS

3942 **Dolls.**—Establishments primarily engaged in manufacturing dolls, doll parts, and doll clothing. Establishments primarily engaged in manufacturing stuffed toy animals are also included in this industry.

3944 Games, Toys, and Children's Vehicles; Except Dolls and Bicycles.—Establishments primarily engaged in manufacturing games and game sets for adults and children, and mechanical and nonmechanical toys. Important products of this industry include games such as chess, checkers, dominoes, puzzles, and other indoor games; and toys, such as toy furniture, doll carriages and carts, construction sets, mechanical trains, toy guns and air rifles, and other mechanical games and toys; baby carriages and strollers; children's velocipedes and tricycles, coaster wagons, play cars, sleds, and other children's outdoor wheel goods and vehicles, except bicycles (industry 3751). Establishments primarily engaged in manufacturing dolls are classified in industry 3942; and sporting and athletic goods for children and adults in industry 3949.

3949 Sporting and Athletic Goods, Not Elsewhere Classified.—Establishments primarily engaged in manufacturing sporting and athletic goods, not elsewhere classified, such as fishing tackle; golf and tennis goods; baseball, football, basketball, and boxing equipment; roller skates and ice skates; gymnasium and playground equipment; billiard and pool tables; and bowling alleys and equipment. Establishments primarily engaged in manufacturing athletic apparel are classified in SIC Major Group 23, small arms ammunition in industry 3482, and firearms in industry 3484.

395 PENS, PENCILS, AND OTHER OFFICE AND ARTISTS' MATERIALS

3951 Pens, Mechanical Pencils, and Parts.—Establishments primarily engaged in manufacturing pens, pen points, fountain pens, ballpoint pens, refill cartridges, porous-tipped felt tip markers, and parts.

3952 Lead Pencils, Crayons, and Artists' Materials.—Establishments primarily engaged in manufacturing lead pencils, pencil leads, and crayons; and materials and equipment for artwork, such as airbrushes, drawing tables and boards, palettes, sketch boxes, pantographs, artists' colors and waxes, pyrography goods, drawing inks, and drafting materials. Establishments primarily engaged in manufacturing mechanical pencils are classified in industry 3951, and drafting instruments in industry 3811.

3953 Marking Devices.—Establishments primarily engaged in manufacturing rubber and metal hand stamps, dies, and seals; steel letters and figures; and stencils for use in painting or marking. Establishments primarily engaged in manufacturing felt tip markers are classified in industry 3951.

3955 Carbon Paper and Inked Ribbons.—Establishments primarily engaged in manufacturing carbon paper for business machines, sales books, etc.; spirit or gelatin process and other stencil paper; and inked or carbon ribbons for business machines.

396 COSTUME JEWELRY, COSTUME NOVELTIES, BUTTONS, AND MISCELLANEOUS NOTIONS, EXCEPT PRECIOUS METAL

3961 Costume Jewelry and Costume Novelties, Except Precious Metal.—Establishments primarily engaged in manufacturing costume jewelry, costume novelties, and ornaments made of all materials, except precious metal, precious or semiprecious stones, and rolled gold plate and gold filled materials (industry 3911).

3962 Feathers, Plumes, and Artificial Trees and Flowers.—Establishments primarily engaged in manufacturing artificial trees (including Christmas trees), flowers, fruits, and foliage made from all materials except glass; in producing fancy feathers, plumes, and articles made principally of feathers and plumes. Establishments primarily engaged in manufacturing artificial flowers, fruits, and foliage from glass are classified in industry 3231.

3963 Buttons.—Establishments primarily engaged in manufacturing buttons, button parts, and button blanks and molds, of all materials except precious metal and precious or semiprecious stones (industry 3911).

3964 Needles, Pins, Hooks and Eyes, and Similar Notions.—Establishments primarily engaged in manufacturing notions, such as machine and hand needles, pins, hooks and eyes, eyelets, buckles, and slide and snap fasteners.

399 MISCELLANEOUS MANUFACTURING INDUSTRIES

3991 Brooms and Brushes.—Establishments primarily engaged in manufacturing household, industrial, and street sweeping brooms; and brushes, such as paintbrushes, toothbrushes, toilet brushes, and household and industrial brushes.

3993 **Signs and Advertising Displays.**—Establishments primarily engaged in manufacturing electrical, mechanical, cutout, or plate signs and advertising displays, including neon signs and advertising novelties. Sign painting shops doing business on a custom basis are classified in industry 7399. Establishments primarily engaged in manufacturing electric signal equipment are classified in industry 3662, and commercial lighting fixtures in industry 3646.

3995 **Burial Caskets.**—Establishments primarily engaged in manufacturing burial caskets and cases including shipping cases of wood or other material except concrete. Establishments primarily engaged in producing other goods for use by morticians are classified on the basis of the product, such as burial garments in SIC Major Group 23.

3996 **Linoleum, Asphalted-Felt-Base, and Other Hard-Surface Floor Coverings, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing linoleum, asphalted-felt-base, and other hard-surface floor coverings not elsewhere classified. Establishments primarily engaged in manufacturing rubber floor coverings are classified in industry 3069, and cork floor and wall tile in industry 2499.

3999 **Manufacturing Industries, Not Elsewhere Classified.**—Establishments primarily engaged in manufacturing miscellaneous fabricated products, including beauty shop and barbershop equipment; hairwork; tobacco pipes and cigarette holders; coin-operated amusement machines; matches; candles; lampshades; dressed and dyed furs; umbrellas; parasols and canes; and other articles not elsewhere classified.

APPENDIX D. Reporting Forms

This appendix contains reproductions of a representative selection of reporting forms used in the 1977 economic censuses, with emphasis on the census of manufactures.

These forms are described in section 7 of the Introduction.

DUE DATE: February 15, 1978

Form Approved: O.M.B. No. 41-R2751

FORM NC-X1 (Items 1–4)
(4-27-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES

REPORT OF ORGANIZATION

NOTICE – Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

Refer to this CENSUS FILE NUMBER in any correspondence pertaining to this report

CENSUS USE ONLY	Unit No.	Item code	Unit No.	Item code	Unit No.	Item code

(Please correct any errors in name and address including ZIP code)

ACT	CCS	DOC

Important – Please read

Please complete this report by February 15, 1978 and

RETURN YELLOW COPY TO – –

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

***NOTE** – Shaded boxes are for Bureau of the Census use only*

Item 1 – COMPANY OWNERSHIP OR CONTROL (DOMESTIC)

Does another U.S. (domestic) company own more than 50 percent of the voting stock of your company OR have the power to control the management and policies of your company?

1 ☐ YES – *Enter the following information on the owning or controlling company and go to item 2.*

2 ☐ NO – *Go to item 2*

Name of owning or controlling company	Home office address *(Number and street, city, State, and ZIP code)*	Employer Identification Number of owning or controlling company
		–

Percent of voting stock owned – *Mark (X) one* → 1 ☐ **Less than 50%** 2 ☐ **50%** 3 ☐ **More than 50%**

Item 2 – COMPANY OWNERSHIP OR CONTROL (FOREIGN)

Does a foreign entity (company, individual, government, etc.) own 10 percent or more of the voting stock or other equity rights of your company?

1 ☐ YES – *Enter the following information on the owning entity and go to item 3.*

2 ☐ NO – *Go to item 3*

Name of owning entity	Home office address *(City, country)*

Percent of ownership – *Mark (X) one* → 1 ☐ **Less than 10%** 2 ☐ **10–24%** 3 ☐ **25–49%** 4 ☐ **50%** 5 ☐ **51–99%** 6 ☐ **100%**

Item 3 – FOREIGN AFFILIATES

Does this enterprise alone, or with its domestic affiliates, own 10 percent or more of the voting stock of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise, including ownership of real estate?

1 ☐ YES – *Go to item 4*

2 ☐ NO – *Go to item 4*

Item 4 – CERTIFICATION

Name of person to contact regarding this report	Address (if different from above address)	Telephone: Area code	Number	Extension

This report is substantially accurate.

Signature of authorized person	Title	Date

FORM NC-X1 (Item 5A) (4-27-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES
REPORT OF ORGANIZATION

Refer to this CENSUS FILE NUMBER in any correspondence pertaining to this report

Item 5A – ESTABLISHMENTS OF YOUR COMPANY AND ITS SUBSIDIARIES

This item should include an up-to-date list of all establishments of your company and its subsidiaries, for which separate establishment reports are not required, for the 1977 Economic Censuses. Please correct any errors or omissions in the prelisted information in column (a) and complete columns (b) and (c) as indicated. Estimates are acceptable if book figures are not readily available. Please read the definitions and instructions on the reverse side before completing this item.

Line No.	(a) Employer Identification (EI) Number, establishment name, address of physical location (including ZIP code), and major activity. *Add store or plant number, if any, and correct any errors or omissions*	(b) 1977 Establishment data. *Report the number of employees and payroll for each establishment (including part year operations)*	(c) Status of establishment at end of 1977. *Mark (X) one box and complete as indicated*
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	
	EMPLOYER IDENTIFICATION NO. / Census use only: GEO, SC, TE	Employees (during pay period including March 12, 1977) (Number)	1 ☐ In operation 2 ☐ Sold or leased → MO DAY YR NAME OF PURCHASER OR LESSEE NUMBER AND STREET CITY STATE ZIP CODE
	NAME / STORE OR PLANT NO.	Payroll for 1st quarter of 1977 before deductions (Mil. Thou. Dol.)	
	NUMBER AND STREET OF PHYSICAL LOCATION		
	CITY STATE ZIP	Total annual payroll for 1977 before deductions (Mil. Thou. Dol.)	3 ☐ Closed (no new owner or operator), dismantled, or destroyed on → MO DAY YR 4 ☐ Idle or inactive (but still owned) → 5 ☐ Other – *Describe* →
	MAJOR ACTIVITY		
Census use only	CENSUS FILE NO. / TO / IND / TAB / WT	CCS / NID	

Page _____ of _____ pages

FORM NC-X1 (Item 5B)
(4-27-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES
REPORT OF ORGANIZATION

PLEASE ENTER YOUR CENSUS FILE NUMBER
(See front page)

_____

Item 5B – YOUR LISTING OF ADDITIONAL ESTABLISHMENTS AND SUBSIDIARIES

- **Column (a)** – List separately any establishments of your company and its subsidiaries located in the U.S. or any of its territories which are not accounted for on other report forms in this mailing package.
- **Instructions for questions (e) and (f)** – Answer question (e) for acquired establishments. Complete question (f) entering the date the establishment opened. If not yet in operation, enter the expected opening date and the expected employment.
- **Column (b)** – Complete this column for each listed establishment.
- **Column (c)** – Mark (X) the box which best describes the activity of each establishment. *See box codes*
- **Column (d)** – Describe major activity or list principal products or services.
- **NOTE:** Additional copies of **Item 5B** are available upon request to Bureau of the Census, 1201 East Tenth Street, Jeffersonville, Indiana 47132. If you prefer, you may use your own paper to list additional establishments; however, please **follow the same format** as shown on the report form. Be sure to **enter** the item number, your company's name and address, and the Census File Number in the upper right-hand corner of each additional sheet.

DESCRIPTION AND CODES FOR COLUMN (c)

1 – Agricultural production
2 – Agricultural services
3 – Mining
4 – Construction
5 – Merchant wholesalers
6 – Commission agent/broker
7 – Communications
8 – Manufacturers' sales branches, manufacturers' sales offices
9 – Manufacturing
10 – Retail
11 – Retail concessions/departments in retail stores
12 – Transportation and public utilities
13 – Finance, insurance, or real estate
14 – Services
15 – Medical, legal, or educational
16 – Auxiliary establishments primarily providing service to your own or affiliated company rather than customers or clients such as storage warehouses and research laboratories
17 – Central Administrative Office: accounting, purchasing, legal activities for your own company
18 – Other – *Specify major activity in column (d) below*

Line No.	Employer Identification (EI) Number, establishment name, your store or plant number, if any, and address of physical location (including ZIP code) (a)	1977 establishment data *Report number of employees and payroll for each establishment (including part-year operations)* (b)	Kind of business activity in 1977: Major activity *Mark (X) one box from the above descriptions* (c)	Kind of business activity in 1977: Description of major activity or principal products or services (d)
	EMPLOYER IDENTIFICATION NUMBER ___ — ___ ; NAME; STORE OR PLANT NO.; NUMBER AND STREET OF PHYSICAL LOCATION; CITY; STATE; ZIP CODE; (e) Was this establishment acquired from another company? ☐ YES ☐ NO — DATE ACQUIRED MONTH DAY YEAR; NAME AND ADDRESS OF FORMER OWNER OR OPERATOR; (f) Date establishment opened or is expected to open and expected employment. MONTH DAY YEAR EXPECTED EMPLOYMENT	Employees (during pay period including March 12, 1977) (Number); Payroll for 1st quarter of 1977 before deductions Mil. Thou. Dol.; Total annual payroll for 1977 before deductions; Census use only: CENSUS FILE NO. SC TO IND FORM; TAB WT CCS OID	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐	
	EMPLOYER IDENTIFICATION NUMBER ___ — ___ ; NAME; STORE OR PLANT NO.; NUMBER AND STREET OF PHYSICAL LOCATION; CITY; STATE; ZIP CODE; (e) Was this establishment acquired from another company? ☐ YES ☐ NO — DATE ACQUIRED MONTH DAY YEAR; NAME AND ADDRESS OF FORMER OWNER OR OPERATOR; (f) Date establishment opened or is expected to open and expected employment. MONTH DAY YEAR EXPECTED EMPLOYMENT	Employees (during pay period including March 12, 1977) (Number); Payroll for 1st quarter of 1977 before deductions M. Thou. Dol.; Total annual payroll for 1977 before deductions; Census use only: CENSUS FILE NO. SC TO IND FORM; TAB WT CCS OID	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐	
	EMPLOYER IDENTIFICATION NUMBER ___ — ___ ; NAME; STORE OR PLANT NO.; NUMBER AND STREET OF PHYSICAL LOCATION; CITY; STATE; ZIP CODE; (e) Was this establishment acquired from another company? ☐ YES ☐ NO — DATE ACQUIRED MONTH DAY YEAR; NAME AND ADDRESS OF FORMER OWNER OR OPERATOR; (f) Date establishment opened or is expected to open and expected employment. MONTH DAY YEAR EXPECTED EMPLOYMENT	Employees (during pay period including March 12, 1977) (Number); Payroll for 1st quarter of 1977 before deductions Mil. Thou. Dol.; Total annual payroll for 1977 before deductions; Census use only: CENSUS FILE NO. SC TO IND FORM; TAB WT CCS OID	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐	
	EMPLOYER IDENTIFICATION NUMBER ___ — ___ ; NAME; STORE OR PLANT NO.; NUMBER AND STREET OF PHYSICAL LOCATION; CITY; STATE; ZIP CODE; (e) Was this establishment acquired from another company? ☐ YES ☐ NO — DATE ACQUIRED MONTH DAY YEAR; NAME AND ADDRESS OF FORMER OWNER OR OPERATOR; (f) Date establishment opened or is expected to open and expected employment. MONTH DAY YEAR EXPECTED EMPLOYMENT	Employees (during pay period including March 12, 1977) (Number); Payroll for 1st quarter of 1977 before deductions Mil. Thou. Dol.; Total annual payroll for 1977 before deductions; Census use only: CENSUS FILE NO. SC TO IND FORM; TAB WT CCS OID	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐	

DUE DATE: 7 Days after Receipt

Form Approved: O.M.B. No. 41-S77010

FORM NC-X2

U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES

LISTING OF ADDITIONAL ESTABLISHMENTS

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

NOTICE – Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

In correspondence pertaining to this report, please refer to this Census File Number

Employer Identification Number

NOTE – Additional copies of this form are available upon request. If you prefer, list additional establishments on your own paper. BE SURE TO ENTER THE CENSUS FILE NUMBER in the upper right-hand corner of each additional sheet.

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Census use only	Unit No.	Item code	Unit No.	Item code	Unit No.	Item code	ACT	CCS	DOC

Item 1 – Does your organization or any of its subsidiaries have any establishments located in the United States or any of its territories which are not accounted for on other report forms in this mailing package?

☐ YES – *Go to item 2*
☐ NO – *Complete CERTIFICATION on reverse side and return report*

Item 2 – LISTING OF ADDITIONAL ESTABLISHMENTS

INSTRUCTIONS

Column (a) – Complete this column for each establishment that you list.

Column (b) – Mark (X) the box which best describes the principal activity of each establishment using the following code box descriptions:

1 – Agricultural production
2 – Agricultural services
3 – Mining
4 – Construction
5 – Merchant wholesaler
6 – Commission agent/broker
7 – Communications
8 – Manufacturers' sales branch/office
9 – Manufacturing
10 – Retail
11 – Retail concessions/departments in retail stores
12 – Transportation and public utilities
13 – Finance, insurance, or real estate
14 – Services
15 – Medical, legal, or educational
16 – Auxiliary establishments such as storage warehouses and research laboratories primarily providing service to your own or affiliated company rather than customers or clients
17 – Central administrative office, accounting, purchasing, legal activities for your own company
18 – Other – *Specify in column (c) below*

Column (c) – List in order of importance the principal products mined or made; kinds of wholesale or retail business; types of services provided; kinds of construction work done; or the types of crops grown or animals raised, etc.

Column (d) – Complete as indicated.

NOTE – Please return this report form whether or not you report additional establishments.

Employer Identification (EI) Number, establishment name, your store or plant number, if any, and address of **physical** location (including ZIP code) (a)	Principal activity *Mark (X) one box from the above descriptions* (b)	Description of products, business, services, etc. *List in order of importance* (c)	Operating status (d)
EMPLOYER IDENTIFICATION NUMBER – NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐	GEO	**Date establishment opened or is expected to open** MONTH / DAY / YEAR / APPROXIMATE EMPLOYMENT **Was this establishment acquired from another company?** ☐ YES ☐ NO → DATE ACQUIRED: MONTH / DAY / YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
EMPLOYER IDENTIFICATION NUMBER – NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐	GEO	**Date establishment opened or is expected to open** MONTH / DAY / YEAR / APPROXIMATE EMPLOYMENT **Was this establishment acquired from another company?** ☐ YES ☐ NO → DATE ACQUIRED: MONTH / DAY / YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
EMPLOYER IDENTIFICATION NUMBER – NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐	GEO	**Date establishment opened or is expected to open** MONTH / DAY / YEAR / APPROXIMATE EMPLOYMENT **Was this establishment acquired from another company?** ☐ YES ☐ NO → DATE ACQUIRED: MONTH / DAY / YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR

Continued on reverse side

Item 2 – LISTING OF ADDITIONAL ESTABLISHMENTS – Continued

Employer Identification (EI) Number, establishment name, your store or plant number, if any, and address of **physical** location (including ZIP code) (a)	Principal activity *Mark (X) one box from the above descriptions* (b)	Description of products business, services, etc. *List in order of importance* (c)	Operating status (d)
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	
EMPLOYER IDENTIFICATION NUMBER –	1 ☐ 10 ☐ 2 ☐ 11 ☐ 3 ☐ 12 ☐ 4 ☐ 13 ☐ 5 ☐ 14 ☐ 6 ☐ 15 ☐ 7 ☐ 16 ☐ 8 ☐ 17 ☐ 9 ☐ 18 ☐		Date establishment opened or is expected to open MONTH | DAY | YEAR | APPROXIMATE EMPLOYMENT Was this establishment acquired from another company? ☐ YES ☐ NO DATE ACQUIRED MONTH | DAY | YEAR NAME AND ADDRESS OF FORMER OWNER OR OPERATOR
NAME / STORE OR PLANT NO. NUMBER AND STREET OF PHYSICAL LOCATION CITY / STATE / ZIP CODE **Census use only** CENSUS FILE NO. / SC / TO / IND / FORM TAB / WT / CCS / OID		GEO	

Item 3 CERTIFICATION

Name of person to contact regarding this report	Address (if different from label address)	Telephone: Area code / Number / Extension

This report *(including attached continuation pages)* is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person	Title	Date

FORM NC-X2

PENALTY FOR FAILURE TO REPORT
DUE DATE: FEBRUARY 15, 1978

O.M.B. No. 41-S77014; Approval Expires December 31, 1978

FORM NC-X3 (4-4-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NOTICE – Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

1977 ECONOMIC CENSUSES

GENERAL SCHEDULE

In correspondence pertaining to this report, please refer to this Census File Number

NC-X3

Employer Identification Number

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

Census use only	Unit No.	Item code	Unit No.	Item code	Unit No.	Item code

KEEP THIS COPY FOR YOUR FILES

PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Important–Please read

The data reported on this form should cover only the establishment shown on the address label. However, if more than one establishment (location) was operated under the same Employer Identification Number in 1977, consolidate data for all such locations in items 5 and 6. In item 1 enter the location of the MAIN establishment. In item 12c provide information separately for each location, INCLUDING the main establishment.

Item 1 – PHYSICAL LOCATION OF ESTABLISHMENT – In order to assign this establishment to the correct geographic area, the Bureau of the Census must know the actual location **which may differ from the mailing address.** *Complete items a through g.*

a. Address number and street name of physical location – *If not known, enter building name, shopping center name, or other physical location description. Do not enter P.O. box or rural route.*
Mark (X) for a, b, c, and d if same as mailing label; if different show corrections.
Same as mailing label ☐ OR ▶

b. Name of city, town, village, borough, etc. of physical location
Same as mailing label ☐ OR ▶

c. State
Same as mailing label ☐ OR ▶

d. ZIP code
Same as mailing label ☐ OR ▶

e. Type of municipality indicated in 1b – ***Mark (X) one***
1 ☐ City 2 ☐ Town 3 ☐ Village 4 ☐ Borough 5 ☐ Township 6 ☐ Unincorporated 7 ☐ Other – *Specify* _____ 8 ☐ Don't know

f. **Is this establishment located inside the legal boundaries of the city, town, village, etc., indicated in 1b?**
1 ☐ Yes 2 ☐ No 3 ☐ No legal boundaries 4 ☐ Don't know
NOTE – The area served by a post office generally does not coincide with the legal boundaries of the municipality from which the post office takes its name.

g. Name of county (Louisiana parish) of physical location

Item 2 – EMPLOYER IDENTIFICATION NUMBER
Is the Employer Identification (EI) Number printed in the upper right of the address box the SAME as that used for this establishment on its latest 1977 Employer's Quarterly Federal Tax Return, Treasury Form 941?
☐ YES
☐ NO – *Enter current EI number* ▶ (9 digits)

Item 3 – OPERATIONAL STATUS
a. Mark (X) the **ONE** box which best describes this establishment at the end of 1977.
001
1 ☐ In operation
2 ☐ Temporarily or seasonally inactive
3 ☐ Ceased operation – *Give date* ▶
4 ☐ Sold or leased to another operator – *Give date AND name, etc.* ▶

Figures only

Month	Day	Year

Name of new owner or operator

Number and street

City | State | ZIP code

b. **How many months during 1977 did your firm or organization actively operate this establishment?**
Number of months: 002

Item 4 – ORGANIZATIONAL STATUS
a. Mark (X) the **ONE** box which best describes this establishment during 1977.
003
1 ☐ Individual proprietorship
2 ☐ Partnership
8 ☐ Cooperative association
5 ☐ Governmental – *Specify* _____
0 ☐ Corporation (other than specified above)
9 ☐ Other – *Specify* _____

b. **Was all or part of the income of this establishment or organization exempt from Federal income taxes under Section 501 or 521 of the Internal Revenue Code?**
004
1 ☐ YES
2 ☐ NO

Important–Please read

Dollar figures should be reported as illustrated. Please be careful to enter the figures in the **correct columns.** See example below:

EXAMPLE: If figure is **$1,125,628.28** ▶

	Millions (000)	Thousands (000)	Dollars (000)
• PREFERRED method	1	125	
Acceptable method	1	125	628

Item 5 – DOLLAR VOLUME

		Mil.	Thou.	Dol.
a. Sales of merchandise and other operating receipts or total revenue in 1977 **EXCLUDING** sales (or other) taxes collected	010			
b. Were sales (or other) taxes collected from customers and forwarded to taxing authorities?	011 1 ☐ YES 2 ☐ NO			
If "YES," report the amount of such taxes (***DO NOT*** *include taxes in 5a above*)	012			
c. **TOTAL DOLLAR VOLUME** including sales (or other) taxes (Sum of 5a and 5b above) ▶	013			
d. Expenses in 1977	040			

Item 6 – PAYROLL AND EMPLOYMENT

		Mil.	Thou.	Dol.
a. Payroll (1) Total **ANNUAL** payroll in 1977 before deductions	030			
(2) Payroll for the **FIRST QUARTER** of 1977	031			

b. **Employment** – Number of paid employees for the pay period including the 12th of the month (Include both full- and part-time employees)

032 MAR	033 MAY	034 AUG	035 NOV

Item 7 – SOURCE OF SALES, RECEIPTS, OR REVENUE – List below the principal lines of merchandise sold, kinds of construction work done, products produced, or services provided and indicate the approximate percentage each was of the total receipts or revenue in 1977.

Source	Percentage of receipts or revenue	Source	Percentage of receipts or revenue
	%		%
	%		%
	%		%
	%		%

Make sure all items on this page have been completed and continue to ***NEXT PAGE***

Item 8 – BUSINESS OR ACTIVITY – Mark (X) the **ONE** box which best describes the **principal** activity during the past year. 070 **Census use only**

- ☐ **AGRICULTURAL PRODUCTION**
- ☐ **MINERALS EXTRACTION OR ORE PROCESSING**
- ☐ **MANUFACTURING**
- ☐ **MOTOR CARRIER (ICC REGULATED)**
- ☐ **MOTOR CARRIER (EXCEPT ICC REGULATED)**
- **CONSTRUCTION**
  - ☐ Building construction – General contractor
  - ☐ Other construction – General contractor
  - ☐ Special trade contractor (electricians, carpenters, painters, etc.)
  - ☐ Land developer and subdivider
  - ☐ Real estate – *Specify activity* _____
- **WHOLESALE TRADE**
  - ☐ Merchant wholesaler
  - ☐ Agent or broker
  - ☐ Other type of wholesaler – *Specify* _____
- **RETAIL TRADE**
  - ☐ Selling at this establishment
  - ☐ Mail order (catalog selling)
  - ☐ House-to-house (direct selling)
  - ☐ Operating merchandise vending machines
  - ☐ Other type of retailer – *Specify* _____
- ☐ **Other – *Specify activity*** _____

Item 9 – If "Manufacturing" is marked in item 8, list the primary materials consumed in producing the manufactured products.

Item 10 – CLASS OF CUSTOMER

To whom do you sell most of your products or provide your services?

- ☐ Retail or wholesale establishments
- ☐ Construction contractors
- ☐ General public (household consumers and individuals)
- ☐ Institutional, industrial, commercial, professional, government, and farm users
- ☐ Other – *Specify* _____

Item 11 – OWNERSHIP OR CONTROL

Enter the company name and address (street name and number, city, State, ZIP code) and EI Number. If more space is needed to list companies, attach a separate sheet.

a. Is this company owned or controlled by another company? 1 ☐ YES → 2 ☐ NO

Owning or controlling company

EI No. *(9 digits)* ☐☐☐–☐☐☐☐☐☐

b. Does this company own or control any other company or companies? 1 ☐ YES → 2 ☐ NO

Owned or controlled company

EI No. *(9 digits)* ☐☐☐–☐☐☐☐☐☐

Item 12 – LOCATIONS OF OPERATION

a. Were the operations under the EI Number shown in the mailing label (or as corrected in item 2) conducted at more than one location during 1977? (Including all selling or service locations and any other facilities such as warehouses, administrative offices, etc.)

1 ☐ YES – *Answer (b) and (c)*
2 ☐ NO – *SKIP to Item 13*

b. At how many separate locations were these operations conducted during 1977? — Number of locations

c. List each location – including main location. If more space is needed, attach a separate sheet providing the same information required below.

Census use only	Physical location of each operation *Name, address and ZIP code* (a)			1977 sales and receipts and annual and 1st quarter payrolls *Totals should equal items 5a and 6a(1) and (2)* (b)		Mil.	Thou.	Dol.	Number of paid employees for the pay period including the 12th of each month *Totals should equal corresponding entries in item 6b* (c)		Primary kind of business or activity of each location *Describe* (d)
080	Name			Sales and receipts	081				084 MAR	085 MAY	
	Number and street of physical location			Total annual payroll	082				086 AUG	087 NOV	
	City	State	ZIP code	1st quarter payroll	083						088 **Census use only**
080	Name			Sales and receipts	081				084 MAR	085 MAY	
	Number and street of physical location			Total annual payroll	082				086 AUG	087 NOV	
	City	State	ZIP code	1st quarter payroll	083						088 **Census use only**
080	Name			Sales and receipts	081				084 MAR	085 MAY	
	Number and street of physical location			Total annual payroll	082				086 AUG	087 NOV	
	City	State	ZIP code	1st quarter payroll	083						088 **Census use only**
080	Name			Sales and receipts	081				084 MAR	085 MAY	
	Number and street of physical location			Total annual payroll	082				086 AUG	087 NOV	
	City	State	ZIP code	1st quarter payroll	083						088 **Census use only**
080	Name			Sales and receipts	081				084 MAR	085 MAY	
	Number and street of physical location			Total annual payroll	082				086 AUG	087 NOV	
	City	State	ZIP code	1st quarter payroll	083						088 **Census use only**
	TOTALS (Sum of entries should equal corresponding entries in items 5a and 6 on page 1)			Sales and receipts					MAR	MAY	
				Total annual payroll					AUG	NOV	
				1st quarter payroll							

Item 13 – CERTIFICATION

Name of person to contact regarding this report	Telephone: Area code	Number	Extension

Address – *Number and street*

City	State	ZIP code

This report is substantially accurate and has been prepared in accordance with instructions.

Period covered → From: Mo. Day Year To: Mo. Day Year

Signature of authorized person

Title Date

FORM NC-X3 (4-4-77)

PENALTY FOR FAILURE TO REPORT
DUE DATE: FEBRUARY 15, 1978

Form Approved: O.M.B No. 41-S77017

FORM NC-X6 (0600)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES

CENTRAL ADMINISTRATIVE OFFICE OR AUXILIARY ESTABLISHMENT

Important – PLEASE READ ALL ACCOMPANYING INSTRUCTIONS

NOTICE – Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report, please refer to this Census File Number

NC-X6 (0600)

Employer Identification Number

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

Census use only

Unit No.	Item code	Unit No.	Item code	Unit No.	Item code

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Item 1 – PHYSICAL LOCATION OF ESTABLISHMENT – In order to assign this establishment to the correct geographic area, the Bureau of the Census must know the actual location **which may differ from the mailing address.** *Complete items a through g.*

a. Address number and street name of physical location – *If not known, enter building name, shopping center name, or other physical location description. Do not enter P.O. box or rural route.*
Mark (X) for a, b, c, and d if same as mailing label; if different show corrections.
Same as mailing label OR ▶

b. Name of city, town, village, borough, etc., of physical location
Same as mailing label OR ▶

c. State
Same as mailing label OR ▶

d. ZIP code
Same as mailing label OR ▶

e. Type of municipality indicated in 1b
Mark (X) one
1 ☐ City
2 ☐ Town
3 ☐ Village
4 ☐ Borough
5 ☐ Township
6 ☐ Unincorporated
7 ☐ Other – *Specify* _____
8 ☐ Don't know

f. **Is this establishment located inside the legal boundaries of the city, town, village, etc., indicated in 1b?**
1 ☐ Yes
2 ☐ No
3 ☐ No legal boundaries
4 ☐ Don't know

NOTE – The area served by a post office generally does not coincide with the legal boundaries of the municipality from which the post office takes its name.

g. Name of county (Louisiana parish) of physical location

Item 2 – EMPLOYER IDENTIFICATION NUMBER

Is the Employer Identification (EI) Number printed in the upper right of the address box the SAME as that used for this establishment on its latest 1977 Employer's Quarterly Federal Tax Return, Treasury Form 941?

☐ YES
☐ NO – *Enter current EI number* ▶ ☐☐-☐☐☐☐☐☐☐ *(9 digits)*

Item 3 – OPERATIONAL STATUS

a. Mark (X) the **ONE** box which best describes this establishment at the end of 1977.

001
1 ☐ In operation
2 ☐ Temporarily or seasonally inactive
3 ☐ Ceased operation – *Give date* ▶
4 ☐ Sold or leased to another operator – *Give date AND name, etc.* ▶

Figures only

Month	Day	Year

Name of new owner or operator

Number and street

City | State | ZIP code

b. **How many months during 1977 did your firm or organization actively operate this establishment?** 002 ☐☐ Number of months

Item 4 – ORGANIZATIONAL STATUS

a. Mark (X) the **ONE** box which best describes this establishment during 1977.

003
1 ☐ Individual proprietorship
2 ☐ Partnership
8 ☐ Cooperative association
5 ☐ Governmental – *Specify* _____
0 ☐ Corporation (other than specified above)
9 ☐ Other – *Specify* _____

b. **Was all or part of the income of this establishment or organization exempt from Federal income taxes under Section 501 or 521 of the Internal Revenue Code?** 004
1 ☐ YES
2 ☐ NO

Item 5 – PRINCIPAL ACTIVITIES OF YOUR COMPANY SERVICED BY THIS ESTABLISHMENT IN 1977

a. **Does this establishment perform management, general administrative functions, or other supporting services PRIMARILY for establishments of this company (rather than for other business firms or for the general public)?** ("Company" refers to the parent firm and all its subsidiaries under common ownership or control.)
050
1 ☐ YES – *Complete items 5b, c, and d*
2 ☐ NO – *SKIP to Item 6*

b. **Does this establishment perform these management administrative functions or services for more than one establishment of this company?**
051
1 ☐ YES
2 ☐ NO

c. Mark (X) the **principal** kind of business or industrial activity of the establishments of this company that are managed or serviced by this central office or auxiliary.

052
1 ☐ Manufacturing
2 ☐ Construction
3 ☐ Mining and mineral industries
4 ☐ Manufacturer sales branches or other wholesale operations
5 ☐ Retail stores
6 ☐ Other – *Describe* _____

d. List in order of importance, the **principal** products made, kinds of retail or wholesale business operated, types of services rendered, or construction activities performed by the establishments that are managed or serviced by this central office or auxiliary.

(1)

(2)

Important – Please read

Dollar figures should be reported as illustrated. Please be careful to enter the figures in the **correct columns.** See example below:

EXAMPLE: If figure is **$1,125,628.28** ▶

	Millions (000)	Thousands (000)	Dollars (000)
• PREFERRED method	1	125	
Acceptable method	1	125	628

Item 6 – EMPLOYMENT

	Number
a. Employment by function for pay period including March 12	
(1) Centralized administration	060
(2) Research, development, and testing	061
(3) Warehousing	062
(4) Electronic data processing	063
(5) Sales to customers directly from this location	064
(6) Trading stamp redemption	065
(7) Other – *Specify*	066
(8) **TOTAL employment (Sum of lines (1) through (7))** ▶	067
b. Total employment for pay period including the 12th of the following months –	
(1) May	068
(2) August	069
(3) November	070

Item 7 – PAYROLL

	Mil.	Thou.	Dol.
a. **TOTAL FIRST QUARTER payroll before deductions** ▶	071		
b. **TOTAL ANNUAL PAYROLL before deductions** ▶	072		
c. Of the total annual payroll reported in item 7b above, how much was for delivery personnel (including drivers, driver salesmen, etc.), who are engaged in transporting the merchandise of this company, and who are employed at this establishment? ▶	073		

Item 8 – EMPLOYER COSTS FOR FRINGE BENEFITS

a. Required by law	080		
b. Other fringe benefits	081		
c. **TOTAL fringe benefits (Sum of lines a and b)** ▶	082		

Please continue on page 2 ▶

Item 9 – BILLINGS TO RETAIL STORES OF THIS COMPANY (090)

a. Did this establishment have billings to retail stores of this company during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 10*

		Mil.	Thou.	Dol.
b. Total billings by this establishment in 1977 to retail stores of this company.	091			

EXAMPLE FOR REPORTING PERCENTS — If figure is **38.76%** of total sales:

	Whole percent
• Report whole percents →	39%
Not acceptable →	38.76%

Item 10 – SALES TO CUSTOMERS OUTSIDE THIS COMPANY (100)

a. Did this establishment have sales to customers outside this company during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 11*

		Mil.	Thou.	Dol.
b. (1) Sales and other operating receipts (exclude sales or other taxes collected)	101			
(2) Were sales (or other) taxes collected from customers and forwarded to taxing authorities? 1 YES 2 NO	102			
If "YES," report amount of taxes (*DO NOT include in 10b(1)*) →	103			
(3) TOTAL sales and other operating receipts (including sales or other taxes collected) (Sum of lines (1) and (2)) →	104			

c. Of the value of sales and other operating receipts reported in item 10b(1), report the approximate percentage of these receipts to –		Whole percent
(1) General public (households, consumers and individuals)	105	%
(2) Other, include retailers; wholesalers; institutional, industrial, commercial, professional, and farm users (for use in farm production); and government	106	

d. List the **principal** products sold or services rendered by this establishment to customers outside this company, and their approximate percent of 1977 sales and receipts as reported in item 10b(1) above.

Principal products sold or services rendered	Percent of sales and receipts in 1977
(1)	%
(2)	%

Item 11 – CAPITAL EXPENDITURES (EXCLUDE LAND AND MINERAL RIGHTS) (110)

a. Did this establishment make capital expenditures during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 12*

b. Type of capital expenditures		Mil.	Thou.	Dol.
(1) New structures and additions to plant	111			
(2) New automobiles, trucks, trailers, etc., for highway use	112			
(3) New computers and peripheral data processing equipment	113			
(4) All other expenditures for new machinery and equipment	114			
(5) Used plant and used equipment acquired from others	115			
(6) TOTAL capital expenditures (Sum of lines (1) through (5)) →	116			

Item 12 – GROSS VALUE OF DEPRECIABLE ASSETS (EXCLUDE LAND) (120)

a. Did this establishment maintain depreciable assets during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 13*

		Mil.	Thou.	Dol.
b. Gross value of depreciable assets, end of 1976	121			
(1) Buildings and structures	122			
(2) Machinery and equipment	123			
(3) TOTAL (Sum of lines (1) and (2)) →				
c. Gross value of depreciable assets, end of 1977	124			
(1) Buildings and structures	125			
(2) Machinery and equipment	126			
(3) TOTAL (Sum of lines (1) and (2)) →				

Item 13 – DEPRECIATION CHARGES (130)

a. Did this establishment maintain depreciation accounts during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 14*

		Mil.	Thou.	Dol.
b. TOTAL depreciation charges against assets during 1977 →	131			

Item 14 – SELECTED OPERATING EXPENSES (140)

		Mil.	Thou.	Dol.
(1) Cost of purchased electricity	140			
(2) Cost of fuels consumed	141			
(3) Cost of purchased communication services	142			
(4) Cost of purchased repair services for buildings and structures	143			
(5) Cost of purchased repair services for machinery and equipment	144			

Item 15 – RENTAL PAYMENTS (EXCLUDE LAND) (150)

a. Did this establishment make rental payments during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 16*

b. Rental payments made for this establishment		Mil.	Thou.	Dol.
(1) For use of buildings and structures	151			
(2) For use of machinery and equipment	152			
(3) TOTAL rental payments (Sum of lines (1) and (2)) →	153			

Item 16 – COST OF RESEARCH AND DEVELOPMENT (160)

a. Did this establishment perform research and development during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 17*

b. Type of research and development performed		Mil.	Thou.	Dol.
(1) Federal contracts and subcontracts	161			
(2) With own funds and nonfederal sources	162			
(3) TOTAL cost of research and development (Sum of lines (1) and (2)) →	163			

Item 17 – INVENTORIES AND METHOD OF VALUATION (170)

a. Did this establishment have inventories during 1977? 1 YES – *Go to b* 2 NO – *SKIP to item 18*

b. Value of inventories of this establishment		Mil.	Thou.	Dol.
(1) End of 1976	171			
(2) End of 1977	172			

c. If the dollar value of inventories at the end of 1977 exceeds $25(000), report the method of valuation below –		Inventories end of 1977 Whole percent
(1) Cost		
(a) First-in, First-out (FIFO)	180	%
(b) Last-in, First-out (LIFO)	181	%
(c) Average cost	182	%
(d) Specific or actual cost	183	%
(e) Standard cost	184	%
(f) Other – *Specify*	185	%
(2) Market	186	
(a) Market used because lower than cost	187	%
(b) Market always used		%
(3) Other – *Specify*	188	%
(4) TOTAL (Sum of lines (1) through (3)) →		100%

Item 18 – CONSISTENCY CHECK (190)

a. Were any of the above data (items 6–17) also reported in any other 1977 Census establishment report form of this company, i.e., in the Census Forms MA-, MC-, CB-, or CC- series? 1 YES – *Go to b* 2 NO – *SKIP to item 19*

b. Please give the 10-digit CENSUS FILE NUMBER of that report (191) CFN

Remarks *This space may be used for any explanation that may be essential in understanding your reported data.*

Item 19 – CERTIFICATION

Name of person to contact regarding this report	Telephone: Area code	Number	Extension
Address – *Number and street*			
City	State	ZIP code	

This report is substantially accurate and has been prepared in accordance with instructions.

Period covered → From: Mo. Day Year To: Mo. Day Year

Signature of authorized person

Title Date

PENALTY FOR FAILURE TO REPORT — DUE DATE: FEBRUARY 15, 1978 — Form Approved: O.M.B. No. 41-S77009

FORM NC-K1 (6-28-77)

NOTICE – Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report please refer to this Census File Number:

NC-K1 (9991)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 ECONOMIC CENSUSES

ENTERPRISE REPORT

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Please complete this form and RETURN TO: BUREAU OF THE CENSUS, 1201 East Tenth Street, Jeffersonville, Indiana 47132

If filing by due date causes a burden, a request for an extention of time should be sent to the above address.

CENSUS USE ONLY

Unit No.	Item code	Unit No.	Item code	Unit No.	Item code

Important – *Please read instructions before completing report*

Report the following items on a consolidated basis for the domestic activities of your enterprise. An enterprise is a business organization (i.e., company, service organization, membership organization, association, etc.) consisting of one or more establishments under common ownership or control. Furthermore, if an enterprise owns or controls other entities, all establishments of its subsidiaries are to be included as part of the owning or controlling enterprise. For purposes of this report, "domestic" activities include all 50 States and the District of Columbia. Do not include foreign activities, if any, except for reporting foreign assets in item 9. Consolidate all domestic activities, whether or not covered in the 1977 Economic Censuses by individual report forms.

If book records are not available, enter your best estimate. **Before completing these items, please read the detailed instructions.**

Item 1 – CERTIFICATION

Name of person to contact regarding this report	Telephone: Area code	Number	Extension

Address – *Number and street*

City	State	ZIP code

This report is substantially accurate and has been prepared in accordance with instructions.

Period covered → From: Mo. 010 Day 011 Year 012 To: Mo. 013 Day 014 Year 015

Signature of authorized person

Title — Date

Important - Please read

Dollar figures should be reported as illustrated. Please be careful to enter your figures in the correct columns. See example below:

EXAMPLE: If figure is $1,125,628.28

	Mil.	Thou.	Dol.
	000	000	000
• PREFERRED method	1	126	
Acceptable method	1	125	628

Item 2 – TOTAL EMPLOYMENT

Number of paid employees for the pay period including March 12, 1977 — Number of employees 020

Item 3 – TOTAL PAYROLL

	Mil.	Thou.	Dol.
	000	000	000
a. Payroll for the **FIRST QUARTER** of 1977, before deductions (030)			
b. **TOTAL ANNUAL** payroll in 1977, before deductions (031)			

Item 4 – EMPLOYER COSTS FOR FRINGE BENEFITS

a. Required by law (040)			
b. Other fringe benefits (041)			
c. Total fringe benefits *(Sum of lines a and b)* (042)			

Item 5 – SALES AND RECEIPTS

a. Sales and other operating receipts (exclude sales or other taxes collected) (050)			
b. Were sales (or other) taxes collected from customers and forwarded to taxing authorities? (051) 1 ☐ YES 2 ☐ NO			
	Mil.	Thou.	Dol.
If "Yes," report amount of taxes. *Do not include in 5a.* (052)			
c. **TOTAL sales and other operating receipts (including sales or other taxes collected)** *(Sum of lines a and b)* (053)			

PLEASE CONTINUE ON REVERSE SIDE

Item 6 – CAPITAL EXPENDITURES (Exclude land and mineral rights)		Millions	Thousands	Dollars
		000	000	000
a. New structures and additions to plant	060			
b. New automobiles, trucks, trailers, etc., for highway use	061			
c. New computers and peripheral data processing equipment	062			
d. All other expenditures for new machinery and equipment	063			
e. Used plant and used equipment acquired from others	064			
f. Capitalized development and exploration of mineral properties	065			
g. **Total capital expenditures** *(Sum of lines a through f)*	066			

Item 7 – GROSS VALUE OF DEPRECIABLE ASSETS				
a. Gross depreciable assets, end of **1976**	070			
(1) For machinery and equipment	071			
(2) For buildings and structures	072			
(3) **Total** *(Sum of lines (1) and (2))*	073			
b. Total capital expenditures during 1977 (should equal line 6g)	074			
c. Other acquisitions by your company during 1977	075			
d. Deductions from depreciable assets during 1977	076			
e. Gross depreciable assets, end of **1977**	077			
(1) For machinery and equipment	078			
(2) For buildings and structures				
(3) **Total** *(Sum of lines (1) and (2))*				

Item 8 – CHANGES IN DEPRECIATION RESERVES				
a. Accumulated depreciation as of end of **1976**	080			
b. Depreciation charged against assets during 1977	081			
c. Additions charged to other accounts during 1977	082			
d. Deductions from reserves for retirements, renewals, and replacements during 1977	083			
e. Accumulated depreciation as of end of **1977** *(Sum of lines a through c minus line d)*	084			

Item 9 – TOTAL ASSETS, AS OF END OF 1977				
a. Net value of depreciable assets (should equal line 7c(3) minus line 8e)	090			
b. All other domestic assets, including inventories	091			
c. Net foreign assets	092			
d. **Total assets, as of end of 1977** *(Sum of lines a through c)*	093			

Item 10 – INVENTORIES AND METHOD OF VALUATION		Millions	Thousands	Dollars
		000	000	000
a. All inventories, as of end of **1976**	100			
b. All inventories, as of end of **1977**	101			

c. **METHOD OF INVENTORY VALUATION**

EXAMPLE FOR REPORTING PERCENTS	If figure is **38.76%** of total receipts:	Percent
	Report whole percents →	39%
	Not acceptable →	38.76%

Method of inventory		Whole percents: End of 1977	Whole percents: End of 1976
(1) **Cost**	(a) First-in, First-out (FIFO)	102	114
	(b) Last-in, First-out (LIFO)	103	115
	(c) Average cost	104	116
	(d) Specific or actual cost	105	117
	(e) Standard cost	106	118
	(f) Other – *Specify*	107	119
(2) **Market**	(a) Market used because lower than cost	108	120
	(b) Market always used	109	121
(3) **Retail method**	(a) Approximating lower of cost or market	110	122
	(b) Approximating cost	111	123
	(c) LIFO retail	112	124
(4) Other – *Specify*		113	125
(5) **TOTAL**		**100%**	**100%**

Item 11 – SELECTED OPERATING EXPENSES		Millions	Thousands	Dollars
		000	000	000
a. Did this enterprise make royalty payments for the use of intangible property rights during 1977?	126 1 ☐ YES – *Report value of payments* → 2 ☐ NO – *GO to b*	127		
b. Did this enterprise purchase advertising services during 1977?	128 1 ☐ YES – *Report cost of purchased services* → 2 ☐ NO – *GO to c*	129		
c. Did this enterprise make rental payments during during 1977?	130 1 ☐ YES – *GO to d* 2 ☐ NO – *SKIP to Item 12*			
d. Rental payments, excluding land		131		
(1) For use of buildings and structures		132		
(2) For machinery and equipment		133		
(3) Total rental payments *(Sum of lines (1) and (2))*				

Item 12 – CONSISTENCY CHECK

Is the gross value of depreciable assets at the end of the year minus total capital expenditures during the year within 5% of the gross value of depreciable assets at the beginning of the year? 140 1 ☐ YES 2 ☐ NO – *Explain in Remarks*

REMARKS – *Please use this space for any explanation that may be essential in understanding your reported data.*

FORM NC-K1 (5-25-77)

PENALTY FOR FAILURE TO REPORT — DUE DATE: FEBRUARY 15, 1978 — Form Approved: O.M.B. No. 41-S77035

FORM MC-36B (Rev.) — U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES

SWITCHGEAR AND SWITCHBOARD APPARATUS AND INDUSTRIAL CONTROLS

Please complete this form and RETURN TO: BUREAU OF THE CENSUS, 1201 East Tenth Street, Jeffersonville, Indiana 47132

NOTICE – Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report, please refer to this Census File Number

Employer Identification Number

Please read ...

A separate census report must be filed for each manufacturing establishment which your company operated in 1977. A manufacturing establishment is defined as a single physical location where products are manufactured, processed, or assembled.

Please read the instructions for each item before completing it. If book figures are not available, carefully prepared estimates are acceptable.

If filing by due date causes an undue burden, a time extension request should be sent to the above address. Please enter your 11-digit Census File Number on each page of this report and on any correspondence with us regarding this report.

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

110 | | | | | | | | | | 111 | | | | | | | |

ITEM 1A Physical location of establishment

In order to assign this establishment to the correct geographic area, the Bureau of the Census must know the actual location which may differ from the mailing address. *Complete items a through g.*

a. Address number and street name of physical location – *If not known, enter building name, shopping center name, or other physical location description. Do not enter P.O. box or rural route.*
Mark (X) for a, b, c, and d if same as mailing label; if different enter corrections.
Same as mailing label ☐ OR ▶

b. Name of city, town, village, borough, etc. of physical location
Same as mailing label ☐ OR ▶

c. State
Same as mailing label ☐ OR ▶

d. ZIP code
Same as mailing label ☐ OR ▶

e. Type of municipality indicated in 1Ab
1 ☐ City 2 ☐ Town 3 ☐ Village 4 ☐ Borough 5 ☐ Township 6 ☐ Unincorporated 7 ☐ Other – *Specify* _____ 8 ☐ Don't know

f. **Is this establishment located inside the legal boundaries of the city, town, village, etc., indicated in 1Ab?**
1 ☐ Yes 2 ☐ No 3 ☐ No legal boundaries 4 ☐ Don't know
NOTE – The area served by a post office generally does not coincide with the legal boundaries of the municipality from which it takes its name.

g. Name of county (Louisiana parish) of physical location

ITEM 1B Employer identification number(s)

Is the Employer Identification (EI) Number printed in the upper right of the address box the SAME as that used for this establishment on its latest 1977 Employer's Quarterly Federal Tax Return, Treasury Form 941? 108
☐ YES ☐ NO – *Enter current EI number* ▶ (9-digits) – | | | | | | | | | |

ITEM 1C Organizational status

Mark (X) the **ONE** box which best describes this establishment during 1977
109
1 ☐ Individual proprietorship
2 ☐ Partnership
0 ☐ Corporation (Do not mark if any form of cooperative association)
8 ☐ Cooperative association, corporate or non-corporate
9 ☐ Other – *Specify*

Important – Please read

Dollars, hours worked, and kilowatt-hour figures should be reported in thousands. If you wish, you may report to the nearest unit. Please be careful to enter your figures in the **correct columns.**

EXAMPLE: If figure is $1,125,628.28 ▶

	Millions	Thousands	Dollars
	000	000	000
• PREFERRED method	1	126	
Acceptable method	1	125	628

REFER TO SPECIAL INSTRUCTIONS ON REVERSE SIDE FOR ITEMS 2–8

• Complete each item and enter "0" when appropriate.

ITEM 2 Number of employees

	Key	Number
Number of production workers during pay period including the 12th of month: a. March	301	
b. May	302	
c. August	303	
d. November	304	
e. Sum of lines a–d	305	
f. Average number (divide line e by 4, omit fractions)	306	
g. All other employees (pay period including March 12th)	307	
h. TOTAL EMPLOYMENT (Sum of lines f and g, item 2) ▶	308	

ITEM 3A Annual payrolls

	Key	Mil.	Thou.	Dol.
a. Production workers' wages (for employees reported in item 2f)	309	$		
b. All other salaries and wages (for employees reported in item 2g)	310			
c. TOTAL PAYROLL (item 3A) ▶	311	$		

ITEM 3B – Not applicable to this form

ITEM 3C First quarter payroll

	Key	Mil.	Thou.	Dol.
TOTAL PAYROLL FOR THE FIRST QUARTER (JANUARY–MARCH) ▶	315	$		

ITEM 4 Plant hours worked by production workers by quarter

	Key	Mil.	Thou.	Hrs.
a. January through March	316			
b. April through June	317			
c. July through September	318			
d. October through December	319			
e. TOTAL HOURS WORKED (item 4) ▶	320			

ITEM 5 Cost of materials, resales, fuels, electricity, and contract work

	Key	Mil.	Thou.	Dol.
a. Cost of materials, parts, supplies, containers, etc., which were put into production, used as operating supplies, or used in repair and maintenance	321	$		
b. Cost of products bought and sold without further manufacture or assembly (Resales)	322			
c. Cost of fuels consumed during the year for heat and power	323			
d. Cost of purchased electricity	324			
e. Cost of contract work done for you by others on your materials	325			
f. TOTAL COST (item 5) ▶	326	$		

ITEM 6 – Not applicable to this form

ITEM 7 Inventories of this establishment

	END OF 1976 Key	Mil.	Thou.	Dol.	END OF 1977 Key	Mil.	Thou.	Dol.
a. Finished products	331	$			335	$		
b. Work-in-process	332				336			
c. Materials, supplies, fuels, etc.	333				337			
d. TOTAL INVENTORIES (item 7) ▶	334	$			338	$		

ITEM 8 Capital expenditures during year

	Key	Mil.	Thou.	Dol.
a. New structures and new additions to this plant (Exclude land)	342	$		
b. New machinery and equipment including replacements and capitalized repairs	343			
c. Used buildings and equipment	347			
d. TOTAL CAPITAL EXPENDITURES (item 8) ▶	350	$		

ITEMS 9–15 – Not applicable to this form

CENSUS USE

CONTINUE ON PAGE 2 ▶

Form MC-36B (Rev.,

Page 2

ITEM 16A — Operational status

a. Mark (X) **ONE** box — *Be sure to indicate the date of any change*

		Enter figures only Mo.	Day	Year
112 1 ☐	No change in operator or operations			
2 ☐	Reorganized — *Complete report for full year and describe type of change in remarks*			
3 ☐	Started new business (newly constructed or completely equipped when started)			
4 ☐	Establishment closed (no new owner or operator), dismantled, abandoned, or destroyed			
5 ☐	Establishment idle or inactive but still owned			
6 ☐	Establishment was acquired or leased from another company			

Mark (X) **ONE** box and give name and address if —

☐ Building only acquired

☐ Complete plant acquired (building, machinery, and equipment)

Name of former operator — Enter current EI number (9 digits)

Number and street, city, State, ZIP code

	Mo.	Day	Year
7 ☐ Establishment was sold or leased to another company			

Mark (X) **ONE** box and give name and address if —

☐ Building only sold

☐ Complete plant sold (building, machinery, and equipment)

Name of new operator — Enter current EI number (9 digits)

Number and street, city, State, ZIP code

b. Is the FIRST DIGIT of your Census File Number (imprinted in the address box) a Zero "0"? ☐ YES — *Complete item 16B, a through d* ☐ NO — *SKIP to Item 16C*

ITEM 16B — Ownership and control

Enter the company name and address *(Number and street, city, State, ZIP code)* and EI number. If more space is needed to list companies, use remarks section.

113 a. Is this company owned or controlled by another company? 1 ☐ YES → 2 ☐ NO — 603 Name and address of owning or controlling company — Enter current EI number (9 digits)

114 b. Does this company own or control any other company or companies? 1 ☐ YES → 2 ☐ NO — 604 Name and address of owned or controlled company — Enter current EI number (9 digits)

c. Did this company have any manufacturing plants under construction but not in operation at the end of the year? 1 ☐ YES 2 ☐ NO

d. Did this company operate at more than one location during the survey year? If more space is needed, attach separate sheet. 1 ☐ YES — *List additional locations below* 2 ☐ NO — *SKIP to Item 16C*

Physical address of business location *(Number and street, city, State, ZIP code)* (1)	Employer Identification Number (2)	Kind of business at this location (3)	Sales and receipts (4) Mil.	Thou.	Dol.	Annual payroll (5) Mil.	Thou.	Dol.	Number of employees (6)	Are these figures included on the front of this report? (7)
605	606 *(9 digits)*	607	608			609			610	☐ YES ☐ NO
605	606 *(9 digits)*	607	608			609			610	☐ YES ☐ NO

ITEM 16C — CHECKS to assure a complete and accurate report

The Bureau of the Census reviews this report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning this report.

- Review the report carefully to see that no items are omitted for the year being covered.
- Calculate and enter figures for the four "reasonableness" checks below, and review the results.
- Correct your report for any errors you find and explain unusual figures in remarks.

For most manufacturing establishments, the figures computed usually fall within the ranges indicated.

"Reasonableness" checks	Calculation required for each check	Figures for survey year	Usual range
a. Average hourly wages per production worker	Item 3Aa (Production workers' wages) ÷ item 4e (Total hours worked)	$/hr.	$2 – $10
b. Hours worked per year per production worker	Item 4e (Total hours worked) ÷ item 2f (Average number of production workers)	hrs./yr.	1000 – 3000
c. Salaries and wages per dollar of shipments	Item 3Ac (Total payroll) ÷ item 18 (Total value of shipments)	¢	05¢ – 95¢
d. Materials cost per dollar of shipments	Item 5f (Total materials cost) ÷ item 18 (Total value of shipments)	¢	05¢ – 95¢

e. Is the total for Value of Shipments (item 18) greater than the sum for payroll (item 3Ac) plus total Cost of Materials, etc. (item 5f)? ☐ YES ☐ NO — *Explain in remarks*

Remarks — *Please use this space for any explanations that may be essential in understanding your reported data.*

SPECIAL INSTRUCTIONS FOR ITEMS 2–8

▶ **Item 2 — Number of employees** — Report all employees at this establishment who received pay for part of the pay period including the 12th of the specified months. Include officers at this establishment, if a corporation; if an unincorporated concern exclude proprietor or partners.

▶ **Items 2a–2d — Number of production workers** — Report workers (up through the working foreman level) engaged in fabricating, processing, assembling, inspecting, and other manufacturing.

▶ **Item 2g — All other employees** — Report nonproduction personnel, including those engaged in supervision (above the working foreman level), installation and servicing of own product, sales, delivery, professional, technical, administrative, etc.

▶ **Item 3a — Annual payrolls** — Report gross earnings prior to deductions paid in the calendar year to those employees reported in item 2. Include commissions, dismissal pay, bonuses, and vacation pay.

▶ **Item 4 — Plant hours worked by production workers by quarter** — Include all production hours worked, including overtime hours, but excluding paid vacations, etc. These should be reported as actual hours worked, not straight-time equivalent hours.

▶ **Item 5 — Cost of materials, etc.** — Report total delivered cost after discounts and including freight of the materials actually consumed or put in production during the year. Include purchases, interplant transfers, and withdrawal from inventories.

If there are no records of consumption, purchases may be reported instead for minor items. This can also be done for major items if purchases do not differ significantly from the amounts actually used. Where consumption of major items differs significantly from purchases, consumption may be estimated by adding beginning inventories to the amount purchased and subtracting ending inventories.

▶ **Item 5a — Cost of materials, parts, supplies, containers, etc., consumed** — The delivered cost figures should cover all raw materials, containers, scrap, supplies, etc., which were: (1) put into production, (2) used as operating supplies, (3) used in repair and maintenance. Item 5a should be consistent with the data in item 17B.

▶ **Item 5b — Cost of products bought and sold** — Report the cost of all products bought and sold in the same condition as when purchased, and not made part of another product manufactured by this establishment. (Total sales value of all products sold is to be reported in item 18 on the line for resales.)

▶ **Item 5c — Cost of fuels consumed** — Report the total cost of all fuels consumed for heat, power, transportation, or the generation of electricity. Do not include the estimated cost of fuels, such as sawdust or blast furnace gas, produced as a by-product of your manufacturing activities. Include anthracite and bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, and all other fuels including purchased steam.

▶ **Item 5d — Cost of purchased electricity** — Report the total cost of electric energy purchased from other companies or received from other establishments of your company. Exclude the value of electricity generated and used at this establishment.

▶ **Item 5e — Cost of contract work done for you by others on your materials** — If any contract work was done by others on materials furnished by your establishment, report the total payments made during the year for such work, including freight out and in. Exclude the cost of materials worked on, which should be included in item 5a.

▶ **Item 8 — Capital expenditures during year (Exclude expenditures for land)** — Include all costs actually incurred during 1977 chargeable to the fixed assets accounts and of the type for which depreciation or amortization accounts are ordinarily maintained. This should include construction and repair work performed by your own forces.

CONTINUE ON PAGE 3 →

FORM MC-36B (Rev.) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES

SWITCHGEAR AND SWITCHBOARD APPARATUS AND INDUSTRIAL CONTROLS – Continued

PLEASE ENTER THIS ESTABLISHMENT'S 11-DIGIT CENSUS FILE NUMBER

Name of establishment (Same as address box)

Item 17A WATER USE DURING 1977

348

1. What was the total quantity of water intake for this establishment for use in the production process and auxiliary operations (such as cooling and condensing, sanitary services, and boiler feed) during the calendar year 1977?

Mark (X) one box only

1 ☐ Under 1 million gallons
2 ☐ 1–9 million gallons
3 ☐ 10–19 million gallons
4 ☐ 20–49 million gallons
5 ☐ 50–99 million gallons
6 ☐ 100 million gallons or over

349

2. Did you recirculate any water during the calendar year 1977? . . . . . 1 ☐ YES 2 ☐ NO

Item 17B CONSUMPTION OF SELECTED MATERIALS DURING 1977

Instructions - Please read

1. **GENERAL** – The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in item 18. Please review the entire list and **report separately** for each item consumed. The materials, parts, and supplies consumed at this establishment which are not prelisted should be described and reported in the "All other materials, etc." line at the end of this section. If your consumption of a listed material is valued at less than $10 000, enter an (X) in column (E) and include the value with "All other materials, etc." Census material code 970099 8.

   If your book records do not contain information as requested, **reasonable estimates are acceptable.**

2. **VALUATION OF MATERIALS CONSUMED** – The value of the materials, etc., consumed should be based on the delivered cost, i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials. This includes purchases, transfers from other establishments of your company, and withdrawals from inventories. Materials transferred to you from other plants within your company should be assigned their full economic value, as assigned by the shipping plant, plus cost of freight and handling charges.

3. **CONTRACT WORK** – Materials purchased for use by others making products for you on a contract basis should be included. Amounts paid to other companies for such contract work should be reported in item 5e, and should include freight in and out. Materials owned by others but used at this establishment in making products for others under contract or on commission should be excluded.

4. **MATERIALS PRODUCED AND CONSUMED** – Materials, parts, and supplies which are produced and consumed in the same establishment in the manufacture of products should be reported in column (C-1). Please report only the quantities of these materials produced and consumed. If the specific input materials used to produce these items are listed, the quantity and value should be reported in columns (C-2) and (D). If not, the cost should be included in the "All other materials, etc." line, Census material code 970099 8.

Line number	5 Materials, parts, and supplies (A)			Census material code 571 (B-1)	Unit of measure for quantities (B-2)	Quantities produced and consumed 572 (C-1)	Materials purchased and consumed: Quantity 573 (C-2)	Materials purchased and consumed: Cost, including delivery cost (freight-in) (D) 574 Millions 000	Thousands 000	Dollars 000	If you consumed less than $10,000 of the item enter (X) 575 (E)
1	MILL SHAPES AND FORMS (EXCEPT CASTINGS)	Carbon steel	Bars and bar shapes	331011 7	Short tons			$			
2			Sheet and strip	331012 5							
3			Plates	331013 3							
4			Structural shapes	331015 8							
5			All other	331019 0							
6		Alloy steel (except stainless)		331020 8							
7		Stainless steel	Sheet and strip	331033 1							
8			All other	331050 5							
9		Insulated wire and cable, except magnet wire	Copper – Report quantity of copper content only in column (C-2)	335792 8	Thousand pounds						
10			Aluminum – Report quantity of aluminum content only in column (C-2)	335793 6							
11		Magnet wire		335770 4							
12		Copper and copper-base alloy	Bare wire (for electrical conduction only)	335728 2							
13			Rod, bar, and mechanical wire, including extruded and/or drawn shapes	335102 0							
14			Plate, sheet, and strip, including military cups and discs	335143 4							
15			Pipe and tube	335152 5							
16		Aluminum and aluminum-base alloy	Sheet, plate, and foil	335301 8							
17			Extruded shapes, including extruded rod, bar, pipe, tube, etc.	335405 7							
18			All other (wire, rolled rod and bar, powder, welded tubing, etc.)	335008 9							
19	CASTINGS (ROUGH AND SEMIFINISHED)	Steel		332045 4	Short tons						
20		Aluminum and aluminum-base alloy		336100 3	1,000 lbs.						
21		Copper and copper-base alloy		336200 1	1,000 lbs.						
22	INDUSTRIAL ELECTRICAL CONTROL EQUIPMENT	(Received for incorporation only into other industrial electrical control equipment shipped, as such, by this plant) Purchased from other companies		362200 8							
23		Received from other plants of your company		362209 9							
24	Porcelain, steatite, and other ceramic electrical products			326400 9							
25	Plastic products consumed in the form of sheets, rods, tubes and other shapes			307903 5							
26	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but exclude sheets, rods, tubes and shapes			282104 9	Thousand pounds						
27	Nonferrous metal smelter and refinery shapes, including precious metal			333001 6	Thousand pounds						
28	Bolts, nuts, screws, rivets, and screw machine products			345001 2							
29	Switches, except snap, toggle and push, and circuit breakers			361301 5							
30	Electric motors, generators and parts			362101 8							
31	Sheet metal products, except stampings			344401 5							
32	Resistors, capacitors, transformers, transducers, and other electronic-type components, except electron tubes and semiconductors			367001 5							
33	Cost of all other materials and components, parts, containers, and supplies consumed including those values checked in column (E) . . . . . *Describe the three principal materials, etc., included in this value.*			970099 8							
34	**TOTAL** *Sum of lines 1–33 should be same as item 5a*							$			

CONTINUE ON PAGE 4 ➔

Form MC-36B (Rev.)

Item 18 **PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1977**

Instructions - Please read

1. **GENERAL** – The products and services listed below are those that are generally made in your industry. Please review the entire list before completing the inquiry. If you produce products that are not prelisted, they should be described and reported in the "All other products" section at the end of item 18. **Please do not combine product lines.**

   Products for which quantity data are requested should be reported in the unit of measure specified.

   If your book records do not contain information as requested, **reasonable estimates are acceptable.**

2. **VALUATION OF PRODUCTS** – The value of the products shipped and services performed should be based on the **net selling value, f.o.b. plant,** after discounts and allowances, and exclusive of freight charges and excise taxes.

   When transferring products to other establishments within your company, the shipping plant should assign the full economic value to the transferred products, i.e., include all direct costs of production and a reasonable proportion of all other costs and profits.

3. **PRODUCTS BOUGHT AND SOLD WITHOUT FURTHER MANUFACTURE** – Products which you purchase and sell as originally purchased (not used in the further manufacturing, processing, or assembling of products made in this establishment) should be reported as "Resales," Census product code 99989 00 6.

4. **CONTRACT WORK**

   a. **Products made by others for you from your materials:** Report such products on the specific lines of this section as if they were made in this establishment.

   b. **Products that you made from materials owned by others:** Report the amount that you received for "commission or contract receipts" on line 29, Census product code 93000 00 8. Do not report on the specific product lines for these products.

5. **DETAILED DATA REPORTED ELSEWHERE** – This report requires totals for groups of products covered in more detailed Current Industrial Reports (CIR). If you report on the CIR forms the value of shipments for items designated by an asterisk should equal the sum of the detail reported on the CIR's.

Line number	Products and services (5) — * Item corresponds to products reported on Current Industrial Reports	Census product code 581	Unit of measure for quantities	Corresponds to the sum of products for 1977 reported on – Census form	Corresponds to the sum of products for 1977 reported on – Code	Products shipped and other receipts: Quantity 583	Value, f.o.b. plant (E) 584 Millions	Thousands	Dollars
	(A)	(B-1)	(B-2)	(B-3)	(B-4)	(D)	000	000	000
1	Switchgear, except ducts and relays (36131)*	36131 00 1		MA-36A	3613109–3613193		$		
2	Power circuit breakers, all voltages (36132)*	36132 00 9			3613215–3613230				
3	Low voltage panelboards and distribution boards and other switching and interrupting devices, 750 volts and under (36133)*	36133 00 7			3613311–3613398				
4	Fuses and fuse equipment under 2300 volts, except power distribution cut-outs (36134)*	36134 00 5			3613431–3613493				
5	Molded case circuit breakers, 750 volts and under (36135)*	36135 00 2			3613511–3613595				
6	Duct, including plug-in units and accessories, 750 volts and under (36136)*	36136 00 0			3613611–3613631				
7	Relays, control circuit (36137)*	36137 00 8			3613701–3613704				
8	General industry power circuit devices, controls, and parts (36220)*	36220 00 2			3622012–3622099				
9	Integrating instruments, electrical (38251)*	38251 00 5		MA38B	3825110–3825161				
10	Instruments to measure electricity (38253)*	38253 00 1		MA38B	3825308–3825376				
11	Power mercury arc rectifiers	36292 51 4	No. of units						
12	Current-carrying wiring devices, including lightning rods (36430)*	36430 00 7		MA36K	3643001–3643099				
13	Electrical metallic conduit and conduit fittings (36442)*	36442 00 2		MA36K	3644221–3644273				
14	Resistors for electronic applications (36700)*	36700 00 3	Thousands of units	MA36N	3676011–3676064				
15	Controls for monitoring residential and commercial environments and appliance regulating controls (38220)*	38220 00 0		MA38B	3822020–3822080				
16	Fractional horsepower motors (exclude hermetics) (36211)*	36211 00 1		MA36H	3621101–3621185				
17	Fractional motor-generator sets and other rotating equipment, including hermetics (36217)*	36217 00 8		MA36H	3621721–3621798				
18	Land transportation motors, generators, control equipment and parts (36213)*	36213 00 7		MA36H	3621311–3621398				
19	Parts and supplies for motors, generators, and motor generator sets, except for land transportation equipment. (Exclude motors for built in jobs)	36219 11 1							
20	Parts and attachments for adding, calculating, accounting machines and cash registers produced by complete machine manufacturers*	35745 10 8		MA35R	3574510				
21	Copper and copper-base alloy wire (bare and tinned) for purposes other than electrical transmission (alloyed)	33511 31 2	Short tons						
22	Galvanizing and other hot dip coatings	34790 31 1							
23	ALL OTHER PRODUCTS MADE IN THIS ESTABLISHMENT — *Describe and report separately for each product whose value was $50,000 or more and* ***not listed above****. Specify unit of measure for quantity.*								
24									
25									
26									
27									
28	*Report a single total value for your remaining products* ***not listed above.***	77777 00 1							
29	CONTRACT WORK — Receipts for work done for others on their own materials ..... *Describe products worked on and kind of work*	93000 00 8							
30	MISCELLANEOUS RECEIPTS — Sales of scrap and refuse	99980 13 8							
31	Receipts for repair work	99980 61 7							
32	Other miscellaneous receipts	99980 98 9							
33	RESALES — Sales of products **bought and sold without further manufacture, processing, or assembly** in this establishment. *The cost of such items should be reported in item 5b.*	99989 00 6							
34	**TOTAL** *Sum of lines 1–33 column (E)*	77000 00 8					$		

CONTINUE ON PAGE 5

Page 5

FORM MC-36B (Rev.) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES

SWITCHGEAR AND SWITCHBOARD APPARATUS AND INDUSTRIAL CONTROLS – Continued

PLEASE ENTER THIS ESTABLISHMENT'S 11-DIGIT CENSUS FILE NUMBER

Name of establishment (same as address box)

Item 19 – Not applicable to this form

Item 20 SELECTED METALWORKING AND RELATED OPERATIONS PERFORMED IN THIS ESTABLISHMENT DURING 1977

Mark (X) appropriate box

	5 Census code	YES	NO
	591	592	592
Were any of the operations listed below performed in this establishment in 1977?	208	1 ☐	2 ☐

If "Yes," indicate in column (C) by marking appropriately, which of the specified operations were performed in this establishment during 1977. Where "Yes" is marked, show in column (D) the approximate number of production workers on all shifts usually engaged in the specified operation.

Line number	Operation (A)	5 Census code 591 (B)	Was this operation performed in this establishment during 1977? 592 (C) Yes	(C) No	Number of production workers (on all shifts) usually employed when operated (estimate if necessary) 593 (D)
1	Foundry (iron or steel)	018	1 ☐	☐	
2	Foundry (nonferrous, except die casting)	026	1 ☐	☐	
3	Electroplating and other plating	059	1 ☐	☐	
4	Heat treating of metals for production purposes	075	1 ☐	☐	
5	Automatic screw machine department	083	1 ☐	☐	
6	Machine shop	091	1 ☐	☐	
7	Tool and die shop (if separate from machine shop) for jigs, fixtures, dies, and other special tooling	109	1 ☐	☐	
8	Pattern shop (foundry patterns only – metal, wood, etc.)	117	1 ☐	☐	
9	Plate or structural fabrication	125	1 ☐	☐	
10	Stamping, blanking and forming of metals	133	1 ☐	☐	
11	Painting, lacquering and enameling on metals	141	1 ☐	☐	
12	Plastics molding	158	1 ☐	☐	

Item 21 – Not applicable to this form

Remarks – *Please use this space for any explanation that may be essential in understanding your reported data.*

Item 22 CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report	Telephone: Area code	Number	Extension	Period covered → From: Mo.	Day	Year	To: Mo.	Day	Year

Address – *Number and street*	Signature of authorized person	
City / State / ZIP code	Title	Date

PENALTY FOR FAILURE TO REPORT — DUE DATE: FEBRUARY 15, 1978

FORM MC-37EX
(RAILROAD SHOPS)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES

LOCOMOTIVES AND CARS BUILT AND REBUILT IN SHOPS OF OPERATING RAILROADS

Please complete and return this form as soon as possible after receipt to

BUREAU OF THE CENSUS
Industry Division
Washington, D.C. 20233

NOTICE – Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

In correspondence pertaining to this report, please refer to this Census File Number

Employer Identification Number

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Instructions - Please read

Please return one copy of this report to the Bureau of the Census, Industry Division, Washington, D.C., 20233, WITHIN 30 DAYS. A separate report should be completed for each shop of your company at which any locomotives or railroad cars were built or rebuilt during 1977.

Include as "rebuilt" locomotives and railroad cars those for which the cost of their dismantling, improvement, and modernization is more than 50 percent of the replacement cost of a new unit of the same class and kind at the time of rebuilding. Do not include as "rebuilt" any conversions or reclassifications, nor units which were reconditioned by replacing defective parts. The values reported for "rebuilt" locomotives and cars should represent the additional value written into the property account.

Item A – NAME OF ESTABLISHMENT COVERED BY THIS REPORT			
Item B – LOCATION OF ESTABLISHMENT	Number and street		
	City	State	ZIP code
Item C – NATURE OF ACTIVITY	Describe briefly the kind of activity of this establishment		
Item D – MAN-HOURS OF PRODUCTION WORKERS	Were more than 50 percent of the total production worker man-hours worked at this shop during 1977 devoted to building or rebuilding locomotives, passenger cars, or freight cars? ..... ☐ Yes ☐ No		

PLEASE CONTINUE ON PAGE 2

Form MC-37EX

Page 2

Item E PRODUCTS MADE IN RAILROAD SHOP DURING 1977

Instructions - Please read

Columns (D) and (E) — Total built and rebuilt — Locomotives and cars built and rebuilt by railroads in their shops for their own use should be reported when they are transferred from the shop to the operating part of the company. The value of new locomotives and cars built by railroads for their own use should represent the amount at which they were written into the property accounts. The value reported for locomotives and cars "rebuilt" by railroad companies should represent the additional value written into the property account.

Report separately each product listed; do not combine product lines.

Lines 1–4, 21, and 22 — Include under "rebuilt," locomotives and railroad cars for which the cost of their dismantling, improvement, and modernization is more than 50 percent of the replacement cost of a new unit of the same class and kind at the time of rebuilding. Do not include as rebuilt any units which were reconditioned by replacing defective parts. Do not include conversions or reclassifications.

Column (F) — Weight of items reported in column (D) — Report the weight of locomotives and cars as the empty light weight or "tare" weight.

Line number	Product (A)				Census product code 581 (B)	Total built and rebuilt: Quantity (NUMBER OF UNITS) 583 (D)	Total built and rebuilt: Value f.o.b. plant (THOUSANDS OF DOLLARS) 584 (E)	Weight of items reported in column (D) (SHORT TONS) 585 (F)
1	LOCOMOTIVES, BOTH NEW AND REBUILT, AND PARTS FOR LOCOMOTIVES SOLD SEPARATELY (37431)	Locomotives	Diesel-electric (except mining type)	Rail service type	37431 11 1		$	
2				Other types	37431 15 2			
3			Other (except mining type)	Rail service type	37431 21 0			
4				Other types	37431 25 1			
5			Mining type, including both new and rebuilt		37431 60 8			
6		Parts for locomotives	Air brakes		37431 72 3			
7			Other locomotive parts, except wheels and axles		37431 79 8			
8	PASSENGER AND FREIGHT TRAIN CARS, NEW (37432)	Freight train cars, new	Box		37432 11 9			
9			Flat		37432 15 0			
10			Gondola		37432 25 9			
11		Hopper (covered)	Steel		37432 28 3			
12			Aluminum		37432 32 5			
13			Other		37432 34 1			
14		Hopper (uncovered)			37432 31 7			
15		Tank			37432 41 6			
16		Caboose			37432 45 7			
17		Other freight train cars, including refrigerator cars and industrial rail cars	Suitable for common carrier service		37432 51 5			
18			Not suitable for common carrier service		37432 52 3			
19		Passenger train cars, new	Self-propelled vehicles designed to carry passengers or articles		37432 61 4			
20			Non-self-propelled vehicles, including coach, coach combination, etc.		37432 62 2			
21	STREET CARS, PARTS AND ACCESSORIES FOR RAILROAD CARS AND STREET CARS, AND REBUILT PASSENGER AND FREIGHT TRAIN CARS (37433)	Rebuilt passenger and freight train cars	Rebuilt passenger train cars		37433 31 5			
22			Rebuilt freight train cars		37433 51 3			
23		Self-propelled street cars, subway cars, rapid transit, trolley buses, etc.			37433 61 2			
24		Non-self-propelled street cars, subway cars, rapid transit, trolley buses, etc.			37433 62 0			
25		Other work and service railroad vehicles (exclude locomotive cranes)			37433 69 5			
26		Parts and accessories for railroad and street cars	Airbrake equipment		37433 71 1			
27			Other railroad and street car parts and accessories		37433 79 4			
28	**TOTAL** *Sum of lines 1–27*				77000 00 8		$	

Remarks — *Please use this space for any explanation that may be essential in understanding your reported data.*

Item F CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report	Telephone: Area code	Number	Extension	Period covered — From: Mo.	Day	Year	To: Mo.	Day	Year

Address — *Number and street*	Signature of authorized person	

City	State	ZIP code	Title	Date

PENALTY FOR FAILURE TO REPORT — DUE DATE:

Form Approved O M B No. 41-R2611

FORM MA-100(SU) — U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS

1977 ANNUAL SURVEY OF MANUFACTURES

NOTICE – Response to this inquiry is **required by law** (Title 13, U S Code). By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

RETURN TO: Bureau of the Census, 1201 East Tenth Street, Jeffersonville, Indiana 47132

NOTE ● *This is the first sheet of the 1977 Census of Manufactures form* ● *PLEASE READ INSTRUCTION MANUAL*

110 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 111 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

201 TAB
202 IND-T
203 AREA
204 INFL
205 CCS

In correspondence pertaining to this report refer to this Census File Number (11 digits)

Employer Identification Number

ITEM 1A Physical Location — *Complete a, b, and c.*

a. Is this establishment located in the State, county, and place shown below? *(If blank or incomplete, please complete (1) through (4).)* 650
1 ☐ YES – *SKIP to part b*
2 ☐ NO – *Correct or complete lines (1) through (4)*

(1) Number and street

(2) City, village, or other place | State | ZIP code

(3) County | (4) If you corrected lines 1, 2, 3, give year moved to new location 19__

(Please correct any error in name and address including ZIP code)

b. Type of municipality indicated in 1Aa(2)
1 ☐ City 2 ☐ Town 3 ☐ Village 4 ☐ Borough 5 ☐ Township 6 ☐ Unincorporated 7 ☐ Other – *Specify* 8 ☐ Don't know

c. Is this establishment located inside the legal boundaries of the city, town, village, etc., indicated in 1Aa(2)?
1 ☐ Yes 2 ☐ No 3 ☐ No legal boundaries 4 ☐ Don't know

NOTE – The area served by a post office generally does not coincide with the legal boundaries of the municipality from which it takes its name.

ITEM 1B Employer Identification Number(s) — Is the Employer Identification (EI) Number printed in the upper right of the address box the SAME as that used for this establishment on its latest 1977 Employer's Quarterly Federal Tax Return, Treasury Form 941?
☐ YES ☐ NO – *Enter current EI number* → (9-digits) 108

ITEM 1C Organizational status — 109
Mark (X) the **ONE** box which best describes this establishment during 1977
1 ☐ Individual proprietorship 2 ☐ Partnership 0 ☐ Corporation (Do not mark if any form of cooperative association) 8 ☐ Cooperative association (corporate or non-corporate) 9 ☐ Other – *Specify*

NOTE Figures for dollars, man-hours, KWH should be rounded to thousands. However, you may enter figures to nearest dollars. Carefully enter your figures in the correct columns, e.g., if payroll is $1,125,628, report either . . . . . | Mil. | Thou. | Dols. | OR | Mil. | Thou. | Dols.
$ 1 | 126 | | | $ 1 | 125 | 628

Complete each item, enter "0" when appropriate.

	Key	1977 Number	1976 Number
ITEM 2 – Number of employees			
Number of production workers during pay period including the 12th of month — a. March	301		
b. May	302		
c. August	303		
d. November	304		
e. Sum of lines a–d	305		
f. Average number *(Divide line e by 4)*	306		
g. All other employees (pay period of March 12)	307		
h. TOTAL f and g (Item 2) →	308		

ITEM 3A – Annual payrolls		1977 Mil.	1977 Thou.	1977 Dols.	1976 Mil.	1976 Thou.	1976 Dols.
a. Production workers' wages	309						
b. All other salaries and wages	310						
c. TOTAL (Item 3A) →	311						
ITEM 3B – Employer's cost for fringe benefits (supplemental labor costs) *(Exclude from items 3A and 3C)*							
a. Legally required including Social Security	312						
b. Payments for voluntary programs	313						
c. TOTAL (Item 3B) →	314						
ITEM 3C – First quarter payroll							
Total payroll for the first quarter (Jan.–March)	315				XXX	XXX	XXX

ITEM 4 – Plant hours worked by production workers	Key	1977 Mil.	1977 Thou.	1977 Hours	1976 Mil.	1976 Thou.	1976 Hours
a. January through March	316						
b. April through June	317						
c. July through September	318						
d. October through December	319						
e. TOTAL (Item 4) →	320						

Complete each item, enter "0" when appropriate.	Key	1977 Mil.	1977 Thou.	1977 Dols.	Key	1976 Mil.	1976 Thou.	1976 Dols.
ITEM 5 – Cost of materials and services used								
a. Cost of materials, parts, components, containers, etc., used	321							
b. Cost of products bought and sold as such	322							
c. Cost of fuels consumed for heat or power *(See item 12)*	323							
d. Cost of purchased electricity *(See item 6)*	324							
e. Cost of contract work done for you by others	325							
f. TOTAL (Item 5) →	326							

ITEM 6 – Quantity of electricity	Key	1977 Kilowatt hours Mil.	1977 Thou.	1977 Units	1976 Kilowatt hours Mil.	1976 Thou.	1976 Units
a. Purchased electricity (quantity comparable to cost as reported in item 5d)	327						
b. Generated electricity (gross less generating station use)	328						
c. Electricity sold or transferred to other establishments	329						

ITEM 7 – Inventories of this establishment at end of year *(Report both years)*	Key	1977 Mil.	1977 Thou.	1977 Dols.	Key	1976 Mil.	1976 Thou.	1976 Dols.
a. Finished products	335				331			
b. Work-in-process	336				332			
c. Materials, supplies, fuels, etc.	337				333			
d. TOTAL (Item 7) →	338				334			

ITEM 8 – Depreciable assets, capital expenditures, and retirements

Refer to the instruction manual for detailed instructions.

(a)	Key	1977 Total (b) Mil.	Thou.	Dols.	Key	Buildings and other structures (exclude land) (c) Mil.	Thou.	Dols.	Key	Machinery and equipment (d) Mil.	Thou.	Dols.	1976 Total (e) Mil.	Thou.	Dols.
a. Gross value of depreciable assets (usually original cost) at beginning of year	341				339				340						
b. Capital expenditures for new buildings and machinery	344				342				343						
c. Capital expenditures for used buildings and machinery	347				345				346						
d. Retirements and disposition of depreciable assets (i.e., gross value of assets sold, retired, scrapped, destroyed, etc.)	353				351				352				XXX	XXX	XXX
e. Gross value of depreciable assets at end of year (should equal lines 8a + 8b + 8c – 8d)	356				354				355						
ITEM 9 – Depreciation charges for the year	359				357				358				XXX	XXX	XXX
ITEM 10 – Rental payments	362				360				361						

ITEM 11A Total value of products shipped and other receipts

For 1977 report the total value of products shipped and other receipts as entered in **item 18.** This value should be completely comparable to the total reported for 1976. If the two figures are not comparable, please explain the reasons why in the remarks section. (Reporting by product class is not required for 1977.) →

	Key	1977 Value (a) Mil.	Thou.	Dols.	1976 Value (b) Mil.	Thou.	Dols.
	330						

ITEM 11B Value of products exported (also included in item 11A)

Report the value of products shipped for EXPORT. Include direct exports and products shipped to exporters or others for export. Do not include products shipped for further manufacture, assembly, or fabrication in the United States. 370
1 ☐ $0–24(999)
2 ☐ $25(000) or more – *Report the value of exports* → 371

ITEM 11C Unfilled orders — *(See instruction manual)*

a. Does this establishment primarily produce for stock and fill orders from inventory? 372 1 ☐ Yes 2 ☐ No

b. What is the number of months normally required to fill an order? 373 1 ☐ Less than one month 2 ☐ 1 or 2 months 3 ☐ 3 months or more

NOTE – If there are any qualifications regarding the unfilled orders data, please explain in the remarks section on the reverse side and complete all parts of this item.

c. Report the value of unfilled orders on your books as of the end of the year → 374

CENSUS USE

MA-100 SU 5-77

CONTINUE ON PAGE 2 →

Page 2

ITEM 12 — Purchased fuels used for heat, power, and generating electricity in 1977

Kind of fuel (a)	Code (b)	Unit of measure for quantities (c)	1977 Quantity (d)	1977 Cost, including delivery cost (freight-in) (e) Mil.	Thou.	Dols.	Unit cost calculation: Calculated unit cost (f)	Usual range of unit costs (Please explain unusual figures in remarks) (g)
1. Coal	121005 3	Short ton					$ per ton	$10–$90 per ton
2. Coke (including breeze)	331210 5	Short ton					per ton	40–150 per ton
3. Distillate fuel oil (#'s 1, 2, 4, and light diesel)	291141 0	Bbl. (42 gal.)					per bbl.	5–25 per bbl.
4. Residual fuel oil (#'s 5, 6 and heavy diesel)	291151 9	Bbl. (42 gal.)					per bbl.	5–25 per bbl.
5. Natural gas	131157 0	1,000 cu. ft.					per MCF	0.25–4.00 per MCF
6. Other fuels — *Specify kind*	960011 5							
7. TOTAL COST OF FUELS *(Should equal cost shown in item 5c, page 1)* →								

ITEM 13 — Method of valuation for inventories reported for 1977 in item 7

Using the inventory total reported for this establishment in item 7d for 1977, please indicate the breakdown of that total according to the inventory valuation methods shown.

- **Cost method** — Report amounts on lines 1a–f.
- **Market basis always used** — Report amounts on line 2b.
- **Lower of cost or market** — Report amounts valued at cost on lines 1a–f according to the applicable methods and the amount at market on line 2a.

Method of valuation (a)		Key	Amount at end of 1977 (b) Mil.	Thou.	Dols.
1. Cost	a. First-in, First-out (FIFO)	381			
	b. Last-in, First-out (LIFO)	382			
	c. Average cost	383			
	d. Specific or actual cost	384			
	e. Standard cost	385			
	f. Other — *Specify*	386			
2. Market	a. Market used for valuation because market lower than cost	387			
	b. Market always used for valuation	388			
TOTAL *(Equals the total reported in item 7d for 1977)* →		389			397

During the calendar year 1977 did you change the method of valuating the inventories that you reported for this establishment?

1 ☐ YES — *Indicate the nature of the changes in remarks.*

2 ☐ NO

ITEM 14 — Cost of purchased services *(See Instruction Manual)*

	Key	1977 Mil.	Thou.	Dols.
1. Repair of buildings and other structures	390			
2. Repair of machinery	391			
3. Cost of purchased communication services (telephone, telegraph, etc.)	392			

ITEM 15 — Breakdown of machinery and equipment expenditures by type reported in item 8b, col. d *(See instruction manual)*

	Key	1977 Mil.	Thou.	Dols.
1. Automobiles, trucks, etc., for highway use	393			
2. Computers and peripheral data processing equipment	394			
3. All other expenditures for new machinery and equipment	395			
TOTAL *(Should be the same as item 8b, column d)* →				

ITEM 16A — Status of this establishment during 1977 *(Be sure to indicate the date of any change.)*

112 *MARK (X) ONE BOX*

	Enter figures only Mo.	Day	Year
1 ☐ No change in operator or operations			
2 ☐ Reorganized — Complete report for full year and describe type of change in remarks.			
3 ☐ Started new business (newly constructed or completely equipped when started)			
4 ☐ Establishment closed (no new owner or operator), dismantled, abandoned, or destroyed on			
5 ☐ Establishment idle or inactive but still owned			
6 ☐ Establishment was acquired or leased from another company			
☐ Building only acquired			
☐ Complete plant acquired (building, machinery, and equipment)			
Name of former operator / EI Number *(9 digits)*			
Number and street, city, State, ZIP code			
7 ☐ Establishment was sold or leased to another company			
☐ Building only sold			
☐ Complete plant sold (building, machinery, and equipment)			
Name of new operator / EI Number *(9 digits)*			
Number and street, city, State, ZIP code			

ITEM 16B — Company organization

113 **a. Is this company owned or controlled by another company?** 1 ☐ YES → 2 ☐ NO

114 **b. Does this company own or control any other company or companies?** 1 ☐ YES → 2 ☐ NO

Enter the company name and address *(Number and street, city, State, ZIP code)* and EI number. *If more space is needed to list companies, use remarks section.*

603 Name and address of owning or controlling company — EI Number *(9 digits)*

604 Name and address of owned or controlled company — EI Number *(9 digits)*

c. Did this company have any manufacturing plants under construction but not in operation at the end of the year? 1 ☐ YES 2 ☐ NO

d. Did you operate at more than one location during the survey year? *If more space is needed, attach separate sheet.* 1 ☐ YES — *List additional locations below* 2 ☐ NO — *SKIP to item 16C below*

Physical address of business location *(Number and street, city, State, ZIP code)* (a)	Employer Identification Number (b)	Kind of business at this location (c)	Sales and receipts (d) Mil.	Thou.	Dols.	Annual payroll (e) Mil.	Thou.	Dols.	Number of employees (f)	Are these figures included on the front of this report? (g)
605	606	607	608			609			610	☐ YES ☐ NO
605	606	607	608			609			610	☐ YES ☐ NO

ITEM 16C — CHECKS to assure a complete and accurate report

The Bureau of the Census reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report.

(1) Review the report carefully to see that no items are omitted for the year being covered.
(2) Calculate and enter figures for the four "reasonableness" checks below, and review the results.
(3) Correct your report for any errors you find and explain unusual figures in remarks.

For most manufacturing establishments, the figures computed usually fall within the ranges indicated.

"Reasonableness" checks	Calculation required for each check	Figures for survey year	Usual range
a. Average hourly wages per production worker	Item 3Aa (Production workers' wages) ÷ item 4e (Total hours worked)	$/hr.	$2 – $10
b. Hours worked per year per production worker	Item 4e (Total hours worked) ÷ item 2f (Average number of production workers)	hrs./yr.	1000 – 3000
c. Salaries and wages per dollar of shipments	Item 3Ac (Total payroll) ÷ item 11A (Total value of shipments)	¢	05¢ – 95¢
d. Materials cost per dollar of shipments	Item 5f (Total materials cost) ÷ item 11A (Total value of shipments)	¢	05¢ – 95¢

e. Is the total for Value of Shipments (item 11A) greater than the sum for payroll (item 3Ac) plus total Cost of Materials, etc. (item 5f)? ☐ YES ☐ NO — *Explain in remarks*

Remarks — *Please use this space for any explanations that may be essential in understanding your reported data.*

PENALTY FOR FAILURE TO REPORT
DUE DATE: FEBRUARY 15, 1978

Form Approved: O.M.B. No. 41-S77001

FORM CB-50F (5006)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF DISTRIBUTIVE TRADES

ELECTRICAL GOODS

Important — *PLEASE READ ALL ACCOMPANYING INSTRUCTIONS*

Please complete this form and RETURN TO → **BUREAU OF THE CENSUS**
1201 East Tenth Street
Jeffersonville, Indiana 47132

Census use only	Unit No.	Item code	Unit No.	Item code	Unit No.	Item code

NOTICE — Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

In correspondence pertaining to this report, please refer to this Census File Number → **CB-50F (5006)**

Employer Identification Number →

KEEP THIS COPY FOR YOUR FILES

PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

Item 1 – PHYSICAL LOCATION OF ESTABLISHMENT – In order to assign this establishment to the correct geographic area, the Bureau of the Census must know the actual location **which may differ from the mailing address.** *Complete items a through g.*

a. Address number and street name of physical location – *If not known, enter building name, shopping center name, or other physical location description. Do not enter P.O. box or rural route.*

Mark (X) for a, b, c, and d if same as mailing label; if different show corrections.

Same as mailing label [ ] **OR ▶**

b. Name of city, town, village, borough, etc., of physical location

Same as mailing label [ ] **OR ▶**

c. State — Same as mailing label [ ] **OR ▶**

d. ZIP code — Same as mailing label [ ] **OR ▶**

e. Type of municipality indicated in 1b (*Mark (X) one*)
1 [ ] City
2 [ ] Town
3 [ ] Village
4 [ ] Borough
5 [ ] Township
6 [ ] Unincorporated
7 [ ] Other – *Specify* _____
8 [ ] Don't know

f. Is this establishment located inside the legal boundaries of the city, town, village, etc., indicated in 1b?
1 [ ] Yes
2 [ ] No
3 [ ] No legal boundaries
4 [ ] Don't know

NOTE – The area served by a post office generally does not coincide with the legal boundaries of the municipality from which the post office takes its name.

g. Name of county (Louisiana parish) of physical location

Item 2 – EMPLOYER IDENTIFICATION NUMBER

Is the Employer Identification (EI) Number printed in the upper right of the address box the SAME as that used for this establishment on its latest 1977 Employer's Quarterly Federal Tax Return, Treasury Form 941?

1 YES
2 NO – *Enter current EI number* → [ ][ ][ ]–[ ][ ][ ][ ][ ][ ][ ] *(9 digits)*

Item 3 – OPERATIONAL STATUS

a. Mark (X) the **ONE** box which best describes this establishment at the end of 1977.

001
1 [ ] In operation
2 [ ] Temporarily or seasonally inactive
3 [ ] Ceased operation – *Give date* →
4 [ ] Sold or leased to another operator – *Give date AND name, etc.* →

Figures only

Month	Day	Year

Name of new owner or operator

Number and street

City | State | ZIP code

b. How many months during 1977 did this firm or organization actively operate this establishment? 002 — Number of months

Item 4 – ORGANIZATIONAL STATUS

a. Mark (X) the **ONE** box which best describes this establishment during 1977.

003
1 [ ] Individual proprietorship
2 [ ] Partnership
8 [ ] Cooperative association
5 [ ] Governmental – *Specify* _____
6 [ ] Corporation (other than specified above)
9 [ ] Other – *Specify* _____

b. Was all or part of the income of this establishment or organization exempt from Federal income taxes under Section 501 or 521 of the Internal Revenue Code? 004
1 [ ] YES
2 [ ] NO

Important – Please read

Dollar figures should be reported as illustrated. Please be careful to enter the figures in the **correct columns.** See example below:

EXAMPLE: If figure is **$1,125,628.28** →

	Millions (000)	Thousands (000)	Dollars (000)
•**PREFERRED** method	1	125	
Acceptable method	1	125	628

Item 5 – DOLLAR VOLUME OF BUSINESS IN 1977

		Mil.	Thou.	Dol.
a. Sales and other operating receipts **EXCLUDING** sales (or other) taxes collected	010			
b. Were sales (or other) taxes collected from customers and forwarded to taxing authorities?	011 (1 YES, 2 NO)			
If "YES," report the amount of such taxes (**DO NOT** include taxes in 5a above)	012			
c. TOTAL SALES and other operating receipts including sales (or other) taxes (Sum of 5a and 5b above) →	013			
d. Did this establishment sell merchandise on a commission basis? (1 YES, 2 NO) *If "YES," go to 5e, if "NO," SKIP to 5g.*	100			
e. Gross selling value of business conducted for the account of others (Include in 5a)	101			
f. Dollar volume of commissions or brokerage received on transactions negotiated for others	102			
g. Did your company (including firms under common ownership and control) manufacture or mine, in the United States or its possessions, 50% or more of the products sold by this establishment? (1 YES, 2 NO)	103			
h. Did this establishment have transfers (billings) to other establishments within your company? (1 YES, 2 NO) *If "YES," go to 5i; if "NO," SKIP to item 5j.*	104			
i. Dollar volume of transfers (billings) to other establishments within your company (**DO NOT** include in 5a)	105			
j. Did construction receipts represent 50% or more of the total sales (as reported in 5a) of this establishment? (1 YES, 2 NO)	106			

Item 6 – PAYROLL AND EMPLOYMENT

		Mil.	Thou.	Dol.
a. Payroll (1) **Total ANNUAL** payroll in 1977 before deductions	030			
(2) Payroll for the **FIRST QUARTER** of 1977	031			

b. Employment – Number of paid employees for the pay period including the 12th of the month (include both full- and part-time employees)

032 (1) MAR	033 (2) MAY	034 (3) AUG	035 (4) NOV

Item 7 – OPERATING EXPENSES AND INVENTORIES

		Mil.	Thou.	Dol.
a. **Total** 1977 operating expenses, including payroll →	040			

b. Did you have merchandise inventories during 1977? 045 (1 YES – *Go to 7c*, 2 NO – *SKIP to item 8*)

c. Indicate the value of merchandise inventories on hand at the end of the year specified according to the valuation methods shown.

- **Cost method** – Report amounts on lines (1)(a) through (e)
- **Market basis always used** – Report amounts on line (2)(b)
- **Lower of cost or market** – Report amounts valued at cost on lines (1)(a) through (e) according to the applicable methods and the amount at market on line (2)(a)

Method of inventory valuation		Key	Amount at end of 1977 Mil.	Thou.	Dol.	Key	Amount at end of 1976 Mil.	Thou.	Dol.
(1) Cost	(a) First-in, First-out (FIFO)	110				120			
	(b) Last-in, First-out (LIFO)	111				121			
	(c) Average cost	112				122			
	(d) Specific or actual cost	113				123			
	(e) Other – *Specify*	114				124			
(2) Market	(a) Market used for valuation because market lower than cost	115				125			
	(b) Market always used for valuation	116				126			
(3)	TOTAL INVENTORIES (Sum of lines (1)(a) through (e) and lines (2)(a) and (b)) →	046				047			

Please continue on page 2 →

Item 8 – TYPE OF OPERATION – Mark (X) the **ONE** item that is best suited to your business – the basis on which the major portion of your operation was conducted in 1977.

a. Merchant (buying and selling on own account) – An establishment primarily engaged in buying and selling merchandise produced by other firms on its own account.

- **Importer** – Source of purchase is primarily foreign.
- **Exporter** – Purchasing goods in the United States for delivery to customers outside the United States.
- **Wholesale merchant, jobber, distributor** – Buying and selling merchandise in the United States for delivery in the United States.

b. Manufacturers' sales branch or sales office – An establishment primarily engaged in selling goods mined or manufactured in the United States and its possessions or Puerto Rico by your company, your parent company, or companies corporately affiliated with your company.

- **Sales branch** – Manufacturers' sales outlet which carries stock.
- **Sales office** – Manufacturers' sales outlet which does not carry stock.

c. Broker, agent, commission merchant – An establishment primarily engaged in selling (or buying) merchandise on an agency basis for others, but not dealing primarily on own account.

- **Auction company** – Selling merchandise for others at wholesale from a permanent location by the auction method.
- **Broker** – Selling (or buying) merchandise on a brokerage basis for others in the United States market, but not receiving goods on consignment.
- **Commission merchant** – Receiving goods on consignment and selling them in the United States market.
- **Import agent** – Representing, on an agency basis, firms outside the United States selling goods in the domestic market.
- **Export agent** – Representing, on an agency basis, domestic firms selling merchandise for delivery outside the United States or its possessions.
- **Manufacturers' agent** – Selling for a limited number of manufacturers on a continuing agency basis.

d. Other type of operation – If none of the above types apply, describe your method of operation.

060

a. Merchant (buying and selling on own account)
- (1) Importer ☐ 12
- (2) Exporter ☐ 13
- (3) Wholesale merchant, jobber, distributor ☐ 11

b. Manufacturers' sales branch or sales office
- (1) Sales branch (with stock) ☐ 21
- (2) Sales office (without stock) ☐ 22

c. Broker, agent, commission merchant
- (1) Auction company ☐ 41
- (2) Broker (representing buyers or sellers) ☐ 42
- (3) Commission merchant ☐ 43
- (4) Import agent ☐ 44
- (5) Export agent ☐ 45
- (6) Manufacturers' agent ☐ 46

d. Other type of operation – *Specify* ☐

Item 9 – KIND OF BUSINESS – Mark (X) the **ONE** item that best describes the **principal** kind of business of this establishment in 1977. If none applies, mark the last item and enter the description by which your business is known to the trade or public.

070

a. Electrical goods
- (1) Electrical apparatus and equipment, wiring supplies, and construction materials ☐ 506300
- (2) Electrical appliances, television and radio sets ☐ 506400
- (3) Electronic parts and equipment ☐ 506500

b. Other kind of business – *Specify* ☐

Item 10 – SALES BY COMMODITY LINES

Report the volume of sales of each of the listed commodity lines which account for at least 1% of this establishment's sales. If any commodities sold are not prelisted but account for 1% or more of total sales, write in the description and volume of sales in the space provided.

Sales may be reported either in dollar figures (see example on page 1), or as a percent (in whole percents) of the total (see example).

The sum of reported commodity lines should equal the total sales as reported in item 5a if dollars are reported; if percents are used, the sum should equal 100.

EXAMPLE FOR REPORTING PERCENTS	If figure is **38.76%** of total sales:	Mil.	Thou.	Dol.	Percent
	• Report whole percents →				39%
	Not acceptable →				38.76%

Description	Census use only	Estimated sales during 1977 Mil.	Thou.	Dol.	Percent
Electrical goods	170	171			172
1. Electrical apparatus and equipment					
a. Power and distribution transformers	1311				
b. Switchgear and switchboard apparatus	1312				
c. Motors and generators	1313				
d. Industrial controls (power circuit devices and controls)	1314				
e. Electric lamps and bulbs	1316				
f. Interior wiring (Report conduit on line i)	1317				
g. Lighting fixtures (residential and commercial)	1318				
h. Communication equipment	1319				
i. Other electrical apparatus and equipment (Include conduits, transmission hardware, lightning rods, etc.)	1321				
j. **Total** (Sum of lines 1a through 1i) →	1300				
2. Electrical appliances, household	170	171			172
a. Radio and TV sets	1411				
b. Electrical household ranges and ovens	1412				
c. Refrigerators and freezers, household	1413				
d. Household laundry equipment	1414				
e. Vacuum cleaners and sewing machines, household	1415				
f. Room air conditioners	1416				
g. Other electric household appliances (Include fans, dishwashers, etc.)	1417				
h. **Total** (Sum of lines 2a through 2g) →	1400				
3. Electronic parts and equipment					
a. Electron tubes, receiving and transmitting (Include cathode ray TV picture tubes)	1511				
b. Intercommunication equipment	1512				
c. Public address equipment	1513				
d. Semiconductors, transistors, diodes, rectifiers, and other semiconductor devices (solar cells, zener diodes, etc.)	1514				
e. Other electronic parts and equipment	1515				
	170	171			172
f. **Total** (Sum of lines 3a through 3e) →	1500				

Description	Census use only	Estimated sales during 1977 Mil.	Thou.	Dol.	Percent
Other commodity lines	170	171			172
4. Automotive parts and supplies	0200				
5. Household and lawn furniture	0400				
6. Household china, glassware, and crockery	0500				
7. Linens, domestics, draperies, and shades	0520				
8. Floor coverings	0540				
9. Other home furnishings	0560				
10. Plywood, millwork	0650				
11. Sporting and recreational goods and supplies	0800				
12. Toys, hobby goods and supplies	0900				
13. Photographic equipment and supplies	1000				
14. Hardware (Include power hand tools)	1600				
15. Plumbing and heating equipment and supplies	1700				
16. Warm air heating and air conditioning equipment and supplies	1800				
17. Refrigeration equipment and supplies	1900				
18. Restaurant and hotel equipment and supplies	2020				
19. Farm machinery and equipment	2200				
20. Garden, lawn machinery and equipment	2250				
21. Jewelry, watches, diamonds, and other precious stones (Include silverware)	170 2900	171			172
22. Other durable goods (Include phonograph records and pre-recorded tapes)	3030				
23. Art goods (Include gifts, novelties, and souvenirs)	5910				
24. Miscellaneous commodities – *Specify*					
a.	9800				
b.	9800				
c.	9800				
25. Rental receipts – *Specify*	9940				
26. Service receipts and labor charges (Include installed parts)					
a. Labor charges	9711				
b. Parts installed and repair work	9712				
c. Other service receipts	9713				
d. **Total** (Sum of lines 26a through 26c) →	9700				
27. TOTAL SALES IN 1977 (Sum of lines 1 through 26 should equal the entry in item 5a) →	170 9990	171			172 100%

FORM CB-50F

Please continue on page 3 →

FORM CB-50F (5006)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF DISTRIBUTIVE TRADES
ELECTRICAL GOODS

Please enter the 11-digit CENSUS FILE NUMBER as shown on this report *(See label on page 1)*

Item 11 – SALES BY CUSTOMER CLASSES

Report the approximate percentage of your 1977 sales (item 5a) to each of the customer classes listed.

Line a – Sales to laboratories, manufacturers of all types, service business, and other business concerns that normally buy for business use rather than for resale of the goods in the form purchased.

Line b – Sales to farmers for use in agricultural production.

Line c – Sales to builders and contractors for construction purposes, not for resale.

Line d – Sales to the Federal government (including the military, post exchanges, GSA, GPO, and similar Federal agencies) and to State and local governments. Include here only sales made by this establishment DIRECT to governmental agencies.

Line e – Sales to retailers of all types (retail chain organizations, independent stores, department stores, etc.) who normally buy for resale to home consumers. Sales to repair shops of all types.

Line f – Sales to organizations that normally purchase for resale at wholesale. Sales to suppliers of plumbing, electrical, farm, and office machinery and supplies. Sales through agents and brokers selling on your account.

Line h – Include sales made direct to buyers in foreign countries, or through their agents in this country. Include transfers, if any, to your own foreign branches. United States possessions should not be considered as foreign countries.

		Whole percents
a.	To institutional, industrial, commercial, and professional users *Report sales to repair shops on line e.*	141
b.	To farmers (for farm use)	142
c.	To builders	143
d.	To governmental bodies (Federal, State, and local governments)	144
e.	To retailers and repair shops	145
f.	To wholesale establishments	146
g.	To household consumers and individual users	147
h.	Export sales	148
i.	TOTAL (Sum of lines a through h should add to 100) →	100%

Item 12 – EMPLOYMENT BY PRINCIPAL ACTIVITY

Report the approximate number of employees at this establishment according to their principal activity during the pay period including March 12, 1977 (total should equal item 6b(1)).

Line a – Include employees primarily engaged in selling services and merchandise from this establishment.

Line b – Include traveling salesmen, truck salesmen, etc.

Line c – Include employees primarily engaged in office and clerical work for this establishment. (See instruction for line e.)

Line d – Include employees primarily engaged in warehousing activities for this establishment. (See instruction for line e.)

Line e – Central administrative – Employees primarily engaged in various management, accounting, clerical, warehousing, etc., services for **other** establishments of your company. Include corporate officers unless primarily engaged in sales activities.

		Number of employees
a.	Inside selling	130
b.	Outside selling	131
c.	Office and clerical	132
d.	Warehousing	133
e.	Administrative	134
f.	Manufacturing	135
g.	Other – *Specify*	136
h.	TOTAL (Sum of lines a through g should equal entry in item 6b(1)) →	137

Item 13 – WAREHOUSE, STOCKROOM, AND OTHER INVENTORY STORAGE SPACE, DECEMBER 31,1977

Report occupiable floor space excluding space occupied by interior walls, permanent aisles, elevator shafts, stairways, offices, receiving and shipping platforms, etc.

a. Did you have warehouse, stockroom, or other inventory storage space on December 31, 1977? 149 — 1 ☐ YES – *Go to 13b* 2 ☐ NO – *SKIP to item 15*

		Square feet		
		Mil.	Thou.	000
b.	Occupiable floor space (under-roof) – occupied and unoccupied – of this establishment	150		

Item 14 – Not applicable to this form

Item 15 – CREDIT SALES, RECEIVABLES, AND BAD DEBT LOSSES

a. Did you have credit sales, receivables, or bad debt losses in 1977? 155 — 1 ☐ YES – *Go to 15b* 2 ☐ NO – *SKIP to item 16*

b.	Approximately what percent of your 1977 sales were made on credit?	156	%	
		Mil.	Thou.	Dol.
c.	Accounts and notes receivable, outstanding as of December 31, 1977	157		
d.	Bad debt losses, 1977	158		

Item 16 – TRUCKS, TRUCK TRACTORS, AND TRUCK TRAILERS OPERATED, MID-DECEMBER 1977

a. Did this establishment operate any trucks, truck tractors, or truck trailers mid-December 1977? 160 — 1 ☐ YES – *Go to 16b* 2 ☐ NO – *SKIP to item 17*

b. Number and type of vehicles operated mid-December 1977	TOTAL	Owned	Rented or leased (without drivers)
(1) Trucks (except tractor trailer)	161	162	163
(2) Truck tractors	164	165	166
(3) Semi-trailers and full-trailers	167	168	169

Remarks – *Please use this space for any explanation that may be essential in understanding your reported data.*

Item 17 – CERTIFICATION

Census use only	18a. ☐ YES ☐ NO	18b. ☐ YES ☐ NO	19a. ☐ YES ☐ NO	19b. Number 079	Not returned ☐	Blank ☐

Name of person to contact regarding this report

Telephone: Area code | Number | Extension

Address – *Number and street*

City | State | ZIP code

This report is substantially accurate and has been prepared in accordance with instructions.

Period covered → From: Mo. | Day | Year — To: Mo. | Day | Year

Signature of authorized person

Title | Date

O.M.B. No. 41-R2349: Approval Expires November 30, 1978

FORM MA-171 (11-25-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

DEPARTMENT OF DEFENSE-OWNED AND OPERATED ESTABLISHMENTS PRIMARILY ENGAGED IN MANUFACTURING AND ASSEMBLY, AND/OR RESEARCH AND DEVELOPMENT – 1977

(Includes shipyards)

(Supplement to the Annual Survey of Manufactures, Census Form MA-100)

INSTRUCTIONS – This report is to be prepared by those Department of Defense establishments whose primary activities are manufacture and assembly and/or research and development. All shipyards are included.

The information requested is based upon reports now regularly prepared by most such establishments.

NOTICE – Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

(Please correct if any error in name and address, including ZIP code)

PLEASE RETURN THIS COPY

ITEM 1 – NAME AND PHYSICAL LOCATION OF ESTABLISHMENT ON DECEMBER 31, 1977

a. Name of establishment

Your answers to parts b, c, d, e, and f of this item should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.

b. Street and number of establishment location*

*If establishment location cannot be described by street and number, give name and number, if any, of road or highway and sufficient information to locate establishment, e.g., Rt. 25, 3 miles south of Charlesville.

c. Type and name of place in which located – *Mark (X) first applicable type and enter name of place.*

Type	Name of place
☐ City	
☐ Village or borough	
☐ Town	
☐ Township	
☐ Other – *Specify*	

d. Is this establishment physically located within the legal boundaries of the place named in "c"?

☐ Yes ☐ No

e. County in which located

f. State | **ZIP code**

g. Telephone number of establishment *(Include area code)*

ITEM 2 – NATURE OF ACTIVITY

Describe briefly the kind of activity of this establishment. If a manufacturing plant, list the three most important products.

ITEM 3 EMPLOYMENT PAYROLLS IN CALENDAR YEAR 1977

(Civilian employees only)

Class of employee	Item code	Number of civilian employees in 1977: At end of quarter (As reported on Civil Service Form SF-113-A**) March (A)	June (B)	September (C)	December (D)	Sum of columns A, B, C, and D (E)	Average number of employees (Col. E divided by 4) (F)	Total wages and salaries of civilian employees (Thousands of dollars) (G)
a. Wage Board employees	41							$
b. All others	42							$
c. **TOTAL CIVILIAN EMPLOYEES** → *(Sum of lines a and b)*	49							$

** The number of Wage Board employees (line a) should be the same as reported on line 5 of SF-113-A. The total (line c) should be the same as reported on line 1 of SF-113-A.

ITEM 4 MAN-DAYS OF WAGE BOARD EMPLOYEES BY CALENDAR QUARTER 1977

Enter the total number of man-days of Wage Board employees for each calendar quarter of 1977. Do not include days paid for vacations, holidays, or sick leave.

Item code	1977 Quarterly period	Man-days (Thousands) (A)	Estimated number of man-hours*** (Thousands) (B)
51	a. January through March		
52	b. April through June		
53	c. July through September		
54	d. October through December		
59	e. **TOTAL, 1977** → *(Sum of lines a, b, c, and d)*		

*** Obtain figure for column (B) by multiplying column (A) by average number of hours per day per Wage Board employee in this establishment.

Please continue on page 2

ITEM 5 BILLINGS BY THIS ESTABLISHMENT DURING CALENDAR YEAR 1977

Enter below the specified classes of billings of this establishment for calendar year 1977

Billings for products and services (including progress billings)	Item code	Value (Thousands of dollars)
Manufacture and assembly	61	$
Construction and conversion	62	
Overhaul, repair, and renovation	63	
Alteration and modification	64	
Research and development	65	
Other billings	66	
Total billings for products and services	67	
Increase or decrease in unbilled costs of work in progress	68	
TOTAL EARNED REVENUE →	69	

ITEM 6 COSTS DURING CALENDAR YEAR 1977

Types of costs incurred	Item code	Cost (Thousands of dollars)
Materials, supplies, and parts used	71	$
Wages and salaries (same as item 3, code 49, col. G)	72	
Contractual services and other costs	73	
TOTAL COSTS INCURRED →	79	
VALUE ADDED (Census use only)	81	

ITEM 7 CHECKS TO ASSURE A COMPLETE AND ACCURATE REPORT

(Please complete this item after you have answered all items on this report.)

The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report:

a. Review this report carefully to see that no items are omitted.
b. Calculate and enter the four "reasonableness" checks (described below), then review the resulting figures.
c. Correct your report for any errors you find, explain unusual figures in "Remarks" section.

"Reasonableness" checks	Calculation required for each check	Resulting figures for 1977
(1) Average hourly wages per Wage Board employee	Item code 41, column G (Wages paid Wage Board employees) – item code 59, column B (Total estimated work-hours)	$
(2) Work days per year per Wage Board employee	Item code 59, column A (Wage Board work-days in thousands) × 1,000 – item code 41, column F (Average number of Wage Board employees)	_____ Work-days
(3) Wages and salaries per dollar of earned revenue	Item code 72, (Wages and salaries of civilian employees) – item code 69 (Total earned revenue)	$

(4) Is the total earned revenue (item code 69, total) greater than total costs incurred (item code 79, total)? . . . . . ☐ Yes ☐ No – *If "No," please explain in "Remarks" section.*

ITEM 8 REMARKS PERTAINING TO THIS REPORT

PERIOD OF REPORT

This report covers the period from _____ to _____

ITEM 9

Name of person to be contracted regarding this report	Address – *Number and street, city, State, ZIP code*	Telephone – *Area code, number, extension*

ITEM 10

CERTIFICATION – This report is substantially accurate and has been prepared in accordance with instructions.

Name of establishment	Address – *Number and street, city, State, ZIP code*	
Signature of authorized official	Title	Date

FORM MA-71 (11-25-77)

DUE DATE: 30 days after receipt

Form Approved: O.M.B. No. 41-S77041

FORM MC-D4
(6-7-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES

REPORT FROM PENAL INSTITUTIONS

(Please correct any error in name or address including ZIP code)

Please complete this form and RETURN TO ➧ **BUREAU OF THE CENSUS**
Industry Division
Washington, D.C. 20233

YOUR FILE COPY

PRODUCTS MADE IN THIS ESTABLISHMENT DURING 1977

INSTRUCTIONS FOR TOTAL PRODUCTION

Column (D) — Quantity — Report where appropriate the quantity of all products you made in this institution during 1977. Include products produced for use within the institution and products transferred to other branches of your government.

Column (E) — Value — Report at approximate market value all products, either used within the institution or transferred to other governmental units.

Line No.	Product (A)	Unit of measure (B)	Total production: Quantity (D)	Total production: Value *(Thousands of dollars)* (E)	Census product code (J)
1	Meat and meat products			$	201
2	Canned foods				203
3	Coffee and tea				209
4	Tobacco, chewing and smoking				213
5	Blankets				221
6	Woven fabrics	1,000 lbs.			223
7	Cordage and twine	Thousand linear yards			229
8	Apparel and clothing, including uniforms, coats, etc.				230
9	Sheets and pillowcases				232
10	Canvas specialties				239
11	Mattresses				251
12	Wooden furniture				253
13	Printing and binding				275
14	Soaps				284
15	Paints				285
16	Shoes	Pairs			314
17	Brick — Clay	Thousand brick			325
18	Brick — Concrete				326
19	Concrete blocks	Thousand block 8"×8"×16" equivalent			327
20	Motor vehicle license plates *(Count a set of front and rear plates as two plates)*	Number			346
21	Highway and road signs				399
22	Miscellaneous metal products				349
23	Brooms and brushes				399
24	Prepared animal feeds				204
25	All other products — *Specify kind and unit of measure*				
26					
27					
28					
29					
30	TOTAL *(Sum of lines 1–29)* ➧			$	

Remarks — *Please use this space for any explanation that may be essential in understanding your reported data.*

CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report	Telephone: Area code	Number	Extension

Period covered → **From:** *(Mo., day, Yr.)* **To:** *(Mo., day, Yr.)*

Address — *Number and street*

Signature of authorized person

City	State	ZIP code	Title	Date

Form Approved: O.M.B. No. 41-S79040

FORM MC-D-13A (8-6-79) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

NOTICE – Response to this inquiry is required by law (title 13, U.S. Code). By the same law, your report to the Census Bureau is confidential. It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

(Please correct if any error in name and address including ZIP code)

Survey No. 5001

1978 SURVEY OF WATER USE IN MANUFACTURING

Please complete and return this form within 30 days after receipt to:

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

PLEASE RETURN THIS COPY

GENERAL INSTRUCTIONS

Report all quantities in millions of gallons per year. Do not report in gallons per minute or gallons per day.

If the quantity used for the year is → 5,600,000,000 gallons – report as 5,600
5,600,000 gallons – report as 6
600,000 gallons – report as 1
Less than 500,000 gallons – report as 0

If no water is used, treated, or discharged, report "None." If your records on water used are in cubic feet, convert to gallons (1 cubic foot equals 7.5 gallons). Reasonably accurate estimates are acceptable.

Brackish water is defined as all water with 1,000 to 10,000 parts per million of dissolved solids.

Salt water is defined as all water with more than 10,000 parts per million of dissolved solids.

Item I – WATER INTAKE BY SOURCE AND BY KIND, 1978

1 – Include water supplied by a water system (whether municipally or privately owned), the primary purpose of which is the supply of water to the general public. Include water supplied by systems, the principal function of which is the supply of water to industrial users.

2 through 5 – Include water obtained from your own water supply system, and water obtained from another company where the supplying company is not primarily a water supplier to the general public and/or industrial users. Include only your own portion of water obtained from a joint water supply system.

Water from –	Item code (a)	MILLIONS OF GALLONS FOR THE YEAR Fresh (b)	Brackish (c)	Salt (d)
1. Public water system	1010			
2. Company surface water system, such as streams or lakes	1020			
3. Company ground water systems, such as wells or deep springs	1030			
4. Company tide water system from estuaries, bays, or oceans	1040			
5. Other sources	1060			
6. TOTAL *(Sum of lines 1 through 5)* →	1099			

Item II – WATER INTAKE BY PURPOSE AND BY KIND, 1978

1 – Process water is all water that comes directly in contact with products and/or materials, including water which is consumed in the manufacture of products.

2a, 2b, 4, and 5 – Self-explanatory.

2c – Include water which is used for cooling and condensing purposes in conjunction with the operation of process equipment, but which does not come in direct contact with products or materials.

3 – Sanitary service includes all water used for drinking, lunchrooms or cafeterias, and domestic sewage.

	Item code (a)	Fresh (b)	Brackish (c)	Salt (d)
1. Process	2010			
2. Cooling and condensing – a. For steam electric power generation	2020			
b. For air conditioning	2030			
c. Other cooling and condensing	2040			
3. Sanitary service	2045			
4. Boiler feed	2055			
5. Other uses	2065			
6. TOTAL *(Sum of lines 1 through 5 should equal item 1, line 6)* →	2099			

Item III – TOTAL WATER INTAKE, WATER RECIRCULATED AND REUSED, AND GROSS WATER USED, BY PURPOSE, 1978

If no water was recirculated or reused, mark "No" box on line 1 and skip to item IV.

If water was recirculated or reused –

In col. (b) report the sum of cols. (b) through (d) for each line in item II above.

In col. (c) report the estimated quantity of water recirculated or reused. For example: If 100 million gallons of intake water were recirculated twice, report 200 million gallons in this column.

In col. (d) report the estimated quantity of water that would have been required if no water had been recirculated or reused. Col. (d) should equal the sum of cols. (b) and (c), less consumption and evaporation loss.

1. Was any water recirculated or reused? *(Mark "X" one box)*
3002 ☐ No – *SKIP to item IV*
3001 ☐ Yes – *Complete columns (b) through (d)*

	Item code (a)	MILLIONS OF GALLONS FOR THE YEAR Total intake (b)	Recirculated and reused (c)	Gross water used (d)
2. Process	3010			
3. Cooling and condensing – a. For steam electric power generation	3020			
b. For air conditioning	3030			
c. Other cooling and condensing	3040			
4. Sanitary service	3045			
5. Boiler feed	3055			
6. Other uses	3065			
7. TOTAL *(Sum of lines 2 through 6)* →	3099			

Item IV – WATER DISCHARGED BY POINT OF DISCHARGE AND BY TREATMENT, 1978

Treated means the use of any of a wide variety of techniques used to cool, detoxify, decompose, separate-to-store, or ameliorate. Treated or untreated water applies to the status of the effluent as it reaches the discharge point.

Include all water brought to ultimate discharge point whether treated or not. Do not include water held in your ponds, lagoons or basins, for reuse or treatment, until actually discharged. Do not report water evaporated or otherwise consumed and not brought to ultimate discharge point.

1 – Report water discharged to public utility sewer systems, whether municipally or privately owned.

2 through 5 – Self-explanatory.

6 – Include seepage into ground from your holding ponds, lagoons, etc. (**Note** – If water is transferred to an agricultural establishment for spray irrigation, report such quantity on line 7.)

7 – Include transfers, after your own use, to another establishment of either your company or another company.

Water used and discharged to –	Item code (a)	MILLIONS OF GALLONS FOR THE YEAR Untreated (b)	Treated (c)
1. Public utility sewer	4010		
2. Streams and rivers	4015		
3. Lakes and ponds	4025		
4. Bays and estuaries	4031		
5. Ocean	4035		
6. Ground (wells, spray, seepage, etc.)	4040		
7. Transferred to other users	4050		
8. TOTAL *(Sum of lines 1 through 7)* →	4099		

Please continue on page 2

Item V – WATER DISCHARGED BY LAST USE AND BY TREATMENT

Col. (c) – Includes process water that has come directly into contact with products and or materials.

Cols. (d), (e), (h), and (i) – Self-explanatory.

Col. (f) – Includes water which has been used for cooling and condensing purposes in conjunction with the operation of process equipment, but which has not come in direct contact with products or materials.

Col. (g) – Sanitary service water discharged is that water which has been used for drinking, lunchrooms or cafeterias, and domestic sewage.

Item (a)	Item code (b)	Process (c)	COOLING AND CONDENSING: For steam electric power generation (d)	COOLING AND CONDENSING: For air conditioning (e)	COOLING AND CONDENSING: Other cooling and condensing (f)	Sanitary service (g)	Boiler feed (h)	Other uses (i)	TOTAL *(Should equal item IV, line 8)* (j)
MILLIONS OF GALLONS FOR THE YEAR									
1. Untreated	5010								
2. Treated	5020								
3. Percent treated by method of treatment (When more than one method of treatment is used, the percentages may add to more than 100 percent) ***REPORT TO THE NEAREST WHOLE PERCENT***									
a. Surface skimming (e.g., oil separation)	5031	%	%	%	%	%	%	%	%
b. Neutralization (pH control)	5032	%	%	%	%	%	%	%	%
c. Coagulation	5033	%	%	%	%	%	%	%	%
d. Flotation	5034	%	%	%	%	%	%	%	%
e. Primary settling	5035	%	%	%	%	%	%	%	%
f. Biological oxidation: trickling filters, activated sludge, digestion basins, ponds, and lagoons	5036	%	%	%	%	%	%	%	%
g. Secondary settling	5037	%	%	%	%	%	%	%	%
h. Filtration	5038	%	%	%	%	%	%	%	%
i. Chlorination	5039	%	%	%	%	%	%	%	%
j. Other – Specify _____	5040	%	%	%	%	%	%	%	%
_____	5040	%	%	%	%	%	%	%	%
	5040	%	%	%	%	%	%	%	%

Item VI – CAPITAL EXPENDITURES, ASSETS, AND ANNUAL COSTS FOR WATER TREATMENT, 1978

Instructions –

1 – Include capital expenditures for new plant and equipment acquisitions (both replacement and expansion) and expenditures for construction in progress. Capital expenditures are those chargeable to your establishment's accounts for plant and equipment that are subject to depreciation or amortization. Include expenditures for both end-of-line techniques and changes-in-production processes. **NOTE –** If you report on form MA-200, this line should equal item 3, line c, on that form.

2 – Report the original cost of depreciable assets used for abatement of water pollutants such as buildings, structures, machinery, and equipment for which depreciation or amortization reserves are maintained. Include cumulative costs for both end-of-line techniques and changes-in-production processes. Exclude land. Report as of the end of 1978.

3a – Report the annual operating costs and expenses for abatement of water pollutants in 1978. Include all costs and expenses to operate and maintain plant(s) and equipment to abate water pollutants. Include leasing costs of equipment to treat water, payments to private contractors and consultants, monitoring costs, and rental costs of land. **NOTE –** If you report on form MA-200, this line should equal the part of the cost reported in item 7a, on form MA-200 that is for abatement of water pollutants. Do not reduce annual costs by subtracting the estimate of costs recovered. Do not include payments to governmental units for public sewerage use.

4 – Report land that you own or rent or lease from others primarily for abatement of water pollutants. For example, land use used for settling ponds, drying beds, equalization basins, sludge lagoons, etc.

	Item code (a)	Report in thousands of dollars (b) Millions ($000)	Report in thousands of dollars (b) Thousands (000)	Mark (X) here if less than $500 and greater than 0 (c)
1. Capital expenditures for abatement of water pollutants	6010	$		☐
2. Estimated gross value of assets (original cost) of your in-place plant and equipment for abatement of water pollutants	6020	$		☐
3. Annual operating costs for abatement of water pollutants a. Report your best estimate of the annual costs of abatement of water pollutants	6031	$		☐
b. Report your best estimate of the percentage incurred by KIND OF COST		Report to the nearest whole percent		
(1) Depreciation	6032	%		
(2) Labor	6033	%		
(3) Private contractor services	6034	%		
(4) Materials and supplies (including fuel and power)	6035	%		
(5) Equipment leasing and other costs	6036	%		
(6) TOTAL *(Sum of lines (1) through (5) should equal 100%)*		100%		
4. Land used in the abatement of water pollutants a. Report your best estimate of the number of acres of land used in the abatement of water pollutants	6041	_____ Acres		
b. Estimate the percentage of such land that is rented and or leased	6042	Report to the nearest whole percent: %		

	Item code (a)	Report in thousands of dollars (b) Millions ($000)	Report in thousands of dollars (b) Thousands (000)	Mark (X) here if less than $500 and greater than 0 (c)
c. Estimate the rental cost of such land that is rented and or leased	6043	$		☐

Remarks

Item VII – CERTIFICATION

Name of person to contact regarding this report	Address *(Number and street, city, State)*	ZIP code	Telephone: Area code	Number	Extension

This report is substantially accurate and covers the period from _____ to _____

Signature of authorized person	Title	Date

FORM MC-D-13A (8-6-79)

PENALTIES FOR FAILURE TO REPORT — DUE DATE: FEBRUARY 15, 1978 — Form Approved: O.M.B. No. 41-S77034

FORM NC-K4S (8-17-77)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NOTICE — Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

In correspondence pertaining to this report, refer to this Census File Number

Employer Identification Number

1977 CENSUS OF MANUFACTURES

DISTRIBUTION OF MANUFACTURERS' SALES BY CLASS OF CUSTOMER

KEEP THIS COPY FOR YOUR FILES

PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

CENSUS USE ONLY		Weight		P/G

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

INSTRUCTIONS

▶ **SURVEY DESCRIPTION**

As part of the 1977 Census of Manufactures, the Bureau of the Census is conducting this survey on Distribution of Manufacturers' Sales by Class of Customer. This survey is conducted every 10 years and was last done as part of the 1967 Census of Manufactures. Similar information on the sales of wholesalers by class of customer is being collected in the Census of Business for 1977 on Forms CB-50A—CB-50W. This survey will provide a current analysis of the marketing channels through which goods move from the manufacturer to the user or consumer. The results are needed for the improvement of the national income and product statistics.

▶ **HOW TO REPORT** — This report provides a summary of the distribution of the shipments of this company by class of customer. The total value of products distributed should approximately **equal the total value reported on the accompanying 1977 Census of Manufactures report form.** If you operate additional places of business, please let us know and we will send you the correct forms.

This report will measure the flow of products from this company to its customers. Please report in column (B) the value of all of your products, **whether made in your company or purchased and sold without further fabrication**, shipped to each of the class of customer categories listed in column (A). Report shipments on consignment as though the merchandise had been sold at the time of the shipment. If such consignment shipments are to agents, consider the agent as a wholesaler.

We appreciate that there is no uniform system of sales analysis and that completeness of records varies considerably among companies. Therefore, it will be necessary for companies to derive **estimates** based on any information available as to the type of economic activity of their customers. **Approximations are acceptable. If filing by due date causes an undue burden, a time extension request should be sent to the above address.** Please enter your 11-digit Census File Number on any correspondence with us regarding this report.

▶ **DESCRIPTION OF CLASS OF CUSTOMER**

- **Wholesalers — line 1** — Report shipments to companies who are purchasing primarily to sell the products to other businesses or institutions. Include industrial distributors, drop shippers, desk jobbers, voluntary group wholesalers, retail cooperative warehouses, and exporters.
- **Retailers — line 2** — Report shipments to chain stores, mail order houses, department stores, independent retailers, including independent route salesmen such as bakery or dairy truck distributors who sell directly to households.
- **Manufacturers — line 3** — Include as manufacturers, food processors such as meat packers, bakeries, and bottling plants; sheet metal operations; feed mixers; logging camps; sawmills; printing; publishing; ready-mixed concrete; apparel jobbers; and machine shops.
- **Federal Government — line 4** — Include sales to all branches of Federal Government and to corporations owned by the Federal Government. If you have sales as a subcontractor on a Federal contract, report your sales according to the activity of the prime contractor for whom you did the work.
- **Other — line 5** — Includes the following:
  - a. State and local governments
  - b. Construction companies
  - c. Mining companies
  - d. Utility companies
  - e. Transportation companies
  - f. Private and public institutions (e.g., hospitals and schools)
  - g. Banks
  - h. Restaurants
  - i. Hotels
  - j. Individuals
  - k. Households
  - l. Farmers
  - m. Exports (Include products directly exported by your company. Products shipped to export intermediaries should be reported as shipped to wholesalers.)

▶ **1. Distribution of sales**

Class of customer (A)	Line No.	Value of products shipped (B) Mil. $000	Thou. 000	Dol. 000
Shipments to wholesalers	1	$		
Shipments to retailers	2			
Shipments to other manufacturers	3			
Shipments to the Federal Government	4			
Other shipments (State and local governments, construction, mining, utility and transportation companies, private and public institutions, banks; restaurants, hotels, other service-type businesses, including exports. Include here also direct sales to individual households, farmers, etc.)	5			
TOTAL *(Sum of lines 1 through 5 should equal sum of values reported in specified PRODUCT LINES including resales in item 18 on your Census of Manufactures report form.)* →	6			
Receipts for work done for others on their materials *(same as contract receipt values in item 18 on Census of Manufactures report form)*	7			
Miscellaneous receipts *(sum of miscellaneous receipts reported in item 18 on Census of Manufactures report form)*	8			
TOTAL *(Sum of lines 6, 7, and 8 should be the same as total value of shipments reported in item 18 of your Census of Manufactures report form.)* →	9	$		

		Percentage
▶ **2.** Enter the percent of line 9 which represents goods manufactured by other companies and **bought and sold** by this company without further fabrication (resales).	10	%
▶ **3.** If data are reported on line 5, do they include shipments to State and local governments and/or construction companies?		
1 ☐ YES — Estimate the percentage breakdown of shipments reported on line 5 for the three categories listed on lines 11 through 13 →		
2 ☐ NO		
a. State and local governments	11	%
b. Construction	12	%
c. Other	13	%
d. TOTAL *(Sum of lines 11 through 13 should equal 100%)* →	14	%

▶ **CERTIFICATION**

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report	Telephone: Area code	Number	Extension	Period covered → From: Mo. Day Year	To: Mo. Day Year
Address — *Number and street*				Signature of authorized person	
City	State	ZIP code		Title	Date

USE REVERSE SIDE FOR REMARKS

PENALTIES FOR FAILURE TO REPORT — DUE DATE: FEBRUARY 15, 1978 — Form Approved: O.M.B. No. 41-S77034

FORM NC-K4M (6-13-77) — U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS

NOTICE – Response to this inquiry is **required by law (title 13, U.S. Code).** By the same law, your report to the Census Bureau is **confidential.** It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are **immune from legal process.**

1977 CENSUS OF MANUFACTURES

DISTRIBUTION OF MANUFACTURERS' SALES BY CLASS OF CUSTOMER

In correspondence pertaining to this report, refer to this Census File Number

Employer Identification Number

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47132

CENSUS USE ONLY		Weight					P/G

Please correct errors in name, address and ZIP code. ENTER street and number if not shown.

GENERAL INSTRUCTIONS

(See also specific instructions with Product Group Reference List)

▶ SURVEY DESCRIPTION

As part of the 1977 Census of Manufactures, the Bureau of the Census is conducting this survey on Distribution of Manufacturers' Sales by Class of Customer. This survey is conducted every 10 years and was last done as part of the 1967 Census of Manufactures. (Similar information on the sales of wholesalers by class of customer is collected in the Census of Business for 1977 on forms CB-50A–CB-50W.) This survey will provide a current analysis of the marketing channels through which goods move from the manufacturer to the user or consumer. The results are needed for the improvement of the national income and product statistics.

▶ HOW TO REPORT – You are requested to provide a summary company level report on the shipment of groups of products as reported by your manufacturing establishments on census forms for 1977. The reference list which accompanies this report shows the product group categories for which class of customer information is to be reported. These 4-digit categories represent combinations of the 7-digit product shipments reported in item 18 of your census forms based on the first 4 digits of the 7-digit code. (A detailed example illustrating this cumulative process can be found on pages 2 and 3 of the reference list.) Report at FOB factory value.

Please indicate at the top of the columns on this NC-K4 report form those product group codes which best fit the description of your manufacturing activities. If you reported values for products bought and sold in the same condition (resales), code 99989 00 6 of your census report form, allocate that amount to the appropriate product group. Please estimate the percent of each product group which is resales on line 11. **Exclude** miscellaneous receipts and receipts for contract and commission work.

We appreciate that there is no uniform system of sales analysis and that completeness of records varies considerably among companies. Therefore, it will be necessary for companies to derive **estimates** based on any information available as to the type of economic activity of their customers. **Approximations are acceptable. If filing by due date causes an undue burden, a time extension request should be sent to the above address.** Please enter your 11-digit Census File Number on any correspondence with us regarding this report.

▶ DESCRIPTION OF CLASS OF CUSTOMER

Shipments to other establishments of this company –

These shipments should be allocated on lines 1–4, according to type of business activity of these locations.

- **Wholesale establishments – line 1 –** Include not only shipments to wholesale locations but also shipments to or on order from sales branches, sales offices, and administrative offices which operate primarily to sell products manufactured by your company. These activities are reported on Census of Business Forms CB-50A–CB-50W and on Form NC-X6, Central Administrative Offices and Auxiliaries.
- **Retail stores and outlets – line 2 –** Report shipments to separately operated retail stores which also report in the Census of Business for this company.
- **Manufacturing establishments – line 3 –** Report all transfers or shipments from one manufacturing plant of this company to another whether for further processing, for use as a material or supply, or for resales by the other plants.
- **Other establishments – line 4 –** Report shipments to other plants of this company such as mining, construction, transportation, communication, services, etc.

Shipments to other companies, governments, individuals, and for export –

These shipments should be allocated according to type of customer on lines 5–9. Report shipments on consignment as though the merchandise had been sold at the time of the shipment. If such consignment shipments are to agents, consider the agent as a wholesaler.

- **Wholesalers – line 5 –** Report shipments to companies that are purchasing primarily to resell the products to other businesses or institutions. Include industrial distributors, drop shippers, desk jobbers, voluntary group wholesalers, retail cooperative warehouses, and exporters.
- **Retailers – line 6 –** Report shipments to chain stores, mail order houses, department stores, independent retailers, including independent route salesmen such as bakery or dairy truck distributors who sell directly to households.
- **Manufacturers – line 7 –** Include as manufacturers, food processors such as meat packers, bakeries, dairies, and bottling plants; sheet metal operations; feed mixers; logging camps; sawmills; printing; publishing; ready mixed concrete; apparel jobbers; machine shops.
- **Federal Government – line 8 –** Include sales to all branches of the Federal Government and to corporations owned by the Federal Government. If you have sales as a subcontractor on a Federal contract, report your sales according to the activity of the prime contractor for whom you did the work.
- **Other – line 9 – Includes the following:**
  - a. State and local governments
  - b. Construction companies
  - c. Mining companies
  - d. Utility companies
  - e. Transportation companies
  - f. Private and public institutions (e.g., hospitals and schools)
  - g. Banks
  - h. Restaurants
  - i. Hotels
  - j. Individuals
  - k. Households
  - l. Farmers
  - m. Exports (Include products directly exported by your company. Products shipped to export intermediaries should be reported as shipped to wholesalers.)

Remarks – *Please use this space for any information that may be essential in understanding your reported data.*

▶ CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report	Telephone: Area code	Number	Extension	Period covered → From: Mo.	Day	Year	To: Mo.	Day	Year

Address – *Number and street*			Signature of authorized person	
City	State	ZIP code	Title	Date

CONTINUE ON REVERSE SIDE

Page 2

DISTRIBUTION OF SALES BY CLASS OF CUSTOMER DURING 1977 (See Product Group Reference List for codes and descriptions)

Enter 4-digit product group codes (See product group reference list.) If you need additional columns, use extra worksheets.

1. Distribution of sales by class of customer		Line No.	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000	Code	Mil. $000	Thou. 000	Dol. 000
Shipments to other establishments of this company	Wholesale establishments (include those shipments to or on order from your separate sales branches, sales offices, and administrative offices).	1		$				$				$				$				$				$				$				$		
	Retail stores and outlets	2																														
	Manufacturing establishments (usually for further processing)	3																														
	Other establishments (mining, construction service, transportation, communication, etc.)	4																														
Shipments to other companies, governments, individuals, and for export	Wholesalers	5																														
	Retailers	6																														
	Manufacturers	7																														
	Federal Government	8																														
	Other (State and local governments; construction, mining, utility, and transportation companies; private and public institutions; banks, restaurants, hotels, and other service-type businesses; and for exports. Include also direct sales to individual households, farmers, etc.)	9																														
Total *(Sum of lines 1–9 should approximate the sum of product shipments reported in item 18, of your Census of Manufactures report, including an allowance for any products bought and sold without further fabrication.)* ⟶		10		$				$				$				$				$				$				$				$		
2. Approximate percent of shipments reported on line 10 that are products bought and sold (resales) without further fabrication by the establishment making the shipment.		11				%				%				%				%				%				%				%				%
3. If data are reported on line 9 for ANY PRODUCT GROUP, do they include shipments to State and local governments and/or construction companies? 1 ☐ Yes 2 ☐ No																																
If "Yes," estimate the percentage breakdown of shipments reported on line 9 for the three categories listed on lines 12 through 14.																																
a. State and local governments		12				%				%				%				%				%				%				%				%
b. Construction companies		13				%				%				%				%				%				%				%				%
c. All other		14				%				%				%				%				%				%				%				%
d. Total *(Sum of lines 12–14 should equal 100%)* ⟶		15				%				%				%				%				%				%				%				%

FORM NC-K4M (8-12-77)

DUE IN WASHINGTON: 30 DAYS AFTER RECEIPT OF FORM

Form Approved: O.M.B. No. 41-S79017

FORM MA-131.3732
(1-19-79)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF MANUFACTURES
SUPPLEMENTAL INQUIRY

Consumption of Materials, Parts, Containers, and Supplies During 1977

Complete and return this form to: Bureau of the Census, ATTN: Industry Division, Washington, D.C. 20233

NOTICE – Your report to the Census Bureau is confidential by law (title 13, U.S. Code, section 9). It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

(Please correct any error in name and address including ZIP code)

This form covers materials used by establishments classified in the following industries according to the 1972 Standard Industrial Classification. The 1977 Census of Manufactures form which was probably completed for this establishment appears in the parenthesis.

3732 – Boat Building and Repairing (MC-37K – Boat Building and Repairing)

GENERAL INSTRUCTIONS

This report form is a supplement to items 5a and 17B, "Consumption of selected materials," of the 1977 Census of Manufactures report which you have already completed. It requests additional information about the materials, parts, containers, and supplies used to make your products. Please refer to the file copy of the report you originally returned for the establishment described in the address box as you complete the information requested on this form.

This report requests information about the detailed composition of the line in item 17B coded 970099, "All other materials, components, parts, containers, and supplies consumed." Although you may have provided us with your three principal materials included in item 17B, code 970099 on your original Census form, a breakdown of the costs is also needed. If you also provided us with the cost figures for these three materials, the sum of these materials may still leave a substantial portion of your "All other materials" unclassified. This information is needed for the preparation of the basic tables used to benchmark the estimates of the Gross National Product.

SPECIFIC INSTRUCTIONS

Section 1 – SUMMARY OF MATERIALS CONSUMED DURING 1977.

This section contains a three-line summary of information that was reported in item 17B of your 1977 Census of Manufactures report form, "Consumption of selected materials during 1977."

Line 1 – Materials, parts, components, containers, etc. – The figure that has been preposted on line 1 represents the sum of the dollar figures for item 17B as reported on your original Census report form, less the figure reported for code **970099**.

Line 2 – All other materials, etc. – The figure that has been preposted on line 2 represents the dollar value of code **970099** of item 17B of your original Census report form.

Line 3 – Sum of lines 1 and 2 – This preposted figure should be identical to the dollar value reported in the total of item 17B of your original Census report form (which should also be identical to that value reported in item 5a).

Section 2 – 1977 CONSUMPTION OR USE OF SELECTED MATERIALS, PARTS, COMPONENTS, ETC.

In this section, report the cost of each specified material, part, component, etc., **provided** that cost was $50,000 or more. (If some of the item was consumed but less than $50,000 worth, we would appreciate your entering an "X" in the cost column.) The materials specified in this section were not requested separately in item 17B of the original Census report.

If your records are summarized differently from the classifications indicated on the prelisted items, you may use your categories, **unless** they are too general. You may use the write-in lines under "Other important materials," code **99998**, to describe these categories or attach a separate sheet. Please describe these categories as clearly as possible.

Other important materials (code 99998) – If this establishment used any materials, components, or parts that were not specified above in section 2 or in item 17B of the original Census report, please list them separately here and report the cost of each, **provided** the cost was $50,000 or more and the total expenditure was 1 percent or more of the total cost reported in section 1, line 3.

In reporting nonlisted items on the blank lines provided do not use general terms such as "operating supplies" or "interplant receipts." Groupings of closely related materials, parts, and supplies similar to those shown on the preprinted items may be used.

All other materials, parts, etc., not reported above – Code **99999** (next to last line, section 2). Report the total costs of those materials, parts, etc., used for which separate costs were not reported on the lines above. Include also the costs of the preprinted specified materials that were not reported separately because the individual cost was less than $50,000.

Report each of the materials actually consumed during **1977** whether received from other companies, withdrawn from inventory or obtained from other establishments of this company. Report all materials, parts, components, etc., purchased or received from other establishments of your company. Do not report parts, components, etc., produced in this establishment which are consumed in producing the final products of this establishment. For example: castings, forgings, stampings, fasteners, valves, hardware, etc., produced in this establishment which become part of the establishment's final product should not be reported since this would involve duplication of the materials consumed in the production of these components. Castings, forgings, etc., **received from other plants** of this company should be reported by this establishment.

1977 Delivered cost – Report in thousands of dollars, the delivered cost actually paid or payable, after discounts and allowances. Include freight and direct charges incurred in acquiring the listed materials consumed during **1977**. The values for materials transferred from other establishments of this company should be consistent with the values reported on your Census of Manufactures form.

The reported figures may be derived from either purchase, consumption, or other records. The figures reported for major materials and supply items should represent amounts actually consumed, and if these differ significantly from purchase costs, the latter should be adjusted to consumption levels by means of an estimate.

If **1977** actual data are not available for any item, the cost may be estimated by utilizing percentages or other techniques, provided the results are reasonably representative of the types and proportions of materials used in **1977**.

NAME OF PERSON TO CONTACT SHOULD QUESTIONS ARISE CONCERNING THIS REPORT

Name of person to contact	Address	Telephone		
		Area code	Number	Extension
PERIOD OF REPORT This report covers the period	From *(Month, day, year)*	To *(Month, day, year)*		

CERTIFICATION – This report is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person	Title	Date

IMPORTANT ▶ • Dollar figures should be reported in thousands; however, if you prefer, you may report in nearest dollar.
• Please be careful to enter figures in the correct column.

SIC	FORM
3732	MA-131.3732

Section 1 – SUMMARY OF MATERIALS, PARTS, COMPONENTS, ETC., USED OR CONSUMED DURING 1977

Line No.	Material (a)	1977 delivered cost (b) Mil. ($000)	Thou. (000)	Dol. (000)
1	Materials, parts, components, containers, and supplies reported separately in item 17B of 1977 Census of Manufactures form			
2	All other materials, parts, components, containers, and supplies used or consumed (item 17B, code 970099 of 1977 Census of Manufactures form)			
3	**TOTAL** *(Same as figure reported for Item 5a and Item 17B for the 1977 Census of Manufactures)* ▶			

Section 2 – 1977 CONSUMPTION OR USE OF MATERIALS, PARTS, COMPONENTS, CONTAINERS, AND SUPPLIES INCLUDED IN SECTION 1, LINE 2, ABOVE

Line No.	Material (a)	Code No.	1977 delivered cost (b) Mil. ($000)	Thou. (000)	Dol. (000)
1	Millwork	24310 5			
2	Lighting fixtures	36470 3			
3	Carpeting	22700 9			
4	Metal hardware	34290 7			
5	Canvas products	23940 0			
6	Cordage and twine	22980 7			
7	Nautical and navigational instruments	38111 0			
8	Storage batteries	36911 6			
9	Electronic communications equipment	36620 3			
10	Other important materials, supplies, etc. *(List and specify remaining important materials separately – see instructions)*	99998 7			
11	All other materials, parts, components, containers, and supplies not reported above	99999 5			
12	**TOTAL – Sum of lines 1–11** *(Same as figure reported in section 1, line 2)* ▶				

FORM MA-131.3732 (1-19-79)

DUE IN WASHINGTON: 30 DAYS AFTER RECEIPT OF FORM Form Approved: O.M.B. No. 41-S79027

FORM MA-131.1011
(5-3-79)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1977 CENSUS OF MINERAL INDUSTRIES

SUPPLEMENTAL INQUIRY SUPPLIES USED DURING 1977

Complete and return this form to: Bureau of the Census, ATTN: Industry Division, Washington, D.C. 20233

NOTICE – Your report to the Census Bureau is confidential by law (title 13, U.S. Code, section 9). It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

(Please correct any error in name and address including ZIP code)

This form covers materials used by establishments classified in the following industries according to the 1972 Standard Industrial Classification. The 1977 Census of Mineral Industries form which was probably completed for this establishment appears in the parenthesis.

1011 – Iron Ores (Form MC-10A – Iron, Bauxite, Ferroalloy, Uranium, and Miscellaneous Ores)

GENERAL INSTRUCTIONS

This report form is a supplement of items 5a and 17B, "Gas purchased for gas lift and repressuring, purchased machinery installed, and supplies used during 1977," of the 1977 Census of Mineral Industries report which you have already completed. It requests additional information about the all other supplies used in your operations. Please refer to the file copy of the report you originally returned for the establishment described in the address box as you complete the information requested on this form.

This report requests information about the detailed composition of the line in item 17B coded 970099, "All other supplies." Although you may have provided us with your three principal supplies included in item 17B, code 970099 on your original Census form, a breakdown of the costs is also needed. This report also requests a breakdown of the line in item 17B coded 353011, "Purchased machinery installed (including mobile loading and transportation equipment as well as equipment and parts for renewal and repairs)." This information is needed for the preparation of the basic tables used to benchmark the estimates of the Gross National Product

SPECIFIC INSTRUCTIONS

Section 1 – SUMMARY OF SUPPLIES USED AND PURCHASED MACHINERY INSTALLED DURING 1977.

This section contains a four-line summary of information that was reported in item 17B of your 1977 Census of Mineral Industries report form, "Gas purchased for . . . and supplies used during 1977."

Line 1 – Supplies reported separately – The figure that has been preposted on line 1 represents the sum of the dollar figures for item 17B as reported on your original Census report form, less the figures for "Purchased machinery installed" (code **353011**) and "All other supplies" (code **970099**).

Line 2 – Purchased machinery installed (including mobile loading and transportation equipment as well as equipment and parts for renewal and repairs) – The figure that has been preposted on line 2 represents the dollar value reported in item 17B, code **353011**, of your original Census report form.

Line 3 – All other supplies – The figure that has been preposted on line 3 represents the dollar value reported in item 17B, code **970099**, of your original Census report form.

Line 4 – Total purchased machinery installed and all other supplies – The figure that has been preposted on line 4 represents the sum of lines 2 and 3, above.

Line 5 – Sum of lines 1–3 – This preposted figure should be identical to the dollar value reported in the total of item 17B of your original Census report form (which should also be the same as the value reported in item 5a).

Section 2 – SELECTED SUPPLIES USED DURING 1977

In this section, report the cost of each specified supply item, **provided** that cost was $50,000 or more. (If some of the item was used but less than $50,000 worth, we would appreciate your entering an "X" in the cost column.) The items specified in this section were not requested separately in item 17B of the original Census report.

If your records are summarized differently from the classifications indicated on the prelisted items, you may use your categories, **unless** they are too general. You may use the write-in lines under "Other important supplies," (code **99998**) to describe these categories or attach a separate sheet. Please describe these categories as clearly as possible.

Other important supplies (code 99998) – If this establishment used any items, components, or parts that were not specified above in section 2 or in item 17B of the original Census report, please list them separately here and report the cost of each, **provided** the cost was $50,000 or more and total expenditure was 1% or more of the total cost reported in section 1, line 4.

In reporting nonlisted items on the blank lines provided do not use general terms such as "operating supplies" or "interplant receipts." Groupings of closely related materials, parts, and supplies similar to those shown on the preprinted items may be used.

All other supplies not listed above – Code **99999** (next to last line, section 2). Report the total costs of those supplies used for which separate costs were not reported on the lines above. Include also the costs of the preprinted specified materials that were not reported separately because the individual cost was less than $50,000.

Report each of the supplies actually consumed during **1977** whether received from other companies, withdrawn from inventory, or obtained from other establishments of this company.

1977 Delivered cost – Report in thousands of dollars, the delivered cost actually paid or payable, after discounts and allowances. Include freight and direct charges incurred in acquiring the listed supplies consumed during **1977**. The values for supplies transferred from other establishments of this company should be consistent with the values reported on your Census of Mineral Industries form.

The reported figures may be derived from either purchase, consumption, or other records. The figures reported for major supply items should represent amounts actually consumed, and, if these differ significantly from purchase costs, the latter should be adjusted to consumption levels by means of an estimate.

If **1977** actual data are not available for any item, the cost may be estimated by utilizing percentages or other techniques, provided the results are reasonably representative of the types and proportions of supplies used in **1977**.

NAME OF PERSON TO CONTACT SHOULD QUESTIONS ARISE CONCERNING THIS REPORT

Name of person to contact	Address *(Number and street, city, State, ZIP code)*	Telephone: Area code	Number	Extension

PERIOD OF REPORT This report covers the period	From *(Month, day, year)*	To *(Month, day, year)*

CERTIFICATION – This report is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person	Title	Date

IMPORTANT ▶ • Dollar figures should be reported in thousands; however, if you prefer, you may report in nearest dollar.
• Please be careful to enter figures in correct column.

SIC	FORM
1011	MA-131.1011

Section 1 – SUMMARY OF SUPPLIES USED AND PURCHASED MACHINERY INSTALLED DURING 1977

Line No.	Item (a)	1977 delivered cost (b) Mil. $000	Thou. 000	Dol. 000
1	Sum of supplies reported separately in item 17B, part I, of your 1977 Census of Mineral Industries report form (except "Purchased machinery installed" (including mobile loading and transportation equipment as well as equipment and parts for renewals and repairs), code 353011, and "All other supplies," code 970099			
2	Purchased machinery installed (including mobile loading and transportation equipment as well as equipment and parts for renewal and repairs) (code 353011 in item 17B of your original Census form) ——→ $ _____ (000)			
3	All other supplies (code 970099 in item 17B of your original Census form) ——→ $ _____ (000)			
4	Total "Purchased machinery installed" (including mobile loading and transportation equipment as well as equipment and parts for renewals and repairs)" and "All other supplies" (sum of lines 2 and 3 above)			
5	Total (same as figure reported for item 5a and item 17B for the 1977 Census of Mineral Industries)			

Section 2 – SELECTED SUPPLIES USED DURING 1977, INCLUDED IN SECTION 1, LINE 4, ABOVE

Line No.	Material (a)		Code No.		1977 delivered cost (b) Mil. $000	Thou. 000	Dol. 000
1	Bentonite and other clay nonmetallic minerals		14500	3			
2	Industrial chemicals (chemical reagents, calcium chloride, fatty acids, etc.)		28011	5			
3	Lubricating oils and greases (including hydraulic oils)		29000	7			
4	Tires and inner tubes		30110	1			
5	Refractories (clay and nonclay)		32040	8			
6	Steel castings, steel forgings (including grinding rods and balls), and metallic grinding media		33090	2			
7	Nonferrous metal mill shapes and forms		33500	0			
8	The total for these two codes should correspond to the figure reported for code 353011 on your Census form. *(See line 2 of section 1 above.)*	Purchased machinery installed, including mobile loading and transportation equipment	35302	9			
9		Parts and attachments (except those listed elsewhere) for construction, mining, and conveying equipment; and for mineral preparation machinery and equipment *(Include only those costs chargeable to current accounts; do not include depreciable costs.)*	35303	1			
10	Drill bits and reamers		35331	8			
11	Other important supplies *(List and specify remaining important materials separately — see instructions)*		99998	7			
12	All other supplies, not listed above		99999	5			
13	**TOTAL – Sum of lines 1–12** *(Same as figure reported in section 1, line 4)* ——→						

APPENDIX E. Authority for Census: Title 13, United States Code

COLLECTION AND PUBLICATION: Five-year periods (131)

The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses . . . in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof.

Geographic scope of censuses (191a)

(a) Each of the censuses authorized by this chapter shall include each State, the District of Columbia, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty. Inclusion of the other areas over which the United States exercises jurisdiction or control shall be subject to the concurrence of the Secretary of State.

Wrongful Disclosure of Information (214)

Whoever, being or having been an employee or staff member referred to in subchapter II of chapter I of this title, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by section 9 of this title, publishes or communicates any information, the disclosure of which is prohibited under the provisions of section 9 of this title, and which comes into his possession by reason of his being employed (or otherwise providing services) under the provisions of this title, shall be fined not more than $5,000 or imprisoned not more than 5 years, or both.

FAILURE TO ANSWER QUESTIONS AFFECTING COMPANIES, BUSINESSES, RELIGIOUS BODIES, AND OTHER ORGANIZATIONS: FALSE ANSWERS (224)

Whoever, being the owner, official, agent, person in charge, or assistant to the person in charge, of any company, business, institution, establishment, religious body, or organization of any nature whatsoever, neglects or refuses, when requested by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof, to answer completely and correctly to the best of his knowledge all questions relating to his company, business, institution, establishment, religious body, or other organization, or to records or statistics in his official custody, contained on any census or other schedule or questionnaire prepared and submitted to him under the authority of this title, shall be fined not more than $500; and if he willfully gives a false answer to any such question, he shall be fined not more than $10,000.

APPENDIX F. Standard Consolidated Statistical Areas and Standard Metropolitan Statistical Areas

(Titles and definitions of the SCSA's and the SMSA's in the United States established by the Department of Commerce, Office of Federal Statistical Policy and Standards, as of December 1977)

Standard Consolidated Statistical Areas

Boston-Lawrence-Lowell, Mass.-N.H.	Consists of Boston, Mass., SMSA; Lawrence-Haverhill, Mass.-N.H., SMSA; Lowell, Mass.-N.H., SMSA; and Brockton, Mass., SMSA
Chicago-Gary, Ill.-Ind.[1]	Consists of Chicago, Ill., SMSA, and Gary-Hammond-East Chicago, Ind., SMSA
Cincinnati-Hamilton, Ohio-Ky.-Ind.	Consists of Cincinnati, Ohio-Ky.-Ind., SMSA, and Hamilton-Middletown, Ohio, SMSA
Cleveland-Akron-Lorain, Ohio	Consists of Cleveland, Ohio, SMSA; Akron, Ohio, SMSA; and Lorain-Elyria, Ohio, SMSA
Detroit-Ann Arbor, Mich.	Consists of Detroit, Mich., SMSA, and Ann Arbor, Mich., SMSA
Houston-Galveston, Tex.	Consists of Houston, Tex., SMSA, and Galveston-Texas City, Tex., SMSA
Los Angeles-Long Beach-Anaheim, Calif	Consists of Los Angeles-Long Beach, Calif., SMSA; Anaheim-Santa Ana-Garden Grove, Calif., SMSA; Riverside-San Bernardino-Ontario, Calif., SMSA; and Oxnard-Simi Valley-Ventura, Calif., SMSA
Miami-Fort Lauderdale, Fla	Consists of Miami, Fla., SMSA, and Fort Lauderdale-Hollywood, Fla., SMSA
Milwaukee-Racine, Wis.	Consists of Milwaukee, Wis., SMSA, and Racine, Wis., SMSA
New York-Newark-Jersey City, N.Y.-N.J.-Conn.[2]	Consists of New York, N.Y.-N.J., SMSA; Nassau-Suffolk, N.Y., SMSA; Newark, N.J., SMSA; Jersey City, N.J., SMSA; New Brunswick-Perth Amboy-Sayreville, N.J., SMSA; Paterson-Clifton-Passaic, N.J., SMSA; Long Branch-Asbury Park, N.J., SMSA; Stamford, Conn., SMSA; and Norwalk, Conn., SMSA
Philadelphia-Wilmington-Trenton, Pa.-Del.-N.J.-Md.	Consists of Philadelphia, Pa.-N.J., SMSA; Wilmington, Del.-N.J.-Md., SMSA; and Trenton, N.J., SMSA
San Francisco-Oakland-San Jose, Calif.	Consists of San Francisco-Oakland, Calif., SMSA; San Jose, Calif., SMSA; and Vallejo-Fairfield-Napa, Calif., SMSA
Seattle-Tacoma, Wash.	Consists of Seattle-Everett, Wash., SMSA, and Tacoma, Wash., SMSA

Standard Metropolitan Statistical Areas

Abilene, Tex.	Consists of Callahan, Jones, and Taylor Counties, Tex.
Akron, Ohio	Consists of Portage and Summit Counties, Ohio
Albany, Ga.	Consists of Dougherty and Lee Counties, Ga.
Albany-Schenectady-Troy, N.Y.	Consists of Albany, Montgomery, Rensselaer, Saratoga, and Schenectady Counties, N.Y.
Albuquerque, N. Mex.	Consists of Bernalillo and Sandoval Counties, N. Mex.
Alexandria, La.	Consists of Grant and Rapides Parishes, La.
Allentown-Bethlehem-Easton, Pa.-N.J.	Consists of Carbon, Lehigh, and Northampton Counties, Pa.; and Warren County, N.J.
Altoona, Pa.	Coextensive with Blair County, Pa.
Amarillo, Tex.	Consists of Potter and Randall Counties, Tex.
Anaheim-Santa Ana-Garden Grove, Calif.	Coextensive with Orange County, Calif.
Anchorage, Alaska	Coextensive with Anchorage Division, Alaska
Anderson, Ind.	Coextensive with Madison County, Ind.
Ann Arbor, Mich.	Coextensive with Washtenaw County, Mich.
Anniston, Ala.[3]	Coextensive with Calhoun County, Ala.
Appleton-Oshkosh, Wis.	Consists of Calumet, Outagamie, and Winnebago Counties, Wis.
Asheville, N.C.	Consists of Buncombe and Madison Counties, N.C.
Atlanta, Ga.	Consists of Butts, Cherokee, Clayton, Cobb, De Kalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, and Walton Counties, Ga.

See footnotes at end of appendix.

SMSA'S—Con.

Atlantic City, N.J.	Coextensive with Atlantic County, N.J.
Augusta, Ga.-S.C.	Consists of Columbia and Richmond Counties, Ga., and Aiken County, S.C.
Austin, Tex.[4]	Consists of Hays, Travis, and Williamson Counties, Tex.
Bakersfield, Calif.	Coextensive with Kern County, Calif.
Baltimore, Md.	Consists of Baltimore[5] city and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, Md.
Baton Rouge, La.	Consists of Ascension, East Baton Rouge, Livingston, and West Baton Rouge Parishes, La.
Battle Creek, Mich.	Consists of Barry and Calhoun Counties, Mich.
Bay City, Mich.	Coextensive with Bay County, Mich.
Beaumont-Port Arthur-Orange, Tex.	Consists of Hardin, Jefferson, and Orange Counties, Tex.
Billings, Mont.	Coextensive with Yellowstone County, Mont.
Biloxi-Gulfport, Miss.	Consists of Hancock, Harrison, and Stone Counties, Miss.
Binghamton, N.Y.-Pa.	Consists of Broome and Tioga Counties, N.Y., and Susquehanna County, Pa.
Birmingham, Ala.	Consists of Jefferson, St. Clair, Shelby, and Walker Counties, Ala.
Bloomington, Ind.[3]	Coextensive with Monroe County, Ind.
Bloomington-Normal, Ill.	Coextensive with McLean County, Ill.
Boise City, Idaho	Coextensive with Ada County, Idaho
Boston, Mass.	Consists of Beverly, Lynn, Peabody, and Salem cities, and Boxford, Danvers, Hamilton, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Saugus, Swampscott, Topsfield, and Wenham towns in Essex County; Cambridge, Everett, Malden, Medford, Melrose, Newton, Somerville, Waltham, and Woburn cities, and Acton, Arlington, Ashland, Bedford, Belmont, Boxborough; Burlington, Carlisle, Concord, Framingham, Holliston, Lexington, Lincoln, Natick, North Reading, Reading, Sherborn, Stoneham, Sudbury, Wakefield, Watertown, Wayland, Weston, Wilmington, and Winchester towns in Middlesex County; Quincy city, and Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxborough, Franklin, Holbrook, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Randolph, Sharon, Stoughton, Walpole, Wellesley, Westwood, Weymouth, and Wrentham towns in Norfolk County; Abington, Duxbury, Hanover, Hanson, Hingham, Hull, Kingston, Marshfield, Norwell, Pembroke, Rockland, Scituate towns in Plymouth County; and Boston, Chelsea, and Revere cities, and Winthrop town in Suffolk County, Mass.
Bradenton, Fla.[3]	Coextensive with Manatee County, Fla.
Bridgeport, Conn.	Consists of Bridgeport and Shelton cities, and Easton, Fairfield, Monroe, Stratford, and Trumbull towns in Fairfield County; and Derby and Milford cities in New Haven County, Conn.
Bristol, Conn.	Consists of Bristol city and Burlington town in Hartford County, and Plymouth town in Litchfield County, Conn.
Brockton, Mass.	Consists of Easton town in Bristol County; Avon town in Norfolk County; and Brockton city, and Bridgewater, East Bridgewater, Halifax, West Bridgewater, and Whitman towns in Plymouth County, Mass.
Brownsville-Harlingen-San Benito, Tex.	Coextensive with Cameron County, Tex.
Bryan-College Station, Tex.	Coextensive with Brazos County, Tex.
Buffalo, N.Y.	Consists of Erie and Niagara Counties, N.Y.
Burlington, N.C.	Coextensive with Alamance County, N.C.
Canton, Ohio	Consists of Carroll and Stark Counties, Ohio
Cedar Rapids, Iowa	Coextensive with Linn County, Iowa
Champaign-Urbana-Rantoul, Ill.	Coextensive with Champaign County, Ill.
Charleston-North Charleston, S.C.[6]	Consists of Berkeley, Charleston, and Dorchester Counties, S.C.
Charleston, W. Va.	Consists of Kanawha and Putnam Counties, W. Va.
Charlotte-Gastonia, N.C.	Consists of Gaston, Mecklenburg, and Union Counties, N.C.

See footnotes at end of appendix.

SMSA'S—Con.

Chattanooga, Tenn.-Ga.	Consists of Hamilton, Marion, and Sequatchie Counties, Tenn.; and Catoosa, Dade, and Walker Counties, Ga.
Chicago, Ill.	Consists of Cook, Du Page, Kane, Lake, McHenry, and Will Counties, Ill.
Cincinnati, Ohio-Ky.-Ind.	Consists of Clermont, Hamilton, and Warren Counties, Ohio; Boone, Campbell, and Kenton Counties, Ky.; and Dearborn County, Ind.
Clarksville-Hopkinsville, Tenn.-Ky.[3]	Consists of Montgomery County, Tenn. and Christian County, Ky.
Cleveland, Ohio	Consists of Cuyahoga, Geauga, Lake, and Medina Counties, Ohio
Colorado Springs, Colo.	Consists of El Paso and Teller Counties, Colo.
Columbia, Mo.	Coextensive with Boone County, Mo.
Columbia, S.C.	Consists of Lexington and Richland Counties, S.C.
Columbus, Ga.-Ala.	Consists of Chattahoochee County and Columbus[5] (consolidated government), Ga., and Russell County, Ala.
Columbus, Ohio	Consists of Delaware, Fairfield, Franklin, Madison, and Pickaway Counties, Ohio
Corpus Christi, Tex.	Consists of Nueces and San Patricio Counties, Tex.
Dallas-Fort Worth, Tex.	Consists of Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, Tex.
Danbury, Conn.	Consists of Danbury city and Bethel, Brookfield, New Fairfield, Newtown, and Redding towns in Fairfield County; and New Milford town in Litchfield County, Conn.
Davenport-Rock Island-Moline, Iowa-Ill.	Consists of Scott County, Iowa and Henry and Rock Island Counties, Ill.
Dayton, Ohio	Consists of Greene, Miami, Montgomery, and Preble Counties, Ohio
Daytona Beach, Fla.	Coextensive with Volusia County, Fla.
Decatur, Ill.	Coextensive with Macon County, Ill.
Denver-Boulder, Colo.	Consists of Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, and Jefferson Counties, Colo.
Des Moines, Iowa	Consists of Polk and Warren Counties, Iowa
Detroit, Mich.	Consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties, Mich.
Dubuque, Iowa	Coextensive with Dubuque County, Iowa
Duluth-Superior, Minn.-Wis.	Consists of St. Louis County, Minn. and Douglas County, Wis.
Eau Claire, Wis.[3]	Consists of Chippewa and Eau Claire Counties, Wis.
El Paso, Tex.	Coextensive with El Paso County, Tex.
Elmira, N.Y.	Coextensive with Chemung County, N.Y.
Erie, Pa.	Coextensive with Erie County, Pa.
Eugene-Springfield, Oreg.	Coextensive with Lane County, Oreg.
Evansville, Ind.-Ky.	Consists of Gibson, Posey, Vanderburgh, and Warrick Counties, Ind. and Henderson County, Ky.
Fall River, Mass.-R.I.	Consists of Fall River city and Dighton, Somerset, Swansea, and Westport towns in Bristol County, Mass.; and Little Compton, Portsmouth, and Tiverton towns in Newport County, R.I.
Fargo-Moorhead, N. Dak.-Minn.	Consists of Cass County, N. Dak. and Clay County, Minn.
Fayetteville, N.C.	Coextensive with Cumberland County, N.C.
Fayetteville-Springdale, Ark.	Consists of Benton and Washington Counties, Ark.
Fitchburg-Leominster, Mass.	Consists of Shirley and Townsend towns in Middlesex County, and Fitchburg and Leominster cities and Lunenburg and Westminster towns in Worcester County, Mass.
Flint, Mich.	Consists of Genesee and Shiawassee Counties, Mich.
Florence, Ala.	Consists of Colbert and Lauderdale Counties, Ala.
Fort Collins, Colo.[3]	Coextensive with Larimer County, Colo.
Fort Lauderdale-Hollywood, Fla.	Coextensive with Broward County, Fla.
Fort Myers, Fla.	Coextensive with Lee County, Fla.
Fort Smith, Ark.-Okla.	Consists of Crawford and Sebastian Counties, Ark. and Le Flore and Sequoyah Counties, Okla.

See footnotes at end of appendix.

SMSA'S—Con.

Fort Wayne, Ind.	Consists of Adams, Allen, De Kalb, and Wells Counties, Ind.
Fresno, Calif.	Coextensive with Fresno County, Calif.
Gadsden, Ala.	Coextensive with Etowah County, Ala.
Gainesville, Fla.	Coextensive with Alachua County, Fla.
Galveston-Texas City, Tex.	Coextensive with Galveston County, Tex.
Gary-Hammond-East Chicago, Ind.	Consists of Lake and Porter Counties, Ind.
Grand Forks, N. Dak.-Minn.[3]	Consists of Grand Forks County, N. Dak. and Polk County, Minn.
Grand Rapids, Mich.	Consists of Kent and Ottawa Counties, Mich.
Great Falls, Mont.	Coextensive with Cascade County, Mont.
Greeley, Colo.[3]	Coextensive with Weld County, Colo.
Green Bay, Wis.	Coextensive with Brown County, Wis.
Greensboro—Winston-Salem—High Point, N.C.	Consists of Davidson, Forsyth, Guilford, Randolph, Stokes, and Yadkin Counties, N.C.
Greenville-Spartanburg, S.C.	Consists of Greenville, Pickens, and Spartanburg Counties, S.C.
Hamilton-Middletown, Ohio	Coextensive with Butler County, Ohio
Harrisburg, Pa.	Consists of Cumberland, Dauphin, and Perry Counties, Pa.
Hartford, Conn.	Consists of Hartford city and Avon, Bloomfield, Canton, East Granby, East Hartford, East Windsor, Enfield, Farmington, Glastonbury, Granby, Manchester, Marlborough, Newington, Rocky Hill, Simsbury, South Windsor, Suffield, West Hartford, Wethersfield, Windsor, and Windsor Locks towns in Hartford County; New Hartford town in Litchfield County; Cromwell, East Hampton, and Portland towns in Middlesex County; Colchester town in New London County; and Andover, Bolton, Columbia, Coventry, Ellington, Hebron, Stafford, Tolland, Vernon, and Willington towns in Tolland County, Conn.
Honolulu, Hawaii	Coextensive with Honolulu County, Hawaii
Houston, Tex.	Consists of Brazoria, Fort Bend, Harris, Liberty, Montgomery, and Waller Counties, Tex.
Huntington-Ashland, W. Va.-Ky.-Ohio	Consists of Cabell and Wayne Counties, W. Va.; Boyd and Greenup Counties, Ky.; and Lawrence County, Ohio
Huntsville, Ala.	Consists of Limestone, Madison, and Marshall Counties, Ala.
Indianapolis, Ind.	Consists of Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby Counties, Ind.
Jackson, Mich.	Coextensive with Jackson County, Mich.
Jackson, Miss.	Consists of Hinds and Rankin Counties, Miss.
Jacksonville, Fla.	Consists of Baker, Clay, Duval, Nassau, and St. Johns Counties, Fla.
Jersey City, N.J.	Coextensive with Hudson County, N.J.
Johnson City-Kingsport-Bristol, Tenn.-Va.[7]	Consists of Carter, Hawkins, Sullivan, Unicoi, and Washington Counties, Tenn., and Bristol[5] city and Scott and Washington Counties, Va.
Johnstown, Pa.	Consists of Cambria and Somerset Counties, Pa.
Kalamazoo-Portage, Mich.	Consists of Kalamazoo and Van Buren Counties, Mich.
Kankakee, Ill.[3]	Coextensive with Kankakee County, Ill.
Kansas City, Mo.-Kans.	Consists of Cass, Clay, Jackson, Platte, and Ray Counties, Mo., and Johnson and Wyandotte Counties, Kans.
Kenosha, Wis.	Coextensive with Kenosha County, Wis.
Killeen-Temple, Tex.	Consists of Bell and Coryell Counties, Tex.
Knoxville, Tenn.	Consists of Anderson, Blount, Knox, and Union Counties, Tenn.
Kokomo, Ind.[3]	Consists of Howard and Tipton Counties, Ind.
La Crosse, Wis.	Coextensive with La Crosse County, Wis.
Lafayette, La.	Coextensive with Lafayette Parish, La.
Lafayette-West Lafayette, Ind.	Coextensive with Tippecanoe County, Ind.
Lake Charles, La.	Coextensive with Calcasieu Parish, La.

See footnotes at end of appendix.

SMSA'S—Con.

Lakeland-Winter Haven, Fla.	Coextensive with Polk County, Fla.
Lancaster, Pa.	Coextensive with Lancaster County, Pa.
Lansing-East Lansing, Mich.	Consists of Clinton, Eaton, Ingham, and Ionia Counties, Mich.
Laredo, Tex.	Coextensive with Webb County, Tex.
Las Vegas, Nev.	Coextensive with Clark County, Nev.
Lawrence, Kans.[5]	Coextensive with Douglas County, Kans.
Lawrence-Haverhill, Mass.-N.H.	Consists of Haverhill and Lawrence cities and Amesbury, Andover, Georgetown, Groveland, Merrimac, Methuen, North Andover, Salisbury, and West Newbury towns in Essex County, Mass. and Atkinson, Hampstead, Kingston, Newton, Plaistow, Salem, and Windham towns in Rockingham County, N.H.
Lawton, Okla.	Coextensive with Comanche County, Okla.
Lewiston-Auburn, Maine	Consists of Auburn and Lewiston cities and Lisbon town in Androscoggin County, Maine
Lexington-Fayette, Ky.[8]	Consists of Bourbon, Clark, Fayette, Jessamine, Scott, and Woodford Counties, Ky.
Lima, Ohio	Consists of Allen, Auglaize, Putnam, and Van Wert Counties, Ohio
Lincoln, Nebr.	Coextensive with Lancaster County, Nebr.
Little Rock-North Little Rock, Ark.	Consists of Pulaski and Saline Counties, Ark.
Long Branch-Asbury Park, N.J.	Coextensive with Monmouth County, N.J.
Longview, Tex.[3]	Consists of Gregg and Harrison Counties, Tex.
Lorain-Elyria, Ohio	Coextensive with Lorain County, Ohio
Los Angeles-Long Beach, Calif.	Coextensive with Los Angeles County, Calif.
Louisville, Ky-Ind.	Consists of Bullitt, Jefferson, and Oldham Counties, Ky. and Clark and Floyd Counties, Ind.
Lowell, Mass.-N.H.	Consists of Lowell city and Billerica, Chelmsford, Dracut, Tewksbury, Tyngsborough, and Westford towns in Middlesex County, Mass.; and Pelham town in Hillsborough County, N.H.
Lubbock, Tex.	Coextensive with Lubbock County, Tex.
Lynchburg, Va.	Consists of Lynchburg[5] city and Amherst, Appomattox, and Campbell Counties, Va.
Macon, Ga.	Consists of Bibb, Houston, Jones, and Twiggs Counties, Ga.
Madison, Wis.	Coextensive with Dane County, Wis.
Manchester, N.H.	Consists of Manchester city and Bedford and Goffstown towns in Hillsborough County; Allenstown, Hooksett, and Pembroke towns in Merrimack County; and Derry and Londonderry towns in Rockingham County, N.H.
Mansfield, Ohio	Coextensive with Richland County, Ohio
McAllen-Pharr-Edinburg, Tex.	Coextensive with Hidalgo County, Tex.
Melbourne-Titusville-Cocoa, Fla.	Coextensive with Brevard County, Fla.
Memphis, Tenn.-Ark.-Miss.	Consists of Shelby and Tipton Counties, Tenn.; Crittenden County, Ark.; and De Soto County, Miss.
Meriden, Conn.	Coextensive with Meriden city in New Haven County, Conn.
Miami, Fla.	Coextensive with Dade County, Fla.
Midland, Tex.	Coextensive with Midland County, Tex.
Milwaukee, Wis.	Consists of Milwaukee, Ozaukee, Washington, and Waukesha Counties, Wis.
Minneapolis-St. Paul, Minn.-Wis.	Consists of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties, Minn. and St. Croix County, Wis.
Mobile, Ala.	Consists of Baldwin and Mobile Counties, Ala.
Modesto, Calif.	Coextensive with Stanislaus County, Calif.
Monroe, La.	Coextensive with Ouachita Parish, La.
Montgomery, Ala.	Consists of Autauga, Elmore, and Montgomery Counties, Ala.
Muncie, Ind.	Coextensive with Delaware County, Ind.
Muskegon-North Shores-Muskegon Heights, Mich.[9]	Consists of Muskegon and Oceana Counties, Mich.

See footnotes at end of appendix.

SMSA'S—Con.

Nashua, N.H.	Consists of Nashua city and Amherst, Hudson, Merrimack, and Milford towns in Hillsborough County, N.H.
Nashville-Davidson, Tenn.	Consists of Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, and Wilson Counties, Tenn.
Nassau-Suffolk, N.Y.	Consists of Nassau and Suffolk Counties, N.Y.
New Bedford, Mass.	Consists of New Bedford city and Acushnet, Dartmouth, Fairhaven, and Freetown towns in Bristol County; and Lakeville, Marion, and Mattapoisett towns in Plymouth County, Mass.
New Britain, Conn.	Consists of New Britain city and Berlin, Plainville, and Southington towns in Hartford County, Conn.
New Brunswick-Perth Amboy-Sayreville, N.J.	Coextensive with Middlesex County, N.J.
New Haven-West Haven, Conn.[10]	Consists of Clinton town in Middlesex County; and New Haven and West Haven cities and Bethany, Branford, East Haven, Guilford, Hamden, Madison, North Branford, North Haven, Orange, Wallingford, and Woodbridge towns in New Haven County, Conn.
New London-Norwich, Conn.-R.I.	Consists of Old Saybrook town in Middlesex County; New London and Norwich cities and Bozrah, East Lyme, Griswold, Groton, Ledyard, Lisbon, Montville, Old Lyme, Preston, Sprague, Stonington, and Waterford towns in New London County, Conn.; and Hopkinton and Westerly towns in Washington County, R.I.
New Orleans, La.	Consists of Jefferson, Orleans, St. Bernard, and St. Tammany Parishes, La.
New York, N.Y.-N.J.	Consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester Counties, N.Y. and Bergen County, N.J.
Newark, N.J.	Consists of Essex, Morris, Somerset, and Union Counties, N.J.
Newport News-Hampton, Va.[11]	Consists of Hampton,[5] Newport News,[5] Poquoson,[5] and Williamsburg[5] cities and Gloucester, James City, and York Counties, Va.
Norfolk-Virginia Beach-Portsmouth, Va.-N.C.[12]	Consists of Chesapeake,[5] Norfolk,[5] Portsmouth,[5] Suffolk,[5] and Virginia Beach[5] cities, Va. and Currituck County, N.C.
Northeast Pennsylvania	Consists of Lackawanna, Luzerne, and Monroe Counties, Pa.
Norwalk, Conn.	Consists of Norwalk city and Weston, Westport, and Wilton towns in Fairfield County, Conn.
Odessa, Tex.	Coextensive with Ector County, Tex.
Oklahoma City, Okla.	Consists of Canadian, Cleveland, McClain, Oklahoma, and Pottawatomie Counties, Okla.
Omaha, Nebr.-Iowa	Consists of Douglas and Sarpy Counties, Nebr. and Pottawattamie County, Iowa
Orlando, Fla.	Consists of Orange, Osceola, and Seminole Counties, Fla.
Owensboro, Ky.	Coextensive with Daviess County, Ky.
Oxnard-Simi Valley-Ventura, Calif.	Coextensive with Ventura County, Calif.
Panama City, Fla.[3]	Coextensive with Bay County, Fla.
Parkersburg-Marietta, W. Va.-Ohio	Consists of Wirt and Wood Counties, W. Va. and Washington County, Ohio
Pascagoula-Moss Point, Miss.[3]	Coextensive with Jackson County, Miss.
Paterson-Clifton-Passaic, N.J.	Coextensive with Passaic County, N.J.
Pensacola, Fla.	Consists of Escambia and Santa Rosa Counties, Fla.
Peoria, Ill.	Consists of Peoria, Tazewell, and Woodford Counties, Ill.
Petersburg-Colonial Heights-Hopewell, Va.	Consists of Colonial Heights,[5] Hopewell,[5] and Petersburg[5] cities and Dinwiddie and Prince George Counties, Va.
Philadelphia, Pa.-N.J.	Consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; and Burlington, Camden, and Gloucester Counties, N.J.
Phoenix, Ariz.	Coextensive with Maricopa County, Ariz.
Pine Bluff, Ark.	Coextensive with Jefferson County, Ark.
Pittsburgh, Pa.	Consists of Allegheny, Beaver, Washington, and Westmoreland Counties, Pa.
Pittsfield, Mass.	Consists of Pittsfield city and Adams, Cheshire, Dalton, Lanesborough, Lee, Lenox, and Stockbridge towns in Berkshire County, Mass.

See footnotes at end of appendix.

SMSA'S—Con.

Portland, Maine	Consists of Portland, South Portland, and Westbrook cities and Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Scarborough, Windham, and Yarmouth towns in Cumberland County; and Saco city and Old Orchard Beach town in York County, Maine
Portland, Oreg.-Wash.	Consists of Clackamas, Multnomah, and Washington Counties, Oreg. and Clark County, Wash.
Poughkeepsie, N.Y.	Coextensive with Dutchess County, N.Y.
Providence-Warwick-Pawtucket, R.I.-Mass.	Consists of Barrington, Bristol, and Warren towns in Bristol County; Warwick city and Coventry, East Greenwich, and West Warwick towns in Kent County; Jamestown town in Newport County; Central Falls, Cranston, East Providence, Pawtucket, Providence, and Woonsocket cities and Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Scituate, and Smithfield towns in Providence County; and Narragansett, North Kingstown, and South Kingstown towns in Washington County, R.I.; Attleboro city and North Attleborough, Norton, Rehoboth, and Seekonk towns in Bristol County; Plainville town in Norfolk County; and Blackstone and Millville towns in Worcester County, Mass.
Provo-Orem, Utah	Coextensive with Utah County, Utah
Pueblo, Colo.	Coextensive with Pueblo County, Colo.
Racine, Wis.	Coextensive with Racine County, Wis.
Raleigh-Durham, N.C.	Consists of Durham, Orange, and Wake Counties, N.C.
Reading, Pa.	Coextensive with Berks County, Pa.
Reno, Nev.	Coextensive with Washoe County, Nev.
Richland-Kennewick, Wash.	Consists of Benton and Franklin Counties, Wash.
Richmond, Va.[13]	Consists of Richmond[5] city and Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, and Powhatan Counties, Va.
Riverside-San Bernardino-Ontario, Calif.	Consists of Riverside and San Bernardino Counties, Calif.
Roanoke, Va.	Consists of Roanoke[5] and Salem[5] cities and Botetourt, Craig, and Roanoke Counties, Va.
Rochester, Minn.	Coextensive with Olmsted County, Minn.
Rochester, N.Y.	Consists of Livingston, Monroe, Ontario, Orleans, and Wayne Counties, N.Y.
Rockford, Ill.	Consists of Boone and Winnebago Counties, Ill.
Sacramento, Calif.	Consists of Placer, Sacramento, and Yolo Counties, Calif.
Saginaw, Mich.	Coextensive with Saginaw County, Mich.
St. Cloud, Minn.	Consists of Benton, Sherburne, and Stearns Counties, Minn.
St. Joseph, Mo.	Consists of Andrew and Buchanan Counties, Mo.
St. Louis, Mo.-Ill.	Consists of St. Louis[5] city and Franklin, Jefferson, St. Charles, and St. Louis Counties, Mo.; and Clinton, Madison, Monroe, and St. Clair Counties, Ill.
Salem, Oreg.	Consists of Marion and Polk Counties, Oreg.
Salinas-Seaside-Monterey, Calif.	Coextensive with Monterey County, Calif.
Salt Lake City-Ogden, Utah	Consists of Davis, Salt Lake, Tooele, and Weber Counties, Utah
San Angelo, Tex.	Coextensive with Tom Green County, Tex.
San Antonio, Tex.	Consists of Bexar, Comal, and Guadalupe Counties, Tex.
San Diego, Calif.	Coextensive with San Diego County, Calif.
San Francisco-Oakland, Calif.	Consists of Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties, Calif.
San Jose, Calif.	Coextensive with Santa Clara County, Calif.
Santa Barbara-Santa Maria-Lompoc, Calif.	Coextensive with Santa Barbara County, Calif.
Santa Cruz, Calif.	Coextensive with Santa Cruz County, Calif
Santa Rosa, Calif.	Coextensive with Sonoma County, Calif.
Sarasota, Fla.	Coextensive with Sarasota County, Fla.
Savannah, Ga.	Consists of Bryan, Chatham, and Effingham Counties, Ga.
Seattle-Everett, Wash.	Consists of King and Snohomish Counties, Wash.

See footnotes at end of appendix.

SMSA'S—Con.

Sherman-Denison, Tex.	Coextensive with Grayson County, Tex.
Shreveport, La.	Consists of Bossier, Caddo, and Webster Parishes, La.
Sioux City, Iowa-Nebr.	Consists of Woodbury County, Iowa and Dakota County, Nebr.
Sioux Falls, S. Dak.	Coextensive with Minnehaha County, S. Dak.
South Bend, Ind.	Consists of Marshall and St. Joseph Counties, Ind.
Spokane, Wash.	Coextensive with Spokane County, Wash.
Springfield, Ill.	Consists of Menard and Sangamon Counties, Ill.
Springfield, Mo.	Consists of Christian and Greene Counties, Mo.
Springfield, Ohio	Consists of Champaign and Clark Counties, Ohio
Springfield-Chicopee-Holyoke, Mass.-Conn.	Consists of Chicopee, Holyoke, Springfield, and Westfield cities and Agawam, East Longmeadow, Hampden, Longmeadow, Ludlow, Monson, Palmer, Southwick, West Springfield, and Wilbraham towns in Hampden County; Northampton city and Belchertown, Easthampton, Granby, Hadley, Hatfield, Southampton, and South Hadley towns in Hampshire County; Warren town in Worcester County, Mass.; and Somers town in Tolland County, Conn.
Stamford, Conn.	Consists of Stamford city and Darien, Greenwich, and New Canaan towns in Fairfield County, Conn.
Steubenville-Weirton, Ohio-W. Va.	Consists of Jefferson County, Ohio and Brooke and Hancock Counties, W. Va.
Stockton, Calif.	Coextensive with San Joaquin County, Calif.
Syracuse, N.Y.	Consists of Madison, Onondaga, and Oswego Counties, N.Y.
Tacoma, Wash.	Coextensive with Pierce County, Wash.
Tallahassee, Fla.	Consists of Leon and Wakulla Counties, Fla.
Tampa-St. Petersburg, Fla.	Consists of Hillsborough, Pasco, and Pinellas Counties, Fla.
Terre Haute, Ind.	Consists of Clay, Sullivan, Vermillion, and Vigo Counties, Ind.
Texarkana, Tex.-Texarkana, Ark.	Consists of Bowie County, Tex. and Little River and Miller Counties, Ark.
Toledo, Ohio-Mich.	Consists of Fulton, Lucas, Ottawa, and Wood Counties, Ohio and Monroe County, Mich.
Topeka, Kans.	Consists of Jefferson, Osage, and Shawnee Counties, Kans.
Trenton, N.J.	Coextensive with Mercer County, N.J.
Tucson, Ariz.	Coextensive with Pima County, Ariz.
Tulsa, Okla.	Consists of Creek, Mayes, Osage, Rogers, Tulsa, and Wagoner Counties, Okla.
Tuscaloosa, Ala.	Coextensive with Tuscaloosa County, Ala.
Tyler, Tex.	Coextensive with Smith County, Tex.
Utica-Rome, N.Y.	Consists of Herkimer and Oneida Counties, N.Y.
Vallejo-Fairfield-Napa, Calif.	Consists of Napa and Solano Counties, Calif.
Vineland-Millville-Bridgeton, N.J.	Coextensive with Cumberland County, N.J.
Waco, Tex.	Coextensive with McLennan County, Tex.
Washington, D.C.-Md.-Va.[14]	Consists of District of Columbia; Charles, Montgomery, and Prince Georges Counties, Md; and Alexandria,[5] Fairfax,[5] Falls Church,[5] Manassas,[5] and Manassas Park[5] cities and Arlington, Fairfax, Loudoun, and Prince William Counties, Va.
Waterbury, Conn.	Consists of Thomaston, Watertown, and Woodbury towns in Litchfield County; and Waterbury city, Naugatuck borough, and Beacon Falls, Cheshire, Middlebury, Prospect, Southbury, and Wolcott towns in New Haven County, Conn.
Waterloo-Cedar Falls, Iowa	Coextensive with Black Hawk County, Iowa
West Palm Beach-Boca Raton, Fla.	Coextensive with Palm Beach County, Fla.
Wheeling, W. Va.-Ohio	Consists of Marshall and Ohio Counties, W. Va. and Belmont County, Ohio
Wichita, Kans.	Consists of Butler and Sedgwick Counties, Kans.
Wichita Falls, Tex.	Consists of Clay and Wichita Counties, Tex.
Williamsport, Pa.	Coextensive with Lycoming County, Pa.
Wilmington, Del.-N.J.-Md.	Consists of New Castle County, Del.; Salem County, N.J.; and Cecil County, Md.
Wilmington, N.C.	Consists of Brunswick and New Hanover Counties, N.C.

See footnotes at end of appendix.

SMSA'S—Con.

Worcester, Mass.	Consists of Worcester city and Auburn, Berlin, Boylston, Brookfield, Charlton, East Brookfield, Grafton, Holden, Leicester, Millbury, Northborough, Northbridge, North Brookfield, Oxford, Paxton, Shrewsbury, Spencer, Sterling, Sutton, Upton, Uxbridge, Webster, Westborough, and West Boylston towns in Worcester County, Mass.
Yakima, Wash.	Coextensive with Yakima County, Wash.
York, Pa.	Consists of Adams and York Counties, Pa.
Youngstown-Warren, Ohio	Consists of Mahoning and Trumbull Counties, Ohio

[1] Retitled from Chicago-Northeastern Indiana SCA since 1972 Economic Censuses; but no boundary change.
[2] Includes New York-Northeastern New Jersey SCA and Long Branch-Asbury Park, N.J., Stamford, Conn., and Norwalk, Conn., SMSA's added since 1972 Economic Censuses.
[3] Newly designated SMSA since 1972 Economic Censuses.
[4] Williamson County, Tex. added since 1972 Economic Censuses.
[5] Independent of any county and considered a county equivalent.
[6] Retitled from Charleston, S.C., SMSA since 1972 Economic Censuses.
[7] Retitled from Kingsport-Bristol, Tenn.-Va., SMSA and Carter, Unicori, and Washington Counties, Tenn., added since 1972 Economic Censuses.
[8] Retitled from Lexington, Ky., SMSA since 1972 Economic Censuses.
[9] Retitled from Muskegon-Muskegon Heights, Mich., SMSA since 1972 Economic Censuses.
[10] Killingworth town in Middlesex County was deleted since 1972 Economic Censuses.
[11] Poquoson city was added since 1972 Economic Censuses.
[12] Nansemond city was deleted since 1972 Economic Censuses.
[13] New Kent County added since 1972 Economic Censuses.
[14] Manassas and Manassas Park cities added since 1972 Economic Censuses.

Abbreviations Used for State Names
(Alaska, Hawaii, Idaho, Iowa, Maine, Ohio, and Utah are not abbreviated)

Ala.	Alabama	Ind.	Indiana	N.C.	North Carolina	R.I.	Rhode Island
Ariz.	Arizona	Kans.	Kansas	N. Dak.	North Dakota	S.C.	South Carolina
Ark.	Arkansas	Ky.	Kentucky	Nebr.	Nebraska	S. Dak.	South Dakota
Calif.	California	La.	Louisiana	Nev.	Nevada	Tenn.	Tennessee
Colo.	Colorado	Mass.	Massachusetts	N.H.	New Hampshire	Tex.	Texas
Conn.	Connecticut	Md.	Maryland	N.J.	New Jersey	Va.	Virginia
D.C.	District of Columbia	Mich.	Michigan	N. Mex.	New Mexico	Vt.	Vermont
Del.	Delaware	Minn.	Minnesota	N.Y.	New York	Wash.	Washington
Fla.	Florida	Miss.	Mississippi	Okla.	Oklahoma	Wis.	Wisconsin
Ga.	Georgia	Mo.	Missouri	Oreg.	Oregon	W. Va.	West Virginia
Ill.	Illinois	Mont.	Montana	Pa.	Pennsylvania	Wyo.	Wyoming

APPENDIX G. Scope and Coverage of Fuels and Electric Energy

BACKGROUND

The manufacturing industries in the United States consume a substantial portion of the coal, coke, fuel oil, natural gas, and electric energy produced in this country. These energy inputs are the primary sources of the heat and power used by the manufacturing sector to produce manufactured products. Data on this important aspect of the domestic economy have been collected and published by the Bureau of the Census for more than six decades. This report presents statistics on quantities and costs of specified fuels used for heat and power, quantity and cost of electric energy purchased, and quantity of electric energy generated less that sold by manufacturing plants in the United States during 1977.

Census reports on quantities of fuels important in manufacturing began with the census of manufactures for 1909. This series has continued to be compiled periodically in subsequent censuses of manufactures for 1914, 1919, 1929, 1937, 1939, 1947, 1954, 1958, 1962 (as part of the 1963 Census of Manufactures), 1967, and 1971 (as part of the 1972 Census of Manufactures), and as part of the annual survey of manufactures (ASM) for 1974, 1975, and 1976.

Data on quantities of electric energy purchased by manufacturers were first collected for 1929 and then for the subsequent census years (listed above). Data on cost of fuels and electric energy were first published for 1929, although some data on costs had been collected in prior censuses. Data on quantity of electric energy generated by manufacturing plants were first compiled for 1939. The data for that year also provided, for the first time, statistics on fuels purchased for heat and power separate from those purchased as materials.

For the intercensal years prior to 1974, which were covered by the annual survey of manufactures, data on the total cost of fuels purchased, the quantity and cost of purchased electric energy, and the quantity of electricity generated appear in the ASM volumes covering 1950-1953, 1955-1957, 1959-1962, 1964-1966, and 1968-1971. The data for 1972 and 1973 appear in the individual ASM report on Fuels and Electric Energy for 1974, M74(AS) 4.2.

The 1974 report included, for the first time as part of the ASM, detailed data on the total cost of fuels and total quantity consumed by fuel type: Distillate and residual fuel oil; bituminous coal, lignite, and anthracite; coke and breeze; and natural gas.

Except for the 1950-1953 statistics on electricity generated, which were prepared from Federal Power Commission data, all of the intercensal statistics are estimates. A description of the sample, sampling techniques, coverage, etc., for these years is included in the ASM publications.

1977 REPORTING STRUCTURE

For 1977, data on cost of fuels and purchased electric energy were collected on the 1977 Census of Manufactures report forms. Data on individual fuels as well as data on quantity of purchased electric energy and generated and sold electric energy were collected on 1977 Annual Survey of Manufactures form MA-100. The MA-100 was mailed with the census report form to each of the manufacturing establishments included in the survey sample. Establishments not included in the sample received only census report forms. Thus the statistics published on the cost of fuels and electric energy are census totals whereas the statistics on the individual fuels and quantities of electric energy are sample estimates.

Fuels Consumed

Form MA-100 requested information on detailed fuels consumed: Quantity and cost of coal, coke, distillate fuel oil, residual fuel oil, and natural gas. It also requested cost only for other types of fuels consumed.

The cost of fuels refers to direct charges actually paid or payable for fuels consumed during the year, including freight charges and other direct charges incurred by the establishment in acquiring these fuels. Manufacturers included the cost of fuels consumed regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Electric Energy

Data also were obtained on form MA-100 on the quantity and cost of electric energy purchased from other companies or transferred from other establishments of the same company. In addition, information was collected on the amount of electric energy generated by the establishment, and the quantity of electric energy sold or transferred to other plants of the same company. In reporting figures on energy sold some manufacturing establishments, acting as central distribution stations for several company plants in the same general area, included quantities of purchased electricity which were subsequently transferred to other company plants.

The cost of electric energy represents the amount actually paid during the year for electric energy purchased from other companies or received from other establishments of the same company. It does not include the value of electricity generated and used at the establishment.

DESCRIPTION OF SURVEY SAMPLE

Sample estimates in this report are compiled from a survey of a probability sample of about 70,000 manufacturing establishments selected from a total of about 300,000 establishments. The sample was selected from the 1972 Census of Manufactures list supplemented by Social Security Administration (SSA) lists of new manufacturers that opened after 1972. As in earlier surveys, companies rather than establishments were defined as the sampling units. The selected companies were required to report for all of their plants so that new establishments of existing companies also were represented.

All companies that had any manufacturing establishments with 250 employees or more in the 1972 census were included in the survey panel. These large companies, which were included with certainty, collectively account for more than two-thirds of total manufacturing employment. Smaller companies were sampled with probabilities ranging from 1.000 down to 0.005, in accordance with mathematical theory for optimum allocation of a sample.

The certainty cutoff level of 250 employees is a change from the previous sample design (1965-1969) in which all companies with any manufacturing establishments with more than 100 employees were included (except for the apparel and printing and publishing industries where the certainty cutoff level was 250 employees). The higher certainty cutoff level for the new panel permits a more effective representation of the smaller manufacturing companies.

The probabilities of selection assigned to the smaller companies were proportional to measures of size determined for each company. For companies included in the 1972 Census of Manufactures, the measures of size depended directly upon each company's 1972 product class values and the historic variability of the year-to-year shipments of each product class. Roughly equivalent measures of size were assigned to the postcensus companies based on their industry codes and anticipated employment. (More specific information was not available for them in the SSA lists used for sampling.)

In order to improve reliability of general statistics for geographic areas, two features were incorporated into the sample design. First, some weight was given to the total value of shipments of each establishment relative to the total value of shipments for the State in which the establishment was located. Second, product class values for establishments in States where the total level of manufacturing was relatively low or rapidly expanding (but for which the reliability of estimates was not expected to be much improved by the first sample design feature) were multiplied by factors ranging from 1.15 to 1.25 before measures of size were developed.

This method of assigning measures of size was used to maximize the precision (minimize the variance) of the estimates of the year-to-year change in the value of product class shipments. It also gave weight to differences in employment, value added, and other general statistics, for these are highly correlated with total value of shipments, and the assigned size measures varied directly with that total for each company.

The cost of collecting and processing data for a company is roughly proportionate to the number of its establishment reports. Therefore, each company's initial size measure was divided by the square root of its number of establishments. Sample selection probabilities then were obtained by multiplying each company's final measure of size by an overall sampling fraction calculated to yield the total expected sample size.

The sample selection procedure gave each company in the sampling frame an independent chance of selection. This method of selection differs from the method of systematic selection used in annual surveys before 1959. With systematic selection only certain combinations of companies can fall into the sample, depending on the order in which they are arrayed at the time the sample is drawn. Independent selection permits the rotation of companies into and out of a given sample panel, without introducing a bias into the survey estimates.

REVISED METHOD OF ESTIMATION

The estimates of fuel and electric energy data for 1976 that appear in this report may differ from those found in the 1976 publication. The reason for this is a change in the basic estimation procedure. The original 1976 estimates were produced using a fixed base difference estimator, as follows:

$$Y'_{76} = Y'_{76} + (X_{72} - X'_{72})$$

where Y'_{76} is a linear estimate obtained by multiplying each sample establishment's data by its corresponding sampling weight. The term in the parenthesis is a fixed base difference. It represents the difference in the 1972 census or base year between the census universe total, X_{72}, and the linear estimate from the sample X'_{72}.

This difference estimate was used to produce more reliable estimates than could have been produced by the simple linear estimate alone. One very important assumption involved in the decision to use the difference estimate was that the universe totals, and hence the absolute difference between a given linear estimate and the corresponding universe total, would remain relatively constant for four to five years. However, a high rate of inflationary growth has been experienced by the data items in this report. This suggested the need for revision of 1976 data.

Revised data for 1976 were generated using a ratio adjusted difference estimation procedure that allows for adjustment of the difference estimate for estimates of universe growth.

The revised estimates for 1976 were obtained as follows:

$$Y''_{76} = Y'_{76} + \frac{Y'_{76}}{Y'_{77}}(X_{77} - X'_{77})$$

where Y'_{76} is the linear estimate as defined above. The term in parenthesis $(X_{77} - X'_{77})$ is the difference between the linear estimate from the sample in 1977 (X'_{77}) and the universe census estimate in 1977 (X_{77}).

The ratio Y'_{76}/Y'_{77} is computed at the State total level and is a measure of the reciprocal of the estimated growth in the universe between 1976 and 1977. If the universe has in fact not changed between 1976 and 1977 we would expect this ratio to be equal to 1.0 and the 1977 fixed base difference would be appropriate for 1976 data. If, however, the universe has changed, whether by inflation or actual growth, the estimated difference based on 1977 data would probably be an overstatement of the 1976 difference. This ratio adjustment, Y'_{76}/Y'_{77}, is intended to adjust the 1977 difference to reflect the year-to-year universe change. The use of this estimation procedure involves assumption that the percent of the universe covered by the weighted sample is relatively constant between 1976 and 1977, as opposed to the fixed base difference estimate assumption that the absolute difference between the weighted sample and the universe was relatively constant for the two years.

QUALIFICATIONS OF THE DATA

The estimates developed from the Annual Survey of Manufactures (ASM) sample may differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The sampling errors—differences between estimates obtained and the results theoretically obtainable from a comparable complete coverage survey—are unknown. Guides to potential size of the sampling errors, however, are provided by standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable complete coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors, the standard errors divided by the estimated values to which they refer.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals—ranges that would include the comparable complete coverage value for specified percentages of all the possible samples. The complete coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable complete survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence with which the estimates from a particular sample would differ from complete coverage results by as much as one, two, or three standard errors.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, i.e., a standard error of 1,000 (2 percent of 50,000). Then there is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete coverage total.

In addition to the sampling errors, the estimates are subject to various operational errors: Errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors would also occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. When they were detected too late to correct, the data were suppressed or specifically qualified in the tables. The small operational errors usually remain. To some extent the aggregated totals compensate for them.

As derived, the estimated standard errors include part of the effect of the operational errors. The total error, which depends upon the joint effect of the sampling and operation errors, is usually of the order of size indicated by the standard error or only moderately higher. For some estimates, however, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the annual surveys of manufactures is not identical to the complete coverage of the censuses of manufactures as the censuses have been conducted. Nearly all types of operational errors that affect the surveys also occur in the censuses. The surveys and the censuses, however, are conducted under quite different conditions, and operational errors can be controlled more tightly in the surveys than in the censuses. As a result, errors in many of the census figures are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and survey operating conditions also disturb, to some degree, the comparability of the ASM and census data.

APPENDIX H. Water Use Region Maps



New England and Middle Atlantic Industrial Water Use Regions: 1977



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Upper Mississippi, Great Lakes, and Ohio Industrial Water Use Regions: 1977



U. S. DEPARTMENT OF COMMERCE

Bureau of the Census

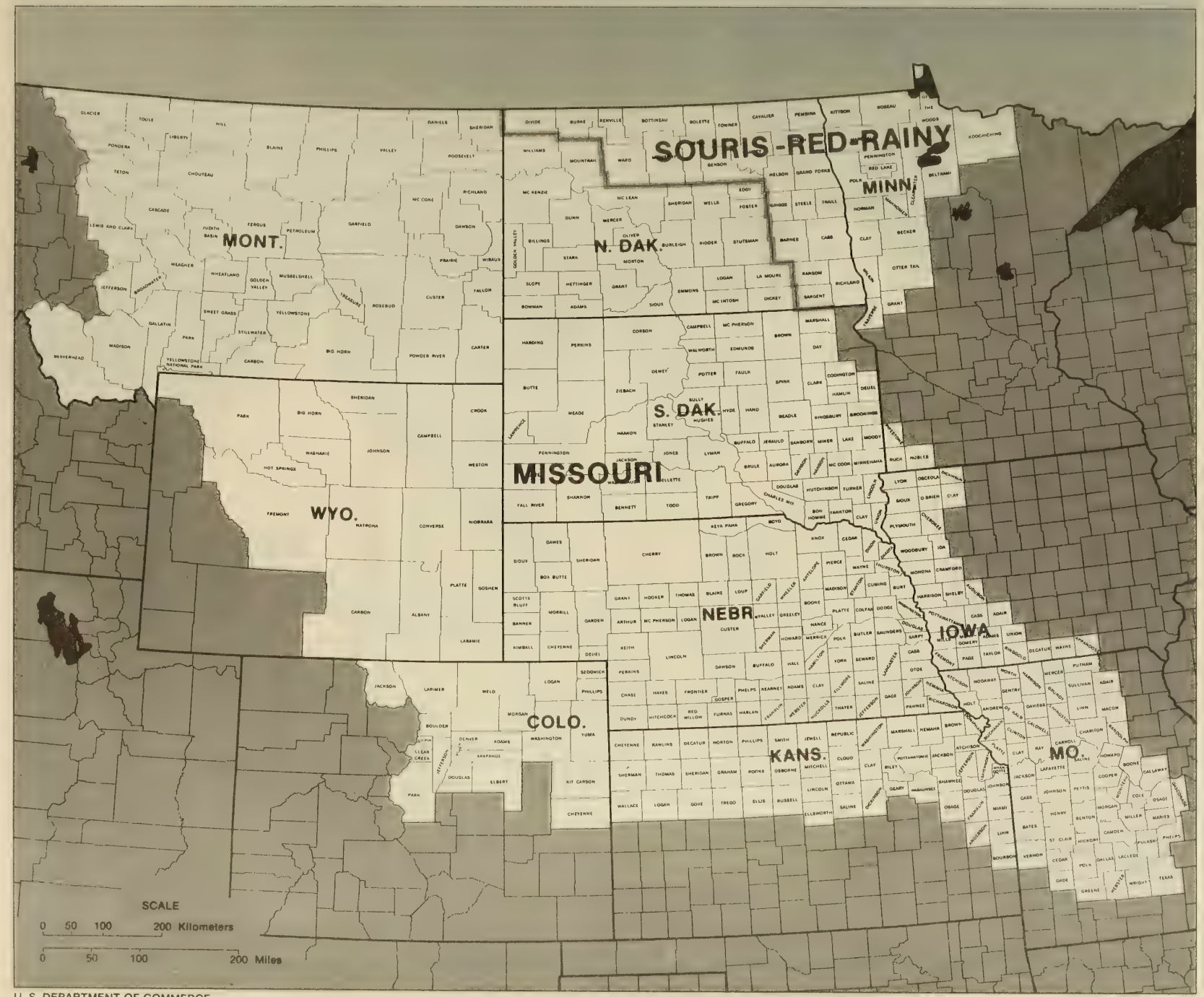
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U. S. DEPARTMENT OF COMMERCE

Bureau of the Census

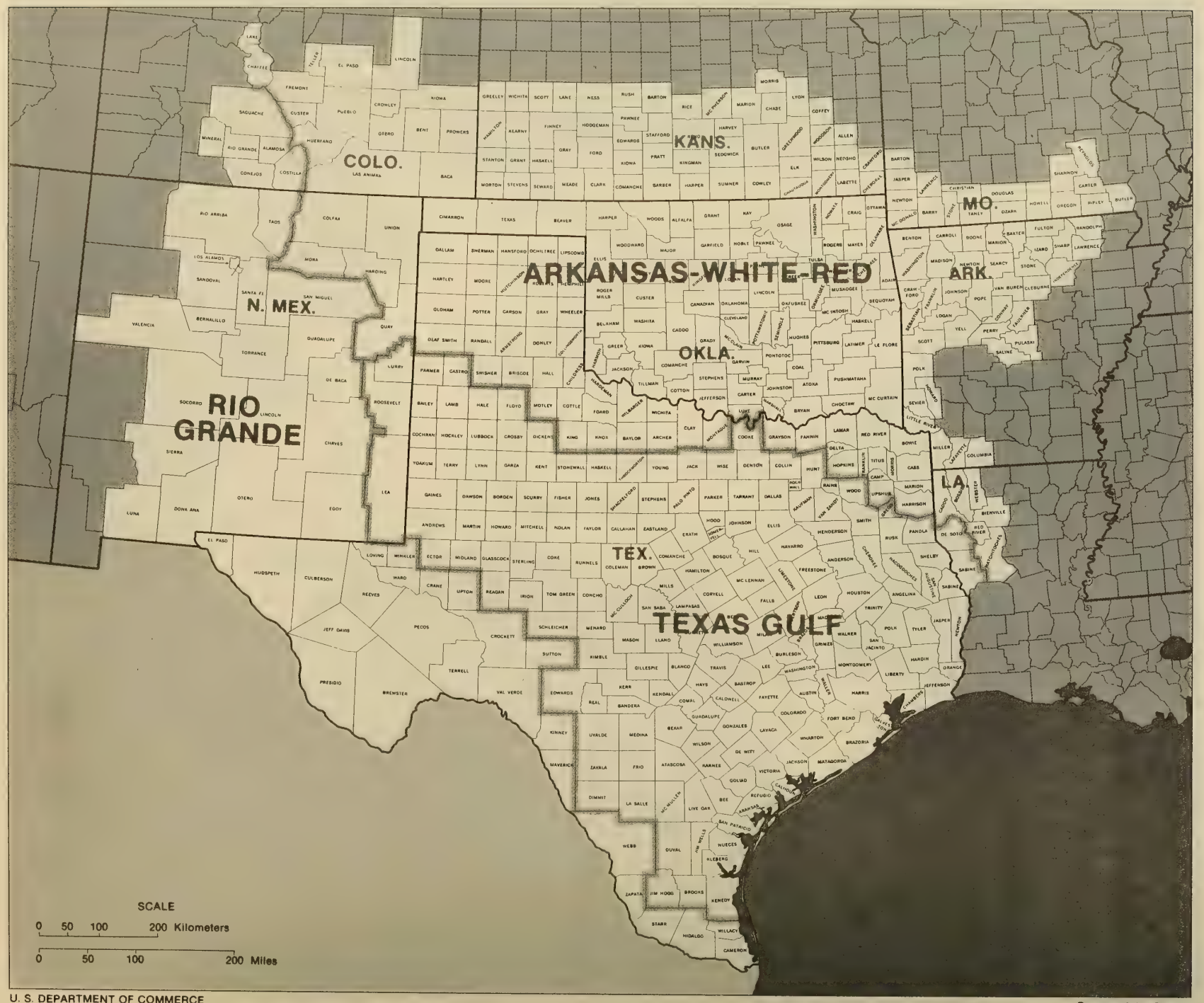
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U. S. DEPARTMENT OF COMMERCE

Bureau of the Census

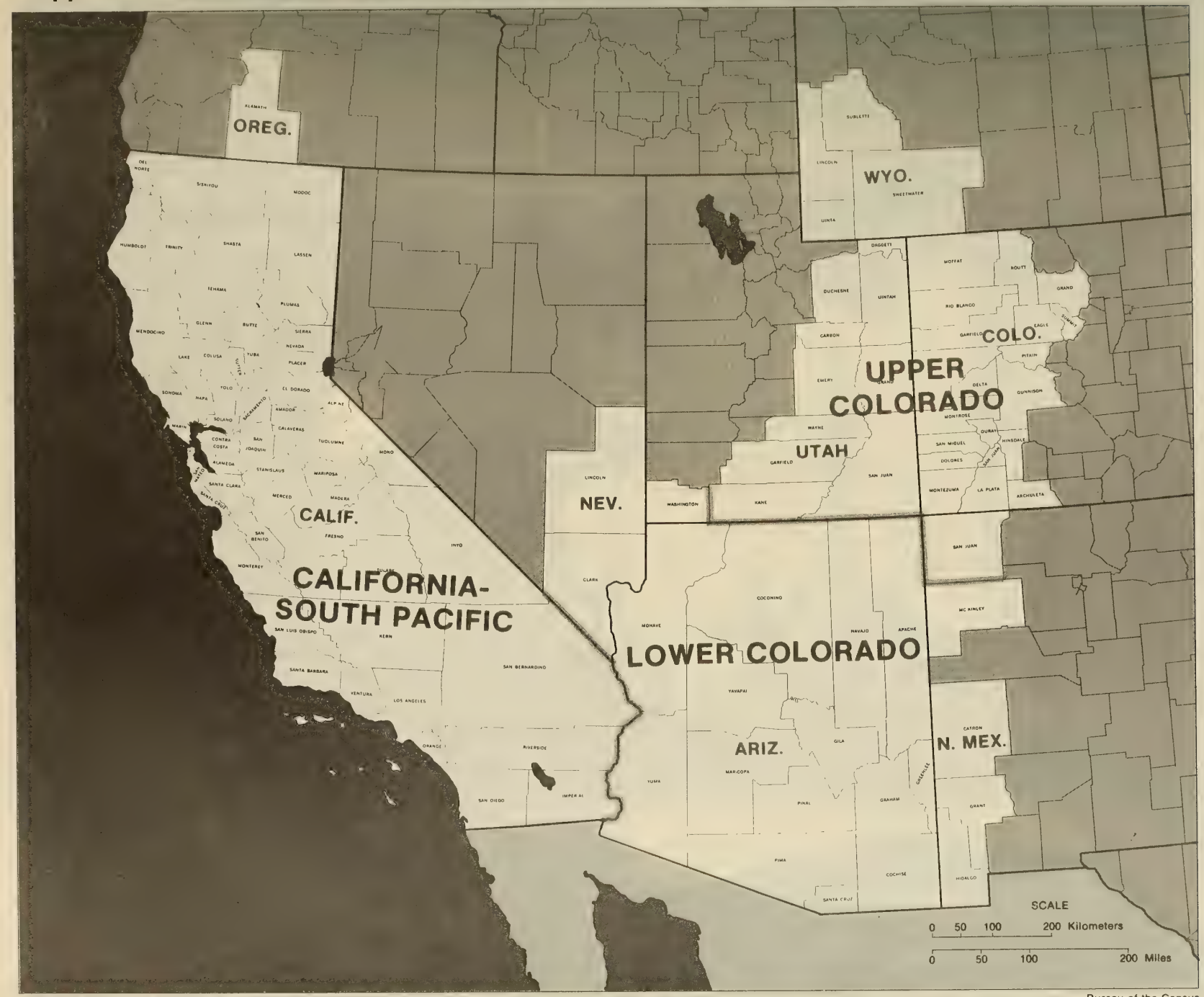
Arkansas-White-Red, Rio Grande, and Texas Gulf Industrial Water Use Regions: 1977



U. S. DEPARTMENT OF COMMERCE

Bureau of the Census

Upper Colorado, California-South Pacific, and Lower Colorado Industrial Water Use Regions: 1977



U. S DEPARTMENT OF COMMERCE

Bureau of the Census

Columbia-North Pacific and Great Basin Industrial Water Use Regions: 1977



Hawaii and Alaska Industrial Water Use Regions: 1977



U S DEPARTMENT OF COMMERCE

Bureau of the Census

APPENDIX I. Description of Water Use Regions

WATER USE REGIONS

New England—The drainage within the United States that ultimately discharges into (a) the Bay of Fundy; (b) the Atlantic Ocean, whose point of discharge is located within and between the States of Maine and Connecticut; (c) Long Island Sound; and (d) the St. Francis River, a tributary of the St. Lawrence River.

Middle Atlantic—The drainage within the United States that ultimately discharges into (a) the Atlantic Ocean, whose point of discharge is located within and between the States of New York and Virginia; and (b) the Richelieu River, a tributary of the St. Lawrence River.

South Atlantic—The drainage that ultimately discharges into (a) the Atlantic Ocean, whose point of discharge is located within and between the States of North Carolina and Florida; and (b) the Gulf of Mexico whose point of discharge is located within and between the States of Florida and Mississippi, including the Pearl River.

Great Lakes—The drainage within the United States that discharges into (a) the Great Lakes system, including the Lakes surfaces; and (b) the St. Lawrence River as far east as, but excluding, the Richelieu River.

Ohio—The drainage of the Ohio River, excluding that of the Tennessee River.

Tennessee—The drainage of the Tennessee River.

Upper Mississippi—The drainage of the Mississippi River above the mouth of the Ohio River, but excluding that of the Missouri River above a point immediately below the mouth of the Gasconade River.

Lower Mississippi—The drainage of (a) the Mississippi River below the mouth of the Ohio River, but excluding the drainages of the Arkansas, White, and Red Rivers above the points of highest backwater effects of the Mississippi River in those rivers; and (b) the coastal streams, other than the Mississippi River, that discharge into the Gulf of Mexico from, but excluding, the Pearl River to, but excluding, the Sabine River.

Souris-Red-Rainy—The drainage within the United States of the Souris, Red, and Rainy Rivers.

Missouri—The drainage within the United States of (a) the Missouri River above a point immediately below the mouth of the Gasconade River; and (b) the Saskatchewan River.

Arkansas-White-Red—The drainage of (a) the Arkansas River above the point of highest backwater effect of the Mississippi River; (b) the Red River above the point of highest backwater effect of the Mississippi River; and (c) the White River above the point of highest backwater effect of the Mississippi River, near Peach Orchard Bluff, Arkansas.

Texas Gulf—The drainage that discharges into the Gulf of Mexico from and including Sabine Pass to, but excluding, the Rio Grande and the lower Rio Grande Valley.

Rio Grande—The drainage within the United States of (a) the Rio Grande; (b) the San Luis Valley, North Plains, San Augustine Plains, Mimbres, Estancia, Jornado del Muerto, Tularosa, Salt, and various smaller closed basins; and (c) the lower Rio Grande Valley.

Upper Colorado—The drainage of (a) the Colorado River above the Lee Ferry Compact Point which is about 1 mile below the mount of the Paria River; and (b) the Great Divide closed basin.

Lower Colorado—The drainage within the United States of (a) the Colorado River below the Lee Ferry Compact Point which is about 1 mile below the mouth of the Paria River; (b) the Rios Yaqui, Magdalena, and Sonoita and other lesser streams that ultimately discharge into the Gulf of California; and (c) the Animas Valley, Wilcox Playa, El Dorado Valley, and other smaller closed basins.

Great Basin—The drainage of the Great Basin that ultimately discharges into the States of Utah and Nevada.

Columbia-North Pacific—The drainage within the United States that ultimately discharges into (a) the Straits of Georgia and of Juan de Fuca; (b) the Pacific Ocean whose point of discharge is within the States of Washington and Oregon, including the Columbia River; and (c) the Great Basin in the State of Oregon.

California-South Pacific—The drainage within the United States that ultimately discharges into (a) the Pacific Ocean whose point of discharge is within the State of California, which includes the Central Valley; and (b) that portion of the Great Basin, and other closed basins, in the State of California.

Alaska—The drainage within the State of Alaska.

Hawaii—The drainage within the State of Hawaii.

APPENDIX J. Technical Notes for Origin of Exports

This appendix presents the estimating procedure followed in developing the various levels of export and export-related data for 1977.

I. VALUE OF EXPORTS

A. Reported Value of Export Shipments

1. Establishments in the annual survey of manufactures (ASM) were requested to report their value of products which were shipped for export, if that value was $25,000 or more. There was no estimation or imputation of export data for nonreporting establishments, although large establishments were contacted if they left the export question blank.

2. ASM sample estimates of the reported value of products shipped for export were then derived by a ratio estimating procedure. For each geographic four-digit SIC cell, the estimated ratio of reported export shipments to total value of shipments was obtained. This ratio (which is a ratio of two linear estimates) was then multiplied by the census estimate for total value of shipments for the cell. The use of the census estimate corrects for oversampling or undersampling in the ASM in each detail cell.

Since export data are not collected in the census, the adjustment described above could not be applied directly for exports. It is applied indirectly by this ratio estimating process, in which it is assumed that where there is oversampling or undersampling for total value of shipments, there will be a similar oversampling or undersampling for exports.

These ratio estimates were calculated as follows:

$$77\ Ex_{Geo\ 4} = \left(\frac{\sum_{h \epsilon Geo\ 4} w_h\ 77\ Ex_h}{\sum_{h \epsilon Geo_4} w_h\ 77\ VS_h} \right) \left(77\ VS_{Geo\ 4} \right)$$

where

$77\ Ex_{Geo\ 4}$	=	the 1977 ratio adjusted estimate of reported exports for a specified geographic cell at the four-digit industry level,
$\sum_{h \epsilon Geo\ 4}$	=	the sum over the set of establishments in a geographic cell at the four-digit industry level,
w_h	=	the ASM weight associated with establishment h,
$77Ex_h$	=	the reported value of export shipments for establishment h,
$77VS_h$	=	the reported total value of shipments for establishment h,
$77VS_{Geo4}$	=	the census estimate for total value of shipments applied to the geographic by four-digit industry cell.

B. Estimated Total Value of Export Shipments

1. The estimate for exports just described understates the true value of exports:

a. It does not provide estimates for establishments in the survey sample not responding to the export question.
b. It does not provide estimates for those manufactured products which are exported by wholesalers and/or exporters, the export of which is unknown to the manufacturer and, therefore, not reported.

2. In order to convert these estimates of exports to estimates of the total value of exports, data were assembled from FT 610, U.S. Exports/Domestic Merchandise, SIC-Based Products by World Area, which presents actual port value of exports based on shipper's export documents. Two conversion processes were necessary to equate these exports to f.o.b. plant values. (See appendix B)

a. The foreign trade statistics were summarized to three-digit industry group levels. Adjustments were then made to convert the data to comparable three-digit SIC groups.
b. The export values (at the three-digit SIC level) were further adjusted from port value to f.o.b. plant values (which makes them compatible with the ASM concepts) by utilizing factors developed from the Bureau of Economic Analysis (BEA) input/output tables. The factors serve to eliminate the costs of transportation, insurance, wholesalers, and other expenses incurred between the time an export leaves the manufacturing plant and the time it reaches its port of exportation.

3. These foreign-trade-based data for exports, which have now been converted to f.o.b. plant values, were next compared to the ratio estimates of exports (summed to three-digit SIC levels) developed from the ASM reported export values. Differences between these sets of estimates were allocated to geographic levels within the three-digit SIC groups. This allocation was based on a weighted average of two ratios:

a. The estimated reported exports for the three-digit SIC geographic level to the estimated reported exports for the three-digit-national level.
b. The estimated employment at the three-digit SIC geographic level to the estimated employment at the three-digit SIC national level. (The components of this second ratio are difference estimates from the ASM.)

The weighting factors applied to these two ratios vary by three-digit SIC and are based on the coverage percentages of the ASM export estimates relative to their respective foreign-trade-based estimates.

The final estimates of the value of export shipments were calculated as follows:

$$77\ \text{Fin Ex}_{\text{Geo 3}} = 77\ \text{Ex}_{\text{Geo 3}} + \left\{ \left(\text{Ft}_{\text{Nt 3}} - \text{ASM}_{\text{Nt 3}} \right) \left[\left(\frac{\text{ASM}_{\text{Nt 3}}}{\text{FT}_{\text{Nt 3}}} \right) \left(\frac{77\ \text{Ex}_{\text{Geo 3}}}{\text{ASM}_{\text{Nt 3}}} \right) + \left(1 - \frac{\text{ASM}_{\text{Nt 3}}}{\text{FT}_{\text{Nt 3}}} \right) \left(\frac{77\ \text{TE}_{\text{Geo 3}}}{77\ \text{TE}_{\text{Nt 3}}} \right) \right] \right\}$$

where

- $77\ \text{Fin Ex}_{\text{Geo 3}}$ = the 1977 final adjusted export estimate for a specified three-digit SIC, geographic cell,
- $77\ \text{Ex}_{\text{Geo 3}}$ = the 1977 ratio estimate of exports for a specified three-digit SIC, geographic cell (see I.A.2.),
- FT_{Nt3} = the 1977 foreign-trade-based estimate of exports for a national three-digit SIC level,
- $\text{ASM}_{\text{Nt 3}}$ = the 1977 ASM ratio estimate for exports for a national three-digit SIC level,
- $77\ \text{TE}_{\text{Geo 3}}$ = the 1977 census estimate for total manufacturing employment for a specified three-digit SIC, geographic cell,
- $77\ \text{TE}_{\text{Nt 3}}$ = the 1977 census estimate of total manufacturing employment for a national three-digit SIC level.

It should be noted that in a small number of cases where the ratio $\frac{\text{ASM}_{\text{Nt 3}}}{\text{FT}_{\text{Nt3}}}$ exceeded 1, the ratio was made to equal 1. This situation can occur for any of three reasons:

a. A noncertainty establishment in the ASM, reports exports out of context with its sampling weight.
b. The margin of cost markup between f.o.b. plant and port of export is overstated.
c. The commodity classification of the foreign trade data versus the industry classification of the ASM data causes significant data discrepancies at the three-digit SIC level. These conceptual differences rarely affect two-digit SIC level data.

II. ESTIMATES OF EMPLOYMENT RELATED TO EXPORTS

A. Derived Export-Related Employment for ASM Establishments

1. Employment related to exports was not reported in the ASM. Therefore, it was estimated for each ASM establishment by assuming that the percentage of the establishment's total employment that is export related is the same as the percentage of the establishment's total value of shipments that is exported. Using these establishment export-related employment figures, ASM estimates were then developed by the same ratio estimating method (with total employment as the associated item) that was used for the value of export shipments (described in paragraph I.A.2. of this appendix).

2. The employment data presented in this report which are considered to be export related or export generated were first calculated (not reported) at the establishment level for establishments reporting $25,000 or more of exports as follows:

$$77\ \text{EE}_{n} = 77\ \text{TE}_{h} \left(\frac{77\ \text{Ex}_{h}}{77\ \text{VS}_{h}} \right)$$

where

- $77\ \text{EE}_{h}$ = the 1977 export-related employment for establishment h,
- $77\ \text{TE}_{h}$ = the 1977 total employment (as reported in the ASM) for establishment h,
- $77\ \text{Ex}_{h}$ = the 1977 value of exports (as reported in the ASM) for establishment h,
- $77\ \text{VS}_{h}$ = the 1977 value of shipments (as reported in the ASM) for establishment h.

ASM sample estimates for export-related employment were then derived using the ratio-estimating method as follows:

$$77\ \text{EE}_{\text{Geo 4}} = \left(\frac{\sum_{h \epsilon \text{Geo 4}} w_h\ 77\ \text{EE}_h}{\sum_{h \text{Geo 4}} w_h\ 77\ \text{TE}_h} \right) \left(77\ \text{Te}_{\text{Geo 4}} \right)$$

where

- $77\ \text{EE}_{\text{Geo 4}}$ = the 1977 ratio estimate of employment related to exports, for a specified geographic cell at the four-digit industry level,
- $77\ \text{TE}_{\text{Geo 4}}$ = the sum over the set of establishments in a geographic four-digit SIC industry cell,
- w_h = the ASM weight associated with establishment h,
- $77\ \text{TE}_{\text{Geo 4}}$ = the census estimate for employment applied to the geographic by four-digit industry cell.

B. Universe Estimates of Export-Related Employment

The ratio estimates of employment considered to be directly related to exports must be further adjusted to a universe level comparable to the final estimate of exports as defined in paragraph I.B.3. This adjustment, however, is simple and straightforward. After the ratio estimates are summed to three-digit SIC geographic levels, final export-related employment estimates are calculated such that:

$$77\ \text{Fin EE}_{\text{Geo 3}} = 77\ \text{EE}_{\text{Geo 3}} \left(\frac{77\ \text{Fin Ex}_{\text{Geo 3}}}{77\ \text{Ex}_{\text{Geo 3}}} \right)$$

where

$77\ Fin\ EE_{Geo\ 3}$ = the 1977 final adjusted estimate of employment related to exports for a specified three-digit SIC geographic cell,

$77\ EE_{Geo\ 3}$ = the 1977 ratio estimate of employment related to exports for a specified three-digit SIC geographic cell,

$77\ Fin\ Ex_{Geo\ 3}$ = the 1977 final adjusted export estimate for a specified three-digit SIC geographic cell,

$77\ Ex_{Geo\ 3}$ = the 1977 ratio estimate of reported exports for a specified three-digit SIC geographic cell.

Note: All aggregate estimates above the three-digit SIC and/or State levels are summations of the appropriate detail levels, rather than independently calculated estimates.

APPENDIX K. Comparison of Value of Exports at Port of Exportation to the Value of Exports at Producing Plant by Industry Group: 1977

Code	Industry group	Value of exports at port of exportation			F.O.B. adjustment factor[3]	Value of exports, f.o.b. producing plant		
		Summary totals[1] (million dollars)	Classification adjustment[2] (million dollars)	Adjusted totals (million dollars)		Estimated total, f.o.b. plant (col. C x col. D) (million dollars)	Directly reported[4] (million dollars)	Reported exports as percent of estimated exports
		A	B	C	D	E	F	G
	All industries	94,808.3	+742.8	95,551.1	.8978	85,787.0	67,387.5	78.6
20	Food and kindred products	7,269.9	+488.2	7,758.1	.8742	6,782.1	4,634.4	68.3
201	Meat products	1,480.3	+111.4	1,591.7	.9003	1,433.0	826.6	57.7
202	Dairy products	227.5	+15.2	242.7	.8468	205.5	135.8	66.1
203	Preserved fruits and vegetables	635.2	+46.9	682.1	.8299	566.1	407.8	72.0
204	Grain mill products	1,459.7	+100.6	1,560.3	.8806	1,374.0	964.8	70.2
205	Bakery products	20.0	+1.3	21.3	.8462	18.0	11.9	66.1
206	Sugar and confectionery products	154.7	+10.9	165.6	.8448	139.9	139.3	99.6
207	Fats and oils	2,363.6	+150.3	2,513.9	.8828	2,219.3	1,711.3	77.1
208	Beverages	251.2	+13.9	265.1	.9008	238.8	207.0	86.7
209	Miscellaneous foods, kindred products	677.7	+37.7	715.4	.8214	587.6	230.0	39.1
21	Tobacco products	637.4	+680.8	1,318.2	.9481	1,190.3	936.6	78.7
211	Cigarettes	614.9	-	614.9	.8066	496.0	562.1	113.3
212	Cigars	5.6	-	5.6	.7500	4.2	5.8	138.1
213	Chewing and smoking tobacco	16.9	-	16.9	.8108	13.7	1.9	13.9
214	Tobacco stemming and redrying	.0	+680.8	680.8	.9937	676.5	366.9	54.2
22	Textile mill products	1,406.8	+253.5	1,660.3	.8986	1,491.9	488.9	32.8
221	Weaving mills, cotton	438.4	-57.2	381.1	.9091	346.5	142.4	41.1
222	Weaving mills, manmade fibers and silks	349.5	+13.5	363.0	.9091	330.0	81.5	24.7
223	Weaving and finishing mills, wool	3.1	+4.4	7.5	.9091	6.8	.9	13.2
224	Narrow fabric mills	41.9	+3.2	45.1	.8846	39.9	8.1	20.3
225	Knitting mills	60.9	+59.5	120.4	.8333	100.3	40.8	40.7
226	Dyeing and finishing textiles, except wool fabrics and knit goods	.0	+192.3	192.3	.9114	175.3	46.8	26.7
227	Floor covering mills	108.6	+8.2	116.8	.8684	101.4	43.9	43.3
228	Yarn and thread mills	163.3	+11.6	174.9	.9077	158.8	38.1	24.0
229	Miscellaneous textile goods, n.e.c.	241.2	+18.0	259.2	.8986	232.9	86.5	37.1
23	Apparel, other textile products	858.6	-41.1	817.5	.9258	756.8	247.8	32.7
231	Men's and boys' suits and coats	5.2	+25.8	31.0	.9363	29.0	.7	2.4
232	Men's and boys' furnishings	187.3	+57.2	244.5	.9363	228.9	56.7	24.8
233	Women's and misses' outerwear	66.5	+36.4	102.9	.9363	96.3	11.0	11.4
234	Women's and children's undergarments	72.0	-3.8	68.2	.9363	63.8	20.7	32.4
235	Hats, caps, and millinery	14.6	+6.6	21.2	.9363	19.8	1.8	9.1
236	Children's outerwear	120.9	-84.2	36.7	.9363	34.4	2.8	8.1
237	Fur goods	25.2	+1.4	26.6	.9363	24.9	1.0	4.0
238	Miscellaneous apparel and accessories	27.1	+2.0	29.1	.9363	27.2	15.0	55.1
239	Miscellaneous fabricated textile products	339.6	-82.5	257.1	.9035	232.3	138.0	59.4
24	Lumber and wood products	2,152.9	-	2,152.9	.8656	1,863.5	1,242.6	66.7
241	Logging camps and log contractors	1,018.3	-	1,018.3	.8945	910.9	622.3	68.3
242	Sawmills and planing mills	739.1	-	739.1	.8342	616.6	324.7	52.7
243	Millwork, plywood, and structural wood members	167.3	-	167.3	.8205	137.3	136.8	99.6
244	Wood containers	6.8	-	6.8	.8571	5.8	21.2	365.5
245	Wood buildings and mobile homes	126.9	-	126.9	.9286	117.8	81.0	68.8
249	Miscellaneous wood products	94.5	-	94.5	.9000	85.1	56.7	66.6
25	Furniture and fixtures	230.7	-	230.7	.8964	206.8	107.8	52.1
251	Household furniture	132.7	-	132.7	.9429	125.1	35.7	28.5
252	Office furniture	32.1	-	32.1	.9091	29.2	22.8	78.1
253	Public building and related furniture	10.9	-	10.9	.5000	5.5	20.7	376.4
254	Partitions and fixtures	28.2	-	28.2	.8889	25.1	9.7	38.6
259	Miscellaneous furniture and fixtures	26.7	-	26.7	.8182	21.8	18.8	86.2
26	Paper and allied products	2,452.0	-	2,452.0	.8562	2,099.4	1,924.3	96.7
261	Pulpmills	925.4	-	925.4	.8860	819.9	717.9	87.6
262	Papermills, except building paper	418.0	-198.0	220.0	.8443	185.7	327.5	176.4
263	Paperboard mills	611.6	-175.3	436.3	.8688	379.1	420.7	111.0
264	Miscellaneous converted paper products	389.6	+373.3	762.9	.8110	618.7	386.9	62.5
265	Paperboard containers and boxes	92.5	-	92.5	.9429	87.2	61.5	70.5
266	Building paper and board mills	14.9	-	14.9	.6000	8.9	9.7	109.0
27	Printing and publishing	681.9	+48.6	730.5	.8890	649.4	421.9	65.0
271	Newspapers	7.0	+.4	7.4	1.0	7.4	3.3	44.6
272	Periodicals	185.2	+12.4	197.6	.8235	162.7	63.5	39.0
273	Books	314.9	+23.4	338.3	.8878	300.3	218.0	72.6
274	Miscellaneous publishing	.6	+12.5	13.1	1.0	13.1	23.9	182.4
275	Commercial printing	153.0	+3.6	156.6	.9744	152.6	54.2	35.5
276	Manifold business forms	2.0	+.1	2.1	.8000	1.7	30.9	1,817.6
277	Greeting card publishing	6.7	+.4	7.1	.7500	5.3	7.8	147.2
278	Blankbooks and bookbinding	7.3	+.5	7.8	.7500	5.8	8.8	151.7
279	Printing trade services	5.1	-4.7	.4	1.0	.4	11.4	2,850.0

See footnotes at end of table.

Code	Industry group	Value of exports at port of exportation			F.O.B. adjustment factor[3]	Value of exports, f.o.b. producing plant		
		Summary totals[1] (million dollars)	Classification adjustment[2] (million dollars)	Adjusted totals (million dollars)		Estimated total, f.o.b. plant (col. C x col. D) (million dollars)	Directly reported[4] (million dollars)	Reported exports as percent of estimated exports
		A	B	C	D	E	F	G
28	Chemicals and allied products	10,653.6	-	10,653.6	.8885	9,465.7	7,259.6	76.7
281	Industrial inorganic chemicals	1,652.3	-22.4	1,629.9	.9115	1,485.6	635.4	42.8
282	Plastics materials and synthetics	1,776.3	-	1,776.3	.9150	1,625.3	1,342.0	82.6
283	Drugs	1,482.8	-	1,482.8	.8694	1,289.1	884.1	68.6
284	Soap, cleaners and toilet goods	385.1	+22.4	407.5	.9027	367.8	293.4	79.8
285	Paints and allied products	165.5	-	165.5	.8118	134.3	112.6	83.8
286	Industrial organic chemicals	2,946.1	-	2,946.1	.9062	2,669.7	2,921.1	109.4
287	Agricultural chemicals	1,153.6	-	1,153.6	.8549	986.2	755.3	76.6
289	Miscellaneous chemical products	1,091.9	-	1,091.9	.8317	908.1	315.9	34.8
29	Petroleum and coal products	1,327.6	-	1,327.6	.8373	1,111.6	1,041.5	93.7
291	Petroleum refining	1,053.5	-173.2	880.3	.8389	738.5	816.0	110.5
295	Paving and roofing materials	34.1	-	34.1	.7778	26.5	10.3	38.9
299	Miscellaneous petroleum, coal products	239.9	+173.2	413.1	.8389	346.5	215.3	62.1
30	Rubber and miscellaneous plastics products	1,547.8	+82.6	1,630.4	.8653	1,410.8	1,078.1	76.4
301	Tires and inner tubes	309.0	-	309.0	.8349	258.0	237.0	91.9
302	Rubber and plastics footwear	6.3	+.5	6.8	.5000	3.4	1.5	44.1
303	Reclaimed rubber	.9	-	.9	1.0	.9	(Z)	(Z)
304	Rubber and plastics hose and belting	83.0	-	83.0	.8750	72.6	54.1	74.5
306	Fabricated rubber products, n.e.c.	250.9	+17.8	268.7	.8657	232.6	186.0	80.0
307	Miscellaneous plastics products	897.7	+64.3	962.0	.8766	843.3	599.5	71.1
31	Leather and leather products	264.4	+21.7	286.1	.9441	270.1	121.0	44.9
311	Leather tanning and finishing	149.8	+11.0	160.8	.9595	154.3	63.4	41.1
313	Boot and shoe cut stock and findings	8.3	+.5	8.8	1.0	8.8	3.1	35.2
314	Footwear, except rubber	35.3	+2.8	38.1	.8333	31.7	25.1	79.2
315	Leather gloves and mittens	6.8	+.4	7.2	1.0	7.2	(Z)	(Z)
316	Luggage	41.2	+2.7	43.9	1.0	43.9	22.7	51.7
317	Women's handbags and purses	8.1	+.6	8.7	1.0	8.7	2.9	33.3
319	Leather goods, n.e.c.	14.9	+3.7	18.6	.8333	15.5	3.7	23.9
32	Stone, clay, and glass products	1,159.5	-	1,159.5	.8599	997.1	866.3	86.9
321	Flat glass	120.8	-16.0	104.8	.8768	91.9	97.9	106.5
322	Glass, pressed or blown	188.0	+36.5	224.5	.8846	198.6	160.7	80.9
323	Products of purchased glass	204.8	-20.5	184.3	.8768	161.6	74.0	45.8
324	Cement, hydraulic	23.7	-	23.7	.7500	17.8	9.7	54.5
325	Structural clay products	77.4	-	77.4	.9111	70.5	54.9	77.9
326	Pottery and related products	77.8	-	77.8	.9000	70.0	45.6	65.1
327	Concrete, gypsum, and plaster products	34.8	-	34.8	.7273	25.3	17.9	70.8
328	Cut stone and stone products	2.2	-	2.2	1.0	2.2	.6	27.3
329	Miscellaneous nonmetallic mineral products	430.0	-	430.0	.8352	359.1	405.1	112.8
33	Primary metal industries	2,911.8	+27.5	2,939.3	.9498	2,791.7	2,159.1	77.3
331	Blast furnace, basic steel products	1,135.0	+27.1	1,162.1	.9164	1,064.9	650.0	61.0
332	Iron and steel foundries	354.2	-	354.2	.9462	355.1	435.0	122.5
333	Primary nonferrous metals	415.2	-165.4	249.8	.9731	243.1	274.2	112.8
334	Secondary nonferrous metals	-	+159.7	159.7	.8889	142.0	55.9	39.4
335	Nonferrous rolling and drawing	922.0	+6.1	928.1	.9731	903.1	622.4	68.9
336	Nonferrous foundries	29.8	-	29.8	.9357	27.9	58.3	209.0
339	Miscellaneous primary metal products	55.5	-	55.5	1.0	55.5	63.4	114.2
34	Fabricated metal products	4,527.5	+29.3	4,556.8	.9053	4,125.3	3,514.4	85.2
341	Metal cans and shipping containers	59.4	-	59.4	.9643	57.3	78.1	136.3
342	Cutlery, handtools, and hardware	547.0	+37.8	584.8	.8547	499.8	353.2	70.7
343	Plumbing, heating, except electric	156.3	+11.1	167.4	.8193	137.2	122.5	89.3
344	Fabricated structural metal products	972.5	-	972.5	.9419	916.0	748.5	81.7
345	Screw machine products, bolts, etc.	169.8	+12.4	182.2	.9101	165.8	142.5	85.9
346	Metal forgings and stampings	934.8	-	934.8	.9630	900.2	1,093.7	121.5
348	Ordnance and accessories, n.e.c.	534.4	-	534.4	.9301	497.0	213.5	43.0
349	Miscellaneous fabricated metal products	1,153.3	-32.0	1,121.3	.8489	951.9	709.2	74.5
35	Machinery, except electrical	21,448.2	-	21,448.2	.8925	19,142.5	15,218.7	79.5
351	Engines and turbines	2,140.0	-	2,140.0	.9257	1,981.0	1,940.9	98.0
352	Farm and garden machinery	1,618.7	-	1,618.7	.8656	1,401.1	1,044.4	74.5
353	Construction and related machinery	6,092.0	-	6,092.0	.8667	5,279.9	4,682.0	88.7
354	Metalworking machinery	1,245.9	-	1,245.9	.9179	1,143.6	978.9	85.6
355	Special industry machinery	2,859.1	-	2,859.1	.9344	2,671.5	1,259.4	47.1
356	General industrial machinery	2,248.2	-	2,248.2	.8902	2,001.3	1,526.8	76.3
357	Office and computing machines	3,777.2	-	3,777.2	.8949	3,380.2	2,251.7	66.6
358	Refrigeration and service machines	1,400.3	-	1,400.3	.8756	1,226.1	1,043.5	85.1
359	Miscellaneous machinery, except electrical	66.8	-	66.8	.8587	57.4	161.1	280.7

See footnotes at end of table.

Code	Industry group	Value of exports at port of exportation			F.O.B. adjustment factor[3]	Value of exports, f.o.b. producing plant		
		Summary totals[1] (million dollars)	Classification adjustment[2] (million dollars)	Adjusted totals (million dollars)		Estimated total, f.o.b. plant (col. C x col. D) (million dollars)	Directly reported[4] (million dollars)	Reported exports as percent of estimated exports
		A	B	C	D	E	F	G
36	Electric and electronic equipment...	8,819.9	+4.5	8,824.4	.9135	8,061.0	6,775.6	84.1
361	Electric distributing equipment.....	427.1	-	427.1	.9236	394.5	332.0	84.2
362	Electrical industrial apparatus.....	1,069.5	+153.6	1,223.1	.9248	1,131.1	785.6	69.5
363	Household appliances.....	687.0	-	687.0	.8405	577.4	514.4	89.1
364	Electric lighting, wiring equipment...	626.1	-	626.1	.8623	539.9	281.7	52.2
365	Radio and TV receiving equipment.....	542.0	-	542.0	.7969	431.9	288.1	66.7
366	Communication equipment.....	1,808.4	-	1,808.4	.9786	1,769.7	2,361.0	133.4
367	Electronic components, accessories....	2,615.0	-	2,615.0	.9483	2,479.8	1,587.9	64.0
369	Miscellaneous electrical equipment and supplies.....	1,044.8	-149.1	895.7	.8224	736.6	625.0	84.8
37	Transportation equipment.....	18,887.6	+182.5	19,070.1	.9288	17,712.3	15,072.0	85.1
371	Motor vehicles and equipment.....	10,593.3	-	10,593.3	.9004	9,538.2	6,636.1	69.6
372	Aircraft and parts.....	6,637.7	+182.5	6,820.2	.9719	6,628.6	7,113.8	107.3
373	Ship, boat building, repairing.....	266.2	-	266.2	.9594	255.4	275.2	107.8
374	Railroad equipment.....	289.9	-	289.9	.9613	278.7	426.1	152.9
375	Motorcycles, bicycles, and parts.....	39.3	-	39.3	.8750	34.5	5.7	16.5
376	Guided missiles and space vehicles....	448.4	-	448.4	.9769	438.0	317.0	72.4
379	Miscellaneous transportation equipment	612.7	-	612.7	.8789	538.5	298.1	55.4
38	Instruments and related products....	4,512.7	+342.4	4,855.1	.8723	4,235.1	3,517.1	83.0
381	Engineering, scientific instruments...	224.6	+18.0	242.6	.9254	224.5	225.3	100.4
382	Measuring and controlling devices.....	1,786.4	+119.3	1,905.7	.9414	1,794.0	1,054.9	58.8
383	Optical instruments and lenses.....	162.5	+13.7	176.2	.8108	142.9	218.1	152.6
384	Medical instruments and supplies.....	671.2	+76.0	747.2	.7518	561.7	444.4	79.1
385	Ophthalmic goods.....	67.7	+4.5	72.2	.5600	40.4	50.0	123.8
386	Photographic equipment and supplies...	1,436.4	+94.7	1,531.1	.8582	1,314.0	1,434.5	109.2
387	Watches, clocks, and watchcases.....	163.9	+16.2	180.1	.8750	157.6	89.9	57.0
39	Miscellaneous manufacturing industries.....	1,568.6	+111.2	1,679.8	.8475	1,423.6	759.6	53.4
391	Jewelry, silver, and plated ware.....	464.9	+34.0	498.9	.9286	463.3	133.5	28.8
392	Musical instruments.....	128.2	+9.6	137.8	.9149	126.1	40.9	72.1
394	Toys and sporting goods.....	342.0	+23.4	365.4	.8327	296.8	181.7	61.2
395	Pens, office and art goods.....	170.5	+10.4	180.9	.7869	142.4	107.9	75.8
396	Costume jewelry and notions.....	72.7	+5.1	77.8	.8065	62.7	32.6	52.0
399	Miscellaneous manufactures.....	390.3	+28.7	419.0	.7931	332.3	213.1	64.1
--	Manufactured products not distributed by SIC group.....	1,488.9	-1,488.9	-	-	-	-	-

Note: The detail may not add to the total due to independent rounding.

- Represents zero. n.e.c. Not elsewhere classified. (Z) Less than one-half the unit of measurement shown.

[1]Data were developed by three-digit industry group from FT-610, U.S. Exports/Domestic Merchandise, SIC Based Products by World Area and summed to the two-digit level.

[2]The foreign trade data which consist of two or more three-digit industry group classifications were adjusted to produce figures more comparable with the standard industrial classification system. For example, this adjustment procedure accounts for $680.8 million in Industry 214, Tobacco Stemming and Redrying, which was classified as an agricultural product in the foreign trade data, and for military apparel, which was classified only at the two-digit level in the foreign trade data.

The figure for miscellaneous exports ($1,488.9 million) includes only export shipments of $250 or less that were not distributed by SIC group in the foreign trade data. This figure was allocated to those three-digit industry groups that were identified as having some export shipments of $250 or less.

[3]Data were derived from unpublished Bureau of Economic Analysis (BEA) tabulations, forecasted to appear in the April 1979 issue of the Survey of Current Business, table A. The adjustment factors in column D are the BEA tabulation ratios of producer prices to purchased prices, where the producer price is equal to the purchaser price less transportation costs and wholesale and retail trade margins.

[4]The directly reported export values shown in column F may exceed the official export values shown in column E. Refer to appendix J, page J-2, for an explanation of why this situation may occur.

APPENDIX L. Product Reference List

Reproduced in this appendix is the product reference list used in the 1977 survey of distribution of manufacturers' sales by class of customer. See the introduction to this report for a description of the companies receiving the Product Group Reference List.

FORM NC-K4M (1) U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

PRODUCT GROUP REFERENCE LIST

DISTRIBUTION OF SALES CLASS OF CUSTOMER

1977 CENSUS OF MANUFACTURES

The purpose of this survey is to provide measures of the distribution of shipments to specified classes of customers with reasonable accuracy at the national level. If your records are not kept or not tabulated in this form, please provide your best approximations. An example of how to report appears on pages 2 and 3.

PRODUCT GROUP REFERENCE LIST

This booklet lists the Product Groups for which you are to report shipments or sales to specified classes of customers. Each Product Group is defined to include all those products with common first four digits of their codes for which value of shipments was reported in item 18 of your Census of Manufactures report form.

How to Choose the Appropriate PRODUCT GROUP in This List

Examination of the title of each of the lines of activity described below should assist you in selecting the proper page reference and product group listing describing the products applicable to your establishment. Each of the lists has been arranged to include most of the products manufactured by establishments engaged in the major lines of activity described below:

Major line of manufacturing activity:	Page
Food and Kindred Products	4
Tobacco Products	5
Textile Mill Products	5
Apparel and Textile Products	5
Lumber and Wood Products, Except Furniture	5
Furniture and Fixtures	5
Paper and Allied Products	6
Printing and Publishing	6
Chemicals and Allied Products	6
Petroleum and Coal Products	6
Rubber and Miscellaneous Plastics Products	6
Leather and Leather Products	6
Stone, Clay, Glass, and Concrete Products	6, 7
Primary Metals Industries	7
Fabricated Metal Products	7
Machinery, Except Electrical	7, 8
Electrical and Electronic Equipment	8
Transportation Equipment	8
Instruments and Related Products	8
Miscellaneous Manufacturing Industries	8

HOW TO REPORT

In order to complete your NC-K4M, Distribution of Sales by Class of Customer report form, three steps should be taken as shown in the following illustration. Reports from company X which has three manufacturing plants are used in this example.

▶ **STEP 1 – Assemble the 1977 Census of Manufactures reports for your manufacturing plants. Extract the value figures for products shipped from column (E), item 18, for all Census product codes (col. (B-1)) having the same first four digits. Include resales, but exclude contract and other miscellaneous receipts.**

Plant No. 1 → (Form MC-33B)

5 Products and services (A)				Census product code 581 (B-1)	Unit of measure for quantities (B-2)	Products shipped and other receipts, including interplant transfers: Quantity 583 (D)	Products shipped and other receipts, including interplant transfers: Value, f.o.b. plant (THOUSANDS OF DOLLARS) 584 (E)	Transfers to other plants of your company: Quantity 585 (F)	Transfers to other plants of your company: Value, f.o.b. plant (THOUSANDS OF DOLLARS) 586 (G)
GRAY IRON CASTINGS (EXCLUDE DUCTILE IRON)	Molds and stools for heavy steel ingots (33216)			33216 11 0	↑ Short tons ↓	900	$ 110	900	$ 110
	Cast iron pressure pipe and fittings (33217)	Cast iron pressure pipe	3" up to and including 10" (inside diameter)	33217 32 4		540	100		
			12" up to and including 20" (inside diameter)	33217 34 0					
	Other gray iron castings	Rolls for rolling mills		33219 31 2					
		Automotive uses		33219 39 5					
		Construction and utility uses		33219 49 4					
		All other uses		33219 98 1		500	200		
MISCELLANEOUS RECEIPTS	Sales of scrap refuse			99980 13 8			10		
	Other miscellaneous receipts			99980 98 9					
RESALES	Sales of products **bought and sold without further manufacture, processing, or assembly** in this establishment. *The cost of such items should be reported in item 5b.*			99989 00 6			20		
TOTAL *Sum of lines 1–30, column (E)*				77000 00 8	→	→	$ 440		

Plant No. 2 → (Form MC-35J)

5 Products and services (A)				Census product code 581 (B-1)	Unit of measure for quantities (B-2)	Products shipped and other receipts: Quantity 583 (D)	Products shipped and other receipts: Value, f.o.b. plant (E) 584 Millions 000	Thousands 000	Dollars 000
PAPER INDUSTRIES MACHINERY AND PARTS AND ATTACHMENTS (35540)	Pulp- and paper-industries machinery (new)	Paper and paperboard converting equipment	Bagmaking machines, including shipping sack machines, and envelope making machines	35540 51 7	↑ Units ↓	2	$	40	
			Corrugated boxmaking machines	35540 53 3					
			Box, carton, and shipping containers making machines, except corrugated box machines	35540 54 1	·		1	110	
			Toilet roll and napkin making machines	35540 56 6	No. of units				
			Other pulp mill machinery including digesters and recovery room equipment — *Specify kind*	35540 29 3					
Gray iron castings (other than white and ductile iron, pressure and soil pipe, and fittings and rolls for rolling mills)				33219 98 1	Short tons	3	1	120	
Offset multicolor lithographic printing presses (sheet-fed), including perfecting, 4-color, and over				35551 30 8	Complete presses	4		340	
MISCELLANEOUS RECEIPTS	Receipts for installation (or construction) of products of this establishment			99980 31 0					
	Receipts for repair work			99980 61 7					
	Other miscellaneous receipts			99980 98 9					
RESALES	Sales of products **bought and sold without further manufacture, processing, or assembly** in this establishment. *The cost of such items should be reported in item 5b.*			99989 00 6				100	
TOTAL *Sum of lines 1–50, column (E)*				77000 00 8	→	→	$ 2	710	

Plant No. 3 → (Form MC-35K)

5 Products and services (A)			Census product code 581 (B-1)	Unit of measure for quantities (B-2)	Products shipped and other receipts: Quantity 583 (D)	Products shipped and other receipts: Value, f.o.b. plant (E) 584 Millions 000	Thousands 000	Dollars 000
PRINTING PRESSES, OFFSET LITHOGRAPHIC (35551)	Sheet-fed	Single color	35551 23 3	↑ Complete presses ↓	5	$	100	
		Multicolor, including perfecting, 2 and 3 color	35551 26 6					
		Multicolor, including perfecting, 4 color and over	35551 30 8					
	Web-fed (Roll-fed)	Business forms presses	35551 33 2					
		Commercial (including heat-set)	35551 35 7					
		Newspaper	35551 32 4					
		All other	35551 36 5					
OTHER PRINTING	Electrotyping and stereotyping machinery and equipment		35555 62 2		50		200	
	Automatic plate processors		35555 63 0					
DUPLICATING MACHINES, EXCEPT PARTS AND ATTACHMENTS Corresponds to item codes 4111–4112, 4121–4122, 4140 and 4152, on Census Form MA-35R, Office, Computing and Accounting Machines, for 1977			35793 00 9			$	40	

HOW TO REPORT – Con.

▶ **STEP 2 – Combine the data for all products having the same first four digits. (These are referred to in the reference list as product groups.) Also allocate the value of resales (99989 00 6) by type of product.**

Product Group 3321

Plant No. 1	
33216 11 0	110
33217 32 4	100
33219 98 1	200
99989 00 6	20
Plant No. 2	
33219 98 1	1,120
Total	1,550

Product Group 3554

Plant No. 2	
35540 51 7	40
35540 54 1	1,110
99989 00 6	100
Total	1,250

Product Group 3555

Plant No. 2	
35551 30 8	340
Plant No. 3	
35551 23 3	100
35555 62 2	200
Total	640

Product Group 3579

Plant No. 3	
35793 00 9	40
Total	40

▶ **STEP 3 – For each product group estimate the value of shipments that went to various classes of customers listed on the NC-K4M report form and then enter the data accordingly.**

Form NC-K4M

DISTRIBUTION OF SALES BY CLASS OF CUSTOMER DURING 1977 (See Product Group Reference List for codes and descriptions)

▶ *Enter 4-digit product group codes (See product group reference list.) If you need additional columns, use extra worksheets.*

▶ 1. Distribution of sales by class of customer		Line No.	Code 3321 Mil. $000	Thou. 000	Dol. 000	Code 3554 Mil. $000	Thou. 000	Dol. 000	Code 3555 Mil. $000	Thou. 000	Dol. 000	Code 3579 Mil. $000	Thou. 000	Dol. 000	Code Mil. $000	Thou. 000	Dol. 000	Code Mil. $000
Shipments to other establishments of this company	Wholesale establishments (include those shipments to or on order from your separate sales branches, sales offices, and administrative offices).	1	$	100		$			$			$			$			$
	Retail stores and outlets	2																
	Manufacturing establishments (usually for further processing)	3		110														
	Other establishments (mining, construction service, transportation, communication, etc.)	4								40								
Shipments to other companies, governments, individuals, and for export	Wholesalers	5								500								
	Retailers	6	1	340														
	Manufacturers	7					900											
	Federal Government	8								100			40					
	Other (State and local governments; construction, mining, utility, and transportation companies; private and public institutions; banks, restaurants, hotels, and other service-type businesses; and for exports. Include also direct sales to individual households, farmers, etc.)	9					350											
Total *(Sum of lines 1–9 should approximate the sum of product shipments reported in Item 18, of your Census of Manufactures reports, including an allowance for any products bought and sold without further fabrication.)* ▶		10	$ 1	550		$ 1	250		$	640		$	40		$			$
2. Approximate percent of shipments reported on line 10 that are products bought and sold (resales) without further fabrication by the establishment making the shipment.		11		1 %			8 %			0 %			0 %			%		
3. If data are reported on line 9 for **ANY PRODUCT GROUP**, do they include shipments to State and local governments and or construction companies? 1 [X] Yes 2 [ ] No. If "Yes," estimate the percentage breakdown of shipments reported on line 9 for the three categories listed on lines 12 through 14.																		
a. State and local governments		12		%			10 %			%			%			%		
b. Construction companies		13		%			90 %			%			%			%		
c. All other		14		%			%			%			%			%		
d. Total *(Sum of lines 12–14 should equal 100%)* ▶		15		%			100 %			%			%			%		

FORM NC-K4M (8-12-77)

SPECIAL INSTRUCTIONS

The following product groups require special instructions for reporting to certain customers. Please note the instructions for the group codes below before completing the form. These products are designated by an asterisk on the reference list.

Group code	INSTRUCTIONS
2011, 2016, 2017	Shipments of these products directly from your manufacturing establishments to meat jobbers, wholesalers, and retailers should be combined and reported as shipments to wholesalers on line 5.
2211, 2221, 2231, 2241, 2251, 2252, 2253, 2254, 2257, 2258, 2259, 2261, 2262, 2269, 2271, 2272, 2279, 2281, 2282, 2283, 2284, 2291, 2292, 2293 2294, 2295, 2296, 2297, 2298, 2299, 2391, 2392, 2393, 2394, 2395, 2396, 2397	Report shipments from your manufacturing establishments on orders from piece goods converters as shipments to wholesalers on line 5. Report shipments to apparel jobbers as shipments to other manufacturers on line 7.
2311 – 2389	Report total on line 10. Do not report by class of customer.
2711 – 2795	Report total on line 10. Do not report by class of customer.
3721, 3761	Shipments of this group directly from your manufacturing establishments under the Mutual Security Program and the Military Defense Assistance Program should be reported as shipments to the Federal Government on line 8.

PRODUCT GROUP REFERENCE LIST

NOTE – Group codes shown in column (b) should correspond to the first 4-digits of the Census Product Code as reported in item 18 on Form MA-100, for the 1977 Census of Manufactures.

Product group title (a)	Group code (b)	Product group title (a)	Group code (b)
FOOD AND KINDRED PRODUCTS		**FOOD AND KINDRED PRODUCTS – Con.**	
* Meatpacking plants	2011	Bread, cake, related products	2051
Sausages, other prepared meats	2013	Cookies and crackers	2052
* Poultry dressing plants	2016	Raw cane sugar	2061
* Poultry and egg processing	2017	Cane sugar refining	2062
Creamery butter	2021	Beet sugar	2063
Cheese, natural and processed	2022	Confectionery products	2065
Condensed and evaporated milk	2023	Chocolate and cocoa products	2066
Ice cream and frozen desserts	2024	Chewing gum	2067
Fluid milk	2026	Cottonseed oil mills	2074
Canned specialties	2032	Soybean oil mills	2075
Canned fruits and vegetables	2033	Vegetable oil mills, n.e.c.	2076
Dehydrated fruits, vegetables, soup	2034	Animal and marine fats and oils	2077
Pickles, sauces, salad dressing	2035	Shortening and cooking oils	2079
Frozen fruits and vegetables	2037	Malt beverages	2082
Frozen specialties	2038	Malt	2083
Flour, other grain mill products	2041	Wines, brandy, brandy spirits	2084
Cereal breakfast foods	2043	Distilled liquor, except brandy	2085
Rice milling	2044	Bottled and canned soft drinks	2086
Blended and prepared flour	2045	Flavoring extracts, sirups, n.e.c.	2087
Wet corn milling	2046	Canned and cured seafoods	2091
Dog, cat, and other pet food	2047	Fresh or frozen packaged fish	2092
Prepared feeds, n.e.c.	2048	Roasted coffee	2095
		Manufactured ice	2097
		Macaroni and spaghetti	2098
		Food preparations, n.e.c.	2099

* See Special Instructions above for corresponding code.

PRODUCT GROUP REFERENCE LIST – Con.

Product group title (a)	Group code (b)
TOBACCO PRODUCTS	
Cigarettes	2111
Cigars	2121
Chewing and smoking tobacco	2131
Tobacco stemming and redrying	2141
TEXTILE MILL PRODUCTS	
Weaving mills, cotton	2211
* Weaving mills, manmade fiber	2221
* Weaving, finishing mills, wool	2231
* Narrow fabric mills	2241
* Women's hosiery, except socks	2251
* Hosiery, n.e.c.	2252
* Knit outerwear mills	2253
* Knit underwear mills	2254
* Circular knit fabric mills	2257
* Warp knit fabric mills	2258
* Knitting mills, n.e.c.	2259
* Finishing plants, cotton	2261
* Finishing plants, manmade fiber	2262
* Finishing plants, n.e.c.	2269
* Woven carpets and rugs	2271
* Tufted carpets and rugs	2272
* Carpets and rugs, n.e.c.	2279
* Yarn mills, except wool	2281
* Throwing and winding mills	2282
* Wool yarn mills	2283
* Thread mills	2284
* Felt goods, except woven and hats	2291
* Lace goods	2292
* Paddings and upholstery filling	2293
* Processed textile waste	2294
* Coated fabrics, not rubberized	2295
* Tire cord and fabric	2296
* Nonwoven fabrics	2297
* Cordage and twine	2298
* Textile goods, n.e.c.	2299
APPAREL AND OTHER TEXTILE PRODUCTS	
* Men's and boys' suits and coats	2311
* Men's, boys' shirts, nightwear	2321
* Men's and boys' underwear	2322
* Men's and boys' neckwear	2323
* Men's, boys' separate trousers	2327
* Men's and boys' work clothing	2328
* Men's and boys' clothing, n.e.c.	2329
* Women's, misses' blouses	2331
* Women's and misses' dresses	2335
* Women's, misses' suits, coats	2337
* Women's, misses' outerwear, n.e.c.	2339
* Women's, children's underwear	2341
* Brassieres and allied garments	2342
* Millinery	2351
* Hats and caps, except millinery	2352

Product group title (a)	Group code (b)
APPAREL AND OTHER TEXTILE PRODUCTS – Con.	
* Children's dresses and blouses	2361
* Children's coats and suits	2363
* Children's outerwear, n.e.c.	2369
* Fur goods	2371
* Fabric dress and work gloves	2381
* Robes and dressing gowns	2384
* Waterproof outergarments	2385
* Leather, sheep lined clothing	2386
* Apparel belts	2387
* Apparel and accessories, n.e.c.	2389
* Curtains and draperies	2391
* Housefurnishings, n.e.c.	2392
* Textile bags	2393
* Canvas and related products	2394
* Pleating and stitching	2395
* Automotive, apparel trimmings	2396
* Schiffli machine embroideries	2397
* Fabricated textile products, n.e.c.	2399
LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE	
Logging camps, log contractors	2411
Sawmills, planing mills, general	2421
Hardwood dimension and flooring	2426
Special product sawmills, n.e.c.	2429
Millwork	2431
Wood kitchen cabinets	2434
Hardwood veneer and plywood	2435
Softwood veneer and plywood	2436
Structural wood members, n.e.c.	2439
Nailed wood boxes and shook	2441
Wood pallets and skids	2448
Wood containers, n.e.c.	2449
Mobile homes	2451
Prefabricated wood buildings	2452
Wood preserving	2491
Particleboard	2492
Wood products, n.e.c.	2499
FURNITURE AND FIXTURES	
Wood household furniture	2511
Upholstered household furniture	2512
Metal household furniture	2514
Mattresses and bedsprings	2515
Wood TV and radio cabinets	2517
Household furniture, n.e.c.	2519
Wood office furniture	2521
Metal office furniture	2522
Public building, related furniture	2531
Wood partitions and fixtures	2541
Metal partitions and fixtures	2542
Drapery hardware, blinds, shades	2591
Furniture and fixtures, n.e.c.	2599

* See Special Instructions on page 4 for corresponding code.

FORM NC-K4M(1)

PRODUCT GROUP REFERENCE LIST – Con.

Product group title (a)	Group code (b)
PAPER AND ALLIED PRODUCTS	
Pulpmills	2611
Papermills, excluding building paper	2621
Paperboard mills	2631
Paper coating and glazing	2641
Envelopes	2642
Bags, except textile bags	2643
Die-cut paper and board	2645
Pressed and molded pulp goods	2646
Sanitary paper products	2647
Stationery products	2648
Converted paper products, n.e.c.	2649
Folding paperboard boxes	2651
Setup paperboard boxes	2652
Corrugated, solid fiber boxes	2653
Sanitary food containers	2654
Fiber cans, drums, similar products	2655
Building paper and board mills	2661
PRINTING AND PUBLISHING	
* Newspapers	2711
* Periodicals	2721
* Book publishing	2731
* Book printing	2732
* Miscellaneous publishing	2741
* Commercial printing, letterpress	2751
* Commercial printing, lithograph	2752
* Engraving and plate printing	2753
* Commercial printing, gravure	2754
* Manifold business forms	2761
* Greeting card publishing	2771
* Blankbooks, looseleaf binders	2782
* Bookbinding and related work	2789
* Typesetting	2791
* Photoengraving	2793
* Electrotyping and stereotyping	2794
* Lithograph platemaking services	2795
CHEMICALS AND ALLIED PRODUCTS	
Alkalies and chlorine	2812
Industrial gases	2813
Inorganic pigments	2816
Industrial inorganic chemicals, n.e.c.	2819
Plastics materials and resins	2821
Synthetic rubber	2822
Cellulosic manmade fibers	2823
Organic fibers, noncellulosic	2824
Biological products	2831
Medicinals and botanicals	2833
Pharmaceutical preparations	2834
Soap and other detergents	2841
Polishes and sanitation goods	2842
Surface active agents	2843
Toilet preparations	2844

Product group title (a)	Group code (b)
CHEMICALS AND ALLIED PRODUCTS – Con.	
Paints and allied products	2851
Gum and wood chemicals	2861
Cyclic crudes and intermediates	2865
Industrial organic chemicals, n.e.c.	2869
Nitrogenous fertilizers	2873
Phosphatic fertilizers	2874
Fertilizers, mixing only	2875
Agricultural chemicals, n.e.c.	2879
Adhesives and sealants	2891
Explosives	2892
Printing ink	2893
Carbon black	2895
Chemical preparations, n.e.c.	2899
PETROLEUM AND COAL PRODUCTS	
Petroleum refining	2911
Paving mixtures and blocks	2951
Asphalt felts and coatings	2952
Lubricating oils and grease	2992
Petroleum, coal products, n.e.c.	2999
RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS	
Tires and inner tubes	3011
Rubber and plastics footwear	3021
Reclaimed rubber	3031
Rubber, plastics hose, belting	3041
Fabricated rubber products, n.e.c.	3069
Miscellaneous plastics products	3079
LEATHER AND LEATHER PRODUCTS	
Leather tanning and finishing	3111
Boot, shoe cut stock, findings	3131
House slippers	3142
Men's footwear, except athletic	3143
Women's footwear, except athletic	3144
Footwear, except rubber, n.e.c.	3149
Leather gloves and mittens	3151
Luggage	3161
Women's handbags and purses	3171
Personal leather goods, n.e.c.	3172
Leather goods, n.e.c.	3199
STONE, CLAY, GLASS AND CONCRETE PRODUCTS	
Flat glass	3211
Glass containers	3221
Pressed and blown glass, n.e.c.	3229
Products of purchased glass	3231
Cement, hydraulic	3241

* See Special Instructions on page 4 for corresponding code.

PRODUCT GROUP REFERENCE LIST – Con.

Product group title (a)	Group code (b)
STONE, CLAY, GLASS AND CONCRETE PRODS. – Con.	
Brick and structural clay tile	3251
Ceramic wall and floor tile	3253
Clay refractories	3255
Structural clay products, n.e.c.	3259
Vitreous plumbing fixtures	3261
Vitreous china food utensils	3262
Fine earthenware food utensils	3263
Porcelain electrical supplies	3264
Pottery products, n.e.c.	3269
Concrete block and brick	3271
Concrete products, n.e.c.	3272
Ready-mixed concrete	3273
Lime	3274
Gypsum products	3275
Cut stone and stone products	3281
Abrasive products	3291
Asbestos products	3292
Gaskets, packing, sealing devices	3293
Minerals, ground or treated	3295
Mineral wool	3296
Nonclay refractories	3297
Nonmetal, mineral products, n.e.c.	3299
PRIMARY METAL INDUSTRIES	
Blast furnaces and steel mills	3312
Electrometallurgical products	3313
Steel wire and related products	3315
Cold finishing of steel shapes	3316
Steel pipe and tubes	3317
Gray iron foundries	3321
Malleable iron foundries	3322
Steel investment foundries	3324
Steel foundries, n.e.c.	3325
Primary copper	3331
Primary lead	3332
Primary zinc	3333
Primary aluminum	3334
Primary nonferrous metals, n.e.c.	3339
Secondary nonferrous metals	3341
Copper rolling and drawing	3351
Aluminum sheet, plate, and foil	3353
Aluminum extruded products	3354
Aluminum rolling, drawing, n.e.c.	3355
Nonferrous rolling, drawing, n.e.c.	3356
Nonferrous wiredrawing, insulating	3357
Aluminum foundries	3361
Brass, bronze, copper foundries	3362
Nonferrous foundries, n.e.c.	3369
Metal heat treating	3398
Primary metal products, n.e.c.	3399
FABRICATED METAL PRODUCTS	
Metal cans	3411
Metal barrels, drums, and pails	3412

Product group title (a)	Group code (b)
FABRICATED METAL PRODUCTS – Con.	
Cutlery	3421
Hand and edge tools, n.e.c.	3423
Handsaws and saw blades	3425
Hardware, n.e.c.	3429
Metal sanitary ware	3431
Plumbing fittings, brass goods	3432
Heating equipment, except electric	3433
Fabricated structural metal	3441
Metal doors, sash, and trim	3442
Fabricated platework, boiler shops	3443
Sheet metalwork	3444
Architectural metalwork	3446
Prefabricated metal buildings	3448
Miscellaneous metalwork	3449
Screw machine products	3451
Bolts, nuts, rivets, washers	3452
Iron and steel forgings	3462
Nonferrous forgings	3463
Automotive stampings	3465
Crowns and closures	3466
Metal stampings, n.e.c.	3469
Plating and polishing	3471
Metal coating, allied services	3479
Small arms ammunition	3482
Ammunition, excluding small arms, n.e.c.	3483
Small arms	3484
Ordnance and accessories, n.e.c.	3489
Steel springs, except wire	3493
Valves and pipe fittings	3494
Wire springs	3495
Miscellaneous fabricated wire products	3496
Metal foil and leaf	3497
Fabricated pipe and fittings	3498
Fabricated metal products, n.e.c.	3499
MACHINERY, EXCEPT ELECTRICAL	
Turbines, turbine generator sets	3511
Internal combustion engines, n.e.c.	3519
Farm machinery and equipment	3523
Lawn and garden equipment	3524
Construction machinery	3531
Mining machinery	3532
Oilfield machinery	3533
Elevators and moving stairways	3534
Conveyors and conveying equipment	3535
Hoists, cranes, and monorails	3536
Industrial trucks and tractors	3537

PRODUCT GROUP REFERENCE LIST – Con.

Product group title (a)	Group code (b)
MACHINERY, EXCEPT ELECTRICAL – Con.	
Machine tools, metal-cutting	3541
Machine tools, metal-forming	3542
Special dies, tools, jigs, etc.	3544
Machine tool accessories	3545
Power driven handtools	3546
Rolling mill machinery	3547
Metalworking machinery, n.e.c.	3549
Food products machinery	3551
Textile machinery	3552
Woodworking machinery	3553
Paper industries machinery	3554
Printing trades machinery	3555
Special industry machinery, n.e.c.	3559
Pumps and pumping equipment	3561
Ball and roller bearings	3562
Air and gas compressors	3563
Blowers and fans	3564
Industrial patterns	3565
Speed changers, drives, gears	3566
Industrial furnaces and ovens	3567
Power transmission equipment, n.e.c.	3568
General industrial machinery, n.e.c.	3569
Electronic computing equipment	3573
Calculating, accounting machines	3574
Scales, balances, except laboratory	3576
Office machines, typewriters, etc.	3579
Automatic merchandising machines	3581
Commercial laundry equipment	3582
Refrigeration, heating equipment	3585
Measuring and dispensing pumps	3586
Service industry machinery, n.e.c.	3589
Carburetors, pistons, rings, etc.	3592
Machinery, excluding electrical, n.e.c.	3599
ELECTRICAL AND ELECTRONIC EQUIPMENT	
Transformers	3612
Switchgear, switchboard apparatus	3613
Motors and generators	3621
Industrial controls	3622
Welding apparatus, electric	3623
Carbon and graphite products	3624
Electronic industrial apparatus, n.e.c.	3629
Household cooking equipment	3631
Household refrigerators, freezers	3632
Household laundry equipment	3633
Electric housewares and fans	3634
Household vacuum cleaners	3635
Sewing machines	3636
Household appliances, n.e.c.	3639
Electric lamps	3641
Current-carrying wiring devices	3643
Noncurrent-carrying wiring devices	3644
Residential lighting fixtures	3645
Commercial lighting fixtures	3646
Vehicular lighting equipment	3647
Lighting equipment, n.e.c.	3648
Radio and TV receiving sets	3651
Phono records, prerecorded tape	3652
Telephone, telegraph apparatus	3661
Radio, TV communication equipment	3662
Electron tubes, receiving type	3671
Cathode ray TV picture tubes	3672
Electron tubes, transmitting	3673
Semiconductors, related devices	3674
Electronic capacitors	3675
Electronic resistors	3676
Electronic coils, transformers	3677
Electronic connectors	3678
Electronic components, n.e.c.	3679

Product group title (a)	Group code (b)
ELECTRIC, ELECTRONIC EQUIPMENT – Con.	
Storage batteries	3691
Primary batteries, dry and wet	3692
X-ray apparatus and tubes	3693
Engine electrical equipment	3694
Electric equipment, supplies, n.e.c.	3699
TRANSPORTATION EQUIPMENT	
Motor vehicles and car bodies	3711
Truck and bus bodies	3713
Motor vehicle parts, accessories	3714
Truck trailers	3715
* Aircraft	3721
Aircraft engines, engine parts	3724
Aircraft equipment, n.e.c.	3728
Ship building and repairing	3731
Boat building and repairing	3732
Railroad equipment	3743
Motorcycles, bicycles, parts	3751
* Guided missiles, space vehicles	3761
Space propulsion units, parts	3764
Space vehicle equipment, n.e.c.	3769
Travel trailers and campers	3792
Tanks and tank components	3795
Transportation equipment, n.e.c.	3799
INSTRUMENTS AND RELATED PRODUCTS	
Engineering, scientific instruments	3811
Environmental controls	3822
Process control instruments	3823
Fluid meters, counting devices	3824
Instruments to measure electricity	3825
Measuring, controlling devices, n.e.c.	3829
Optical instruments and lenses	3832
Surgical, medical instruments	3841
Surgical appliances, supplies	3842
Dental equipment and supplies	3843
Ophthalmic goods	3851
Photographic equipment, supplies	3861
Watches, clocks, and watchcases	3873
MISCELLANEOUS MANUFACTURING INDUSTRIES	
Jewelry, precious metal	3911
Silverware and plated ware	3914
Jewelers' mats, lapidary work	3915
Musical instruments	3931
Dolls	3942
Games, toys, child's vehicles	3944
Sporting, athletic goods, n.e.c.	3949
Pens and mechanical pencils	3951
Lead pencils and art goods	3952
Marking devices	3953
Carbon paper and inked ribbons	3955
Costume jewelry	3961
Artificial flowers	3962
Buttons	3963
Needles, pins, and fasteners	3964
Brooms and brushes	3991
Signs and advertising displays	3993
Burial caskets	3995
Hard surface floor coverings	3996
Manufacturing industries, n.e.c.	3999

* See Special Instructions on page 4 for corresponding code.

PRODUCT GROUPS NOT SHOWN

The list of product groups and their primary SIC industry code shown below are products which, while tabulated in the survey, are not shown in the table of this report.

The following situations necessitated the exclusion of product groups from the tables:

1. The coverage of the product group was either too low (indicating serious underreporting), and in fewer instances, too high (indicating misclassification of products by respondents).

2. Some figures were statistically unreliable, indicating a pattern of distribution by class of customer not reasonably expected for the products in question.

3. Some data had to be suppressed in order to avoid disclosing figures for individual companies.

SIC code	Product group description
2013	Sausages and other prepared meats
2044	Rice milling
2067	Chewing gum
2077	Animal and marine fats and oils
2097	Manufactured ice
2111	Cigarettes
2121	Cigars
2131	Chewing and smoking tobacco
2141	Tobacco stemming and redrying
2221	Weaving mills, manmade fiber and silk
2231	Weaving and finishing mills, wool
225	Knitting mills
2253	Knit outerwear mills
2257	Circular knit fabric mills
2258	Warp knit fabric mills
2259	Knitting mills, n.e.c.
2293	Paddings and upholstery filling
2429	Special product sawmills, n.e.c.
2515	Mattresses and bedsprings
2519	Household furniture, n.e.c.
2645	Die-cut paper and board
2646	Pressed and molded pulp goods
2649	Converted paper products, n.e.c.
2812	Alkalies and chlorine
2813	Industrial gases
2819	Industrial inorganic chemicals, n.e.c.
2861	Gum and wood chemicals

SIC code	Production group description
2999	Petroleum and coal products, n.e.c.
3031	Reclaimed rubber
3142	House slippers
3149	Footwear, except rubber, n.e.c.
3161	Luggage
317	Handbags and personal leather goods
3171	Women's handbags and purses
3211	Flat glass
3231	Products of purchased glass
3255	Clay refractories
3263	Fine earthenware food utensils
3264	Porcelain electrical supplies
3295	Minerals, ground or treated
3315	Steel wire and related products
3316	Cold finishing of steel shapes
3332	Primary lead
3333	Primary zinc
3339	Primary nonferrous metals, n.e.c.
3362	Brass, bronze, and copper foundries
3369	Nonferrous foundries, n.e.c.
3398	Metal heat treating
3399	Primary metal products, n.e.c.
3471	Plating and polishing
3565	Industrial patterns
3567	Industrial furnaces and ovens
3641	Electric lamps

SIC code	Production group description	SIC code	Production group description
3645	Residential lighting fixtures	3751	Motorcycles, bicycles, and parts
3648	Lighting equipment, n.e.c.	3795	Tanks and tank components
3652	Phonograph records	3799	Transportation equipment, n.e.c.
3671	Electron tubes, receiving types		
3672	Cathode ray television picture tubes	3873	Watches, clocks, and watchcases
3673	Electron tubes, transmitting		
3691	Storage batteries	3914	Silverware and plated ware
3692	Primary batteries, dry and wet	3915	Jewelers' materials and lapidary work
3693	X-ray apparatus and tubes	3953	Marking devices
		3962	Artificial flowers
3714	Motor vehicle parts and accessories	3963	Buttons
3716	Motor homes	3993	Signs and advertising displays

Manufactures. 1977.
1977 census of manufactures.
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